

Fungal Diversity

Notes for genera - Ascomycota

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Abstract:	<p>Knowledge of the relationships and so the classification of fungi has developed rapidly with increasingly widespread use of molecular techniques over the last 10-15 years, and continues to accelerate. Genera found to be polyphyletic have been restricted in use, and new generic names introduced for species which are phylogenetically distinct from the type species of particular genera. The ending of the separate naming of morphs of the same species in 2011, has also caused several changes in fungal</p>

	<p>generic names. In order to facilitate access to all important changes, it was desirable to compile these in a single document. The present article provides a list of generic names of Ascomycota (approximately 6500 accepted names published to the end of 2016), including those which are lichen-forming, with notes and summarizes the changes since the last edition of 'Ainsworth & Bisby's Dictionary of the Fungi' in 2008. The notes include the number of accepted species, classification, type species (with location of the type material), culture availability, life-styles, distribution, and selected publications that have appeared since 2008. This work is intended to provide the foundation for updating the ascomycete component of the "Without prejudice list of generic names of Fungi" published in 2013, which will developed into a list of protected generic names, subject to the International Botanical Congress in Shenzhen in July 2017 agreeing to a modification in the rules relating to protected lists, and scrutiny by procedures determined by the Nomenclature Committee for Fungi (NCF). The previously not validly published generic names Barriopsis, Collophora, Cryomyces, Dematiopleospora, Lithophila, and Saxomyces are validated, as are two previously invalid family names, Bartaliniaceae and Wiesneriomycetaceae.</p>
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Abstract

Knowledge of the relationships and so the classification of fungi has developed rapidly with increasingly widespread use of molecular techniques over the last 10–15 years, and continues to accelerate. Genera found to be polyphyletic have been restricted in use, and new generic names introduced for species which are phylogenetically distinct from the type species of particular genera. The ending of the separate naming of morphs of the same species in 2011, has also caused several changes in fungal generic names. In order to facilitate access to all important changes, it was desirable to compile these in a single document. The present article provides a list of generic names of *Ascomycota* (approximately 6500 accepted names published to the end of 2016), including those which are lichen-forming, with notes and summarizes the changes since the last edition of ‘*Ainsworth & Bisby’s Dictionary of the Fungi*’ in 2008. The notes include the number of accepted species, classification, type species (with location of the type material), culture availability, life-styles, distribution, and selected publications that have appeared since 2008. This work is intended to provide the foundation for updating the ascomycete component of the “Without prejudice list of generic names of *Fungi*” published in 2013, which will developed into a list of protected generic names, subject to the International Botanical Congress in Shenzhen in July 2017 agreeing to a modification in the rules relating to protected lists, and scrutiny by procedures determined by the Nomenclature Committee for Fungi (NCF). The previously not validly published generic names *Barriopsis*, *Collophora*, *Cryomyces*, *Dematiopleospora*, *Lithophila*, and *Saxomyces* are validated, as are two previously invalid family names, *Bartaliniaceae* and *Wiesneriomycetaceae*.

Keywords Article 59 • Classification • One name • Pleomorphic fungi • Taxonomy

Introduction

Knowledge of the taxonomy of fungi, has been changing rapidly since the last edition of *Ainsworth & Bisby's Dictionary of the Fungi* (Kirk et al. 2008), as a consequence of new information from DNA and protein sequence studies, and the integration of asexual and asexual morphs into a unified system. Phylogenetic affiliations and taxonomic placements of a large number of genera are being clarified, and at the same time species complexes and generic circumscriptions are being resolved. Sequences are also increasingly being obtained from genera representing fungi with ecologies not previously well-represented in the system, such as rock-inhabiting and lichenicolous fungi, or which are uncultured or unculturable. In addition, neo- and epitypifications are enabling the application of historic species and genera

to be accommodated into molecularly based systems. Major progress towards a natural classification system is being made.

The ending of dual nomenclature for pleomorphic non-lichenized ascomycetes and basidiomycetes in 2011 (McNeill et al. 2012) has also led to a need to select the name to be adopted for pleomorphic genera. Lists of names are now being proposed for protection or suppression by working groups established under the auspices of the International Commission on the Taxonomy of Fungi (ICTF). The proposals from the working groups are being published and will then be scrutinized by the Nomenclature Committee for Fungi (NCF) and the General Committee (Art. 14.13) established by the last International Botanical Congress.

The problem is especially acute in the phylum *Ascomycota*, the largest in kingdom *Fungi*, with some 15 classes, 68 orders, 327 families, c. 6300 genera, and over 64 000 species (Kirk et al. 2008). However, 1000-1500 new taxa are introduced each year, and our understanding of the *Ascomycota* has been developing rapidly. Keeping track of all the changes and the incorporation of so much new knowledge is a major challenge, though some important compilations have been prepared, for example those of Hyde et al. (2013) and Wijayawardene et al. (2014) for *Dothideomycetes*, and Maharachchikumbura et al. (2015, 2016) for *Sordariomycetes*, which considered both asexually and sexually typified genera. There has also been a major attempt to produce an overall system for *Ascomycota* referring accepted genera down to family (Jaklitsch et al. 2016).

The long-running series *Notes on Ascomycete Systematics* (1986–2010) aimed to provide a current awareness system of novel taxa and changes proposed, and provided 5113 notes. This has not, however, been continued to include asexually typified genera. Here we start to redress this problem, taking the last edition of the *Dictionary* (Kirk et al. 2008) as our starting point. In addition to recent nomenclature changes, we include typification details of the type species of genera (including lecto-, neo- and epitypifications), information on the availability of cultures, and references to accessible sequence data. References to recently established DNA barcodes for plant pathogenic genera are also included where available.

In addition to providing an overview of current knowledge on accepted genera of ascomycetes, this work is also intended to provide the foundation for updating the ascomycete component of the “Without prejudice list of generic names of *Fungi*” published in 2013 (Kirk et al. 2013), which is anticipated will be developed into a list of protected generic names. This will, however, be subject to the XIXth International Botanical Congress in Shenzhen in July 2017 agreeing to a modification in the rules relating to protected lists of names supported by the 10th International Mycological Congress in 2014 (Redhead et al. 2014; Hawksworth 2015), and scrutiny by procedures determined by the Nomenclature Committee for Fungi (NCF).

Materials and Methods

Data collection

Collecting data on existing names of taxa in use was based on Kirk et al. (2008, 2013) and *Species Fungorum* (2016). The works of Sutton (1977, 1980) and Seifert et al. (2011) were also used for further clarification of nomenclatural issues for asexually typified genera. Previous outlines of sexually typified genera (i.e. Lumbsch and Huhndorf 2010) and asexually typified genera (i.e. Hyde et al. 2011; Wijayawardene et al. 2012, 2017) have been used to extract taxonomic placements. For the taxonomic placement of lichen-forming genera, the compilation of Lücking et al. (2016) was used.

One fungus: one name

Recent proposals on names to be selected for use in non-lichenized pleomorphic ascomycete genera were gathered from the reports of ICTF working groups (Table **).

Taxonomic group	Reference
<i>Diaporthales</i>	Rossmann et al. 2015
<i>Dothideomycetes</i>	Hyde et al. 2013; Wijayawardene et al. 2014; Rossmann et al. 2015, 2016
<i>Hypocreales</i>	Rossmann et al. 2013
<i>Leotiomycetes</i>	Johnston et al. 2014
<i>Magnaporthales</i>	Zhang et al. 2016
Miscellaneous genera	Rossmann et al. 2016
<i>Pezizomycetes</i>	Healy et al. 2016
<i>Sordariomycetes</i> – (except <i>Diaporthales</i> , <i>Hypocreales</i> , and <i>Magnaporthales</i>)	Maharachchikumbura et al. 2015, 2016; Réblová et al. 2016
<i>Xylariales</i>	Stadler et al. 2014

Results

Validating of invalid families

Bartaliniaceae Wijayaw., P.M. Kirk & K.D. Hyde

Index Fungorum number: 551079

= *Bartaliniaceae* Wijayaw., Maharachch. & K.D. Hyde, *Fungal Diversity* **73**: 85. 2015, Nom. inval., Art. 42.1 (Melbourne)

Type: *Bartalinia* Tassi, Bulletin Labor. Orto Bot. de R. Univ. Siena 3: 4 (1900)

Description: see Senanayake et al. (2015)

Notes: Senanayake et al. (2015) introduced *Bartaliniaceae* but it is invalid (Art. 42.1) as the identifier cited in the protologue, (i.e. IF511183), was not issued for the name published (i.e. *Bartaliniaceae*). This identifier was issued for *Boletellus exiguus* T.W. Henkel & Fulgenzi 2008. A new identifier was obtained (i.e. 551079) thus *Bartaliniaceae* validly published.

Wiesneriomycetaceae Wijayaw., P.M. Kirk, K.D. Hyde

Index Fungorum number: IF550306

= *Wiesneriomycetaceae* Suetrong, Rungjindamai, Somrithipol. & E.B.G. Jones, *Phytotaxa* **176**(1): 288. 2014; Nom. inval., Art. 42.1 (Melbourne)

Type: *Wiesneriomyces* Koord., Verh. K. Akad. Wet., tweede sect. 13(4): 246 (1907) IF 10438

Description: see Suetrong et al. (2014)

Notes: Suetrong et al. (2014) introduced *Wiesneriomycetaceae* but it is invalid (Art. 42.1) as the identifier cited in the protologue, (i.e. MB809097), was not issued for the name published (i.e. *Wiesneriomycetaceae*). This identifier was issued for *Hypogymnia papilliformis* McCune, Tchabanenko & X.L. Wei 2015. A new identifier was obtained (i.e. IF550306) thus *Wiesneriomycetaceae* is herein validly published.

Notes for genera

Aaosphaeria Aptroot 1995, *Dacampiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. arxii* (van der Aa) Aptroot, asexual morph coelomycetous, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), sequence available for the type: KU158145 (ITS) (unpublished).

Abropelta B. Sutton 1986, *Ascomycota* genera *incertae sedis*, one species, type: *A. fusarioides* B. Sutton, coelomycetous, sexual morph unknown, caulicolous, terrestrial, India, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: IMI 236263.

Abrothallus De Not. 1845 (= *Vouauxiomyces* Dyko & D. Hawksw. 1979 *vide* Rossman et al. 2016), *Abrothallaceae*, *Abrothallales*, *Dothideomycetes*, c. 40 species, type: *A. bertianus* De Not., obligately lichenicolous, parasymbiotic or parasitic on macrolichens from several families of lichen-forming fungi, sexual morph with apothecioid ascomata, asexual morph coelomycetous, some species are known only either by their asexual or sexual morph, terrestrial, worldwide, see Pérez-Ortega et al. (2011; anamorph-teleomorph connection), Pérez-Ortega et al. (2014; phylogeny), Suija et al. (2015; phylogeny, key for species on *Peltigerales*), Rossman et al. (2016; nomenclature), holotype of the type: likely in VER or RO. the species growing on *Parmeliaceae* are in urgent need of revision, preliminary molecular data suggest that current species delimitation, largely based on the host identity is inaccurate (Pérez-Ortega & Suija, data not published).

Absonditella Vězda 1965, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, twelve species, type: *A. sphagnorum* Vězda & Poelt, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Abyssomyces Kohlm. 1970, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *A. hydrozoicus* Kohlm., saprobes, asexual morph unknown, marine, Scotland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Acallomyces Thaxt. 1903, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *A. homalotae* Thaxt., asexual morph unknown, biotrophic on *Coleoptera* in decaying agarics (Staphylinidae), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), morphologically related to *Polyascomyces* Thaxter, cultures and sequences are unavailable, needs generic revision.

Acanthogymnomycetes Udagawa & Uchiy. 2000, *Eoterfeziaceae*, *Ascomycota* family *incertae sedis*, one species, type: *A. terrestris* Udagawa & Uchiy., asexual morph unknown, from soil, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), sequences are unavailable, holotype of the type: CBM SUM3162.

Acanthohelicospora Boonmee & K.D. Hyde, 2014, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, four species, type: *A. pinicola* Boonmee & K.D. Hyde, saprobes, worldwide, asexual morph hyphomycetous, see Boonmee et al. (2014; taxonomy, phylogeny), Rossman et al. (2016; plant pathogens, new combinations), holotype and ex-type strains of type: MFLU 10-0049, MFLUCC 10-0116 = BCC 52036.

Acanthophiobolus Berl., 1893, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, three species, type: *A. helminthosporus* (Rehm) Berl., asexual morph unknown, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Boonmee et al. (2011, 2014; accepted as a genus in *Tubeufiaceae*), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Acanthorus Bat. & Cavalc. 1967, *Ascomycota* genera *incertae sedis*, one species, type: *A. maranhensis* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a

genus in *Dothideomycetes*), Wijayawardene et al. (2017) and in here we treat this genus as *Ascomycota* genera *incertae sedis* since cultures and sequences are unavailable.

Acanthostigma De Not., 1863, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, 64 species, type: *A. perpusillum* de Not., saprobes on dead wood, widespread, asexual morph hyphomycetous, see Lumbsch and Huhndorf (2010; outline), Boonmee et al. (2011, 2014; accepted as a genus in *Tubeufiaceae*), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available for three species, strains available for type: UAMH 7237.

Acanthostigmella Höhn., 1905, *Dothideomycetes* genera *incertae sedis*, six species, type: *A. genuflexa* Höhn., asexual morph unknown, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tubeufiaceae*), Boonmee et al. (2011; accepted as a genus in *Tubeufiaceae*), Hyde et al. (2013) and Boonmee et al. (2014) did not accept as a genus in *Tubeufiaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Acanthotheciella Höhn. 1911, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *A. barbata* (Pat.) Höhn., asexual morph unknown, on dead scale insects, terrestrial, Asia, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Acanthothecis Clem. 1909, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 56 species, type: *A. hololeuroides* (Nyl.) Staiger & Kalb, all with ascomata, lichenized (*Trenthepohlia*), terrestrial (mainly corticolous), pantropical-subtropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rivas Plata et al. (2013; taxonomy), Lumbsch et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Acanthotrema Frisch 2006, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *A. brasilianum* (Hale) Frisch, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. 2013 (genus accepted), Rivas Plata et al. (2010a, 2012; key), Sipman et al. (2012; key), sequences are available.

Acarella Syd. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *A. costaricensis* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Acarellina Bat. & H. Maia 1960, *Ascomycota* genera *incertae sedis*, one species, type: *A. psidii* Bat. & H. Maia, coelomycetous, sexual morph unknown, epiphytes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acaroconium Kocourk. & D. Hawksw. 2008, *Ascomycota* genera *incertae sedis*, one species, type: *A. punctiforme* Kocourk. & D. Hawksw., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Europe, North America, see Kocourková and Hawksworth (2008; taxonomy), Wijayawardene et al. (2016, 2017; taxonomy, outline), holotype of the type: PRM 8926543, cultures and sequences are unavailable, some lichenicolous *Microsphaeropsis* species may belong to this genus.

Acarocybe Syd. 1937, *Ascomycota* genera *incertae sedis*, three species, type: *A. hansfordii* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acarocybellina Subram. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *A. arengae* (Matsush.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Acarocybiopsis J. Mena, A. Hern.-Gut. & Mercado 1999, *Ascomycota* genera *incertae sedis*, one species, type: *A. cubitaensis* J. Mena, A. Hern. Gut. & Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Acaropeltis Petr. 1937, *Ascomycota* genera *incertae sedis*, one species, type: *A. costaricensis* Petr., coelomycetous, sexual morph unknown, on living leaves, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acarospora A. Massal. 1852, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, c. 200 species, type type: *A. schleicheri* (Ach.) A. Massal. all with ascomata, lichenized (green algae), terrestrial (mostly saxicolous or terricolous), cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Westberg et al. (2015; phylogeny), Lücking et al. (2016; classification), polyphyletic, sequences are available.

Acarosporina Sherwood 1977, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *A. monilifera* (Ellis & Everh.) Sherwood, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Acaulium Sopp 1912, *Microascaceae*, *Microascales*, *Sordariomycetes*, three species, type: *A. albonigrescens* Sopp, hyphomycetous, the genus was treated as a synonym of *Scopulariopsis* Bainier 1907 (*vide* Seifert et al. 2011), Sandoval-Denis et al. (2016; phylogeny, reinstated the genus, new species), cultures and sequences are available.

Acephala Grünig & T.N. Sieber 2005, *Vibrisseaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *A. applanata* Grünig & T.N. Sieber, asexual morph unknown, from fine roots of *Pinus*, terrestrial, Germany, Switzerland, see Munzenberger et al. (2009; morphology, new species), ex-type strain of the type: CBS 109321.

Acervuloseptoria Crous & Jol. Roux 2014, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *A. ziziphicola* Crous & Jol. Roux, coelomycetous, sexual morph unknown, associated with leaf spots, terrestrial, South Africa, see Crous et al. (2014, 2015; morphology and phylogeny), holotype and ex-type culture of type: CBS H-21723, CPC 23707.

Acervus Kanouse 1938, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, eight species, type: *A. aurantiacus* Kanouse, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhuang et al. (2011; morphology, taxonomy), Kirk et al. (2013; genus accepted), Ekanayaka et al. (2016; new species, China), cultures and sequences are available but lacks for the type species.

Achaetobotrys Bat. & Cif. 1963, *Antennulariellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *A. affinis* (L.R. Fraser) Bat. & Cif., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Antennulariellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Achaetomium J.N. Rai, J.P. Tewari & Mukerji 1964, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, 13 species, asexual morph unknown, type: *A. globosum* J.N. Rai & J.P. Tewari, saprobes, terrestrial, Asia, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequence are available.

Achorella Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, ten species, type: *A. ametableta* (Rehm) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, worldwide,

see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Achorodothis Syd. 1926, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *A. poasensis* Syd., asexual morph unknown, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mycosphaerellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Achoropeltis Syd. 1929, *Ascomycota* genera *incertae sedis*, one species, type: *A. modesta* Syd., coelomycetous, saprobes, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Achroceratosphaeria Réblová, J. Fourn., K.D. Hyde & Ranghoo 2010, *Pisorisporiaceae*, *Pisorisporiales*, *Sordariomycetes*, two species, type: *A. potamia* Réblová, Fournier & K.D. Hyde, asexual morph unknown, saprobes, aquatic, Europe, see Réblová et al. (2010; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype and ex-type strain of the type: PRM 915719, CBS 125414.

Achroiostachys L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, six species, type: *A. humicola* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, from soil, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22420, CBS 868.73.

Aciculoconidium D.S. King & S.C. Jong 1976, *Metschnikowiaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *A. aculeatum* (Phaff, M.W. Mill. & Shifrine) D.S. King & S.C. Jong, asexual morph unknown (budding of cells and formation of true hyphae with blastoconidia), saprophytes, isolated from fruit flies (*Drosophila* spp.), terrestrial, California, USA, see Kirk et al. (2013; genus accepted), cultures and sequences are available.

Aciculopsora Aptroot & Trest 2006, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *A. salmonea* Aptroot & Trest, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), holotype of the type: CR, Lücking 17543, cultures and sequences are unavailable.

Aciculosporium I. Miyake 1908, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, seven species, type: *A. take* I. Miyake, asexual morph unknown, saprobes, terrestrial, Asia, see Tanaka (2009; in situ visualization), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Acicuseptoria Quaedvl., Verkley & Crous 2013, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. rumicis* Quaedvlieg, Verkley & Crous, asexual morph coelomycetous, sexual morph unknown, saprobes, one species, France, see Quaedvlieg et al. (2013; morphology and phylogeny), holotype and ex-type culture of type: CBS H-18163, CPC 522.78.

Acidea Hujšlová & M. Kolařík 2014, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *A. extrema* Hujšlová & M. Kolařík, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, Europe, Antarctica, see Hujšlová et al. (2014; morphology, phylogeny), holotype and ex type of the type: PRM 922617, CBS 136258.

Acidiella Hujšlová & M. Kolařík, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *A. bohémica* Hujšlová & M. Kolařík, hyphomycetous, sexual morph unknown, saprobes, terrestrial and aquatic, Europe, Australia, see Hujšlová et al. (2013; morphology, phylogeny), Vázquez-Campos et al. (2014), Kolařík et al. (2015; new species), holotype and ex-type of cultures of the type: PRM 859933, CBS 132721.

Acidomyces B.J. Baker, M.A. Lutz, S.C. Dawson, P.L. Bond & Banfield ex Selbmann, de Hoog & De Leo 2008, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, hyphomycetous, two species, type: *A. acidophilus* (Sigler & J.W. Carmich.) Selbmann, de Hoog & De Leo, sexual morph unknown, from soil, terrestrial, Canada, see Selbmann et al. (2008; morphology; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), holotype and ex-type strain of the type: UAMH 3460, CBS 270.74.

Acidothrix Hujšlová & M. Kolařík 2014, *Amplistromataceae*, *Amplistromatales*, *Sordariomycetes*, one species, type: *A. acidophila* Hujšlová & M. Kolařík, hyphomycetous, sexual morph unknown, in highly acidic soil, terrestrial, Czech Republic, see Hujšlová et al. (2014; taxonomy), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Wijayawardene et al. (2017; outline), ex-type culture available for the type: CBS 136259.

Acolium (Ach.) Grev. 1821, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, five species, type: *A. sessile* (Pers.) Arnold, lichenized, see Gaya et al. (2012; taxonomy), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Acompsomyces Thaxt. 1901, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, six species, type: *A. corticariae* Thaxt., asexual morph unknown, biotrophic on *Coleoptera* (Cryptophagidae and Lathridiidae), America, Europe, probably worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acremoniula G. Arnaud ex Cif. 1962, *Ascomycota* genera *incertae sedis*, five species, type: *A. sarcinellae* (Pat. & Har.) G. Arnaud ex Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acrocalymma Alcorn & J.A.G. Irwin 1987, *Acrocalymmaceae*, *Pleosporales*, *Dothideomycetes*, six species, type: *A. medicaginis* Alcorn & J.A.G. Irwin, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Zhang et al. (2012; new species, phylogeny), Kirk et al. (2013; genus accepted), Trakunyingcharoen et al. (2014; phylogeny, introduced *Acrocalymmaceae*), Wijayawardene et al. (2014, 2017; outline), cultures and sequences are available for the type species.

Acroconidiellina M.B. Ellis 1971 (= *Zeuctomorpha* Sivan. et al. 1984 *vide* Rossman et al. 2016), *Sympoventuriaceae*, *Venturiales*, *Dothideomycetes*, four species, type: *A. loudetiae* M.B. Ellis, hyphomycetous, sexual morph formerly known in *Zeuctomorpha*, widespread especially in tropical regions, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Acrocordia A. Massal. 1854, *Monoblastiaceae*, *Monoblastiales*, *Dothideomycetes*, ten species, type: *A. gemmata* (Ach.) A. Massal., asexual morph unknown, lichenized fungi, terrestrial, temperate, placement in *Monoblastiaceae* supported by molecular data, see Nelsen et al. (2009, 2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available but lacks for the type species.

Acrocordiella O.E. Erikss 1982, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, one species, type: *A. occulta* (Romell) O.E. Erikss, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Acrocordiopsis Borse & K.D. Hyde 1989, *Salsugineaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *A. patilii* Borse & K.D. Hyde, asexual morph unknown, saprobes, marine, worldwide, sequence are available for *A. patilii* and placement in residual paraphyletic

assemblage, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Melanommataceae), Suetrong et al. (2009; phylogeny, morphology), Jones et al. (2009, 2015; classification), Alias and Jones (2009, monograph); Besitulo et al. (2010; diversity), Pang et al. (2010; diversity, Malaysia), Zainuddin et al. (2010; antimicrobial activities), Sakayaroj et al. (2011b; diversity, Thailand), Lee et al. (2012; checklist, Malaysia), Zhang et al. (2012; phylogeny, morphology), Hyde et al. (2013; phylogeny), Samón-Legrá et al. (2014; diversity), Tian et al. (2015; morphology, phylogeny), holotype of type: IMI 297769, available cultures of type: BCC 28167, BCC 28166.

Acrodictyella W.A. Baker & Partr. 2001, *Ascomycota* genera *incertae sedis*, one species, type: *A. obovata* W.A. Baker & Partr. 2001, hyphomycetous, sexual morph unknown, wood decaying, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Acrodictys M.B. Ellis 1961, *Ascomycota* genera *incertae sedis*, 22 species, type: *A. bambusicola* M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Zhao et al. (2011; Descriptions of *Acrodictys* and related genera from China), Hu (2011; key to aquatic *Acrodictys* spp.), Ma et al. (2014; new species *Acrodictys nigra*), Ma et al. (2016; DNA), sequences are available.

Acrodontiella U. Braun & Scheuer 1995, *Ascomycota* genera *incertae sedis*, one species, type: *A. falloppiae* U. Braun & Scheuer, hyphomycetous, sexual morph unknown, terrestrial, foliicolous, associated with leaf-spots, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of type: GZU 294903, cultures and sequences are unavailable, needs generic revision.

Acrodontium de Hoog 1972, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, 13 species, type: *A. crateriforme* (J.F.H. Beyma) de Hoog, hyphomycetous, sexual morph unknown, saprobes, cosmopolitan, see Seifert et al. (2011; morphology), Crous et al. (2014; new species), Videira et al. (2016; phylogeny), Wijayawardene et al. (2017; outline), ex-type culture of the type: CBS 144.33 = ATCC 15679.

Acrogenotheca Cif. & Bat. 1963, *Dothideomycetes*, genera *incertae sedis*, two species, type: *A. pulcherrima* Bat. & Cif., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Acrogynomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, six species, type specie: *A. eumicri* Thaxt, parasitic on African scydmaenid genus *Eumicrus*, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acrophialophora Edward 1961, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, six species, type: *A. nainiana* Edward, sexual morph unknown, pathogen, terrestrial, worldwide, thermo-tolerant, see Seifert et al. (2011; morphology), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Sandoval-Denis et al. (2015; clinical), Zhang et al. (2015; DNA and type strains), ex-isotype of type: CBS 100.60, ex-type culture of type: ATCC 22555, IMI 076567.

Acrophragmis Kiffer & Reisinger 1970, *Ascomycota* genera *incertae sedis*, three species, type: *A. coronata* Kiffer & Reisinger, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Acroscyphus Lév. 1846, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *A. sphaerophoroides* Lév., lichenized, terrestrial (saxicolous), Americas, Asia, Africa, see Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Acrospeira Berk. & Broome 1857, *Ascomycota* genera *incertae sedis*, one species, type: *A. mirabilis* Berk. & Broome, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Acrospermoides J.H. Mill. & G.E. Thoms. 1940, *Sordariomycetes* genera *incertae sedis*, two species, asexual morph unknown, type: *A. subulata* J.H. Mill. & G.E. Thoms., saprobes, terrestrial, Greece, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013 genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Acrospermoides J.H. Mill. & G.E. Thoms. 1940, *Sordariomycetes* genera *incertae sedis*, two species, type: *A. subulata* J.H. Mill. & G.E. Thoms., asexual morph unknown, saprobes, terrestrial, Greece, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013 genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are unavailable.

Acrospermum Tode 1790, *Acrospermaceae*, *Acrospermales*, *Dothideomycetes*, eleven species, type: *A. compressum* Tode, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; phylogeny), Hyde et al. (2013; morphology, phylogeny), Kirk et al. (2013 genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available for type species.

Acrostalagmus Corda 1838, *Plectosphaerellaceae*, *Glomerellales*, *Sordariomycetes*, three species, type: *A. cinnabarinus* Corda 1838, hyphomycetous, sexual morph unknown, widespread, see Wijayawardene et al. (2012, 2017; outline), Réblová et al. (2011; DNA, phylogeny), cultures and sequences are available, needs generic revision.

Acrostaurus Deighton & Piroz. 1972, *Ascomycota* genera *incertae sedis*, one species, type: *A. turneri* Deighton & Piroz. 1972, asexual morph unknown, fungicolous, saprobes, widespread especially in tropical regions, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Actidiographium Lar. N. Vassiljeva 2000, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, one species, type: *A. orientale* Lar & Vassiljeva, asexual morphs unknown, saprobes, terrestrial, north temperate, see Boehm et al. (2009; accepted as in *Hysteriaceae*), Lumbsch and Huhndorf (2010; outline),), Hyde et al. (2013; accepted as a genus in *Mytilinidiaceae*), Wijayawardene et al. (2014; outline), holotype of type: VLA P-2938, cultures and sequences are unavailable.

Actidium Fr. 1815, *Mytilinidiaceae*, *Mytilinidiales*, *Dothideomycetes*, nine species, type: *A. hysterooides* Fr., asexual morphs unknown, saprobes, terrestrial, Europe, North America, see Boehm et al. (2009, 2015; accepted as a genus in *Mytilinidiaceae*), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as in *Mytilinidiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Actinocladium Ehrenberg 1819, *Ascomycota* genera *incertae sedis*, eight species, type: *A. rhodosporum* Ehrenb., hyphomycetous, sexual morph unknown, pathogen of wood and bark of fallen twigs and trunk, worldwide, mainly Europe, Asia, Africa, Caribbean, see Manoharachary et al. (2010; two new species), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Actinocymbe Höhn. 1911 (= *Limaciniella* J.M. Mend. 1925), *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, three species, type: *A. separato-setosa* (Henn.) Höhn., asexual morph unknown, parasitic, epiphyllous to hypophyllous, terrestrial, temperate to tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Actinomyxa Syd. & P. Syd. 1917, *Dothideomycetes*, genera *incertae sedis*, one species, type: *A. australiensis* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013) did not accept as a genus in *Microthyriaceae*, Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Actinoplaca Müll. Arg. 1891, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *A. strigulacea* Müll. Arg., lichenized, terrestrial (foliicolous), tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Actinotexis Arx 1960, *Ascomycota* genera *incertae sedis*, one species, type: *A. mirabilis* Berk. & Broome, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Actinothecium Flot. 1855, *Ascomycota* genera *incertae sedis*, five species, type: *A. caricicola* Ces. 1854, coelomycetous, sexual morph unknown, widespread, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Actinothyrium Kunze 1823, *Ascomycota* genera *incertae sedis*, ten species, type: *A. graminis* Kunze ex Fr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acumispora Matsush. 1980, *Ascomycota* genera *incertae sedis*, four species, type: *A. uniseptata* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Adautomilanezia Gusmão, S.S. Silva, Fiuza, L.A. Costa, T.A.B. Santos 2016, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *A. caesalpiniae* Gusmão, S.S. Silva, Fiuza, L.A. Costa, T.A.B. Santos, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Crous et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: HUEFS216632, CCLAMIC 102/12.

Adelococcus Theiss. & Syd. 1918, *Adelococcaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *A. alpestris* (Zopf) Theiss. & Syd., asexual morph unknown, lichenicolous, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Adelodiscus Syd. 1931, *Helotiales*, genera *incertae sedis*, three species, type: *A. philippinensis* Syd., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Adelolecia Hertel & Hafellner in Hafellner 1984, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *A. pilati* (Hepp) Hertel & Hafellner, all with ascomata, lichenized (green algae), terrestrial (saxicolous, rarely corticolous), temperate regions of both Hemispheres, Ekman et al. (2008; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Aderkomyces Bat. 1961, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, c. 30 species, type: *A. couepiae* Bat, currently accepted, with ascomata, lichenized (green algae), terrestrial (foliicolous or corticolous), tropical, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species.

Adomia S. Schatz 1985, *Xylariales genera incertae sedis*, *Sordariomycetes*, one species, type: *A. avicenniae* S. Schatz, saprobes, on mangrove wood, saprobe, Australia, Egypt, Red Sea, Thailand, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; morphology, outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Aegeritella Balazy & J. Wisn. 1974, *Trichosporonaceae*, *Trichosporonales*, *Tremellomycetes*, five species, type: *A. superficialis* Bałazy & J. Wiśn., Poland, hyphomycetous, sexual morph unknown, ectoparasite on ants, worldwide, mainly reported from Europe, Brazil, Spain, Morocco, Poland, Czech Republic, North America, Greece, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Espadaler and Santamaria (2012; review), Kirk et al. (2013; genus accepted), Wrzosek et al. (2016; new insights on phylogeny and biology), reference strain of *Aegeritella tuberculata* = CBS 141264 (Wrzosek et al. 2016), sequences are available from Wrzosek et al. (2016), needs generic revision.

Aequabiliella Crous 2015, *Phaeomoniellaceae*, *Phaeomoniellales*, *Eurotiomycetes*, coelomycetous, sexual morph unknown, one species, type: *A. effusa* Damm & Crous, on living leaves, pathogens, terrestrial, South Africa, see Damm et al. (2010 as *Phaeomoniella effusa* Damm & Crous, morphology), Crous et al. (2015; phylogeny), holotype and ex-type culture of type: CBS H-19998, CBS 120883.

Aeruginoscyphus Dougoud 2012, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *A. sericeus* (Alb. & Schwein.) Dougoud, asexual morph unknown, saprobes, terrestrial, Europe, see Dougoud (2010; taxonomy), cultures and sequences are unavailable.

Agaricodochium X.J. Liu 1981, *Ascomycota genera incertae sedis*, one species, type: *A. camelliae* X.J. Liu, A.J. Wei & S.G. Fan, hyphomycetous, on leaves of *Camellia oleosa*, pathogen of *Camellia oleifera*, terrestrial, Zhejiang, China, see Guang-yu et al. (2008; control), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Fangyan et al. (2013; control), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Agarwalomyces R.K. Verma & Kamal 1987, *Ascomycota genera incertae sedis*, one species, type: *A. indicus* R.K. Verma & Kamal, hyphomycetous, on fruit of *Lythraceae*, terrestrial, India, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aggregatorygma M.Cáceres, Aptroot & Lücking 2014, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *A. triseptatum* M. Cáceres, Aptroot & Lücking, lichenized, see Cáceres et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Agonimia Zahlbr. 1909, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, c. 17 species, type: *A. tristicula* (Nyl.) Zahlbr., asexual morph unknown, lichenized, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Muggia et al. (2010; DNA), Dymytrova et al. (2011; new species), Guzow-Krzemińska et al. (2012; new species), Aptroot and Cáceres (2013; new species), Harada (2013; new species, Japan), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2015, 2016; new species, South Korea), cultures available for the type: L469 (fide Muggia et al. 2010).

Agabeeja Subram. 1995, *Ascomycota genera incertae sedis*, one species, type: *A. kavakapriya* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Singapore, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype MUBL 3140.

Agryiella Sacc. 1884, *Ascomycota genera incertae sedis*, two species, type: *A. nitida* (Lib.) Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Europe, see

Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Agryiellopsis Höhn. 1903, *Ascomycota* genera *incertae sedis*, three species, type: *A. caeruleoatra* Höhn., coelomycetous, sexual morph unknown, Europe see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Agryrium Fr. 1822, *Pertusariaceae*, *Pertusariales*, *Lecanoromycetes*, three species, type: *A. rufum* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; DNA), cultures and sequences are available, needs generic revision.

Ahmadia Syd. 1939, *Ascomycota* genera *incertae sedis*, one species, type: *A. pentatropidis* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ahtiana Goward 1986, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *A. sphaerosporella* (Müll. Arg.) Goward, all with ascomata, lichenized (green algae), terrestrial (corticolous, epixylic), western North America, see Thell et al. (2009; phyogeny), Nelsen et al. (2011; phyogeny), Miadlikowska et al. (2014; phyogeny), Divakar et al. (2015; phyogeny), Lücking et al. (2016; classification), sequences are available.

Aigialus Kohlm. & S. Schatz 1986, *Aigialaceae*, *Pleosporales*, *Dothideomycetes*, asexual morph unknown, five species, type: *A. grandis* Kohlm. & Schatz, saprobes, marine, worldwide, see Suetrong et al. (2009; phylogeny, morphology), Jones et al. (2009, 2012, 2015; classification, outline, review), Alias and Jones (2009, monograph), Schoch et al. (2009; phylogeny), Zhang et al. (2009a, 2012, 2013; phylogeny), Isaka et al. (2009; secondary metabolites), Nambiar and Raveendran (2009; diversity), Nambiar et al. (2009; diversity), Zainuddin et al. (2010; antimicrobial activities), Besitulo et al. (2010; diversity), Lumbsch and Huhndorf, (2010; outline), Pang et al. (2010; diversity), Pang et al. (2011; monograph), Sakayaroj et al. (2011b; diversity), Josphine et al. (2011, diversity), Suetrong et al. (2011a, 2011b, 2014, 2016; phylogeny), Liu et al. (2011b, 2014, 2015; phylogeny, morphology), Boonmee et al. (2012; phylogeny), Dai et al. (2012; phylogeny), Lee et al. (2012; checklist), Pang and Jheng (2012; checklist), Hyde et al. (2013; phylogeny, morphology, outline), Pang et al. (2013a; phylogeny), Ariyawansa et al. (2013, 2014a, 2014b, 2015; phylogeny), Ren et al. (2013; phylogeny), Kocharin et al. (2013; optimization), Sivakumar (2013; review), Sarma and Raghukumar (2013; diversity), Gnavi et al. (2014, phylogeny), Phookamsak et al. (2014, 2015; phylogeny), Wijayawardene et al. (2014b; outline), Shearer et al. (2014; phylogeny), Pratibha and Prabhugaonkar (2015; phylogeny), Shen et al. (2015; secondary metabolites), Zhang et al. (2016; phylogeny), Doilom et al. (2016; phylogeny), holotype of type: J.K. 4332a (IMS), ex-isotype strain J.K.4332b (NY).

Ainoa Lumbsch & I. Schmitt 2001, *Baeomycetaceae*, *Baeomycetales*, *Lecanoromycetes*, three species, type: *A. geochroa* (Körb.) Lumbsch & Schmitt, ascomata apotheciate, conidiomata pycnidial, lichen-forming, saxicolous or terrestrial, worldwide, see Lumbsch and Huhndorf, (2010; outline), Resl et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Aithaloderma Syd. & P. Syd. 1913, *Capnodiaceae*, *Capnodiales*, *Dothideomycetes*, 15 species, type: *A. clavatisporum* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), other recent articles such as Chomnunti et al. (2011), Hyde et al. (2013) and Wijayawardene et al. (2014) did not accept as a genus in *Capnodiaceae*, Kirk et al. (2013; outline, genus accepted), cultures and sequences are unavailable, needs generic revision.

Aivenia Svrček 1977, *Dermateaceae*, *Helotiales*, *Leotiomyces*, four species, type: *A. tantula* Svrček, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ajrekarella Kamat & Kalani 1964, *Ascomycota* genera *incertae sedis*, one species, type: *A. polychaetriae* Kamat & Kalani, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Alanphillipsia Crous & M.J. Wingf. 2013, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomyces*, five species, type: *A. aloes* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes or possibly pathogenic, associated with leaf lesions, South Africa, see Crous et al. (2013, 2014; morphology), Wijayawardene et al. (2016, 2017; outline, morphology, phylogeny), holotype and ex-type culture of type: CBS H-21418, CPC 21298.

Alascospora Raja, Violi & Shearer 2010, *Dothideomyces*, genera *incertae sedis*, one species, type: *A. evergladensis* Raja, Violi & Shearer, asexual morph unknown, saprobes, aquatic, USA, see Raja et al. (2010; morphology), Wijayawardene et al. (2014; outline), holotype of the type: ILL 40789, cultures and sequences are unavailable.

Alatospora Ingold 1942, *Leotiaceae*, *Helotiales*, *Leotiomyces*, four species, type: *A. acuminata* Ingold, hyphomycetous, sexual morph unknown, saprobes, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Baschien et al. (2013; DNA), Kirk et al. (2013; genus accepted), Duarte et al. (2014; DNA), neotype of type: IMI 222997, available cultures of the type: CCM FI2186.

Albertiniella Kirschst. 1936, *Cephalothecaceae*, *Sordariomyces*, families *incertae sedis*, one species, type: *A. reticulata* Kirschst., asexual morph acremonium-like, saprobes, terrestrial, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for the type: NBRC 9424.

Albifimbria L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomyces*, four species, type: *A. verrucaria* (Alb. & Schwein.) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, from soil, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), cultures and sequences are available.

Albonectria Rossman & Samuels 1999, *Nectriaceae*, *Hypocreales*, *Sordariomyces*, type: *A. rigidiuscula* (Berk. & Broome) Rossman & Samuels, one species, asexual morph hyphomycetous, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Zhao et al. (2011; phylogeny), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Albosynnema E.F. Morris 1967, *Bionectriaceae*, *Hypocreales*, *Sordariomyces*, two species, type: *A. elegans* E.F. Morris 1967, asexual morph hyphomycetous, America, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Lombard et al. (2016; phylogeny), cultures and sequence are available, needs generic revision.

Albotricha Raitv. 1970, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, c. 19 species, type: *A. acutipila* (P. Karst.) Raitv., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Alciphila Harmaja 2002, *Ascomycota* genera *incertae sedis*, one species, type: *A. vulgaris* Harmaja, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Aldona Racib. 1900, *Parmulariaceae*, *Dothideomycetes*, families *incertae sedis*, three species, type: *A. stella-nigra* Racib., asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Aldonata Sivan. & A.R.P. Sinha 1989, *Parmulariaceae*, *Dothideomycetes*, families *incertae sedis*, one species, type: *A. pterocarpi* Sivan. & A.R.P. Sinha, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Alectoria Ach. 1810, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, seven species, type: *A. sarmentosa* (Ach.) Ach., with ascomata, but often absent, lichenized (green algae), terrestrial (corticolous, terricolous), widespread, see Halonen et al. (2009; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Divakar et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Aleuria Fuckel 1870, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 17 species, type: *A. aurantia* (Pers.) Fuckel, asexual morph unknown, on soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for the type species.

Aleurina Masee 1898, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, eleven species, type: *A. tasmanica* Masee, asexual morph unknown, on soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

Alfaria Crous, Montano-Mata & Garcia-Jim. 2014, *Hypocreales*, genera *incertae sedis*, *Sordariomycetes*, eight species, type: *A. cyperi-esculenti* Crous, N.J. Montano-Mata & García-Jim., asexual morph coelomycetous, pathogenic, terrestrial, Spain, Italy, see Crous et al. (2014; morphology of sexual morph), Lombard et al. (2016; phylogeny, new species), Wijayawardene et al. (2016, 2017; morphology of asexual morph, phylogeny), ex-type strains of type: CPC 23153; holotype CBS H-21703.

Alfariaclediella Crous & R.K. Schumach. 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *A. spartii* Crous & R.K. Schumach., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Hernández-Restrepo et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and culture ex-type culture of the type: CBS H-22655, CPC 24966.

Algincola Velen. 1939, *Helotiales*, genera *incertae sedis*, three species, type: *A. quercina* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Algonquinia R.F. Castañeda & W.B. Kendr. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *A. inflata* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Canada, see Castañeda and Kendrick (1991; morphology), holotype of the type: INIFAT C89/401, cultures and sequences are unavailable, compare with *Catenocuneiphora*, *Hormomyces* and *Sphaerosporium*.

Alina Racib. 1909, *Parodiopsidaceae*, *Dothideomycetes*, families *incertae sedis*, one species, type: *A. jasmini* Racib., asexual morph hyphomycetous, parasitic on living leaves of *Jasminum* spp., Buitenzorg, Indonesia, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, re-collection and revision required.

Aliquandostipite Inderb. 2001, *Aliquandostipitaceae*, *Jahnulales*, *Dothideomycetes*, seven species, type: *A. khaoyaiensis* Inderb., asexual morph unknown, saprobes, freshwater, Australia, China, Costa Rica, Egypt, Panama, Thailand, Venezuela, USA, see Schoch et al. (2009; phylogeny), Shearer et al. (2009; phylogeny), Suetrong et al. (2010; outline, phylogeny), Suetrong et al. (2011; morphology, phylogeny), Raja et al. (2011; phylogeny), Liu et al. (2015; morphology), holotype and ex-type culture of the type: UBC F13875, CBS 118232.

Alisea Dupont & E. B. G. Jones 2009, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species (est. spp. five), type: *A. longicolla* Dupont & Jones, asexual morph unknown, saprobes, marine, ascomata on deep sea sunken wood, south Pacific Ocean and South China Sea, see Dupont et al. (2009; taxonomy), Jones et al. (2015; outline), Maharachchikumbura et al. (2016; outline), holotype of type: PC 0115840.

Allantonectria Earle 1901, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, type: *A. yuccae* Earle, four species, asexual morph hyphomycetous, terrestrial, saprobes, cosmopolitan, see Grafenhan et al. (2011; DNA, phylogeny), Zheng et al. (2012; new species), Hirooka et al. (2012; monograph), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Allantoparmelia (Vain.) Essl. 1978, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *A. alpicola* (Th. Fr.) Essl., all with ascomata (but often absent), lichenized (green algae), terrestrial (saxicolous, rarely terricolous), boreal or arctic alpine in Northern Hemisphere, see Crespo et al. (2010a; phylogeny), Lumbsch and Huhndorf (2010; outline), Spribille et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; DNA, phylogeny), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

Allantophomopsiella Crous 2014, *Phacidiaceae*, *Phacidiales*, *Leotiomycetes*, one species, type: *A. pseudotsugae* (M. Wilson) Crous, saprobes, Europe, see Crous et al. (2014; morphology, phylogeny), reference specimen and culture of type: CBS H-15946, culture CBS 562.63.

Allantophomopsis Petr. 1925, *Phacidiaceae*, *Phacidiales*, *Leotiomycetes*, eight species, type: *Allantophomopsis cytisporea* (Fr.) Petr., asexual morph unknown, saprobes, terrestrial, worldwide, see Crous et al. (2014, 2015; phylogeny), Wijayawardene et al. (2017; outline), ex-epitype culture of the type: CPC 24977.

Allantoporthe Petr. 1921, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *A. leucothoës* Lar.N. Vassiljeva, asexual morph unknown, saprobes, terrestrial, North America, see Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Alloarthopyrenia Phukhamsakda, Lücking & K.D. Hyde 2016, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, one species, type: *A. italica* Phukhamsakda, Camporesi, Ariyawansa & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Hyde et al. (2016; taxonomy, phylogeny), holotype of the type: MFLU 15-0399.

Alloascoidea Kurtzman & Robnett 2013, *Alloascoideaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *A. africana* (L.R. Batra & Francke-Grosm.) C.P. Kurtzman & C.J. Robnett, asexual morph unknown (budding of cells and formation of true hyphae), saprophytes, from trees and associated insects, terrestrial, Europe, Africa, see Kurtzman and Robnett (2013; taxonomy), cultures and sequences are available.

Allocicium M.Prieto & Wedin 2016, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *A. adaequatum* (Nyl.) M. Prieto and Wedin., lichenized, see Prieto and Wedin (2016; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available.

Allocetraria Kurok. & M.Y.Lai 1991, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, nine species, type: *A. stracheyi* (C. Bab.) Kurok. & M.J. Lai; lichenized; see Thell et al. (2009;

DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; DNA, phylogeny), Miadlikowska et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

Alloconiothyrium Verkley, Göker & Stielow 2014, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. aptrootii* Verkley & Stielow, coelomycetous, sexual morph unknown, from soil, Papua New Guinea, see Verkley et al. (2014; morphology, phylogeny); Wijayawardene et al. (2016; morphology, phylogeny), holotype and ex-type culture of type species CBS H-21035, CBS 980.95.

Allonecte (Pat.) Syd. 1939, *Dothideomycetes* genera *incertae sedis*, one species, type: *A. lagerheimii* (Pat.) Syd. (= *Broomella lagerheimii* Pat. 1895), asexual morph coelomycetous, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Alloneottiosporina Nag Raj 1993, *Ascomycota* genera *incertae sedis*, two species, type: *A. carolinensis* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BPI 1110181.

Allophaeosphaeria Ariyaw., Camporesi & K.D. Hyde 2015, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *A. muriformia* Ariyawansa, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Europe, see Ariyawansa et al. (2015; new species, phylogeny), Liu et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016; outline), holotype and ex-type cultures of the type: MFLU 15-0067, MFLUCC 13-0349.

Allophoma Q. Chen & L. Cai 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, six species, type: *A. tropica* (R. Schneid. & Boerema) Q. Chen & L. Cai, coelomycetous, saprobes, ?pathogens, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), isotype and ex-isotype culture of the type: CBS H-7629, CBS 436.75.

Allophoron Nádv. 1942, *Ascomycota* genera *incertae sedis*, one species, type: *A. farinosum* Nádv., asexual morph unknown, lichenized, terrestrial, Colombia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Allophylaria (P. Karst.) P. Karst. 1870, *Helotiaceae*, *Helotiales*, *Leotiomyces*, six species, type: *X. sticticum* (Fr.) Wallr., asexual morph unknown, saprobes, terrestrial, China, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Allosoma Syd. 1926, *Englerulaceae*, *Dothideomycetes* family *incertae sedis*, four species, type: *A. cestri* Syd., asexual morph hyphomycetous, epiphytic on leaves or saprobes on dead stems, North and South America, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2014a), cultures and sequences are unavailable, needs generic revision, Holotype of type: GZU157-80.

Allothyria Bat. & J.L. Bezerra 1964, *Ascomycota* genera *incertae sedis*, one species, type: *A. serjaniae* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Allothyriopsis Bat., Cif. & H. Maia 1959, *Ascomycota* genera *incertae sedis*, one species, type: *A. landolphiae* Bat., Cif. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, Ghana, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Alnecium Voglmayr & Jaklitsch 2014, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *A. auctum* (Berk. & Broome) Voglmayr & Jaklitsch, asexual morph unknown, saprobes, terrestrial, Europe, see Voglmayr and Jaklitsch (2014; taxonomy, phyloeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Alpakesa Subram. & K. Ramakr. 1954, *Ascomycota* genera *incertae sedis*, four species, type: *A. yuccifolia* (J.G. Hall) Subram. & K. Ramakr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, Thiwan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), available specimens of type: IMI 177975, cultures are unavailable.

Alpakesiopsis Abbas, B. Sutton, Ghaffar & A. Abbas 2003, *Ascomycota* genera *incertae sedis*, one species, type: *A. ghaffarii* Abbas, B. Sutton & Al. Abbas, coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2017; outline), holotype of the type: IMI 202284, cultures are unavailable.

Alpestrisphaeria Thambugala & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. terricola* (G.S. Gong) Thambugala & K.D. Hyde, asexual morph unknown, associated with soil, China, see Thambugala et al. (2015b; phylogeny), ex-type culture of type: SC-12.

Alternaria Nees 1817 (= *Allewia* E.G. Simmons 1990 fide Wijayawardene et al. 2014; Rossman et al. 2015), *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, 663 species, type: *A. alternata* (Fr.) Keissl., sexual morph *Lewia*, saprobes, plant and animal pathogens, terrestrial, worldwide. See Ostry (2008; *Alternaria* mycotoxins), Flors et al. (2008; cell signalling), Aly et al. (2008; cytotoxic metabolites), Pastor and Guarro (2008; infections), Avenot et al. (2008; succinate dehydrogenase mutation), Saravanakumar et al. (2008; competition for host), Wang et al. (2008; biocontrol), Andersen et al. (2008; metabolite profiling), Tabar et al. (2008; immunotherapy), Avenot et al. (2008; fungicidal resistance), Azcarate et al. (2008; toxins), Bartra et al. (2008; respiratory allergy), Craven et al. (2008; Anastomosis), Sabirov et al. (2008; nasal polyposis), Lawrence et al. (2008; pathogenicity review), Cota et al. (2008; Altenusin), Kumar et al. (2008; variability, India), Miyamoto et al. (2008; ACT-toxin biosynthesis), Véléz et al. (2008; Mannitol biosynthesis), Perello et al. (2008; Argentina, black point of wheat), Rosenzweig et al. (2008; sensitivity to azoxystrobin), Harimoto et al. (2008; AMT2 gene), Schmechel et al. (2008; environmental immunoassays), Park et al. (2008; phylogeny), Parada et al. (2008; toxin from germinating spores), Grinn-Gofroń and Strzelczak (2008; meteorological factors), Pasche and Gudmestad (2008; F129L mutation), Kumar et al. (2008; host resistance), Yuan et al. (2008; Tricycloalternarenes), Logrieco et al. (2009; pathogenicity review), Latha et al. (2009; host resistance induction), Lee et al. (2009; protein disruption study), Pogány et al. (2009; biochemistry), Kjer et al. (2009; phenolic extrolites), Mishra et al. (2009; inhibition by *Cinnamomum*), Kobayashi et al. (2009; hypersensitivity), Hadizadeh et al. (2009; antifungal activity), Andrew et al. (2009; phylogeny), Lin et al. (2009; pathological mechanism), Tu (2009; keratitis), Avenot et al. (2009; protein mutation), Ali et al. (2009; malachite green degradation), Pedras et al. (2009; review), Siegel et al. (2009; HPLC, MS), Grinn-Gofroń and Rapiejko (2009; Poland), Aoki et al. (2009; mycovirus), Wight et al. (2009; biochemistry), Fawzi et al. (2009; antifungal effects), Wang et al. (2009; Cerebrosides), Gu (2009, Bioactive metabolites), Andersen et al. (2009; polyphasic taxonomy), Phuwapraisirisan et al. (2009; antitumour metabolites), Yang et al. (2009; AP1 pathway study), Cho et al. (2009; virulence factors), Fernandes et al. (2009; fermentation extract activity), Wang et al. (2009; Postharvest biocontrol), Stępańska and Wołek (2009; Intradialurnal periodicity), Hedayati et al. (2009; IgE analysis), Nallathambi et al. (2009; Trichoderma effects), Gao et al. (2009; Perylene derivatives), Badali et al. (2009; drug activity), Anand et al. (2009; host resistance), Pose et al. (2009; growth factors), Kim et al. (2009; Alternaramide), Miyamoto et al. (2009; gene function), Evidente et al. (2009; Alternethanoxins), Hipolito et al. (2009; brain abscess), Kasahara et al. (2010; Solanapyrone

synthase), Mukherjee et al. (2010; infection proteomics), Wolf et al. (2010; CO₂ effects), Imazaki et al. (2010; peroxisomes), Lin and Chung (2010; signaling pathways), Ntui et al. (2010; wasabi defensin gene), Horsfield et al. (2010; fungicides), Randriamanantany et al. (2010; allergic rhinitis), Siegel et al. (2010; tenuazonic acid), Boyce et al. (2010; Phaeohyphomycosis), Kilic et al. (2010; effect on children), Lin et al. (2010; FUS3 MAPK pathway), Dellavalle et al. (2011; antifungal activity), Kuna et al. (2011; immunotherapy), Boitano et al. (2011; molecular pathogenesis), Dey et al. (2011; lipid profiling), Song et al. (2011; Abscisic acid resistance), Huang et al. (2011; bianthraquinone derivatives), Escuredo et al. (2011; meteorological factors), Joubert et al. (2011; stress adaptation), Sinha and Chattopadhyay (2011; host proteome profile), Lin et al. (2011; pathogenicity), Joubert et al. (2011; pathogenicity), Yago et al. (2011; cell signalling), Noser et al. (2011; UPLC-MS/MS), Karaoglanidis et al. (2011; QoI fungicides resistance), Zheng et al. (2012; bioactive metabolites), Doherty et al. (2012; immunology), Fleck et al. (2012; toxins in mammals), Nowicki et al. (2012; crucifers host), Chruszcz et al. (2012; allergen), Pane et al. (2012; whey compost-tea control), Matsuwaki et al. (2012; immunological pathway), Recio et al. (2012; spore fluctuation), Skjøth et al. (2012; Copenhagen), Yang and Chung (2012; stress resistance), Hu et al. (2012; Genomic characterization), Cho et al. (2012; Amr1), Fuiano et al. (2012; nasal IgE measurement), Asam et al. (2012; mycotoxin in food), Sarkar et al. (2012; Au nanoparticles), Twaroch et al. (2012; vaccine candidates), Chhikara et al. (2012; host resistance), Saha et al. (2012; biochemistry), Woudenberg et al. (2013; review), Tsuge et al. (2013; toxins), Lawrence et al. (2013; phylogeny), Lou et al. (2013; metabolites review), Jia et al. (2013; host pathogen interaction), Prella et al. (2013; toxin detection in food), Müller and Korn (2013; mycotoxins in wheat), Chakraborty et al. (2013; congo red dye degradation), Mangain et al. (2013; pathogenicity), Snelgrove et al. (2014; immunology), Wijayawardene et al. (2014; nomenclature), Woudenberg et al. (2014; review), Ouda (2014; nanoparticle effect), Rossman et al. (2015; nomenclature), Templeton (2016, pathogenesis), Meena et al. (2016; mustard disease), Zhang et al. (2017; LAMP), Molecular data available for most of the species, including type species; GenBank Number NR_131316. Epitype and ex-epitype of type species IMI 254138; CBS 916.96.

Alternariaster E.G. Simmons 2007, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *A. helianthi* (Hansf.) E.G. Simmons, hyphomycetous, sexual morph unknown, pathogens, Brazil, see Alves et al. (2013; new species, morphology, phylogeny), Hyde et al. (2013; accepted as a genus in Pleosporaceae), Wijayawardene et al. (2014; outline), Woudenberg et al. (2014; phylogeny), cultures and sequences are available.

Alveariospora Meir. Silva, R.F. Castañeda, O.L. Pereira & R.W. Barreto, *Ascomycota* genera *incertae sedis*, one species, type: *A. distoseptata* Meir. Silva, R.F. Castañeda, O.L. Pereira & R.W. Barreto, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Silva et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: VIC 31399, cultures and sequences are unavailable, compare with *Annellophragmia*, *Annellosympodia* and *Spiropes*.

Alveophoma Alcalde 1952, *Ascomycota* genera *incertae sedis*, one species, type: *A. caballeroi* Alcalde, coelomycetous, sexual morph unknown, saprobes, Spain, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need further revisions.

Alysidiella Crous 2006, *Dothideomycetes* genera *incertae sedis*, four species, type: *A. parasitica* Crous, hyphomycetous, sexual morph unknown, pathogens, Cyprus, South Africa, Uruguay, see Cheewangkoon et al. (2010; morphology, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type culture of type: CBS H-19742, CPC 12835.

Alysiidiopsis B. Sutton 1973, *Ascomycota genera incertae sedis*, hyphomycetous, five species, type: *A. pipsissewae* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need further revisions.

Alyxoria Ach. 1821, *Lecanographaceae*, *Arthoniales*, *Arthoniomycetes*, twelve species (many additional species in the tropics; revision needed), type: *A. varia* (Pers.) Ertz & Tehler, lichenized, see Ertz and Tehler (2011; taxonomy, phylogeny), Diederich et al. (2012; taxonomy, checklist), Lücking et al. (2016; classification), sequences are available.

Amallospora Penz. 1897, *Ascomycota genera incertae sedis*, one species, type: *A. dacrydion* Penz., hyphomycetous, sexual morph unknown, saprobes, Java, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need further revisions.

Amandinea M.Choisy ex Scheid. & M. Mayrhofer 1993, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 35 species, type: *A. conioops* (Wahlenb.) M. Choisy ex Scheid. & H. Mayrhofer, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; outline, genus accepted), Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Prieto and Wedin (2016; phylogeny), Lücking et al. (2016; classification), sequences are available.

Amarenographium O.E. Erikss. 1982 (= *Amarenomyces* O.E. Erikss. 1981 *vide* Rossman et al. 2016), ?*Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *A. metableticum* (Trail) Erikss., asexual morph coelomycetous, sexual morph unknown, endophytic and saprobes, China, Saudi Arabia, Sweden, Italy, see Abdel-Wahab et al. (2012; morphology, phylogeny); Wijayawardene et al. (2016; morphology, phylogeny), Rossman et al. (2016; nomenclature), cultures and sequences are available but lacks for the type.

Amaurascopsis Guarro, Gené & De Vroey 1992, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, asexual morph unknown, two species, type: *A. perforata* Guarro, Gené & De Vroey, saprobes, from chicken yard soil, Burundi, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2015; phylogeny).

Amauroascus J. Schröt. 1893, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, 14 species, type: *A. verrucosus* (Eidam) J. Schröt., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Sigler et al. (2013; DNA), cultures and sequences are available but lacks for the type.

Amazonia Theiss. 1913, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, more than 70 species, type specie: *A. psychotriae* (Henn.) Theiss., asexual morph unknown, pathogens causing black mildew disease, terrestrial, tropical and subtropical distribution, see Hosagoudar and Archana (2009; host distribution in India), Lumbsch and Huhndorf (2010; outline), Hosagoudar et al. (2010; new species, morphology), Housagoudar and Robin (2011; new species, morphology), Hosagoudar (2013a, b; new species, morphology), LSU sequence are available for *A. acacia*.

Amazonomyces Bat. 1964, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *A. palmae* Bat. & Cavalc., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Amazonotheca Bat. & H. Maia 1959, *Schizothyriaceae*, *Dothideomycetes* family *incertae sedis*, one species, type: *A. santiriae* Bat. & H. Maia, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Amazonotrema Kalb & Lücking 2009, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *A. nigrum* Kalb & Lücking, asexual morph unknown, lichenized, terrestrial,

tropical, see Kalb (2009; new records), Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; classification), Lücking et al. (2016; classification), sequences unavailable.

Aambarignomonía Sogonov 2008, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *A. petiolorum* (Schwein.) Sogonov, asexual morph unknown, saprobes, USA, see Sogonov et al. (2008; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Ambrodiscus S.E. Carp. 1988, *Helotiales*, genera *incertae sedis*, *Leotiomycetes*, one species, type: *A. pseudotsugae* S.E. Carp., asexual morph unknown, on bark beetle galleries, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ambrosiella Brader 1964, *Ceratocystidaceae*, *Microascales*, *Sordariomycetes*, seven species, type: *A. xylebori* Brader, hyphomycetous, obligate, mutualistic symbionts of ambrosia beetles, from bark beetle galleries/ mycangia in Ivory Coast, USA, Africa, Asia, Europe, USA, Japan, Taiwan, terrestrial, polyphyletic, some species belong to *Ophiostomataceae*, see Six et al. (2009; new species), Alamouti et al. (2009; phylogeny), Harrington et al. (2010; taxonomic revisions and new combinations), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Harrington et al. (2014; *Ambrosiella roeperi* sp. nov.), Maharachchikumbura et al. (2016; outline), isotype strain of type: = CBS 110.61, sequences are available at GenBank from Alamouti et al. (2009).

Ambrosiozyma Van der Walt 1972, *Saccharomycopsidaceae*, *Saccharomycetales*, *Saccharomycetes*, six species, type: *A. monospora* (Saito) Van der Walt 1972, yeast or yeast-like, fungal symbionts of ambrosia beetles, widespread, see Endoh et al. (2008; phylogeny), Kirk (2013; genus accepted), Kurtzman and Robnett (2013; phylogeny), ex-type strains of type: CBS 2554.

Ameghiniella Spæg. 1887, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *A. australis* Spæg., asexual morph unknown, bark beetle galleries, terrestrial, North and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

Ameliella Fryday & Coppins 2008, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *A. andreaeicola* Fryday & Coppins, lichenized, see Fryday and Coppins (2008; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Ameroconium U. Braun & Zhurb. 2013, *Ascomycota* genera *incertae sedis*, one species, type: *A. hansfordii* Syd., hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, cosmopolitan, see Zhurbenko and Braun (2013; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: LE 260838, cultures and sequences are unavailable, needs generic revision.

Amerodiscosiella Farr 1961, *Ascomycota* genera *incertae sedis*, one species, type: *A. renispora* M.L. Farr 1961, coelomycetous, sexual morph unavailable, saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amerodiscosiellina Bat. & Cavalc. 1966, *Ascomycota* genera *incertae sedis*, one species, type: *A. annonacearum* Bat. & Cavalc., coelomycetous, sexual morph unavailable, saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ameromassaria Hara 1918, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. japonica* Hara, asexual morph unknown, pathogens, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013 genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Ameromassaria Hara 1918, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. japonica* Hara, asexual morph unknown, pathogen, terrestrial, Japan, see Lumbsch and

Huhndorf (2010), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), cultures and sequences are unavailable, needs generic revision.

Amerosporiopsis Petr. 1941, *Ascomycota* genera *incertae sedis*, one species, type: *A. gaubae* Petr., coelomycetous, sexual morph unavailable, saprobes, Iran, See Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amerosympodula Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *A. malaysiana* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amicodisca Svrček 1987, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, six species, type: *A. brdensis* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Han et al. (2011, 2014; new species, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

Amniculicola Y. Zhang ter & K.D. Hyde 2008 (= *Anguillospora* Ingold 1942 *fide* Rossman et al. 2016), *Amniculicolaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *A. lignicola* Y. Zhang ter & K.D. Hyde, asexual morph hyphomycetous, saprobes in freshwater habitats, Europe, see Zhang et al. (2008, 2009, 2012; taxonomy, phylogeny), Wijayawardene et al. (2012, 2014), Wanasinghe et al. (2015; phylogeny), Rossman et al. (2016; nomenclature), sequence are available for all species, holotype of type: PC 0092661.

Amoenodochium Peláez & R.F. Castañeda, *Ascomycota* genera *incertae sedis*, one species, type: *A. humicola* Peláez & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), holotype of the type: MA-33881, cultures and sequences are unavailable, compare with *Acanthodochium*, *Asperisporium*, *Megalodochium* and *Polythrincium*.

Amoenomyces R.F. Castañeda, Saikawa & Hennebert, *Ascomycota* genera *incertae sedis*, one species, type: *A. catenosporus* R.F. Castañeda, Saikawa & Hennebert, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C94/192, cultures and sequences are unavailable, compare with *Alternaria*, *Embellisia* and *Parapithomyces*.

Amorosia Mantle & D. Hawksw. 2006, *Amorosiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. littoralis* Mantle & D. Hawksw., hyphomycetous, sexual morph unknown, recovered from intertidal sediments, The Bahamas, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Jones et al. (2015; outline of marine genera), Thambugala et al. (2015; phylogeny), holotype of the type: K(M) 139387, cultures and sequences are available, AM292047 (ITS).

Amorphomyces Thaxt. 1893, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, ten species, type: *A. falagriae* Thaxt., asexual morph unknown, dioecious, biotrophic on *Coleoptera* (Staphylinidae), terrestrial, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amorphotheca Parbery 1969, *Amorphothecaceae*, *Leotiomyces*, families *incertae sedis*, one species, type: *A. resinae* Parbery, asexual morph unknown, saprobes on resins, hydrocarbons, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wang et al. (2015; applications), cultures available for the type: CBS 184.54.

Ampelomyces Ces. ex Schltdl. 1852, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *A. quisqualis* Ces., coelomycetous, sexual morph unknown, fungicolous,

terrestrial, worldwide, see de Gruyter et al. (2009; phylogeny), Park et al. (2010; genetic variability), Wijayawardene et al. (2012, 2014, 2017; taxonomy, phylogeny, outline), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeriaceae*), Verkley et al. (2014; phylogeny), cultures of the type: CBS 131.31, CBS 129.79.

Amphibambusa D.Q. Dai & K.D. Hyde 2015, *Cainiaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *A. bambusicola* Dai & Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Liu et al. (2015; phylogeny, taxonomy), Senanayake et al. (2015; phylogeny), holotype and ex-type culture of type: MFLUCC 11–0617, MFLU 14–0825.

Amphilogia Gryzenh., H.F. Glen & M.J. Wingf. 2005, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *A. gyrosa* (Berk. & Broome) Gryzenh., H.F. Glen & M.J. Wingf., asexual morph coelomycetous, pathogenic, terrestrial, temperate, Sri Lanka and New Zealand, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-epitype strain of the type: CBS H-20178, CMW 10470.

Amphimyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *A. cerylonis* Thaxt., asexual morph unknown, biotrophic on *Coleoptera* from the genus *Cerylon* (Cerylonidae), West Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amphiporthe Petr. 1971 (= *Amphicytostroma* Petr. 1921 *fide* Rossman et al. 2015), *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *A. tiliae* (Sacc.) Petr., asexual morph hyphomycetous, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), Rossman et al. (2015; nomenclature), needs generic revision

Amphirosellinia Y.M. Ju, J.D. Rogers, H.M. Hsieh & Lar.N. Vassiljeva 2004, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, five species, type: *A. nigrospora* Y.M. Ju, J.D. Rogers & H.M. Hsieh, asexual morph unknown, saprobes, terrestrial, north temperate, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: HAST Ju & Hsieh 91092308, sequences are available for the type species.

Amphisphaerella (Sacc.) Kirschst. 1934, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, twelve species, type: *A. amphisphaerioides* (Sacc. & Speg.) Kirschst., asexual morph unknown, North America, Norway, Ivory Coast, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amphisphaerellula Gucevič 1952, *Sordariomycetes*, genera *incertae sedis*, two species, type: *A. fagi* Gucevič, sexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Amphisphaeria Ces. & De Not. 1863, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, 266 species, type: *A. umbrina* (Fr.) De Not., asexual morph coelomycetous, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015, morphology and phylogeny), Maharachchikumbura (2015, 2016; morphology, phylogeny), sequences are available.

Amphisphaerina (Cooke) Höhnelt 1919, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. texensis* (Cooke) Höhnelt, asexual morph unknown, saprobes, terrestrial, USA, See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Amphoropycnium Bat. 1963, *Ascomycota* genera *incertae sedis*, one species, type: *A. philippinense* Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amphorothecium P.M. McCarthy, Kantvilas & Elix 2001, *Ostropales* genera *incertae sedis*, *Lecanoromycetes*, one species, type: *A. occultum* P.M. McCarthy, Kantvilas & Elix, lichenized, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.

Amphorulopsis Petr. 1959, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. polygonacearum* Petr., asexual morph unknown, terrestrial, former Yugoslavia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), needs generic revision.

Ampliotrema Kalb ex Kalb 2006, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 20 spp., type: *A. amplius* (Nyl.) Kalb, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Sipman et al. (2012a; key Costa Rica), Rivas Plata et al. (2012b; phylogeny), Cáceres et al. (2012), Rivas Plata and Lücking (2012; classification), Mercado-Díaz et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Amplistroma Huhndorf, A.N. Mill., Greif & Samuels 2009, *Amplistromataceae*, *Amplistromatales*, *Sordariomycetes*, nine species, type: *A. carolinianum* Huhndorf, A.N. Mill., Greif & Samuels, asexual morph hyphomycetous, acrodontium-like in culture, sexual morph ascomycetes, saprobes, French Guiana, Costa Rica, Spain, Singapore, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura (2015, 2016; morphology, phylogeny), holotype of the type: BPI 878925, sequences are available.

Ampullicephala R.F. Castañeda, Minter & M. Stadler 2009, *Ascomycota* genera *incertae sedis*, one species, type: *A. setiformis* (R.F. Castañeda) R.F. Castañeda, Minter & M. Stadler, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Castañeda et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: INIFAT C85/79, cultures and sequences are unavailable, compare with *Gonatobotryum* and *Gonatobotrys*.

Ampulliferina B. Sutton 1969, *Ascomycota* genera *incertae sedis*, three species, type: *A. persimplex* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: IMI 134269.

Amundsenia Søchting, Garrido-Benavent, Arup & Frödén 2014, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *A. austrocontinentalis* Garrido-Benavent, Søchting, Pérez-Ortega & Seppelt, lichenized, see Søchting et al. (2014b; taxonomy), Lücking et al. (2016; classification), sequences are available.

Amycosphaerella Quaedvl. & Crous 2014, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *A. africana* (Crous & M.J. Wingf.) Quaedvlieg & Crous, asexual morph unknown, pathogens, terrestrial, Australia, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), holotype and ex-type culture of the type: PERTH 05849543, CBS 110500.

Amygdalaria Norman 1853, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, 14 species, type: *A. pelobotryon* (Wahlenb.) Norman, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Lücking et al. (2016; classification), sequences are available.

Amylascus Trappe 1971, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, five species, type: *A. herbertianus* (J.W. Cribb) Trappe, mitotic spore mats reported by Healy et al. (2012), mycorrhizal, Australia, the Americas, see Lumbsch and Huhndorf (2010; outline), Healy et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are for several undescribed species.

Amylis Speg. 1922, *Sordariomycetes* genera *incertae sedis*, one specie, type: *A. memorabilis* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amylocarpus Cur. 1859, Helotiaceae, *Helotiales*, *Leotiomyces*, one species, type: *A. encephaloides* Curr., asexual morph unknown, drift wood, temperate marine waters, saprobe, sequence are available, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rämä et al. (2014; DNA, records in Norway), Jones et al. (2015; outline), cultures and sequences are available.

Amylora Rambold 1994, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, one species, type: *A. cervinocuprea* (Arnold) Rambold, lichenized, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Anabahusakala Carmo, J.S. Monteiro, Gusmão & R.F. Castañeda 2014, *Ascomycota* genera *incertae sedis*, one species, type: *A. amapensis* L.T. Carmo, J.S. Monteiro, Gusmão & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, Brazil, Carmo et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Anacraspedodidymum C.R. Silva, R.F. Castañeda & Gusmão 2014, *Ascomycota* genera *incertae sedis*, two species, type: *A. aquaticum* C.R. Silva, R.F. Castañeda & Gusmão, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Silva et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Anamylopsora Timdal 1991, *Anamylopsoraceae*, *Baeomycetales*, *Lecanoromycetes*, one species, type: *A. pulcherrima* (Vain.) Timdal (*Lecidea pulcherrima* Vain.), lichenized, saxicolous, terricolous, temperate northern hemisphere, type specimen TUR-V-22644 (holotype), sequences are available for the type species, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; phylogenetic placement).

Anaphysmene Bubák 1906, *Ascomycota* genera *incertae sedis*, two species, type: *A. heraclei* (Lib.) Bubák, coelomycetous, sexual morph unknown, Europe, Gautamala see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Anaptychia Körb. (1848), *Physciaceae*, *Caliciales*, *Lecanoromycetes*, *Ascomycota*; 15 species; type: *A. ciliaris* (L.) Körb. ex A. Massal.; lichenized; see Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Miadlikowska et al. (2014; phylogeny), Prieto and Wedin (2016; classification), Lücking et al. (2016; classification), sequences are available.

Anarhyma M.H. Pei & Z.W. Yuan 1986, *Ascomycota* genera *incertae sedis*, one species, type: *A. rhododendri* M.H. Pei & Z.W. Yuan, coelomycetous, sexual morph unknown, saprobes, terrestrial, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Anariste Syd. 1927, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *A. poliothea* Syd., asexual morph unknown, epiphytes, terrestrial, Costa Rica, see Hofmann (2009; review, accepted as a genus in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, keys, transferred to *Micropeltidaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Micropeltidaceae*), placement in *Micropeltidaceae* supported by morphology, syntype of type: BPI 690985, cultures and sequences are unavailable.

Anaselenosporella Heredia, R.F. Castañeda & R.M. Arias 2010, *Ascomycota* genera *incertae sedis*, two species, type: *A. sylvatica* Heredia, Castañeda & Arias, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Mexico, see Castañeda et al. (2010; morphology),

Wijayawardene et al. (2012, 2017; outline), holotype of the type: MUCL 45630, cultures and sequences are unavailable, compare with *Selenosporella* and *Selenosporopsis*.

Anaseptoidium R.F. Castañeda, Heredia & R.M. Arias 2012, *Ascomycota* genera *incertae sedis*, hyphomycetous, sexual morph unknown, one species, type: *A. mycophilum* Castañeda, Heredia & Arias, mycophilous, on synnemata of *Phaeoisaria clavulata*, terrestrial, Mexico, see Castañeda et al. (2012; morphology), Wijayawardene et al. (2017; outline), holotype of type: XAL CB1696, cultures and sequences are unavailable, compare with *Septoidium*.

Ancistrosporella G. Thor. 1995, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *A. australiensis* (G. Thor) G. Thor, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Ancoraspora Mig. Rodr. 1982, *Ascomycota* genera *incertae sedis*, one species, type: *A. cubensis* Mig. Rodr., hyphomycetous, sexual morph unknown, saprobes, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures or cultures and sequences are unavailable, needs generic revision.

Andamanomyces Hosag. 2014, *Asterinales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *A. fragariae* Hosag., S.P. Mathew & D. Babu, asexual morph unknown, epiphytes, biotrophic, terrestrial, India, see Hosagoudar et al. (2014; protologue, accepted as a genus in *Asterinales*), placement in *Asterinales* supported by morphology, holotype of type: TBGT 6666, cultures and sequences are unavailable.

Andreiomyces B.P. Hodk. & Lendemer 2013, *Andreiomycetaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *A. morozianus* (Lendemer) B.P. Hodk. & Lendemer, lichenized, see Hodkinson and Lendemer (2013; taxonomy), Lücking et al. (2016; classification), cultures available for the type: NY1377.

Anema Nyl. ex Forssell 1885, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, ten species, type: *A. decipiens* (A. Massal.) Forssell, with ascomata, lichenized (cyanobacteria), terrestrial (saxicolous), arid, semiarid to warm temperate regions, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), see sequences are available.

Angatia Syd. & P. Syd. 1914, *Saccardiaceae*, *Ascomycota* families *incertae sedis*, five species, type: *A. eugeniae* Syd. & P. Syd., asexual morph unknown, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Angelina Fr. 1849, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *A. rufescens* (Schwein.) Duby, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dermateaceae*), Kirk et al. (2013; genus accepted), Karakehian et al. (2014; DNA, phylogeny), culture available for the type: JK 12040101 (*vide* Karakehian et al. 2014).

Angiactis Aptroot & Sparrius 2008, *Arthoniales* genus *incertae sedis*, *Arthoniomycetes*, three species, type: *A. littoralis* (Kantvilas) Aptroot & Sparrius, lichenized, terrestrial, tropical, see Aptroot et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Angiopomopsis Höhn. 1912, *Ascomycota* genera *incertae sedis*, one species, type: *A. lophostoma* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Java, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Anguillosporella U. Braun 1995, *Ascomycota* genera *incertae sedis*, two species, type: *A. vermiformis* (Davis) U. Braun. hyphomycetous, terrestrial, foliicolous, leaf-spotting, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline),

Kirk et al. (2013; genus accepted), lectotype of type: BPI 442755, cultures and sequences are unavailable, needs generic revision.

Angulospora Sv. Nilsson., 1962, *Ascomycota* genera *incertae sedis*, one species, type: *A. aquatica* Sv. Nilsson, hyphomycetous, sexual morph unknown, aquatic, on submerged decaying wood, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Angustimassarina Thambugala, Kaz. Tanaka & K.D. Hyde 2015, *Amorosiaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *A. populi* Thambugala & K.D. Hyde, asexual morph hyphomycetous, fungicolous or saprobes, terrestrial, Germany and Italy, three species, see Thambugala et al. (2015b; morphology, phylogeny), holotype and ex-type strain of type: MFLU 14–0588, MFLUCC 13–0034.

Angustospora Abdel-Aziz 2016, *Testudinaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. nilensis* Abdel-Aziz, asexual morph unknown, saprobes, aquatic, Egypt, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-isotype culture of the type: MFLU 15-1511, MF804.

Anhelliia Racib. 1900, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, nine species, type: *A. tristis* Racib., asexual morph unknown, parasitic on leaves, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Pinho et al. (2012; morphology, phylogeny), Kirk et al. (2013; genus accepted), Dissanayake et al. (2014; morphology), holotype of the type: F47931.

Aniptodera Shearer & M. A. Mill. 1977, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, c. 16 species (est. spp. 20+), type: *A. chesapeakeensis* Shearer & Mill., asexual morph unknown, saprobes, freshwater, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), ex-type strains of type: CS-97-26 = ATCC 32818, holotype of type: ILLS 36523.

Anisogramma Theiss. & Syd. 1917, *Diaporthales*, genera *incertae sedis*, *Sordariomycetes*, three species, type: *A. virgultorum* (Fr.) Theiss. & Syd., asexual morph unknown, terrestrial, saprobes, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Anisomeridium (Müll. Arg.) M. Choisy 1928, *Monoblastiaceae*, *Monoblastiales*, *Dothideomycetes*, c. 200 species, type: *A. xylogena* Müll. Arg., asexual morph unknown, lichenized, terrestrial, mostly tropical, see Nelsen et al. (2009, 2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Anisomyces Theiss. & Syd. 1914, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, seven species, type: *A. papilloideoseptatus* (Henn.) Theiss. & Syd., asexual morph unknown, saprobes?, terrestrial, tropical America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, needs generic revision.

Anisomyopsis I. Hino & Katum. 1964, *Diaporthales*, genera *incertae sedis*, *Sordariomycetes*, one species, type: *A. rosae* I. Hino & Katum., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Anisostagma K.R.L. Petersen & Jørg. Koch 1996, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *A. rotundatum* K.R.L. Petersen & Jørg. Koch, asexual morph unknown, saprobes, marine, Denmark, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: K. R. L. Petersen 9 slides numbered 1-9, Herbarium C, Copenhagen, cultures and sequences are unavailable, needs generic revision.

Annellodentimyces Matsush. 1985, *Ascomycota* genera *incertae sedis*, one species, type: *A. antennatuloideus* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Annellodochium Deighton 1969, *Ascomycota* genera *incertae sedis*, one species, type: *A. ramulisporum* Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Annellolacinia B. Sutton 1964, *Discosiaceae*, *Amphisphaeriales*, *Sordariomycetes*, two species, type: *A. dinemasporioides* B. Sutton, coelomycetous, sexual morph unknown, pathogens, Ghana, Sierra Leone, Trinidad, India, Australia, cultures and sequences are unavailable, see Wijayawardene et al. (2012, 2016, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI37897c.

Annellophora S. Hughes 1952, (Replaced synonym: *Chaetotrichum* Syd. 1927), *Ascomycota* genera *incertae sedis*, 13 species, type: *A. solani* (Syd.) S. Hughes 1952, hyphomycetous, sexual morph unknown, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Annellophorella Subram. 1962, *Ascomycota* genera *incertae sedis*, five species, type: *A. densa* (Syd. & P. Syd.) Subram., hyphomycetous, sexual morph unknown, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequence are unavailable, needs generic revision.

Annellophragmia Subram. 1963, *Ascomycota* genera *incertae sedis*, one species, type: *A. coonoorensis* (Subram.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Annellospermosporella P.R. Johnst. 1999, *Ascomycota* genera *incertae sedis*, one species, type: *A. meliolinae* P.R. Johnst., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Annellosympodia McTaggart, R.G. Shivas & U. Braun 2007, *Ascomycota* genera *incertae sedis*, one species, type: *A. orbiculata* McTaggart, Shivas & Braun, hyphomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: PERTH 03270173, isotype BRIP 49805, paratype BRIP 19908, living cultures unavailable.

Annellosympodiella Crous & Assefa 2014, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *A. juniperi* Crous & Assefa, asexual morph unknown, saprobes, terrestrial, Ethiopia, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), holotype of the type: CBS H-21706, ex-type strain of type: CPC 23276.

Annulatascus Ces. & De Not. 1863, *Annulatascaceae*, *Annulatascales*, *Sordariomycetes*, c. 19 species, type: *A. velatispora* K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Luo et al. (2015; taxonomy), Dayarathne et al. (2016a; DNA), holotype of type: BRIP 17373; epitype MFLU 16-2204.

Annulohyphoxylon Y.M. Ju, J.D. Rogers & H.M. Hsieh 2005, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *A. truncatum* (Schwein.) Y.M. Ju, J.D. Rogers & H.M.

Hsieh, four species, asexual morph hyphomycetous, terrestrial, saprobes, Europe, North America, see Marinowitz et al. (2008; new species, South Africa), Hladki and Romero (2009; new species), Lumbsch and Huhndorf (2010; outline), Pereira et al. (2010; new species, Brazil), Liu et al. (2015; new species), Li et al. (2016; new species, Thailand), Maharachchikumbura et al. (2015, 2016; outline), Kuhnert et al. (2017; new species, revision), cultures and sequences are available.

Annulusmagnus J. Campb. & Shearer 2004, *Annulatasceae*, *Annulatascales*, *Sordariomycetes*, one species, type: *A. triseptatus* (Wong, Hyde & Jones) Campb. & Shearer, asexual morph unknown, saprobes, aquatic, Australia, Canada, USA, see Réblová et al. (2012; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), neotype of the type: HKU889, cultures available CBS 128831.

Anomalemma Sivan. 1983 (= *Exosporiella* P. Karst. 1892), *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. epochnii* (Berk. & Broome) Sivan., asexual morph *Exosporiella* P. Karst., saprobes, terrestrial, United Kingdom, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology; nomenclature; phylogeny), Wijayawardene et al. (2016; phylogeny; coelomycetous taxa), cultures and sequences of type: are unavailable, needs generic revision.

Anomalographis Kalb 1992, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *A. madeirensis* (Tav.) Kalb, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Anomomorpha Nyl. ex Hue 1891, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, eight species, type: *A. turbulenta* (Nyl) Hue, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Lücking et al. 2016 (classification), sequences are unavailable.

Anopeltis Bat. & Peres 1960, *Dothideomycetes*, genera *incertae sedis*, one species, type: *A. venezuelensis* Bat. & Peres, asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Capnodiaceae), Hyde et al. (2013) did not accept as a genus in Capnodiaceae, Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Anopodium N. Lundq. 1964, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, two species, type: *A. ampullaceum* N. Lundq., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kruys et al. (2015; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for voucher E00218015 of the type: (fide Kruys et al. 2015).

Antarctomyces Stchigel & Guarro 2001, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, one species, type: *A. psychrotrophicus* Stchigel & Guarro, asexual morph sporothrix-like, saprobes, terrestrial, Antarctica, see Lumbsch and Huhndorf (2010; outline), Ziao et al. (2010; antifreeze proteins), Kirk et al. (2013; genus accepted), Bansal et al. (2014; antifreeze proteins), cultures and sequences are available.

Anteaglonium Mugambi & Huhndorf 2009, *Anteaglioniaceae*, *Pleosporales*, *Dothideomycetes*, six species, type: *A. abbreviatum* (Schwein.) Mugambi & Huhndorf, asexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Mugambi and Huhndorf (2009, taxonomy), Mugambi and Huhndorf (2010; outline), Almeida et al. (2014, new species), Jayasiri et al. (2016b, new species, asexual morph of this genus and reference specimens), Hyde et al. (2013, included in to new family, Anteaglioniaceae), Wijayawardene et al. (2014; outline), cultures available for the type: ANM 925aT (Mugambi and Huhndorf 2009).

Antennatula Fr. ex F. Strauss 1850, Euantennariaceae, *Dothideomycetes*, families *incertae sedis*, ten species, type: *A. pinophila* Fr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Antennopsis R. Heim 1952, *Ascomycota* genera *incertae sedis*, three species, type: *A. gallica* R. Heim & Buchli ex R. Heim, hyphomycetous, sexual morph unknown, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Antennospora Meyers 1957, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *A. caribbea* Meyers, asexual morph unknown, saprobes, marine, worldwide, see Pang et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Antennulariella Woron. 1915 (= ?*Antennariella* Bat. & Cif., *Capnodendron* S. Hughes 1963 *fide* Wijayawardene et al. 2014), *Antennulariellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *A. fuliginosa* Woron., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Antennulariellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, treated *Antennariella* Bat. & Cif. and *Capnodendron* S. Hughes as synonyms), Rossman et al. (2015) did not agree with Wijayawardene et al. (2014), cultures and sequences are unavailable, needs generic revision.

Anthoanalis Daranagama, Camporesi & K.D. Hyde 2015, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *A. sparti* Daranag., Camporesi & K.D. Hyde, asexual morph nodulisporium-like, saprobes, terrestrial, Europe, see Daranagama et al. (2015), Maharachchikumbura et al. (2015, 2016), holotype and ex-type strains of type: MFLU 14–0225, MFLUCC 14–0010.

Anthopsis Fil. March., A. Fontana & Luppi Mosca 1977, *Ascomycota* genera *incertae sedis*, three species, type: *A. deltoidea* Fil. March., A. Fontana & Luppi Mosca, asexual morph hyphomycetous, Europe, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequence are unavailable, needs generic revision.

Anthostomaria (Sacc.) Theiss. & Syd. 1918, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. apogyra* (Nyl.) Theiss. & Syd., asexual morph unknown, lichenicolous, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), needs generic revision.

Anthostomellina L.A. Kantsch. 1928, *Sordariomycetes* genera *incertae sedis*, two species, type: *A. carpineae* L.A. Kantsch., asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), needs generic revision.

Anthracobia Boud. 1885, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 20 species, type: *A. melaloma* (Alb. & Schwein.) Boud., scytalidium-like asexual morph has been reported, saprobes, terrestrial, on burnt soil, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hansen et al. (2013; phylogeny)

Anthracocarpon Breuss 1996, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, three species, type: *A. virescens* (Zahlbr.) Breuss, lichenized, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available for voucher M. Prieto 530 of the type: (*fide* Prieto et al. 2012).

Anthracoderma Speg. 1888, *Ascomycota* genera *incertae sedis*, three species, type: *A. hookeri* Speg., coelomycetous, sexual morph unknown, South America see Wijayawardene et

al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Anthracothecium Hampe ex A. Massal. 1860, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, five species, type: *A. doleschallii* A. Massal., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Aptroot (2012; key), Weerakoon et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Gueidan et al. (2016; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species.

Antimanoa Syd. 1930, *Ascomycota* genera *incertae sedis*, one species, type: *A. grisleae* Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Antoniomyces Inácio 2012, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, one species, type: *A. loranthicola* Inácio, Araúz & M. Piepenbr., asexual morph unknown. epiphytes, terrestrial, Panama, see Inácio et al. (2012; protologue, accepted as a genus in *Parmulariaceae*), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), placement in *Parmulariaceae* supported by morphology, holotype of type: PMA, cultures and sequences are unavailable, needs generic revision.

Anungitea B. Sutton 1973, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, 17 species, type: *A. fragilis* B. Sutton, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014, 2016; new species), cultures and sequences are available but lacks for the type species, needs generic revision.

Anungitopsis R.F. Castañeda & W.B. Kendr. 1990, *Ascomycota* genera *incertae sedis*, type: *A. speciosa* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: INIFAT C88/275, sequences are available, compare with *Anungitea* and *Iyengarina*.

Anzia Stizenb. 1861, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, c. 25 species, type: *A. colpodes* (Ach.) Stizenb., with ascomata, lichenized (green algae), terrestrial, tropical to subtropical, see Crespo et al. (2010a; phylogeny), Lumbsch and Huhndorf (2010; outline), Jayalal et al. (2012; new species), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Divakar et al. (2015; phylogeny), Wang et al. (2015; new species), Lücking et al. (2016; classification), sequences are available.

Anzina Scheid. 1982, *Ostropales* family *incertae sedis*, *Lecanoromycetes*, one species, type: *A. carneonivea* (Anzi) Scheid., lichenized, terrestrial, Eurasia, see Lumbsch and Huhndorf (2010; outline), Yu-liang et al. (2012; China), Kirk et al. (2013; genus accepted), Resl et al. (2015; phylogeny), Lücking et al. (2016; classification); sequences are available.

Aoria Cif. 1962, *Ascomycota* genera *incertae sedis*, one species, type: *A. amphistroma* Cif., coelomycetous, sexual morph unknown, Dominican Republic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Aparaphysaria Speg. (1922), *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *A. doelloi* Speg., asexual morph unknown, terrestrial, South America, Tierra del Fuego, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Apatelomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *A. ogmocerii* Thaxt., asexual morph unknown, biotrophic only host known is *Ogmocerus* sp. (Coleoptera, Pselaphidae), Afrotropical, Liberia, see Lumbsch and Huhndorf

(2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Apatomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *A. laboulbenioides* Thaxt., asexual morph unknown, dioecious, biotrophic only host known is *Tachys ceylonicus* Nietn. (Coleoptera, Carabidae), Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Apatoplaca Poelt & Hafellner 1980, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *A. oblongula* (H. Magn.) Poelt & Hafellner, lichenized, see Vondrák et al. (2012; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Apenidiella Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *A. strumelloidea* (Milko & Dunaev) Quaedvlieg & Crous, hyphomycetous, sexual morph unknown, pathogens, terrestrial, Russia, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (phylogeny, nomenclature), holotype of the type: BKMF-2534, ex-type strain of type: CBS 114484.

Aphanandromyces W. Rossi 1982, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *A. audisioi* W. Rossi, asexual morph unknown, biotrophic only host known is *Brachypterus urticae* (Coleoptera, Kateretidae), Europe, temperate to cool, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aphanofalx B. Sutton 1986, *Ascomycota* genera *incertae sedis*, two species, type: *A. mali* B. Sutton, coelomycetous, sexual morph unknown, saprobes, Pakistan, Zambia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revisions, holotype of the type: IMI293036.

Aphanophora Réblová & Unter. 2013, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, three species, type: *A. eugeniae* (Crous & Alfenas) Réblová & Unter., hyphomycetous, sexual morph unknown, from living leaves of *Eugenia uniflora*, terrestrial, Rio Grande do Sul, see Réblová et al. (2013; taxonomy), ex-type cultures of the type: CBS 124105.

Aphanopsis Nyl. ex Sydow 1882, *Aphanopsidaceae*, *Ascomycota* family *incertae sedis*, two species, type: *A. terrigena* (Ach.) Nyl. ex P. Syd., lichenized, see Lumbsch and Huhndorf (2010; outline), Printzen et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Aphanostigme Syd. 1926, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, 21 species, type: *A. solani* Syd., asexual morph unknown, ascomata occurring as a saprophyte or a leaf hair parasite, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Boonmee et al. (2017; morphology), cultures and sequences are unavailable, needs generic revision.

Apharia Bonord. 1864, *Sordariomycetes* genera *incertae sedis*, one species, type: *H. nigrescens* Bonord., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), needs generic revision

Aphidomyces Brain 1923, *Saccharomycetales* genera *incertae sedis*, *Saccharomycetes*, three species, type: no typification data, asexual morph unknown, in insects, terrestrial, worldwide, see Lumbsch and Huhndorf (2010) did not accept, Kirk et al. (2013; genus accepted), needs generic revision.

Apiculospora Wijayaw., Camporesi, A.J.L. Phillips & K.D. Hyde 2016, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *A. spartii* Wijayaw., W.J. Li, Camporesi, A.J.L. Phillips & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial,

Italy, see Wijayawardene et al. (2016, 2017; taxonomy, phylogeny, outline), holotype and ex-type culture of the type: MFLU 15–3556, MFLUCC 13–0400.

Apinisia La Touche 1968, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, two species, type: *A. graminicola* La Touche, asexual morph unknown, saprobes, terrestrial, Europe, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), culture available for the type: CBS 721.68 (fide Untereiner et al. 2002).

Apiocamarops Samuels & J.D. Rogers 1987, *Boliniaceae*, *Boliniales*, *Sordariomycetes*, three species, type: *A. alba* Samuels & J.D. Rogers, asexual morphs unknown, saprobes, terrestrial, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable.

Apiocarpella Syd. & P. Syd. 1919, *Ascomycota* genera *incertae sedis*, eight species, type: *A. macrospora* (Speg.) Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but unpublished, needs generic revision.

Apioclypea K.D. Hyde 1994, *Clypeosphaeriaceae*, *Xylariales*, *Sordariomycetes*, six species, type: *A. livistonae* K.D. Hyde, asexual morphs unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified species.

Apiodiscus Petr. 1940, *Rhytismatales*, genera *incertae sedis*, *Leotiomycetes*, one species, type: *A. gillii* Petr., asexual morph unknown, saprobes, terrestrial, Iran, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Apioplagiostoma M.E. Barr 1978, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, three species, type: *A. populi* (E.K. Cash & Waterman) M.E. Barr, asexual morph discula-like, weak pathogens, terrestrial, temperate, Europe, North America, see Lumbsch and Huhndorf (2010; outline, accepted genus in *Valsaceae*), Sogonov et al. (2008; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Apioporthella Petr. 1929, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *A. bavarica* Petr., asexual morph unknown, saprobe, terrestrial, temperate, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Apiorhynchostoma Petr. 1923, *Boliniaceae*, *Boliniales*, *Sordariomycetes*, five species, type: *A. apiculatum* (Sacc.) Petr., asexual morphs unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Apiosordaria Arx & W. Gams. 1967, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, 23 species; type: *A. verruculosa* Arx & W. Gams, asexual morph unknown, saprobes, endophytes, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; genus accepted), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are and culture are available for type: CBS 244.71.

Apiosphaeria (Spegazzini) Höhnelt 1909, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, four species, type: *A. guaranitica* (Speg.) Höhnelt, asexual morph unknown, terrestrial, South America, Lumbsch and Huhndorf (2010; genus accepted), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), culture are available for type: CCMF 766.

Apiosporopsis (Traverso) Mariani 1911, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, three species, type: *A. saccardoana* Mariani (as '*saccardiana*'), asexual morph unknown, saprobes, endophytes, terrestrial, Dominican Republic, Europe, India, Japan, see Lumbsch

and Huhndorf (2010; outline), Osono and Masuya (2012; diversity on Betulaceae), Kirk et al. (2013; genus accepted), Keča et al. (2015; diversity on Poplars), Maharachchikumbura et al. (2015, 2016; outline), sequences are available for *Apiosporopsis carpinea*.

Apiothyrium Petr. 1947, *HypoNectriaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *A. arcticum* Petr., asexual morph unknown, saprobes, terrestrial, Finland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Apiotypa Petr. 1925, *Ascomycota* genera *incertae sedis*, one species, type: *A. philippinensis* Petr., asexual morph unknown, saprobes, terrestrial, Phillipines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision as Kirk et al. (2008) mentioned that type material is missing.

Aplanocalenia Lücking, Sérus. & Vězda 2005, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *Aplanocalenia inconspicua* (Müll. Arg.) Lücking, Sérus. & Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Aplosporella Speg. 1880, *Aplosporellaceae*, *Botryosphaeriales*, *Dothideomycetes*, c. 70 species, type: *A. chlorostroma* Speg., asexual morph unknown coelomycetous, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Kirk et al. (2013; genus accepted), Slippers et al. (2014; phylogeny), Trakunyingcharoen et al. (2015; new species, phylogeny), Crous et al. (2016; new species, phylogeny), cultures and sequences are available.

Apodospora Cain & J.H. Mirza 1970, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, four species, type: *A. simulans* Cain & J.H. Mirza, asexual morph unknown, coprophilous, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Krugs et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), sequences and culture are available for type: IMI 261830

Apodothina Petr. 1970, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. pringlei* (Peck) Petr., asexual morph unknown, saprobes, from living leaves, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Apodus Malloch & Cain 1971, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, two species, type: *A. deciduus* Malloch & Cain, asexual morph unknown, coprophilous, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 506.70 (fide Cai et al. 2006).

Apogaeumannomyces Matsush. 2003, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. perplexus* Matsush., asexual morph unknown, saprobes, from living leaves, terrestrial, Peru, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: MFC 1P446, cultures and sequences are unavailable, needs generic revision.

Apogloeum Petr. 1954, *Ascomycota* genera *incertae sedis*, one species, type: *A. concinnum* Petr., coelomycetous, sexual morph unknown, rarely reported and in case on leaves of *Lomatia polymorpha* in Tasmania, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of the type: BPI 1110296.

Apoharknessia Crous & S.J. Lee 2004, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *A. insueta* (B. Sutton) Crous & S.J. Lee, sexual morph unknown, pathogens, Mauritius, Brazil, Colombia, see Crous et al. (2011; phylogeny), Wijayawardene et al. (2012,

2016, 2017; taxonomy, phylogeny), epitype and ex-epitype culture of type: herb. CBS 9913, CBS 111377.

Apomelasmia Grove 1937, *Ascomycota* genera *incertae sedis*, eight species, type: *A.urticae* (Fr.) Grove, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012) and Maharachchikumbura et al. (2015, 2016) treated as a genus in *Diaporthales*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Aporellula B. Sutton 1986 [1985], *Ascomycota* genera *incertae sedis*, two species, type: *A. erigerontis* (Syd.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, Ecuador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, isotype of the type: IMI 288252.

Aporomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, eleven species, type: *A. uniflagellatus* Thaxt., asexual morph unknown, parasitic on Limnichidae, Histeridae, and Staphylinidae beetles, terrestrial, Asia, Europe, North and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossi and Santamaria (2015; Ecuador), cultures and sequences are unavailable.

Aposphaeria Sacc. 1880, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, 189 species, type: *A. pulviscula* (Sacc.) Sacc., coelomycetous, sexual morph ?*Melanomma* Nitschke ex Fuckel, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Tian et al. (2015; morphology, phylogeny), Li et al. (2016; new species), cultures and sequences are available, needs generic revision.

Aposporella Thaxt. 1920, *Ascomycota* genera *incertae sedis*, three species, type: *A.elegans* Thaxt., hyphomycetous, sexual morph unknown, on insects, terrestrial, Africa, see Seifert et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Apostrasseria Nag Raj 1983, *Ascomycota* genera *incertae sedis*, two species, type: *A. lunata* (Shear) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, New Zealand, North America, see Wijayawardene et al. (2012) treated as a genus in *Phacidiaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Appendichordella R.G. Johnson, E.B.G. Jones & S.T. Moss 1987, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *A. amicta* (Kohlm.) R.G. Johnson, E.B.G. Jones & S.T. Moss, asexual morph unknown, saprobes, marine, Denmark, France, Germany, Yugoslavia, USA, see Jones et al. (2009, 2015; outline, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Appendicospora K.D. Hyde 1995, *Apiosporaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *A. coryphae* (Rehm) K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

Appendicospora K.D. Hyde 1995, *Apiosporaceae*, *Xylariales*, *Sordariomycetes*, two species, asexual morph unknown, saprobes, terrestrial, Asia, type: *A. coryphae* (Rehm) K.D. Hyde, see Hyde 1995, Hyde and Fröhlich 1997), Lumbsch and Huhndorf (2010), accepted genus in Kirk et al. (2013), Maharachchikumbura et al. (2015, 2016), cultures and sequences are unavailable, needs generic revision.

Appendiculella Höhn. 1919, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, c. 110 species, type: *Appendiculella calostroma* (Desm.) Höhn., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Appendispora K.D. Hyde 1994, *Roussowellaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *A. frondicola* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Brunei, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Didymosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Didymosphaeriaceae*), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014b; transferred to *Roussowellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Appendixia B.S. Lu & K.D. Hyde 2000, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, five species, type: *A. closterium* (Berk. & M.A. Curtis) B.S. Lu & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Apseudocercospora Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *A. trigonotidis* Videira, H.D. Shin & Crous, hyphomycetous, sexual morph unknown, plant pathogenic, see Videira et al. (2016; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: KUS-F20054, CBS 131890 = CPC 10864.

Aptrootia Lücking & Sipman 2007, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, three species, type: *A. terricola* Lücking, Umaña & Sipman, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Trypetheliaceae*), Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification), sequences are available.

Aquadiscula Shearer & J.L. Crane 1985, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *A. appendiculata* Shearer & J.L. Crane, asexual morph unknown, saprobes on submerged leaf, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Aquadulciospora Fallah & Shearer 2001, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. rhomboidia* Fallah & Shearer, asexual morph unknown, saprobes, aquatic, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: ILLS 53999, cultures and sequences are unavailable, needs generic revision.

Aqualignicola Ranghoo, K.M. Tsui & K.D. Hyde 2001, *Annulatascales*, *Annulatascales*, *Sordariomycetes*, two species, type: *A. hyalina* Ranghoo, K.M. Tsui & K.D. Hyde, asexual morph unknown, saprobes, fresh water, terrestrial, China, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Hu et al. (2012; new species, China), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: HKU (M) 12178, cultures and sequences are unavailable, needs generic revision.

Aquamarina Kohlm., Volkm.-Kohlm. & O.E. Erikss. 1996, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. speciosa* Kohlm., Volkm.-Kohlm. & O.E. Erikss., asexual morph unknown, saprobes, marine, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aquanectria L. Lombard & Crous 2015, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *A. penicillioides* (Ingold) L. Lombard & Crous, asexual morph hyphomycetous, saprobes, aquatic, Jamaica, USA, see Lombard et al. (2015; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), ex-epitype of type: CBS 257.54.

Aquapeziza D.M. Hu, L. Cai & K.D. Hyde 2012, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *A. globispora* D.M. Hu, L. Cai & K.D. Hyde, asexual morph unknown, saprobes, aquatic, China, see Hu et al. (2012; taxonomy, phylogeny), holotype and cultures available for the type: IFRD 8978, DMH-2010.

Aquaphila Goh, K.D. Hyde & W.H. Ho 1998, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, two species, type: *A. albicans* Goh, K.D. Hyde & W.H. Ho, sexual morph tubeufia-like,

saprobies, submerged wood in aquatic habitats, see Boonmee et al. (2011, 2014), Seifert et al. (2011; morphology), Wijayawardene et al. (2014; outline), Hyde et al. (2016; new species, sexual morph), cultures and sequences are available for authentic strains BCC 3520, BCC 3543 and reference strains MFLUCC16-0010, MFLUCC16-0020.

Aquapoterium Raja & Shearer 2008, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *A. pinicola* Raja & Shearer, saprobies, aquatic, see Koukol and Kolářová (2010; demonstrated that *Bactrodesmium gabretae* Koukol & Kolářová, which was isolated from spruce needles is closely related to *A. pinicola* Raja & Shearer, in the *Helotiales*), Lumbsch and Huhndorf (2010; outline), ex-type strain F47-1 = MYA 4213 (American Type Culture Collection), holotype: F47-1, ILL 40117

Aquapteridospora J. Yang, K.D. Hyde & Maharachch. 2015, *Sordariomycetidae* genera *incertae sedis*, *Sordariomyces*, one species, type: *A. lignicola* Yang Jing, K.D. Hyde & Maharachch., hyphomycetous, sexual morph unknown, saprobies, aquatic, Thailand, see Yang et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016, 2017; taxonomy, outline), holotype of the type: MFLU 15-1172.

Aquasphaeria K.D. Hyde 1995, *Sordariomyces*, genera *incertae sedis*, one species, type: *A. dimorphospora* K.D. Hyde, asexual morph unknown, saprobies, aquatic, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BRIP 21482, cultures and sequences are unavailable, needs generic revision.

Aquastroma Kaz. Tanaka & K. Hiray. 2015, *Parabambusicolaceae*, *Pleosporales*, *Dothideomyces*, one species, type: *A. magniostiolata* Kaz. Tanaka & K. Hiray., asexual morph unknown, saprobies, aquatic, Japan, see Tanaka et al. (2015; taxonomy, phylogeny), holotype and ex-type strain of the type: HHUF 30122, CBS 139680.

Aquaticola W.H. Ho, K.M. Tsui, Hodgkiss & K. D. Hyde. *Annulatasceae*, *Incertae sedis*, *Sordariomyces*, 6 species, type: *A. triseptata* K.M. Tsui, Hodgkiss & K.D. Hyde, asexual morph unknown, saprobies, aquatic, Hong Kong, Australia, China, molecular data available for only three species (Dayarathne et al. 2016), placement in *Annulatasceae* supported by molecular data, see Campbell & Shearer (2004), Luo et al. (2015), Dayarathne et al. (2016a), holotype of type species HKU(M) 2969.

Arachniotus J. Schröt. 1893, *Gymnoascaceae*, *Onygenales*, *Eurotiomyces*, three species, type: *A. ruber* (Tiegh.) J. Schröt., asexual morph unknown, saprobies, from soil, Poland, see Lumbsch and Huhndorf (2010; outline), Ropars et al. (2012; DNA), Kirk et al. (2013; genus accepted), cultures available for the type: MUCL 39748, needs generic revision.

Arachnomycetes Masee & E.S. Salmon 1902, *Arachnomycetaceae*, *Onygenales*, *Eurotiomyces*, ten species, type: *A. nitidus* Masee & E.S. Salmon, asexual morph unknown, saprobies, Europe, see Gueidan et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence available for the type: AB075351, needs generic revision.

Arachnopeziza Fuckel 1870, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, c. 15 species, type: *A. aurelia* (Pers.) Fuckel., asexual morph hyphomycetous, saprobies worldwide, common in temperate and subtropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; phylogeny), cultures and sequence are available but lacks for the type species.

Arachnophora Hennebert 1963, *Ascomycota* genera *incertae sedis*, three species, type: *A. fagicola* Hennebert, hyphomycetous, sexual morph unknown, saprobies, terrestrial, cosmopolitan, see Seifert et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Arachnospora R.F. Castañeda, Minter & Camino 2003, *Ascomycota* genera *incertae sedis*, one species, type: *A. insolita* R.F. Castañeda, Minter & Camino, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of type: MUCL 42859, cultures and sequences are unavailable, compare with *Arachnophora* and *Iyengarina*.

Arachnotheca Arx 1971, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, three species, type: *A. glomerata* (E. Müll. & Pacha-Aue) Arx, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Sigler et al. (2013; DNA), culture available for the type: UAMH 3551 (fide Sigler et al. 2013).

Araneomyces Höhn. 1909 (= *Paranectriella* (Henn. ex Sacc. & D. Sacc.) Höhn. fide Wijayawardene et al. 2014; Rossman et al. 2015), *Dothideomycetes* genera *incertae sedis*, two species, type: *A. acarifer* Höhn., asexual morph hyphomycetous, South America, see Seifert et al. (2011; taxonomy), Wijayawardene et al. (2012, 2014, 2017; outline, nomenclature), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures and sequences are unavailable.

Arborillus Munt.-Cvetk. & Gómez-Bolea 1998, *Ascomycota* genera *incertae sedis*, one species, type: *A. llimonae* Munt.-Cvetk. & Gómez-Bolea, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Arborispora K. Ando., 1986, *Ascomycota* genera *incertae sedis*, four species, type: *A. palma* K. Ando, in rainwater draining from leaves of *Quercus*: Honshu, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sexual morph unknown, cultures and sequences are unavailable.

Arbusculina Marvanová & Descals 1987, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *A. irregularis* (R.H. Petersen) Marvanová & Descals, asexual morph unknown, saprobes, aquatic, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Funck et al. (2015; DNA), cultures and sequences are available but lacks for the type species.

Archaeorhizomyces Rosling & T.Y. James 2011, *Archaeorhizomycetaceae*, *Archaeorhizomycetales*, *Archaeorhizomycetes*, two species (but many others are predicted from the analysis of environmental sequences), type: *A. finlayi* Rosling & T.Y. James, asexual morph unknown, saprobes, from soil, terrestrial, Sweden, Lithuania, see Rosling et al. (2011; taxonomy, phylogeny), Menkis et al. (2014; new species, Lithuania, phylogeny), holotype and ex-type cultures of the type: MICH 72671, CBS 128710.

Architrypethelium Aptroot 1991, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, seven species, type: *A. seminudum* (Mont.) Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted), Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification), sequences are available.

Arctocetraria Kärnefelt & Thell 1993, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *A. andrejevii* (Oxner) Kärnefelt & A. Thell, lichenized, terrestrial (corticolous or terricolous), Northern Hemisphere (arctic), see Thell et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf 2010 (outline), Nelsen et al. (2011; DNA, phylogeny), Kirk et al. 2013 (genus accepted), Miadlikowska et al. (2014; DNA, phylogeny), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

Arctomia Th. Fr. 1860, *Arctomiaceae*, *Arctomiales*, *Lecanoromycetes*, ten species, type: *A. delicatula* Th. Fr. lichenized (cyanobacteria), terrestrial (saxicolous, terricolous or corticolous), cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013;

genus accepted), Otálora and Wedin (2013; DNA, phylogeny), Miadlikowska et al. (2014 DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

Arctomollisia Raitv. 2008, *Dermateaceae*, *Helotiales*, *Leotiomyces*, two species, type: *A. oxyparaphysata* (Rehm) Raitv., asexual morph unknown, saprobes, terrestrial, Magadan, see Raitviir (2008; taxonomy), cultures and sequences are unavailable, needs generic revision.

Arctoparmelia Hale 1986, *Parmeliaceae*, *Lecanorales*, *Lecanoromyces*, five species, type: *A. centrifuga* (L.) Hale, lichenized (green algae), terrestrial (mainly saxicolous), arctic and alpine regions of Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; DNA, phylogeny), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

Arcuadendron Sigler & J.W. Carmich. 1976, *Ascomycota* genera *incertae sedis*, three species, type: *A. ovatum* Sigler & J.W. Carmich, hyphomycetous, sexual morph unknown, soil, India, former Yugoslavia, see Hyde et al. (2011; index), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Ex-type strain of type: = ATCC 34519, CBS 122.77, sequences are unavailable, needs generic revision.

Arecacicola Joanne E. Taylor, J. Fröhl. & K.D. Hyde 2001, *Sordariomyces* genera *incertae sedis*, one species, type: *A. calami* Joanne E. Taylor, J. Fröhl. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: HKU (M) 1126a, cultures and sequences are unavailable, needs generic revision.

Arecomyces K.D. Hyde 1996, *Hyponectriaceae*, *Xylariales*, *Sordariomyces*, eleven species, type: *A. frondicola* K.D. Hyde, ascomycetous, asexual morph unknown, saprobes, reported only from palms, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Vitoria et al. (2011, new species, summary of 10 known species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Arecophila K.D. Hyde 1996, *Cainiaceae*, *Xylariales*, *Sordariomyces*, fifteen species, type: *A. gulubiicola* K.D. Hyde, ascomycetous, asexual morph unknown, saprobes, reported from South East Asia and Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lee et al. (2013; sesquiterpenes from *A. saccharicola*), Maharachchikumbura et al. (2015, 2016; outline), molecular data available for two species (*Arecophila bambusae* (AY083802, AF452038), *Arecophila* sp. HKUCC 6487 (AF452039)), no molecular data from the type materials, needs generic revision.

Arenariomyces Höhnk 1954, *Halosphaeriaceae*, *Microascales*, *Sordariomyces*, five species, type: *A. trifurcatus* Höhnk, aquatic, New Zealand, see Lumbsch and Huhndorf (2010; outline), Koch (2013, new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

Argentinomyces N.I. Peña & Aramb. 1997, *Diaporthales* genera *incertae sedis*, *Sordariomyces*, one species, type: *A. naviculispurus* Peña & Aramb., asexual morph unknown, saprobes, marine, Argentina, Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Ascomycota* genera *incertae sedis*), Koch (2013, new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: LPS 45469.

Argopericonia B. Sutton & Pascoe 1987, *Ascomycota* genera *incertae sedis*, two species, type: *A. elegans* B. Sutton & Pascoe, hyphomycetous, sexual morph unknown, saprobes, saprophytes, Australia, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need further revisions, holotype of the type: VPRI13846.

Argopsis Th.Fr. 1857, *Lecanoromyces* genera *incertae sedis*, three species, type: *A. megalospora* Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a

genus in Brigantiaeaceae), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Argynna Morgan 1895, *Argynnaceae*, *Dothideomycetes*, families *incertae sedis*, two species, type: *A. polyhedron* (Schwein.) Morgan, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Argynnaceae*, taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Aristastoma Tehon 1933, *Ascomycota* genera *incertae sedis*, one species, type: *A. concentrica* Tehon, coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Zhu et al. (2012; DNA, pathogens), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Arkoola J. Walker & Stovold 1986, *Dothideomycetes*, genera *incertae sedis*, one species, type: *A. nigra* J. Walker & Stovold, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Zhang et al. (2012; provisionally accepted as a genus in *Venturiaceae*), Hyde et al. (2013; did not accept as *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Armata W. Yamam. 1958, *Dothideomycetes*, genera *incertae sedis*, one species, type: *A. macrospora* (W. Yamam.) W. Yamam., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013; did not accept as *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Armatella Theiss. & Syd. 1915, *Armatellaceae*, *Meliolales*, *Sordariomycetes*, 20 species, type: *A. litseae* (Henn.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide distribution, see Hosagoudar and Archana (2009; distribution on Lauraceae), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hosagoudar et al. (2013; new species), Hongsanan et al. (2015, family placement), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Arnaudiella Petr. 1927 (= *Seynesiola* Speg. 1918 *vide* Wu et al. 2011), *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, 13 species, type: *A. caronae* (Pass.) Petr., asexual morph hyphomycetous, saprophyte, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Aropsiclus Kohlm. & Volkm.-Kohlm. 1994, *Sordariomycetes*, genera *incertae sedis*, one species, type: *A. junci* (Kohlm. & Volkm.-Kohlm.) Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Arpinia Berthet 1974, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, four species, type: *A. inops* Berthet, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Arthonia Ach. 1806, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, c. 500 species, type: *A. radiata* (Pers.) Ach. 1808, sexual morph with mainly apothecoid ascomata, asexual morph coelomycetous, lichenized, lichenicolous and \pm saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; phylogeny), Sundin et al. (2012, literature review), Kirk et al. (2013; genus accepted), Frisch et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Arthophacopsis Hafellner 1998, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *A. parmeliarum* Hafellner, lichenicolous, terrestrial, North America, Europe (including Canary Islands), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of type: Hafellner 41023 (GZU), cultures and sequences are unavailable.

Arthopyrenia A. Massal. [nom. cons.] 1852, *Arthopyreniaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *A. cerasi* (Schrad.) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Arthopyreniaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Lücking et al. (2016; classification), cultures and sequences are available.

Arthotheliopsis Vain. 1896, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *A. hymenocarpoides* Vain., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Arthothelium A. Massal. 1852, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, ten species, type: *A. spectabile* Flot. ex A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Arthriniium Kunze 1817, *Apiosporaceae*, *Xylariales*, *Sordariomycetes*, 64 species, type: *A. caricicola* Kunze & J.C. Schmidt, saprobes, pathogenic, endophytic, terrestrial, widely distribute, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2013; asexual morph, morphology, phylogeny), Maharachchikumbura et al. (2015; outline), Senanayake et al. (2015; morphology, phylogeny), Dai et al. (2016; sexual and asexual morph, morphology, phylogeny), cultures and sequences are unavailable for type species.

Arthrobotrys Corda 1839, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, 112 species and 08 orthographic variants, type: *A. superba* Corda, sexual morph *Orbilina*, Nematophagous, terrestrial, marine, worldwide see Han et al. (2008; extrolite profiling), Li et al. (2008; taxonomic revision), Swe et al. (2008; new species, marine), Wang et al. (2008; amino acid effect), Braga et al. (2009; predatory activity), Li et al. (2009; new species), Braga et al. (2010; in vitro predatory activity), Ranjbar-Bahadori et al. (2010; in vivo study), Silva et al. (2010; control sheep gastroenteritis), Zhang et al. (2010; phylogeny), Carvalho et al. (2011; predatory activity after freeze dry), Niu and Zhang (2011; review), Su et al. (2011; new species), Wei et al. (2011; Arthrobotrisins), Yang et al. (2011; genomics, proteomics), Zhang et al. (2011; divergence), Freire et al. (2012; effect of *Fusarium* extrolites), Qiao et al. (2012; description), Singh et al. (2012; biocontrol potential), Wu et al. (2012; new species), Zhang et al. (2012; metabolites study), Arias et al. (2013; developmental biology), Chen et al. (2013; trap formation), Falbo et al. (2013; characterization), Jamshidnejad et al. (2013; biocontrol activity), Liang et al. (2013; Proteomic and transcriptional analyses), Singh et al. (2013; role in plant immunity), Wang et al. (2013; mutant predatory activity), Wang et al. (2013; immunological effect of nanoparticles), Wu et al. (2013; metabolite profiling), Yang et al. (2013; chitinase encoding gene analysis), Zhang et al. (2013; genetic diversity), Braga et al. (2014; predatory activity after preservation), Liu et al. (2014; new species), Mostafanezhad et al. (2014; nematode control), Pandit et al. (2014; protease study), Zhao et al. (2014; Malate synthase gene), Liang et al. (2015; cell signalling). Molecular data available for few species, including type: KT215210. Holotype and ex – type of type: unknown. (Although, number of specimens of type: are recorded).

Arthrobotryum Ces. 1854, *Ascomycota* genera *incertae sedis*, five species, type: *A. stilboideum* Ces., coelomycetous, sexual morph unknown, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Arthrocatena Egidi & Selbmann (2014), *Capnodiales*, genera *incertae sedis*, *Dothideomycetes*, one species, type: *A. tenebrio* E. Egidi & L. Selbmann, rock-inhabiting fungus, conidia resulting from arthric secession, sexual morph unknown, see Egidi et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), ex-type cultures available for the type: CBS 136100 = CCFEE 5413.

Arthrocladium Papendorf 1969, *Trichomeriaceae*, *Chaetothyriales*, *Chaetothyriomycetes*, four species, type: *A. caudatum* Papendorf, asexual morph hyphomycetous, saprobes, terrestrial, Africa and Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Nascimento et al. (2015; phylogeny), Kirk (2013; genus accepted), Nascimento et al. (2015; human opportunist), ex-type strains of type: CBS 457.67.

Arthrocristula Sigler, M.T. Dunn & J.W. Carmich. 1982, *Ascomycota* genera *incertae sedis*, one species, type: *A. hyphenata* Sigler, M.T. Dunn & J.W. Carmich., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Arthroderma Curr. 1860, *Arthrodermataceae*, *Onygenales*, *Eurotiomycetes*, 41 species, type: *A. curreyi* Berk, asexual morph unknown, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus not accepted), sequences and culture are available for type: NCPF 0797

Arthrographis G. Cochet ex Sigler & J.W. Carmich. 1976, *Eremomycetaceae*, *Dothideomycetes* family *incertae sedis*, twelve species, type: *A. kalrae* (R.P. Tewari & Macph.) Sigler & J.W. Carmich., hyphomycetous, sexual morph unknown, saprobes, on human, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Giraldo et al. (2014; phylogeny, new species), cultures available for type: CBS 693.77.

Arthrophia W.S. Lisboa, Meir. Silva & R.W. Barreto 2016, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *A. arthrospora* (D.J. Soares et al.) W.S. Lisboa, Meir. Silva & R.W. Barreto, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Crous et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: VIC 30505, COAD 658.

Arthrorhaphis Th.Fr. [nom.cons.] 1860, *Arthrorhaphidaceae*, order *incertae sedis*, *Lecanoromycetes*, 13 species, type: *A. flavovirescens* (A. Massal.) Th. Fr.; lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miądlíkowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Arthrorhynchus Kolen. 1857, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, one additional species (*A. acrandros* Merola) is doubtful, type: *A. nycteribiae* (Peyr.) Thaxt., no asexual state, biotrophic, hosts are Nycteribiidae (Diptera: Hippoboscoidea), Eastern Hemisphere distribution, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (in review; DNA, review), sequences are available for type species.

Arthrosporium A. Massal. 1853, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *A. populorum* Massal., with ascomata, lichenized (green algae), terrestrial (corticolous), Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Arthrowallemia R.F. Castañeda, Dania García & Guarro 1998, *Ascomycota* genera *incertae sedis*, two species, type: *A. formosa* R.F. Castañeda, Dania García & Guarro, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C95/88, sequences are unavailable, compare with *Arthrocristula*, *Bahusakala* and *Parasymphodiella*.

Articulophora C.J.K. Wang & B. Sutton 1982, *Ascomycota* genera *incertae sedis*, one species, type: *A. variispora* C.J.K. Wang & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, need further revisions, holotype of the type: Wang 11021.

Articulospora Ingold 1942, *Helotiaceae*, *Helotiales*, *Leotiomyces*, six species, type: *A. tetracladia* Ingold, hyphomycetous, saprobes, endophytic, aquatic, worldwide, see Seifert et al. (2011; morphology), Seena et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Baschien et al. (2013; phylogeny), compare with *Geniculospora* and *Isthmotricladia*.

Artocarpomyces Subram. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *A. paradoxa* Subram., saprobes, terrestrial, Singapore, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: MUBL 3147, cultures or cultures and sequences are unavailable, needs generic revision.

Arundellina Wanasinghe, E.B.G. Jones & K.D. Hyde 2016, *Lindgomycetaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. typhae* Wanasinghe, E.B.G. Jones & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, UK, see Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 16-1276, MFLUCC 16-0310.

Arwidssonina Arwidsson B. Erikss. 1974, *Hyponectriaceae*, *Xylariales*, *Sordariomyces*, two species, type: *A. empetri* (Rehm) B. Erikss., asexual morph unknown, plant pathogen, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Arxiella Papendorf 1967, *Dothideomycetes*, genera *incertae sedis*, one species, type: *A. terrestris* Papendorf, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; DNA, new species), cultures and sequences are available but lacks for the type:, needs generic revision.

Arxiomyces P.F. Cannon & D. Hawksw. 1983, *Ceratostomataceae*, *Melanosporales*, *Sordariomyces*, one species, type: *A. vitis* (Fuckel) P.F. Cannon & D. Hawksw. (syn. *Ceratostoma vitis* Fuckel), asexual morph unknown, on bark, Europe, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Asahinea W.L.Culb. & C.F.Culb. 1965, *Parmeliaceae*, *Lecanorales*, *Lecanoromyces*, four species; type: *A. chrysantha* (Tuck.) W.L. Culb. & C.F. Culb., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

Asaphomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, four species, type: *A. cholevae* Thaxt., asexual morph unknown, parasitic on Leiodidae beetles, terrestrial, widespread, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Ascitendus J. Campb. & Shearer 2004, *Annulatascales*, *Annulatascales*, *Sordariomyces*, one species, type: *A. austriacus* (Réblová, Winka & Jaklitsch) J. Campb. & Shearer, asexual morph unknown, saprobes, fresh water, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2016; outline), holotype of the type: PRM 842991, cultures available for the type: CBS 131685.

Ascluella DiCosmo, Nag Raj & W.B. Kendr. 1983, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *A. symplocina* (P. Syd.) DiCosmo, Nag Raj & W.B. Kendr., asexual morph

unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascobolus Pers. 1792, *Ascobolaceae*, *Pezizales*, *Pezizomycetes*, more than 61 species, type: *A. pezizoides* Pers., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Doveri (2011, 2014; worldwide key), cultures and sequences are available but lacks for the type species.

Ascocalvatia Malloch & Cain 1971, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *A. alveolata* Malloch & Cain, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), culture available for the type: ATCC 22147 (fide Untereiner et al. 2002).

Ascocalyx Naumov 1926 (= *Bothrodiscus* Shear 1907 fide Johnston et al. 2014), *Godroniaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *A. abietis* Naumov, asexual morph *Bothrodiscus*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

Ascocephalophora K. Matsush. & Matsush. 1995, *Endomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *A. petasiformis* K. Matsush. & Matsush., Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Ascochalara Réblová 1999, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *A. gabretae* Réblová, asexual morph chalara-like, saprobes, Czech Republic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequence available but lack for the type species, generic placement is based on non-type species, needs generic revision.

Ascochyta Lib. 1830, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, c. 400 species, type: *A. pisi* Lib., coelomycetous, saprobes, pathogens, terrestrial, worldwide, see Chilvers et al. (2009; pathogens), Aveskamp et al. (2010; phylogeny), de Gruyter et al. (2009; phylogeny), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Chen et al. (2015; taxonomy, phylogeny), cultures and sequences are available, needs generic revision as more than 1000 records are available.

Ascochytopsis Henn. 1905, *Ascomycota incertae sedis*, 5 species, type species *A. vignae* Henn. 1905, coelomycetous, presumed sexual morph *Parodiella* (Cannon and Kirk 2007), Saprobes, endophytic, pathogenic, Terrestrial and aquatic, Cosmopolitan (incl. China, Switzerland, Sudan, South Africa, Tanzania) (Schnell 1987; Farr and Rossman 2016). See Sun et al. (2011; extracellular enzyme activities), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascochytulina Petr. 1922, *Ascomycota genera incertae sedis*, three species, type: *A. deflectens* (P. Karst.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascoclavulina Otani 1974, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, eight species, type: *A. sakaii* Y. Otani, asexual morph gliomastix-like, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascocorticium Jülich & B. de Vries 1982, *Ascomycota genera incertae sedis*, three species, type: *A. vermisporum* (Hauerslev) Jülich & B. de Vries, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascocorticium Bref. 1891, Ascocorticaceae, *Helotiales*, *Leotiomyces*, eight species, type: *A. albidum* Bref. & Tavel, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascocoryne J.W. Groves & D.E. Wilson 1967 (= *Coryne* Nees 1816; = *Pirobasidium* Höhn. 1902; *Pleurocolla* Petr. 1924; = *Endostilbum* Malençon 1964 fide Johnston et al. 2014), *Helotiaceae*, *Helotiales*, *Leotiomyces*, eight species, type: *A. sarcoides* (Jacq.) J.W. Groves & D.E. Wilson, asexual morph *Monilia*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Johnston et al. (2014; nomenclature), Zhu et al. (2016; pathogens, phylogeny), cultures and sequences are available.

Ascocratera Kohlm. 1986, *Aigialaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. manglicola* Kohlm., asexual morph unknown, saprobes, in marine habitats, worldwide, see Suetrong et al. (2009; phylogeny, morphology), Schoch et al. (2009; phylogeny), Besitulo et al. (2010; diversity), Zainuddin et al. (2010; antimicrobial activities), Pang et al. (2010; diversity), Sakayaroj et al. (2011b; diversity), Zhang et al. (2011; phylogeny), Boonmee et al. (2012; phylogeny), Jones et al. (2012; phylogeny, review), Lee et al. (2012; checklist), Ariyawansa et al. (2014a; phylogeny), Wanasinghe et al. (2015; phylogeny), Zhang et al. (2016; phylogeny), holotype and ex-isotype of type: J.K. 4812a (FH), J.K.4812b (IMS).

Ascocylindrica Abdel-Wahab, Bahkali & E.B.G. Jones 2015, *Ascocylindricaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. marina* Abdel-Wahab, Bahkali & E.B.G. Jones, asexual morph unknown, saprobes, marine, Saudi Arabia, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-0750, MFLUCC 15-0750.

Ascodesmis Tiegh. 1876, *Ascodesmidaceae*, *Pezizales*, *Pezizomyces*, six species, type: *A. aurea* Tiegh., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Doveri (2011; new record from Italy), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type species.

Ascodichaena Butin 1977 (= *Polymorphum* Chevall. 1822 fide Johnston et al. 2014), *Ascodichaenaceae*, *Rhytismatales*, *Leotiomyces*, two species, type: *A. rugosa* Butin, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), culture available for type: DSM 4703.

Ascofascicula Matsush. 2003, *Ascomycota* genera *incertae sedis*, six species, type: *A. talaroluteoides* Matsush., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available but lacks for type species.

Ascographa Velen. 1934, *Incertae sedis*, *Helotiales*, *Leotiomyces*, one species, type: *A. hederæ* Velen., ascomycetous, asexual morph unknown, former Czechoslovakia, on decaying trunk of *Hederæ heliçis*, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascoidea Bref. 1891, *Ascoideaceae*, *Saccharomycetales*, *Saccharomyces*, three species, type: *A. rubescens* Bref., asexual morph unknown (by budding of cells and formation of hyphae), saprophyte, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Ascolacicola Ranghoo & K.D. Hyde 1998, *Sordariales* genera *incertae sedis*, *Sordariomyces*, one species, type: *A. aquatica* Ranghoo & K.D. Hyde, asexual morph *Trichocladium uniseptatum* (Berk. & Broome) S. Hughes & Piroz., saprobes, aquatic, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

Ascolacicola Ranghoo & K.D. Hyde 1998, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *A. aquatica* Ranghoo & K.D. Hyde, asexual morph *Trichocladium uniseptatum* (Berk. & Broome) S. Hughes & Piroz., saprobes, aquatic, Hong Kong, see Lumbsch and Huhndorf (2010), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Ascolectus Samuels & Rogerson 1990, *Saccardiaceae*, *Ascomycota* families *incertae sedis*, one species, type: *A. albus* Samuels & Rogerson, asexual morph unknown, saprobes, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascomauritiana Ranghoo & K.D. Hyde 1999, *Ascomycota* genera *incertae sedis*, one species, type: *A. lignicola* Ranghoo & K.D. Hyde, asexual morph unknown, saprobes, aquatic, Mauritius, see Kir et al. (2013; genus accepted), holotype of type species HKU (M) 5255.

Ascominuta Ranghoo & K.D. Hyde (2000), *Incertae sedis*, *Incertae sedis*, *Dothideomycetes*, 2 spp., type: *A. lignicola* Ranghoo & K.D. Hyde (2000), asexual morph unknown, saprobes, aquatic, Thailand, Hong Kong, molecular data available only for type species (Ranghoo & Hyde 2000), comparison of *Ascominuta* with *Natipusilla* is essential as this may be an earlier name for *Natipusilla* (Ranghoo and Hyde 2000, Hu et al. 2010), holotype of type species HKU (M) 5246.

Ascophanus Boud. 1869, *Thelebolaceae*, *Thelebolales*, *Leotiomyces*, one species, type: *A. granuliformis* (P. Crouan & H. Crouan) Boud., asexual morph unknown, saprobes, terrestrial, Antarctica, see Lumbsch and Huhndorf (2010; outline), Ziao et al. (2010; antifreeze proteins), Kirk et al. (2013; genus accepted), Bansal et al. (2014; antifreeze proteins), cultures and sequences are available.

Ascopolyporus Möller 1901, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *A. polychrous* Möller, asexual morph unknown, saprobes, terrestrial, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Ascorhiza Lecht.-Trinka 1931, *Sordariomycetes*, genera *incertae sedis*, one species, type: *A. leguminosarum* Lecht.-Trinka, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Ascorhizoctonia Chin S. Yang & Korf 1985, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, seven species, type: *A. praecox* Chin S. Yang & Korf, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species.

Ascoronospora Matsush. 2003, *Pleosporales*, genera *incertae sedis*, *Dothideomycetes*, one species, type: *A. yakuensis* Matsush., asexual morph coronospora-like, saprobes, terrestrial, Japan, see Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Ascosacculus J. Campb., J.L. Anderson & Shearer 2003, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *A. aquaticus* (K.D. Hyde) J. Campb., J.L. Anderson & Shearer, saprobes, aquatic, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type:, needs generic revision.

Ascosorus Henn. & Ruhland 1900, *Ascomycota* genera *incertae sedis*, one species, type: *A. floridanus* (Ellis & G. Martin) Henn. & Ruhland, asexual morph unknown, saprobes, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascosphaera L.S.Olive & Spiltoir 1955, *Ascosphaeraceae*, *Onygenales*, *Eurotiomycetes*, 28 species type: *A. apis* (Maasen ex Claussen) L.S. Olive & Spiltoir, pathogenic, worldwide, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wynns et al. (2013; new species), sequences and culture available for type: NBRC 31608.

Ascostratum Syd. & P. Syd. 1912, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, one species, type: *A. insigne* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, South Africa, see Lumbsch and Huhndorf (2010; outline), Dissanayake et al. (2014; morphology), holotype of type: F7426.

Ascostratum Syd. & P. Syd. 1912, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, two species, type: *A. insigne* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, South Africa, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tian et al. (2014; morphology, nomenclature, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Ascotaiwania Sivan. & H.S. Chang (1992), *Savoryellaceae*, *Savoryellales*, *Sordariomycetes*, 13 spp., type species *A. lignicola* Sivan. & H.S. Chang (1992), asexual morph hyphomycetous, saprobes, terrestrial, aquatic, worldwide, molecular data available for some of species (Boonyuen et al. 2012), placement within *Savoryellaceae* confirmed by molecular data, see Maharachchikumbura et al. (2016), holotype of type species IMI 348977.

Ascotremella Seaver 1930, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *A. faginea* (Peck) Seaver, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascotricha Berk. 1838, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *A. chartarum* Berk., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cheng et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Ascotrichella Valldos. & Guarro 1988, *Xylariales*, genera *incertae sedis*, *Sordariomycetes*, one species, type: *A. hawksworthii* Valldos. & Guarro, asexual morph hyphomycetous, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Ascovaginospora Fallah, Shearer & W.D. Chen 1997, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *A. stellipala* Fallah, Shearer & W.D. Chen, saprobes, aquatic, USA, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariomycetidae*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: ILLS 52319, sequences are available, needs generic revision.

Ascoyunnania L. Cai & K.D. Hyde 2005, *Sordariomycetes* genera *incertae sedis*, two species, type: *A. aquatica* L. Cai & K.D. Hyde, saprobes, aquatic, China, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Ascozonus (Renny) E.C. Hansen 1877, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, c. six species, type: *A. cunicularius* (Boud.) Marchal, asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but acks for the type species.

Ashtaangam Subram. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *A. sundaram* Subram., hyphomycete, sexual morph unknown, saprobe, terrestrial, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Holotype MUBL 3127.

Asia, Australia, Neotropics, see Sri-Indrasutdhi et al. (2010; sexual morph), Boonyuen et al. (2011; new species, phylogeny), Hu (2011; phylogeny), Seifert et al. (2011; morphology),

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Zhang (2013; key to freshwater *Canalisporium* spp.), Zhao et al. (2013; accepted in review), culture and sequences are available.

Aspergillus P. Micheli ex Haller 1768 (= *Chaetosartorya* Subram. 1972; = *Cristaspora* Fort & Guarro 1984; = *Dichotomomyces* Saito ex D.B. Scott 1970; = *Emericella* Berk. 1857; = *Eurotium* Link 1809; = *Fennellia* B.J. Wiley & E.G. Simmons 1973; = *Neocarpenteles* Udagawa & Uchiy. 2002; = *Neopetromyces* Frisvad & Samson 2000; = *Neosartorya* Malloch & Cain 1973; = *Petromyces* Malloch & Cain 1973; = *Phialosimplex* Sigler, Deanna A. Sutton, Gibas, Summerb. & Iwen 2010; = *Polypaecilum* G. Sm. 1961), *Aspergillaceae*, *Eurotiales*, *Eurotiomycetes*, c. 360 species, type: *A. glaucus* (L.) Link, mostly terrestrial, but also reported from aquatic environments, mainly saprobes associated with soil, plant material and foodstuffs, but also including phytopathogenic and clinically-relevant fungi causing opportunistic mycoses (aspergillosis) and mycotoxicoses in various vertebrates including humans, cosmopolitan, monophyletic but morphologically diverse both in its sexual and asexual morphs, see Peterson (2008; phylogeny), Sigler et al. (2010; morphology as "*Phialosimplex*"), Varga et al. (2010a, 2010b, 2015; phylogeny, new species, mycotoxins), Houbraeken and Samson (2011; phylogeny), Guarro et al. (2012; selected soilborne species), Hubka et al. (2013a, 2013b, 2015, 2016a, 2016b; phylogeny, new combinations, new species), Asgari et al. (2014; new species, sexual morph), Samson et al. (2014; polyphasic taxonomy, new species, outline), Sugui et al. (2014; new species), Crous et al. (2015; new species), Guinea et al. (2015; new species), Jurjevic et al. (2015; new section and new species), Arzanlou et al. (2016; new species), Tsang et al. (2016; new species), Visagie et al. (2017; new species), ex-neotype strain of the type: CBS 516.65, sequences are available from Peterson (2008).

Asperisporium Maubl. 1913, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetidae*, *Dothideomycetes*, 12 species, type: *A. caricae* (Speg.) Maubl., hyphomycetous, saprobes, terrestrial, America, see Seifert et al. (2011; morphology), Minnis et al. (2011; phylogeny, typification), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), ex-type strains of type: CBS 130298.

Aspicilia A.Massal. [nom.cons.] 1852, *Megasporaceae*, *Pertusariales*, *Lecanoromycetes*, 200 species, type: *A. cinerea* (L.) Körb., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Nordin et al. (2010; phylogeny), Sohrabi et al. (2010; DNA), Raggio et al. (2011; survive exposure to space), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Aspiciliopsis (Müll.Arg.) M.Choisy 1929, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, one species; type: *A. macrophthalma* (Hook. f. & Taylor) B. de Lesd., lichenized, see Hodkinson and Lendemer (2011; taxonomy), Lücking et al. (2016; classification), sequences are available.

Aspidothelium Vain. 1890, *Thelenellaceae*, *Ostropales*, *Lecanoromycetes*, 17 species, type: *A. cinerascens* Vain., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Aspidotheliaceae*), Kirk et al. (2013; genus accepted), Aptroot et al. (2014; new species), Nelsen et al. (2016; phylogeny), Lücking et al. (2016; classification), sequences are available.

Aspilaima Bat. & H. Maia 1961, *Ascomycota* genera *incertae sedis*, one species, type species *A. platoniae* Bat. & H. Maia 1961, Coelomycetous, Sexual morph not reported, Saprobes, Terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aspilidea Hafellner 2001, *Ostropomycetidae*, *incertae sedis*, *Lecanoromycetes*, one species, type: *A. myrinii* (Fr.) Hafellner, lichenized (green algae), terrestrial (saxicolous), restricted to the alpine zone, see Jørgensen and Nordin (2009, DNA), Lumbsch and Huhndorf (2010;

outline), Nordin et al. (2010; taxonomy), Lücking et al. (2016; classification), sequences unavailable.

Asteridiella McAlpine 1897, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, more than 300 species, type specie: *A. solani* McAlpine, asexual morph unknown, pathogens saprobes, terrestrial, worldwide, see Hosagoudar and Archana (2009; host distribution in India), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013 genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Asterina Lév. 1845 (= *Asterolibertia* G. Arnaud 1918, *fide* Hongsanan et al. 2014; *Bheemamyces* Hosag. 2010, *fide* Hosagoudar et al. 2010; *Ishwaromyces* Hosag. 2004, *fide* Hongsanan et al. 2014; *Placoasterina* Toro 1930, *fide* Hongsanan et al. 2014), *Asterinaceae*, *Asterinales*, *Dothideomycetes*, more than 700 species., type: *A. melastomatis* Lév., asexual morph coelomycetous or hyphomycetous (= *Asterostomella*-like, *Clasterosporium*-like and *Mahanteshomyces*-like, *fide* Hofmann 2009). Epiphytes, biotrophic, terrestrial, worldwide, most species do not have molecular data, see Hofmann (2009; review, DNA), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Hongsanan et al. (2014; taxonomy, DNA, keys, nomenclature), Wijayawardene et al. (2014; outline), Guatimosim et al. (2015; phylogeny, taxonomy, DNA), placement in *Asterinaceae* supported by morphology and phylogeny. Neotype of type: PC 0084477, type sequence KP143739 (voucher VIC 42822).

Asterinella Theiss. 1912, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, c 40 species, type: *A. puiggarii* (Speg.) Theiss., asexual morph coelomycetous (= *Asterostomula*-like), epiphytes, biotrophic, terrestrial, worldwide, no molecular data, see Hofmann (2009; review, accepted as a genus in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Wu et al. (2014; review, transferred to *Asterinaceae*), Wijayawardene et al. (2014; outline), Wu et al. (2014), placement in *Asterinaceae* supported by morphology. Holotype of type: LPS 1377, cultures and sequences unavailable.

Asterinema Bat. & Gayão 1953, *Dothideomycetes* genera *incertae sedis*, one species, type: *A. puiggarii* (Speg.) Theiss., asexual morph unknown, foliar epiphytes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Dothideomycetes* genera *incertae sedis*), Wu et al. (2014; accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Asterinothyriella Bat. & Cif. 1959, *Ascomycota* genera *incertae sedis*, three species, type: *A. landolphiae* Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, Uganda, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asterinothyrium Bat., Cif. & H. Maia 1959, *Ascomycota* genera *incertae sedis*, one species, type: *A. singulatum* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013 genus accepted), cultures and sequences are unavailable.

Asteristion Leight. 1870, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *A. erumpens* Leight., asexual morph unknown, lichenized fungi, terrestrial, tropical, placement in *Graphidaceae* supported by molecular data, new synonym *Phaeotrema* Müll.Arg., see Medeiros et al. 2016, Lücking et al. (2014, 2016; classification), sequences are available.

Asteroconium Syd. & P. Syd. 1903, *Ascomycota* genera *incertae sedis*, two species, type: *A. saccardoi* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, China, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013 genus accepted), cultures and sequences are unavailable.

Asterodothis Theiss. 1912, *Dothideomycetes* genera *incertae sedis*, one species, type: *A. solaris* (Kalchbr. & Cooke) Theiss., asexual morph unknown, saprobes, terrestrial, USA, see

Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014c; transferred this genus from *Asterinaceae* to *Dothideomycetes* genera *incertae sedis*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Asteroglobulus Brackel 2011, *Ascomycota* genera *incertae sedis*, one species, type: *A. giselae* Brackel, coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Europe, see Brackel (2011; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Asteroglobulus Brackel 2011, *Ascomycota* genera *incertae sedis*, three species, type: *A. giselae* Brackel, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asteroma DC. 1815, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, more than 200 species, type specie: *M. stellaris* (Pers.) Theiss. & Syd., sexual morph *Gnomoniella*, *Plagiostoma*, pathogens associated with leaf spots, saprobes, terrestrial, worldwide distribution, see Maharachchikumbura et al. (2015; outline), sequences are available for *A. alneum*.

Asteromassaria Höhn. 1917, *Dothideomycetes* genera *incertae sedis*, type: *A. macrospora* (Desm.) Höhn., twelve species but could be higher, asexual morph coelomycetous, saprobes, parasites, terrestrial, Europe, India, Japan, USA, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in *Morosphaeriaceae*), Kirk et al. (2013; genus accepted), Eriksson (2014), Wijayawardene et al. (2014; outline), holotype of type: CBS H-15119, cultures and sequences are available but lacks for the type species.

Asteromella Pass. & Thüm. 1880, *Dothideomycetes* genera *incertae sedis*, 265 species, type: *A. ovata* Thüm., polyphyletic, coelomycetous, sexual morph unknown, widespread, generally regarded as the microconidial or spermogonial states of *Mycosphaerella* species, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lectotype of *Asteromella tiliae* = CBS 265.94, reference sequences are available at GenBank = FR681903-FR681905, KC354574, JN662478, needs generic revision.

Asteromellopsis H.E. Hess & E. Müll. 1951, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, one species, type species *A. insculpta* H.E. Hess & E. Müll., saprobes, anamorphic, *Dothidea insculpta* sexual morph reported for *A. insculpta* (Hess and Müller 1951), Switzerland, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asteromidium Speg. 1888, *Ascomycota* genera *incertae sedis*, three species, type: *A. imperspicuum* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asteromyces Moreau & M. Moreau ex Hennebert 1962, *Ascomycota* genera *incertae sedis*, one species, type: *A. cruciatus* Moreau & M. Moreau ex Hennebert, hyphomycetous, on seaweeds, sand grains, drift wood, saprobe, mostly marine temperate, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Gulder et al. (2012; biochemistry), Jones et al. (2015; outline), cultures and sequences are unavailable.

Asteronectrioidea Cant. 1949, *Incertae sedis*, one species, type: *A. heveicola* Cant., possibly hyphomycetous, sexual morph unknown, saprobes, Africa, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asteronia (Sacc.) Henn. 1895, *Dothideomycetes* genera *incertae sedis*, two species, type: *A. sweetiae* Henn., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus

accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Asteroporum Müll.Arg. (1884), *Ascomycota* genera *incertae sedis*, seven species, type: *A. perminimum* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Asteroscutula Petr. 1948, *Ascomycota* genera *incertae sedis*, one species, type: *A. sydowii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Ecuador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013 genus accepted), cultures and sequences are unavailable.

Asterosporium Kunze 1819, *Diaporthales* genera *incertae sedis*, seven species, type: *A. asterospermum* (Pers.) Hughes, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Kamiyama et al. (2009; phylogeny), Tanaka et al. (2010; taxonomy, phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 112404.

Asterostomopora Bat. & H. Maia 1960, *Ascomycota* genera *incertae sedis*, one species, type: *A. jamaicensis* Bat. & H. Maia, coelomycetous, Jamaica, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asterostomopsis Bat., Cif. & H. Maia 1959, *Ascomycota* genera *incertae sedis*, one species, *A. ghanaensis* Bat., Cif. & H. Maia, coelomycetous, rarely reported and in case on leaves of *Lawsonia inermis* in Ghana and India, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), and sequences are unavailable, needs generic revision.

Asterostomula Theiss. 1916, *Ascomycota* genera *incertae sedis*, four species, type: *Asterostomula loranthi* Theiss., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), treated as a genus in Microthyriaceae, Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asterostomulina Bat., J.L. Bezerra & H. Maia 1964, *Ascomycota* genera *incertae sedis*, one species, type: *A. phoebeicola* Bat., J.L. Bezerra & Cavalc., coelomycetous, sexual morph unknown, rarely reported and in case on *Phoebe rivularis*, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asterotexis Arx 1958, *Asterotexiaceae*, *Asterotexiales*, *Dothideomycetes*, two species, type: *A. cucurbitacearum* (Rehm) Arx, asexual morph unknown epiphytes, pathogens, biotrophic, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Asteriaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hyde et al. (2013; review, keys, accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, keys, accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Asterinaceae*), Guatimosim et al. (2015; phylogeny, DNA, transferred to a newly described family *Asterotexiaceae*), placement in *Asterotexiaceae* supported by morphology and phylogeny, syntype of type: S-F7565, type sequence KP143734 (voucher VIC 24814), HQ610510 (voucher PMA M-0141224).

Asterothyrium Müll. Arg. 1890, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, 33 species; type: *A. argenteum* Müll. Arg., lichenized, see Flakus and Lücking (2008; new species), Lücking et al. (2016; classification), sequences are available.

Astomella Thirum. 1947, *Ascomycota* genera *incertae sedis*, one species, type: *A. neolitseae* Thirum., saprobes, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Astrochapsa Parmen, Lücking & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 26 species, type: *A. astroidea* (Berk. & Broome) Parmen, Lücking & Lumbsch, asexual morph unknown, ascomata apotheciate, conidiomata pycnidial, lichen-forming, corticolous, pantropical, see Parmen et al. (2012; taxonomy, phylogeny), Rivas Plata et al. (2013; phylogeny), Lumbsch et al. (2014; classification), Jaklitsch et al. (2015).

Astronatelia Bat. & H. Maia 1962, *Ascomycota* genera *incertae sedis*, one species, type: *A. andromedae* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013 genus accepted), cultures and sequences are unavailable.

Astrosphaeriella Syd. & P. Syd. 1913, *Pleosporales* genera *incertae sedis*, 5 new species, type: *A. fusispora* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, widespread, see Tanaka et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Liu et al. 2011; phylogeny), Zhang et al. (2012; morphology, phylogeny), Kirk et al. (2013; genus accepted), cultures available for type: MFLUCC 10-0555

Astrothelium Eschw. 1824, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, c. 250 species, type: *A. conicum* Eschw., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Nelsen et al. (2014a; phylogeny) Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification).

Asymmetricospora J. Fröhl. & K.D. Hyde, 1998, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. calamicola* J. Fröhl. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology; nomenclature, phylogeny), cultures and sequences are unavailable, needs generic revision.

Asymmetrispora Thambugala & K.D. Hyde 2015, *Floricolaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *A. tennesseeensis* (Mugambi, A.N. Mill. & Huhndorf) Thambugala & Hyde, asexual morph unknown, saprobes, terrestrial, USA and France, two species, see Thambugala et al. (2015b; phylogeny), holotype of type: ANM911, cultures and sequences are unavailable.

Athallia Arup, Frödén & Söchting 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 13 species, type: *A. holocarpa* (Hoffm.) Arup, Frödén & Söchting with ascomata, lichenized (*'Pseudotreboxia'*), (corticolous, epixylic, terricolous, saxicolous), cosmopolitan, see Arup et al. (2013, DNA), Lücking et al. (2016, classification), Vondrák et al. (2016, geographical range), sequences are available for voucher JV14428 of the type: (fide Arup et al. 2013).

Atichia Flot. 1850 (= *Seuratia* Pat. fide Rossman et al. 2016), *Ascomycota* family *incertae sedis*, four species, type: *A. mosigii* Flot., hyphomycetous, sexual morph *Seuratia* Pat., widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures or cultures and sequences are unavailable, needs generic revision.

Atla Savić & Tibell 2008, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, nine species, type: *A. alpina* Savić & Tibell, lichenized, terrestrial, Europe, see Savić and Tibell (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Tibell and Tibell (2015; new species, Alaska), Lücking et al. (2016; classification), Pykälä and Myllys (2016; new species), holotype and culture of the type: UPS, Savić 3129, SS193.

Atopospora Petr. 1925, *Venturiaceae*, *Venturiales*, *Dothideomycetes*, two species, type: *A. betulina* (Fr.) Petr., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; accepted as a genus in *Venturiaceae*), Hyde et al. (2013; accepted as a genus in *Venturiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Atractilina Dearn. & Barthol. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *A. callicarpae* Dearn. & Barthol., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Atractium Link 1809, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *A. stilbaster* Link, hyphomycetous, sexual morph unknown, saprobes or isolated from drinking water, terrestrial, aquatic, worldwide, see Gräfenhan et al. (2011; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), epitype and ex-epitype strains of type: CBS 410.67.

Atractobolus Tode 1790, *Ascomycota* genera *incertae sedis*, one species, type: *A. ubiquitous* Tode, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Atrocybe Velen. 1947, *Helotiales*, genera *incertae sedis*, four species, type: *A. loricelliformis* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Atronectria Etayo 2008, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *A. magellanica* Etayo, asexual morph unknown, parasymbion on macrolichens, aquatic, South America, see Etayo and Sancho (2008; morphology, distinction of similar lichenicolous genera), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), need revision, holotype of the type: MAF, Etayo 22938, cultures and sequences are unavailable.

Atropellis Zeller & Goodd. 1930, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *A. pinicola* Zeller & Goodd., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Atrosetaphiale Matsush. 1995, *Ascomycota* genera *incertae sedis*, two species, type: *A. flagelliformis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Atrotorquata Kohlm. & Volkm.-Kohlm. 1993, *Cainiaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *Atrotorquata lineata* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, Italy, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), only *Atrotorquata spartii* has sequence: MFLU 14-0738, MFLUCC 13-0444, further sequences are necessary for confirm its placement in *Cainiaceae*.

Auerswaldia Sacc. 1883, *Dothideomycetes* genera *incertae sedis*, 2 new species, type: *A. examinans* (Mont. & Berk.) Sacc., asexual morph coelomycetous, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2012; phylogeny, treated as a genus in *Botryosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; phylogeny, excluded from *Botryosphaeriaceae*), cultures and sequences are unavailable for type species, needs generic revision.

Auerswaldiella Theiss. & Syd. 1914, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, four species, type: *A. puccinioides* (Speg.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Liu et al.

(2012; accepted as a genus in *Botryosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Wijayawardene et al. (2014, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Aulacostroma Syd. & P. Syd. 1914, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, five species, type: *A. palawanense* Syd. & P. Syd., asexual morph unknown. Epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), placement *Parmulariaceae* supported by morphology, cultures and sequences are unavailable.

Aulaxina Fée 1825, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 13 species, type: *A. opegraphina* Fée, with ascomata, lichenized (*Trebouxia*), terrestrial (foliicolous and corticolous), tropical, see Lücking (2008; outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016, classification), Sanders and de los Ríos (2016; outline), sequences are available for *Aulaxina minuta* fide Grube et al. (2004) and *Aulaxina quadrangular* fide Lücking et al. (2004).

Aulographina Arx & E. Müll. 1960, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *A. pinorum* (Desm.) Arx & E. Müll., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as genus in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, transferred to *Teratosphaeriaceae*), Wijayawardene et al. (2014; outline), placement in *Teratosphaeriaceae* supported by morphology and phylogeny, holotype of type: PC 0084689.

Aulographum Lib. 1834, *Aulographaceae*, *Asterinales*, *Dothideomycetes*, no new species, type: *A. hederæ* Lib., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures available for type species MFLUCC 13-0001, CPC21373.

Aulospora Speg. 1909, *Sordariomycetes*, genera *incertae sedis*, 1 species, type: *A. epimyces* (Speg.) Speg., asexual morph unknown, saprobes, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Aurantiascoma Thambugala & K.D. Hyde 2015, *Floricolaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. minimum* (Mugambi, A.N. Mill. & Huhndorf) Thambugala & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Kenya, see Thambugala et al. (2015b; phylogeny), holotype of type: GKM 169N, ex-type strain of type: is not available.

Aurantiosacculus Dyko & B. Sutton 1979, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, three species, type: *A. eucalypti* (Cooke & Masee) Dyko & B. Sutton, coelomycetous, sexual morph unknown, foliicolous, pathogens, saprobes, three species, Australia, see Crous et al. (2012; morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of the type: Reader No. 24 K.

Aurapex Gryzenh. & M.J. Wingf. 2006, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *A. penicillata* Gryzenh. & M.J. Wingf., coelomycetous, sexual morph unknown, ?pathogens, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type cultures of type: PREM 57520, CMW 10030 = CBS115740.

Auratiopycnidiella Crous & Summerell 2012, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *A. tristaniopsisidis* Crous & Summerell, coelomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Crous et al. (2012; morphology,

phylogeny), Maharachchikumbura et al. (2015; classification, phylogeny), ex-type strains of type: CPC 16371; holotype CBS H-20932.

Aureobasidium Viala & G. Boyer 1891, *Aureobasidiaceae*, *Dothideales*, *Dothideomycetes*, 36 species, type: *A. vitis* Viala & G. Boyer 1891, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Peterson et al. (2013; phylogeny), Kirk (2013; genus accepted), ex-epitype strains of type: CBS 130298.

Auriculora Kalb 1988, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *A. byssomorpha* (Nyl.) Kalb, lichenized, Neotropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; classification), Lücking et al. (2016; classification), sequences are unavailable.

Aurifilum Begoude, Gryzenh. & Jol. Roux 2010, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, asexual morph coelomycetous, known only from the type: *A. marmelostoma*, pathogens, terrestrial, Cameroon, Taiwan, see Begoude et al. (2010; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), ex-type of type: CBS 124928 = CMW28290; ex-paratypes of type: CBS 124929, CBS 124930; holotype of type: PREM 60256.

Aurophora Rifai 1968, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *A. dochmia* (Berk. & M.A. Curtis) Rifai, asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aurosphaeria Sun J. Lee, Strobel, Eisenman, Geary, Vargas & S.A. Strobel 2009, *Ascomycota* genera *incertae sedis*, one species, type: *A. flaviradians* Sun J. Lee, Strobel, Eisenman, Geary, Vargas & S.A. Strobel, coelomycetous, sexual morph unknown, saprobes, terrestrial, Bolivia, see Lee et al. (2009; taxonomy), Wijayawardene et al. (2012, 2017; outline), holotype of the type: MONT 2349, cultures and sequences are unavailable, needs generic revision.

Australiaena Matzer, H. Mayrhofer & Elix 1997, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *A. streimannii* Matzer, H. Mayrhofer & Elix, with ascomata, lichenized (green algae), terrestrial (saxicolous), Australia, Papua-New Guinea see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Krika et al. (2016; outline), Prieto et al. (2013; phylogeny), Lücking et al. (2016, classification), Prieto and Wedin (2016; phylogeny), sequences are available for the type: AF540495 (ITS) (fide Helms et al. 2003), sequence available.

Austrella P.M. Jørg. 2004, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *A. arachnoidea* P.M. Jørg., with ascomata, lichenized (*Nostoc*), terrestrial (corticolous), Australia, New Zealand, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016, classification), sequences are available for the type species.

Austroafricana Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, hyphomycetous, three species, type: *A. associata* (Crous & Carnegie) Quaedvl. & Crous, asexual morph unknown, pathogens, terrestrial, Australia, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), holotype of the type: CBS-H 19833, ex-type strain of type: CPC 13119.

Austrocenangium Gamundí 1997, *Helotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *A. australe* (Speg.) Gamundí, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Austrographa Sparrius, Elix & A.W. Archer 2010, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *A. kurriminensis* Sparrius, Elix & A.W. Archer,

lichenized, see Sparrius et al. (2010, 2013; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Austrolecia Hertel 1984, *Catillariaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *A. antarctica* Hertel, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Austroparmeliella (P.M. Jørg.) P.M. Jørg. 2014, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *A. arachnoidea* P.M. Jørg., with ascomata, lichenized (*Nostoc*), terrestrial (corticolous), Australia, New Zealand, see Lücking et al. (2016, classification), sequences are available for the type species.

Austroparmelina A. Crespo, Divakar & Elix 2010, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 15 species, type: *A. endoleuca* (Taylor) A. Crespo, Divakar & Elix, with ascomata, lichenized (green algae), terrestrial (corticolous, saxicolous), Australasia, South Africa, see Crespo et al. (2010a, b; taxonomy), Kantvilas and Divakar (2013; phylogeny), Lücking et al. (2016; classification), sequences are available.

Austropeltum Henssen, Döring & Kantvilas 1992, *Sphaerophoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *A. glareosum* Henssen, Döring & Kantvilas, with ascomata, lichenized (green algae), terrestrial (terricolous), Tasmania and New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification).

Austroplaca Söchting, Frödén & Arup 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, ten species, type: *A. ambitiosa* (Darb.) Söchting, Frödén & Arup, lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification); sequences are available.

Austropleospora R.G. Shivas & L. Morin 2010, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *A. osteospermi* R.G. Shivas & L. Morin, asexual morph coelomycetous, pathogens, terrestrial, Australia, South Africa, see Morin et al. (2010), Ariyawansa et al. (2015; phylogeny), holotype of the type: BRIP 52234, isotype BRIP 51628 (includes ex-isotype culture).

Austrorocella Tehler & Ertz 2013, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *A. gayana* (Mont.) Tehler & Ertz, sexual morph with apothecioid ascomata, asexual morph coelomycetous, lichenized, terrestrial, Chile, see Tehler et al. (2013; morphology, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available

Austrostigidium Pérez-Ortega & Garrido-Benavent 2015, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *A. mastodiae* Pérez-Ortega & Garrido-Benavent, lichenicolous, terrestrial, Artarctica, Tierra del Fuego, asexual morph coelomycetous, See Pérez-Ortega et al. (2015, phylogeny, taxonomy). closely related to the lichenicolous genus *Xanthoriicola* and the rock-inhabiting fungal genus *Friedmanniomyces*, holotype of type: MA–Lich 18215.

Austrotrema I. Medeiros, Lücking & Lumbsch 2017, *Graphidaceae*, *Ostropales*, *Ostropomycetidae*, *Lecanoromycetes*, three species, type: *A. bicinctulum* (Nyl.) I.Medeiros, Lücking & Lumbsch, lichenized, see Medeiros et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Autoicomycetes Thaxt. 1908, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 28 species, type: *A. acuminatus* (Thaxt.) Thaxt., asexual morph unknown, parasitic on Hydrophilidae beetles, aquatic, Asia, Europe, North America, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Autophagomyces Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 20 species, type: *A. platensis* Thaxt., asexual morph unknown, parasitic on Anthicidae, Phalacridae, and Staphylinidae beetles, terrestrial, Africa, Asia, North America, South

America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Auxarthron G.F. Orr & Kuehn 1963, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, 17 species, type: *A. californiense* G.F. Orr & Kuehn, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Crous et al. (2013; new species, Portugal), Hubka et al. (2013; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Auxarthronopsis Rahul Sharma, Gräser & S.K. Singh 2011, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, 18 species, type: *A. californiense* G.F. Orr & Kuehn, asexual morph hyphomycetous, saprobes, terrestrial, India, see Sharma et al. (2011; taxonomy), cultures and sequences are available.

Avesicladiella W.P. Wu, B. Sutton & Gange 1997, *Ascomycota* genera *incertae sedis*, hyphomycetous, sexual morph unknown, two species, type: *A. britannica* Wu, Sutton & Gange, saprobes, UK, China, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 372453, sequence are unavailable.

Avettaea Petr. & Syd. 1927, *Ascomycota* genera *incertae sedis*, three species, type: *A. philippinensis* Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Awasthiella Kr.P.Singh 1980, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *A. indica* Kr. P. Singh, lichenized, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Ayria Fryar & K.D. Hyde (2004), *Annulatasaceae*, *Incertae sedis*, *Sordariomycetes*, 2 spp., type species *A. appendiculata* Fryar & K.D. Hyde (2004), saprobes, aquatic, Costa Rica, USA, Brunei, molecular data not available for any of these species, taxonomic position is currently unknown, based on morphological characteristics it is placed in the current position, see Fryar and Hyde (2004), Raja et al. (2009), Maharachchikumbura et al (2016), holotype of type species HKU (M) 15553.

Azbekinia Lar. N. Vassiljeva 1989, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. ferruginea* (Fuckel) Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable.

Azureothecium Matsush. 1989, *Eurotiomycetidae*, genera *incertae sedis*, *Eurotiomycetes*, two species, type: *A. australiense* Matsush., asexual morph unknown, saprobes, from soil, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Babjeviella Kurtzman & M. Suzuki 2010, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *B. inositovora* (Golubev & Blagod.) Kurtzman & M. Suzuki, asexual reproduction by multilateral budding and cells are short-ellipsoid to elongate, saprophytes, known from peat, rotted balsam fir (*Abies balsamea*), insect frass, unidentified tree, Russia, Canada, USA, see Kurtzman and Suzuki (2010; taxonomy), Kurtzman and Robnett (2013; phylogeny), cultures and sequences are available.

Bachmanniomyces D. Hawksw. 1981, *Ascomycota* genera *incertae sedis*, type: *B. uncialicola* (Zopf) D. Hawksw. (syn. *Phyllosticta uncialicola* Zopf), three species, coelomycetous, sexual morph unknown, gall-forming on lichens, Europe, North and South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), lectotype of type: E, cultures and sequences are unavailable.

Bacidia De Not. (1846), *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, 230 species, type: *B. rosella* (Pers.) De Not., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Bacidina Vězda [nom.cons.] 1991, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, twelve species, type: *B. phacodes* (Körb.) Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Bacidiopsora Kalb 1988, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *B. squamulosa* (Nyl.) Kalb (*Lecidea squamulosa* Nyl.), lichenized fungi, corticolous, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Bacillopeltis Bat. 1957, *Ascomycota* genera *incertae sedis*, one species, type: *B. paypayrolae* Bat., coelomycetous, sexual morph unknown, saprobes, on soil, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bactridium Kunze 1817, *Ascomycota* genera *incertae sedis*, 15 species, type: *B. flavum* Kunze, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bactrodesmiella M.B. Ellis 1959, *Ascomycota* genera *incertae sedis*, two species, type: *B. masonii* (S. Hughes) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bactrodesmium Cooke 1883, *Dothideomycetes* genera *incertae sedis*, more than 48 species, type: *B. abruptum* (Berk. & Broome) Mason & Hughes, sexual morph *Stuartella* spp., saprobes, terrestrial and aquatic, worldwide, see Zhao et al. (2009; outline, diversity), da Cruz et al. (2009; diversity), Koukol and Kolářová (2010; morphology, phylogeny), Kalko (2011; diversity), Seephueak et al. (2011a, 2011b; diversity), Hernández-Restrepo et al. (2013; morphology), Tanaka et al. (2015; phylogeny), sequences are available.

Bactrosphaeria Penz. & Sacc. 1897, *Sordariomycetes* genera *incertae sedis*, one species, type: *B. asterostoma* Penz. & Sacc, asexual morph unknown, saprobe, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bactrospora A. Massal. 1852, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, 35 species, type: *B. dryina* (Ach.) A. Massal., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Knudsen et al. (2011; new species), Kirk et al. (2013; genus accepted), Sobreira et al. (2015; new species), Lücking et al. (2016; classification), sequences are unavailable.

Bactrospora A. Massal. 1852, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, 35 species; type: *B. dryina* (Ach.) A. Massal., lichenized, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Baculifera Marbach & Kalb 2000, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 14 species, type: *B. orosa* Marbach, with ascomata, lichenized (green algae), terrestrial (mostly corticolous and lignicolous), tropical, see Elix and Mayrhofer (2016; outline), Lücking et al. (2016, classification), Prieto and Wedin (2016; DNA, genus accepted), sequences are available but lacks for the type:.

Baculospora Zúkal 1887, *Ascomycota* genera *incertae sedis*, one species, type: *B. pellucida* Zúkal, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bacusphaeria Norlailatul, Alias & S. Suetrong 2016, *Tirisporellaceae*, *Tirisporellales*, *Sordariomycetes*, one species, type: *B.*, asexual morph unknown, saprobes, in brackish water, Malaysia, see Jones et al. (2015; classification), Suetrong et al. (2016; phylogeny, morphology), holotype and ex-type strain of type: MFLU 13-0617, BCC51275.

Badarisama Kunwar, J.B. Manandhar & J.B. Sinclair 1986, *Ascomycota* genera *incertae sedis*, one species, type: *B. sojae* Kunwar, J.B. Manandhar & J.B. Sinclair, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Badimia Vězda [nom.cons.] 1986, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, 18 species, type: *B. dimidiata* (Bab. ex Leight.) Vězda, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Badimiella Malcolm & Vězda 1994, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *B. serusiauxii* Malcolm & Vězda, lichenized, south temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Baeomyces Pers. 1794, *Baeomycetaceae*, *Baeomycetales*, *Lecanoromycetes*, nine species, type: *B. byssoides* (L.) P. Gaertn., G. Mey. & Scherb., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Baflavia Lücking 2008, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *B. flavescens* (Lücking) Lücking, lichenized, see Lücking et al. (2016; classification), sequences are unavailable.

Bagadiella Cheew. & Crous 2009, *Diaporthales*, genera *incertae sedis*, *Sordariomycetes*, two species, type: *B. lunata* Cheew. & Crous, hyphomycetous, sexual morph unknown, saprobes, ?pathogens, terrestrial, Australasia, see Cheewangkoon et al. (2009; taxonomy, phylogeny), Crous et al. (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type culture of the type: CBS H-20281, CBS 124762.

Bagcheea E. Müll. & R. Menon 1954, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *B. albomaculans* (Fukui) Hino & Katumoto asexual morph unknown, mild pathogens, terrestrial, temperate and tropical, Asia, See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Bagcheea E. Müll. & R. Menon 1954, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *B. albomaculans* (Fukui) Hino & Katumoto asexual morph unknown, mild pathogens, terrestrial, temperate and tropical, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Baggea Auersw. 1866, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *B. pachyascus* Auersw., asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), neotype of type species at K herbarium (Royal Botanical Garden), *Ascom.* No. 28.

Bagliettoa A. Massal. 1853, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 20 species, type: *B. limborioides* A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Bagnisimitrula S. Imai 1942, *Leotiomycetes*, genera *incertae sedis*, one species, type: *B. saccardo* (Bagnis) S. Imai, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bahianora Kalb 1984, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *B. poeltii* Kalb, lichenized, see Lumbsch and Huhndorf (2010; outline), Schnull et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Bahuchashaka Subram. 1978, *Ascomycota* genera *incertae sedis*, one species, type: *B. graminis* (Matsush.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bahukalasa Subram. & Chandrash. 1979, *Ascomycota* genera *incertae sedis*, one species, type: *B. samala* Subram. & Chandrash., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bahusakala Subram. 1958, *Dothideomycetes* genera *incertae sedis*, four species, type: *B. olivaceonigra* (Berk. & Broome) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, Caribbean, North America, see Kang et al. (2010; DNA), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), cultures and sequences are available, needs generic revision.

Bahusandhika Subram. 1956, *Ascomycota* genera *incertae sedis*, four species, type: *B. indica* (Subram.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bahusutrabeaja Subram. & Bhat (1977), *Botryosphaeriales*, *Dothideomycetes*, 6 species, type species *B. dwaya* Subram. & Bhat 1977, Hyphomycetous, Sexual morph not reported, Saprobes, Terrestrial, sometimes aquatic, Cosmopolitan (incl. India, Hong Kong and Australia) (Farr and Rossman 2016), See Shenoy et al. (2010, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Li et al. (2013; new species, key), Gao et al. (2015; New record for *B. angularis* from China). Molecular data available for only one species, i.e. for the type species. GenBank Number: HM171320 (28S rRNA gene), Ex-type culture of the type: GUFCC 4904 (= MTCC 9680).

Baipadisphaeria Pinruan 2011, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *B. spathulospora* Pinruan, asexual morph unknown, saprobes, aquatic, on decaying leaves of peat swamp palm *Licuala longicalycata*, Thailand, see Pinruan et al. (2010; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type culture of type: BBH Pinruan Wah32A, BCC16119.

Bakerophoma Died. 1916, *Ascomycota* genera *incertae sedis*, three species, type: *B. sacchari* Died. 1916, lichenicolous, see Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Balaniopsis P.M. Kirk 1985, *Ascomycota* genera *incertae sedis*, four species, type: *B. africana* (Kiffer) P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, on soil, terrestrial, Africa, Australasia, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Balanium Wallr. 1833, *Ascomycota* genera *incertae sedis*, one species, type: *B. stygium* Wallr., hyphomycetous, sexual morph unknown, saprobes, on soil, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Balansia Speg. 1885 (= *Ephelis* Fr. 1849 *vide* Rossman et al. 2016), *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, 27 species, type: *B. claviceps* Speg., asexual morph unknown, saprobes, terrestrial, subtropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures and sequences are available.

Balazucia R.K. Benj. 1968, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *B. bilateralis* R.K. Benj., asexual morph unknown, parasitic on Staphylinoida beetles, terrestrial, Central America and Japan, see Rossi and Weir (2008; treated as a synonym of *Cucujomyces*), Lumbsch and Huhndorf (2010; outline, misspelled as *Balazusia*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Balazucia R.K. Benj. 1968, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, four species, type: *B. bilateralis* R.K. Benj., asexual morph unknown, biotrophic on aquatic Coleoptera (Hydrophilidae), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Balladyna Racib. 1900 (= *Wageria* Stevens & Dalbey. 1918), *Parodiopsidaceae*, *Dothideomycetes* family *incertae sedis*, c. 17 species, type: *B. gardeniae* Racib., asexual morph unknown, see Hosagoudar et al. (2009; morphology), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Balladynocallia Bat. 1965, *Parodiopsidaceae*, *Dothideomycetes* family *incertae sedis*, three species, type: *B. glabra* (Hansf.) Bat. (= *Balladynastrum glabrum* Hansf.), asexual morph unknown, saprophytes on leaves, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Balladynopsis Theiss. & Syd., 1917, *Parodiopsidaceae*, *Dothideomycetes* family *incertae sedis*, 17 species, type: *B. philippinensis* Syd. & P. Syd., asexual morph hyphomycetous, mostly saprophyte on leaf, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences unavailable.

Balsamia Vittad. 1831, *Helvellaceae*, *Pezizales*, *Pezizomycetes*, six species, type: *B. vulgaris* Vittad., asexual morph unknown, saprobes, ?from soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; DNA, phylogeny), sequences are available for voucher AH44224 of the type: (*vide* Crous et al. 2014).

Bambusaria Jaklitsch, D.Q. Dai, K.D. Hyde & Voglmayr 2015, *Valsariaceae*, *Valsariales*, *Dothideomycetes*, one species, type: *B. bambusae* (J.N. Kapoor & H.S. Gill) Jaklitsch, D.Q. Dai, K.D. Hyde & Voglmayr 2015, asexual morph coelomycetous, saprobes, terrestrial, India and Thailand, see Jaklitsch et al. (2015; phylogeny, morphology, sexual and asexual morphs), reference specimen culture of type: MFLUCC 12-0851 = CBS 139763 = MUCL 55880.

Bambusicola D.Q. Dai & K.D. Hyde 2012, *Bambusicolaceae*, *Massarineae*, *Pleosporales*, *Dothideomycetes*, nine species, type: *B. massarinia* D.Q. Dai & K.D. Hyde 2012, asexual morph coelomycetous, saprobes, terrestrial, Thailand, see Dai et al. (2012, 2015, 2016; phylogeny, morphology, sexual morph, key), Wijayawardene et al. (2014; outline), ex-type culture of type: MFLUCC 11-0389 = CBS 139985.

Bambusicularia Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, hyphomycetous, one species, type: *B. brunnea* Klaubauf, Lebrun & Crous, sexual morph unknown, pathogens, terrestrial, Japan, see Klaubauf et al. (2014; morphology,

phylogeny), Maharachchikumbura et al. (2015; outline), holotype of the type: CBS H-21839, ex-type strain of type: CBS 133599.

Bambusistroma D.Q. Dai & K.D. Hyde 2015, *Massarinaceae*, *Massarineae*, *Pleosporales*, *Dothideomycetes*, one species, type: *B. didymosporum* D.Q. Dai & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Adamčík et al. (2015; phylogeny, morphology, sexual morph), holotype and ex-type strain of type: MFLU 15–0057, MFLUCC 13–0862.

Bambusistroma D.Q. Dai & K.D. Hyde 2015, *Massarinaceae*, *Massarineae*, *Pleosporales*, *Dothideomycetes*, one species, type: *B. didymosporum* D.Q. Dai & K.D. Hyde 2015, asexual morph unknown, saprobes, terrestrial, Thailand, see Adamčík et al. (2015; phylogeny, morphology, sexual morph), ex-type culture of type: MFLUCC 13–0862.

Bangkok Herbarium.

Banhegyia Zeller & Tóth 1960, *Dothideomycetes* genera *incertae sedis*, two species, type: *B. setispora* L. Zeller & Tóth, asexual morph unknown, saprobes, terrestrial, Europe, see Sanderson et al. (2009; excluded the genus *Banhegyia* due to differing morphology and phylogeny and synonymized *Banhegyia* with *Mycoelaspilea*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; did not accept as a genus in *Patellariaceae* but included in key due to historical reasons), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; did not accept as a genus in *Patellariaceae*), holotype of type: BP 2835.

Banksiomyces G.W. Beaton 1982, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *B. macrocarpus* G.W. Beaton, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence (ITS) is available for an unidentified species, needs generic revision.

Bapalmuia Sérus. 1993, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, 23 species, type: *B. palmularis* (Müll. Arg.) Sérus., lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Van Den Broeck et al. (2014; new species, Congo), Lücking et al. (2016; classification), sequences are available.

Barbarosporina Kıřulis 1942, *Ascomycota* genera *incertae sedis*, one species, type: *B. rhytismatis* Kıřulis, coelomycetous, sexual morph unknown, former USSR see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Barbatosphaeria Réblová 2008, *Sordariomycetidae*, genera *incertae sedis*, *Sordariomycetes*, eight species, type: *B. barbirostris* (Dufour) Réblová, asexual morph unknown, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Réblová et al. (2015; new species), Maharachchikumbura et al. (2016; outline, phylogeny), cultures available for the type: CBS 121149.

Barnettella D. Rao & P.Rag. Rao 1964, *Ascomycota* genera *incertae sedis*, one species, type: *B. speciosa* D. Rao & P.Rag. Rao, coelomycetous, sexual morph unknown, saprobes, on soil, terrestrial, India, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), cultures and sequences are unavailable, needs generic revision.

Barnettozyma Kurtzman, Robnett & Bas.-Powers 2008, *Phaffomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, ten species, type: *B. populi* (Phaff, Y. Yamada, Tredick & M. Miranda) Kurtzman, Robnett & Basehoar-Powers, asexual reproduction by budding, saprophytic, on soil, water, tree fluxes, insect frass in trees, animal dung, one clinical isolate, worldwide, see Kurtzman et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

Barretomyces Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, hyphomycetous, one species, type: *B. calathea* (Soares, Rocha & Barreto) Klaubauf, Lebrun & Crous, sexual morph unknown, pathogens, terrestrial, Brazil, see

Klaubauf et al. (2014; morphology, phylogeny), Maharachchikumbura et al. (2015; outline), holotype of the type: VIC 30699, ex-type strain of type: CBMAI 1060.

Barria Z.Q. Yuan 1994, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *B. piceae* Z.Q. Yuan, asexual morph unknown, pathogens, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014; transferred the genus *Barria* from *Phaeosphaeriaceae* to *Didymosphaeriaceae*), Phookamsak et al. (2014; accepted as a genus in *Didymosphaeriaceae*), Wijayawardene et al. (2014; outline), sequences are unavailable, isotype of type species NY 00164027.

Barrina A.W. Ramaley 1997, *Coniochaetaceae*, *Coniochaetales*, *Sordariomycetes*, one specie (type): *B. polyspora* A.W. Ramaley, asexual morph *Phialophora*-like, saprobes, USA see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline), sequences are available.

Barriopsis A.J.L. Phillips, A. Alves & Crous, *Persoonia* 21: 39. 2008, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, four species, type species *P. fusca* N.E. Stevens [= *Barriopsis fusca* nom. illeg.; = *Barriopsis stevensiana* A.J.L. Phillips & Pennycook], asexual morph coelomycetous, saprobes, weak pathogens, terrestrial, distribution not known, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2012; phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy), ex-type culture CBS 174.26, needs generic revision.

Barriopsis stevensiana A.J.L. Phillips & Pennycook, *nom. nov.* MycoBank MB819573

≡ *Barriopsis fusca* (N.E. Stevens) A.J.L. Phillips, A. Alves & Crous, *Persoonia* 21: 39. 2008, nom illeg. [ICN(Melbourne) Art. 52.1], replaced synonym.

≡ *Phaeobotryosphaeria fusca* (N.E. Stevens) Petr., *Sydowia* 6: 317. 1952.

≡ *Physalospora fusca* N.E. Stevens, *Mycologia* 18: 210. 1926.

Etymology: Named in honour of N.E. Stevens, the American mycologist and plant pathologist.

See Phillips et al. (2008) for illustrations, description and diagnosis.

Holotype: Cuba, Herradura, on twigs of *Citrus* sp., 15 Jan. 1925, *N.E. Stevens*, holotype BPI 599052, culture ex-type CBS 174.26.

Notes: Phillips et al. (2008) introduced *Barriopsis fusca* as a new combination based on *Physalospora fusca*, but inadvertently rendered it illegitimate (superfluous) by listing *Botryosphaeria disrupta* (Berk. & M.A. Curtis) Arx & E. Müll., as a synonym. However, this synonymy is erroneous; the dark brown, aseptate ascospores of *B. stevensiana* are distinct from the light brown (“hellbraun”) ascospores of *B. disrupta* sensu von Arx & Müller (1954), and clearly distinct from the hyaline ascospores of *Sphaeria disrupta*, the basionym of *B. disrupta* (Berkeley 1876).

Barrmaelia Rappaz 1995, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *B. rhamnnicola* Rappaz, six species, asexual morph libertella-like, terrestrial, saprobes, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Kcultures and cultures and sequences are available.

Barssia Gilkey 1925, *Helvellaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *B. oregonensis* Gilkey, asexual morph unknown, saprobes, ?from soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), sequences are available for the type species.

Bartalinia Tassi 1900, *Bartaliniaceae*, *Amphisphaeriales*, *Sordariomycetes*, 17 species, type: *B. robillardoides* Tassi, saprobes, associated with leaf spots, cosmopolitan, see Marinowitz et al. (2010; new species), Wijayawardene et al. (2012, 2016, 2017; phylogeny, taxonomy,

outline), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), Senanayake et al. (2015; phylogeny, morphology), cultures and sequences are available.

Bartlettella D.J. Galloway & P.M. Jørg. 1990, *Lecanoromycetes* genus *incertae sedis* one species, type: *B. fragilis* D.J. Galloway & P.M. Jørg., with ascomata, lichenized (green algae), lichenized, terrestrial (saxicolous), New Zealand, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016, classification), cultures and sequences are unavailable.

Barubria Vezda 1986, *Pilocarpacae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *B. fuscorubra* (Vezda) Vezda with ascomata, lichenized (green algae), terrestrial (foliicolous), Neotropics and tropical Africa, rare see Lücking (2008; outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Farkas (2015; nomenclature), Lücking et al. (2016, classification), cultures and sequences are unavailable.

Basauxia Subram. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *B. pulchra* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype (MUBL 3126) - On rachis of *Palmae*, Cameroon Highlands, Malaysia (CV Subramanian, 7 May 1987), cultures and sequences are unavailable, needs generic revision.

Basavamyces Hosag. 2005, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, two species, type: *B. litseae* Hosag., C.K. Biju & T.K. Abraham, asexual morph unknown, obligate parasites, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Housagoudar (2008; new species), Housagoudar and Archana (2009; key), holotype (HCIO 43453), cultures and sequences are unavailable, needs generic revision.

Batcheloromyces Marasas, P.S. van Wyk & Knox-Dav. 1975, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, five species, type: *B. proteae* Marasas, P.S. van Wyk & Knox-Dav., hyphomycetous, sexual morph unknown, pathogens, saprobes, terrestrial, Australia, Thailand, see Crous et al. (2009; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017, phylogeny, outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2014; phylogeny), cultures available for type: CBS 110696.

Bathelium Ach. 1803, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, 16 species, type: *B. mastoideum* Afzel. ex Ach., lichenized, see Nelsen et al. (2014a; phylogeny), Aptroot and Lücking (2016; monograph), Lücking et al. (2016c; phylogeny), Lücking et al. (2016; classification), sequences are available.

Bathyascus Kohlm. 1977, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, five species, type: *B. vermispurus* Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: J.K. 1947 = 00966736, NYBG.

Batistia Cif. 1958 (= *Acrostroma* Seifert 1987 *vide* Rossman et al. 2016), *Batistiaceae*, *Ascomycota* families *incertae sedis*, one species, type: *B. annulipes* (Mont.) Cif., asexual morph formerly known in *Acrostroma*, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Batistina Peres (1961), *Ascomycota* genera *incertae sedis*, one species, type species *B. splendida* Peres 1961, Coelomycetous, Sexual morph not reported, Saprobes, Terrestrial, Brazil, See Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Batistinula Arx 1960, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, one species, type: *B. gallesiae* Arx, asexual morph (= *Triposporium*-like, *vide* Sivanesan 1984). Epiphytes, biotrophic, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf

(2010; outline), Hyde et al. (2013; review, keys), Hongsanan et al. (2014; taxonomy, keys), Wijayawardene et al. (2014; outline), Guatimosim et al. (2015; phylogeny, DNA), holotype of type: URM 19988, type sequence KP143736 (voucher VIC 42514), KM111255 (voucher 344).

Batistospora J.L. Bezerra & M.P. Herrera 1964, *Ascomycota* genera *incertae sedis*, one species, type: *B. septentrionalis* J.L. Bezerra & M.P. Herrera, asexual morph unknown, saprobes, Neotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Battarrina (Sacc.) Clem. & Shear 1931, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *B. inclusa* (Berk. & Broome) Clem. & Shear, asexual morph unknown, parasitic (fungicolous), terrestrial, UK, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), holotype of type: K.

Baudoinia J.A. Scott & Unter. 2007, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, five species, type: *B. compniacensis* (Richon) J.A. Scott & Unter., hyphomycetous, sexual morph unknown, saprobes, terrestrial and aquatic, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Scott et al. (2016; new species, phylogeny), epitype and ex-epitype of cultures of the type: DAOM 238773, UAMH 10808.

Beauveria Vuill. 1912, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *B. bassiana* (Bals.-Criv.) Vuill., asexual morph unknown, saprobes, terrestrial, Central and South America, see Lumbsch and Huhndorf (2010; outline), Rehner et al. (2011; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Robène-Soustrade et al. (2015; new species), Imoulan et al. (2016; new species, entomopathogens), cultures and sequences are available.

Beauveriphora Matsush. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *B. sporotricis* Matsush., hyphomycetous, sexual morph unknown, saprobes, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017, outline), cultures and sequences are unavailable, needs generic revision.

Beccopycnidium F. Stevens (1930), *Ascomycota* genera *incertae sedis*, one species, type species *B. palmicola* F. Stevens 1930, Coelomycetous, Sexual morph not reported,

Beejadwaya Subram. 1977, *Ascomycota* genera *incertae sedis*, one species, type: *B. bispora* (Matsu.) Subram., hyphomycetous, sexual morph unknown, saprobe, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017, outline), cultures and sequences are unavailable, needs generic revision, holotype: Matsushima herb. 4861; On dead leaves of *Musa paradisiaca*, Iriomote Island, Okinawa, Japan (Mar 1974, MBL 101407)

Beelia F. Stevens & R.W. Ryan 1925, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *B. suttoniae* F. Stevens & R.W. Ryan, asexual morph unknown, saprobes, Hawaii, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Elsinoaceae*), Kirk et al. (2013; genus accepted), Jayawardena et al. (2014; transferred to *Chaetothyriaceae*), Wijayawardene et al. (2014, outline), cultures and sequences are unavailable, needs generic revision.

Belemnospora P.M. Kirk 1981, *Ascomycota* genera *incertae sedis*, seven species, type: *B. epiphylla* P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, Asia, Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Belizeana Kohlm. & Volkm.-Kohlm. 1987, *Dothideomycetes*, genera *incertae sedis*, one species, type: *B. tuberculata* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, Belize, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Elsinoaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014: outline), Jones

et al. (2015; outline, accepted as a genus in Dothideales *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Bellemerea Hafellner & Cl. Roux 1984, *Lecanoromycetes* genus *incertae sedis*; nine species, type: *B. alpina* (Sommerf.) Clauzade & Cl. Roux., with ascomata, lichenized (green algae), terrestrial (saxicolous), Eurasia, North America, Australia, New Zealand and Antarctica, montane and boreal, arctic-alpine/antarctic regions, see Ekman et al. (2008, DNA), Lumbsch and Huhndorf (2010; outline), Schmuil et al. (2011; phylogeny), Miadlikowska et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available for the type:.

Bellemerella Nav.-Ros. & Cl. Roux 1997, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, four species, type: *B. trapeliae* Nav.-Ros. & Cl. Roux, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bellojisia Réblová 2008, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *B. rhynchostoma* (Höhn.) Réblová, asexual morph unknown, saprobes, terrestrial, Austria, see Réblová (2008; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), culture of the type: CBS 118484.

Bellulicauda B. Sutton 1967, *Ascomycota* genera *incertae sedis*, two species, type: *B. dialii* (Syd.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, Italy, Sierra Leone, Zambia, see Wijayawardene et al. (2012, 2016, 2017; taxonomy, new species, outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of the type: IMI 21609.

Belonioscyphella Höhn. 1918, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *B. hypnorum* (Syd. & P. Syd.) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Huhtinen et al. (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequence are available, needs generic revision.

Belonopsis (Sacc.) Rehm 1891, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *B. excelsior* (P. Karst.) Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), a sequence is available, needs generic revision.

Beltramono Rashmi Dubey, A.K. Pandey bis & Manohar. 2011, *Ascomycota* genera *incertae sedis*, one species, type: *B. costi* Dubey, Pandey & Manohar., hyphomycetous, sexual morph unknown, pathogens, terrestrial, India, see Dubey et al. (2011; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Beltrania Penz. 1882, *Beltraniaceae*, *Xylariales*, *Sordariomycetes*, 14 species, type: *B. rhombica* Penz., saprobes, worldwide, see Kirk et al. (2013; genus accepted), Crous et al. (2015; emended the family), Maharachchikumbura et al. (2015, 2016; outline), Rajeshkumar et al. (2016; taxonomy, phylogeny), cultures and sequences are available, needs generic revision.

Beltraniella Subram. 1952, *Beltraniaceae*, *Xylariales*, *Sordariomycetes*, 21 species, type: *B. odinae* Subram., saprobes, worldwide, see Shirouzu et al. (2010; new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2014; new species, New South Wales), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species, phylogeny), Jaklitsch et al. (2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

Beltraniopsis Bat. & J.L. Bezerra 1960, *Beltraniaceae*, *Xylariales*, *Sordariomycetes*, nine species, type: *B. odinae* Subram., saprobes, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2014; new species, New South Wales), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Benguetia Syd. & P. Syd. 1917, *Helotiales* genera *incertae sedis*, one species, type: *B. omphalodes* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Beniowskia Racib. 1900, *Ascomycota* genera *incertae sedis*, four species, type: *B. graminis* Racib., hyphomycetous, sexual morph unknown, pantropical, saprobes, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Benjaminiomyces I.I. Tav. 2000, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, four species, type: *B. melanophthalmae* (Thaxt.) I.I. Tav., asexual morph unknown, parasitic on Cryptophagidae, Latridiidae, Monotomidae, and Phalacridae beetles, terrestrial, North and South America, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable.

Benjpalia Subram. & Bhat 1989, *Ascomycota* genera *incertae sedis*, one species, type: *B. sundara* Subram. & Bhat, hyphomycetous, sexual morph unknown, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Berkelella (Sacc.) Sacc. 1891, *Hypocreales*, genera *incertae sedis*, *Sordariomyces*, two species, type: *B. caledonica* (Pat.) Sacc., asexual morph unknown, on Myxomycetes, worldwide, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Berkleasium Zobel 1854, *Pleosporales* genera *incertae sedis*, *Dothideomyces*, 36 species, type: *B. concinnum* (Berk.) S. Hughes, sexual morph unknown, saprobes, terrestrial and aquatic, see McKenzie (2008; new species), Zhang et al. (2009; new species), Wongs et al. (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Whitton et al. (2012; key to 34 *Berkleasium* species), Hüseyinet al. (2014; new species), Qu et al. (2014; new species), three species have sequences, needs generic revision.

Bertia De Not. 1844, *Bertiaceae*, *Coronophorales*, *Sordariomyces*, 30 species, type: *B. moriformis*., worldwide, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

Bertiella (Sacc.) Sacc. & P. Syd. 1899, *Melanommataceae*, *Pleosporales*, *Dothideomyces*, two species, type: *B. polyspora* Kirschst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, 2016; accepted as a genus in *Melanommataceae*, new species), Wijayawardene et al. (2014; outline), Tian et al. (2015; accepted as a genus in *Melanommataceae*), cultures and sequences are available.

Bettsia Skou 1972, *Ascospaeraceae*, *Onygenales*, *Eurotiomyces*, two species, type: *B. alvei* (Betts) Skou, asexual morph hyphomycetous, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pitt et al. (2013; new species), sequences and culture available.

Betulina Velen. 1947, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, two species, type: *B. hirta* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, both species have been transferred to other genera (Index Fungorum 2017).

Beverwykella Tubaki., 1975, *Pleomassariaceae*, *Pleosporales*, *Dothideomyces*, three species, type: *B. pulmonaria* (Beverw.) Tubaki, sexual morph unknown, aquatic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in *Melanommataceae*), Hyde et al. (2013; accepted as a genus in *Melanommataceae*), Kirk et al. (2013; genus accepted), Tian et al. (2015; phylogeny, transferred to *Pleomassariaceae*),

Wijayawardene et al. (2017; outline), cultures and sequences are available for authentic strains CBS 283.53, MFUCC 15–0183, reference specimen MFLU 15–1398.

Bhadradriella Nagaraju, Kunwar & Manohar. 2011, *Ascomycota* genera *incertae sedis*, one species, type: *B. hyalina* Nagaraju, Kunwar & Manohar., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Nagaraju et al. (2011; taxonomy), Wijayawardene et al. (2016; outline), holotype of the type: HClO 50143, cultures and sequences are unavailable, needs generic revision.

Bhadradriomyces Sureshk., Manohar. & Kunwar 2009, *Ascomycota* genera *incertae sedis*, one species, type: *B. elegans* Sureshk., Manohar. & Kunwar, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Suresh Kumar et al. (2009; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: HClO 43002, cultures and sequences are unavailable, needs generic revision.

Bharatheeya D'Souza & Bhat 2002, *Ascomycota* genera *incertae sedis*, one species, type: *B. goanensis* (Bhat & W.B. Kendr.) D'Souza & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), holotype of the type: DAOM 214612, cultures and sequences are unavailable, needs generic revision

Bhatia W.A. Baker & Morgan-Jones 2009, *Ascomycota* genera *incertae sedis*, one species, type: *B. malabarica* (Subram. & Bhat) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Biappendiculispora Thambugala, Kaz. Tanaka & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *B. japonica* Thambug., Wanas., Kaz. Tanaka & K.D. Hyde, asexual morph unknown, saprobes on *Poaceae* spp., terrestrial, river bank, Japan, see Thambugala et al. (2015b; taxonomy, phylogeny), holotype of type: HHUF 27313, ex-type living culture of type: MAFF 239452.

Biatora Fr. 1817, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, 42 species, type: *B. vernalis* (L.) Fr., usually with ascomata and often pycnidia, some species sorediate, lichenized (green algae), terrestrial (various substrata), probably cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Printzen (2014; DNA), Rodriguez Flakus and Printzen (2014; DNA), sequences are available.

Biatorella De Not. 1846, *Biatorellaceae*, *Lecanorales*, *Lecanoromycetes*, 30 species, type: *B. rousselii* (Durieu & Mont.) De Not., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Biatoridium J. Lahm ex Körb. 1860, *Lichinomycetes* genera *incerte sedis*, two species, type: *B. monasteriense* J. Lahm ex Körb., with ascomata only, lichenized (green algae), terrestrial (corticolous), Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Miadlikowska et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available only for the type species (*vide* Miadlikowska et al. 2014).

Biatriospora K.D. Hyde & Borse 1986, *Biatriosporaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *B. marina* K.D. Hyde & Borse, asexual morph coelomycetous, on mangroves, human mycetoma, Seychelles, Venezuela, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; introduced *Biatriosporaceae*), Kirk et al. (2013; genus accepted), Ahmed et al. (2014; new species, asexual morph), Wijayawardene et al. (2014; outline), sequences and culture are available.

Bibanasiella R.F. Castañeda & W.B. Kendr. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *B. ramispora* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene

et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C91/137, cultures and sequences are unavailable, compare with *Catenosynnema* & *Speiropsis* ***Biciliopsis*** Diederich 1997, ?*Chaetothyriales* genera *incertae sedis*, *Eurotiomycetes*, one species, type: *B. leptogiicola* Diederich, asexual morph unknown, lichenicolous, non-lichenized, terrestrial, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Biciliosporina Subram. & Sekar 1993, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, one species, type: *B. karwarensis* Subram. & Sekar, asexual unknown, saprobe, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: herb. FSI [sic] 3189; isotype IMI 32468, cultures and sequences are unavailable.

Bicoloromyces Heuchert, U. Braun & D. Hawksw. 2015, *Ascomycota* genera *incertae sedis*, one species, type: *B. kyffinensis* Heuchert, U. Braun & D. Hawksw., sexual morph unknown, on sterile lichen on rock, Antarctica, see Heuchert et al. (2015; taxonomy), holotype of type: MAF 19121, cultures and sequences are unavailable.

Biconiosporella Schaumann 1972, *Sordariomycetes* genera *incertae sedis*, one species, type: *B. corniculata* Schaumann, asexual morph unknown, saprobes, marine, Germany, see Jones et al. (2009, 2015; classification), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Bicornispora Checa, Barrasa, M.N. Blanco & A.T. Martínez 1996, *Rutstroemiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *B. exophiala* Checa, Barrasa, M.N. Blanco & A.T. Martínez, saprobes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Coryneliaceae*), Kirk et al. (2013; genus accepted), Galán et al. (2015; phylogeny, new species), cultures and sequences are available but lacks for the type:, needs generic revision.

Bicrouania Kohlm. & Volkm.-Kohlm. 1990, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *B. maritima* (P. Crouan & H. Crouan) Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine aquatic, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology; nomenclature; phylogeny), cultures and sequences are unavailable, needs generic revision.

Bifidocarpus Cano, Guarro & R.F. Castañeda 1994, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, two species, type: *B. cubensis* Cano, Guarro & R.F. Castañeda saprobes, terrestrial, Cuba, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 356298, cultures and sequences are unavailable, compare with *Renispora* and *Onygena*.

Biflagellospora Matsush. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *B. japonica* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Biflagellosporella Matsush. 1993, *Ascomycota* genera *incertae sedis*, one species, type: *B. amazonensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Biflua Jørgen Koch & E.B.G. Jones 1989, *Ascomycota* genera *incertae sedis*, one species, type: *B. physasca* Jørg. Koch & Jones, asexual morph unknown, on wood associated with sand, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus

accepted), Jones et al. (2015; outline), cultures and sequences are unavailable, needs generic revision.

Bifusella Höhn. 1917, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, eleven species, type: *B. linearis* (Peck) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; DNA, phylogeny), cultures and sequences are available (unpublished).

Bifusepta Darker 1963, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *B. tehonii* Darker, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; DNA, phylogeny), cultures and sequences are unavailable, needs generic revision.

Bilimbia De Not. 1846, *Ramalinaceae*, *Lecanorales*, *Lecanoromyces*, six species, type: *B. hexamera* De Not., lichenized, see Ekman et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Printzen (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Bimeris Petr. 1949, *Ascomycota* genera *incertae sedis*, one species, type: *B. aperta* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Ecuador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bimuria D. Hawksw., Chea & Sheridan 1979, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomyces*, type: *B. novae-zelandiae* D. Hawksw., Chea & Sheridan, one species, asexual morph unknown, isolated from soil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014; taxonomy), Jaklitsch et al. (2016; phylogeny), holotype of type: K(M)-IMI 229814, cultures and sequences are available.

Bioconiosporium Bat. & J.L. Bezerra 1964, *Ascomycota* genera *incertae sedis*, two species, type: *B. baccharidis* Bat. & J.L. Bezerra, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Biophomopsis Petr. 1931, *Ascomycota* genera *incertae sedis*, three species, type: *B. brenesii* Petr., coelomycetous, sexual morph unknown, West Indies, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Bioscypha Syd. 1927, *Helotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *B. cyatheae* Syd., asexual morph hyphomycetous, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, needs generic revision.

Biostictis Petr. 1950, *Stictidaceae*, *Ostropales*, *Lecanoromyces*, five species, type: *B. rubiacearum* (Pat.) Petr., with ascomata only, terrestrial (parasitic on leaves), tropical America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Bipolaris Shoemaker 1959, *Pleosporaceae*, *Pleosporales*, *Dothideomyces*, 121 species and 11 orthographic variants, type: *B. maydis* (Y. Nisik. & C. Miyake) Shoemaker, sexual morph *Cochliobolus*, plant and animal pathogen, saprobes, terrestrial, worldwide. See Janni et al. (2008; resistance in wheat), Motlagh and Kaviani (2008; Iran), Ghazvini and Tekauz (2008; Host-pathogen interaction), Shabana et al. (2008; pathogen control), Kihara et al. (2008; BMR1 gene characterization), de Moura Nascimento and Van Der Sand (2008; restriction analysis), Pandey et al. (2008; clonal variability), Kobayashi et al. (2008; Disseminated infection), Dyer et al. (2008; bronchopulmonary mycosis), Chand et al. (2008; disease resistance screening), Antoniazzi et al. (2008; xanthan and allicin as elicitors), Persson et al. (2008; mutant host resistance), Aggarwal et al. (2008; pathogen histopathology), Jiang and

Zhang (2008; new species), Geng et al. (2008; *Echinochloa* control), Durkin et al. (2008; phaeohyphomycotic keratitis), Felle et al. (2008; host pathogen interaction), Kumar et al. (2009; host resistance), Bashir et al. (2009; keratomycosis, endophthalmitis), Naumann et al. (2009; host enzyme modification), Kamal and Mia (2009; DNA fingerprinting), Poloni et al. (2009; Morphology, physiology, virulence), Asad et al. (2009; Pakistan), Kihara et al. (2009; expression analysis), Persson et al. (2009; mechanism of resistance), El Mhadri et al. (2009; *Citrullus lanatus* host), Zhang and Li (2009; new species), Aggarwal et al. (2009; intraspecific variations), Poloni et al. (2009; vegetative incompatibility), Iftikhar et al. (2009; synthetic host screening), Saha et al. (2010; Ag nanoparticle production), Dong et al. (2010; TaPIEP1 study), Lapmak et al. (2010; L-asparaginase production), Kleczewski and Flory (2010; *Microstegium vimineum* host), Shali et al. (2010; SG2 chitinases inhibition), Kumar et al. (2010; host resistance), Bashyal et al. (2010; conidiogenesis study), Knight et al. (2010; genetic variation), Aggarwal et al. (2010; DNA fingerprinting), Martinez et al. (2010; Tanzania), Gomathinayagam et al. (2010; *Trichoderma* effect), Motlagh and Anvari (2010; genetic variation), Matusinsky et al. (2010; species specific detection), Han et al. (2010; cytology), Tomaso-Peterson and Balbalian (2010; Mississippi), Carissimi et al. (2010; *Bacillus* sp. E164 activity), Dallagnol et al. (2011; host pathogen interaction), Rosow et al. (2011; Cerebral phaeohyphomycosis), Chowdhary et al. (2011; bronchopulmonary mycosis), Kawahigashi et al. (2011; resistance gene cloning), Ishihara et al. (2011; defense response), Dallagnol et al. (2011; host physiology), Acharya et al. (2011; review), Ben-Ze'ev et al. (2011; Israel), Kumar et al. (2011; molecular and pathological characterization), Baturo-Ciesniewska (2011; Poland), Moya-Elizondo et al. (2011; population dynamics), Jiao et al. (2011; MYB73 analysis), Vu et al. (2011; Tennessee), Giri et al. (2011; phaeohyphomycosis in dog), Aggarwal et al. (2011; host defense), Aggarwal et al. (2011; SCAR marker), Ahmadpour et al. (2011; new species), Bashyal et al. (2011; host resistance components), Manamgoda et al. (2012; phylogeny), Zhang et al. (2012; host resistance), Da Cunha et al. (2012; clinical diversity), Mizuno et al. (2012; host pathogen interaction), Arunpanichlert et al. (2012; metabolite profiling), Nizam et al. (2012; transformation), Ahmadpour et al. (2012; new species), Bach et al. (2012; *Bauhinia variegata*), Yazawa et al. (2013; transcriptome analysis), Dallagnol et al. (2013; host physiology), Almaguer et al. (2013; conidial germination), Rossman et al. (2013; name conservation), Tarnowski et al. (2013; South Florida), Wang et al. (2013; metabolite as drug), Burgos et al. (2013; Philippines), Eisa et al. (2013; resistance screening), Gupta et al. (2013; fungicidal management), Manamgoda et al. (2014; review), Small et al. (2014; endophthalmitis), Mishra et al. (2014; Ag nanoparticle fungicide), Teran et al. (2014; fatal infection), Minckler et al. (2014; Bipolaris endophthalmitis), Chand et al. (2014; cell biology), Amaradasa and Amundsen (2014; Nebraska), Bencsik et al. (2014; Ophiobolin A), Meena et al. (2014; genetic evaluation of host), Eghtedari (2015; conjunctiva cyst), Fatima et al. (2015; nanoparticle synthesis), Waxman and Bergstrom (2015; New York), Kuan et al. (2015; phylogeny, genomics), Vu et al. (switchgrass host), Kekuda et al. (2016; antifungal activity). Molecular data available for most of species, including type species; GenBank Number NR_138224, paratype and ex-paratype of type species CBS 136.29.

Biporispora J.D. Rogers, Y.M. Ju & Cand. 1999, *Sordariomycetes* genera *incertae sedis*, one species, type: *B. europaea* J.D. Rogers, Y.M. Ju & Cand., asexual morph unknown, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Bisbyopeltis Bat. & A.F. Vital 1957, *Ascomycota* genera *incertae sedis*, one species, type: *B. phoebes* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial,

USA, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Biscogniauxia Kuntze 1891, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, 33 species, type: *B. nummularia* (Bull.) Kuntze, asexual morph unknown, saprobes, terrestrial, France, see Mugambi et al. (2009; new species, Kenya), Lumbsch and Huhndorf (2010; outline), Vasilyeva and Stephenson (2010; new species), Vasilyeva et al. (2012; new species, Thailand), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), U'Ren et al. (2016; phylogeny), cultures and sequences are available.

Bisifusarium L. Lombard, Crous & W. Gams 2015, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, seven species, type: *B. dimerum* (Penz.) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), ex-type culture of the type: CBS 108944.

Bispora Corda 1837, *Incertae sedis*, 31 species, type: *B. moniliodes* Corda = *B. antennata* (Pers.) E.W. Mason, hyphomycetous, phialophora-like synanamorph, sexual morph unknown, meristematic black fungi, saprobes on wood and leaves, widespread (temperate), producer of various enzymes possessing industrial applications, see Luo et al. (2009a, b; enzymes), Wang et al. (2010; enzyme), Dubey & Pandey (2011; new species), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Xu et al. (2013; enzymes), Hua et al. (2014; enzyme), Liu et al. (2015; enzyme), molecular data not available from the type materials, needs generic revision.

Bisporella Sacc. 1884, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, 19 species, type: *B. monilifera* (Fuckel) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequence are available but lacks for the type species, needs generic revision.

Bisporostibella Brandsb. & E.F. Morris 1971, *Ascomycota* genera *incertae sedis*, one species, type: *B. fusca* Brandsb. & E.F. Morris, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bisseomyces R.F. Castañeda, 1985, *Ascomycota* genera *incertae sedis*, one species, type: *B. havanensis* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: C84/90-2, cultures and sequences are unavailable, compare with *Neojohnstonia*, and *Parapithomyces*.

Bivallum P.R. Johnst. 1991, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, seven species, type: *B. zelandicum* P.R. Johnst., asexual morph unknown, saprobes, terrestrial, Australasia, Chile, Panama, see Hou and Piepenbring (2009; new species, Panama), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Blasdalea Sacc. & P. Syd., 1902 (= *Chrysogloeum* Petr. 1959 *fide* Wijayawardene et al. 2014), *Vizellaceae*, *Dothideomycetes* family *incertae sedis*, one species, type: *B. disciformis* (Rehm) Sacc. & P. Syd. (≡ *Vizella disciformis* Rehm.), asexual morph coelomycetous, ring-like or linear loculus arrangement, associated with leaf spots on leaves of *Escallonia vaccinioides*, Brazil, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Rossman et al. (2016; accept the genus status), cultures and sequences are unavailable, needs generic revision.

Blastacervulus H.J. Swart 1988, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, one species, type: *B. eucalypti* H.J. Swart, coelomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Cheewangkoon et al. (2009; taxonomy, phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, accepted as a genus in *Planistromellaceae*), Kirk et al. (2013; genus accepted), cultures available for the type: CBS124759.

Blastenia A. Massal. 1852, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, eleven species, type: *B. ferruginea* (Huds.) A. Massal., lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Blasticomyces I.I. Tav. 1985, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *B. lispini* (Thaxt.) I.I. Tav., asexual morph unknown, parasitic on Hydrophilidae, Sphaeridiinae and Staphylinidae beetles, asexual morph unknown, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters and Yaakop (2014; Borneo), cultures and sequences are unavailable.

Blastobotrys Klopotek 1967 (= *Trichomonascus* H.S. Jackson emend Kurtzman & Robnett 2007), *Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, 30 species, type: *B. nivea* Klopotek, asexual reproduction by budding (occasionally) or hyphomycetous, primarily saprophytic, some species cause human infections, insect frass from trees, growth on mushrooms, moss, ensiled maize, soil, air, sea water, bat liver, human infections, worldwide, Kirk et al. (2013; genus accepted), Crous et al. (2016; new species), cultures and sequences are available.

Blastocatena Subram. & Bhat 1989, *Ascomycota* genera *incertae sedis*, one species, type: *B. pulneyensis* Subram. & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Blastodesmia A. Massal. 1852, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, one species, type: *B. nitida* A. Massal., asexual morph unknown, lichenized, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Holotype US National Herbarium barcode 01138889 – on bark of *Fraxini*, Austria (Schuler J), cultures and sequences are unavailable.

Blastodictys M.B. Ellis 1976, *Ascomycota* genera *incertae sedis*, one species, type: *B. hibisci* (Hansf.) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Blastofusarioides Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *B. fusca* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Blastomyces Gilchrist & W.R. Stokes 1898 (≡ *Gilchristia* Cif. & Redaelli 1934; = *Ajellomyces* McDonough & A.L. Lewis 1968; = *Zymonema* Beurm. & Gougerot 1909) *Ajellomycetaceae*, *Onygenales*, *Eurotiomycetes*, two species, (but phylogenetic studies suggest the existence of more taxa *fide* de Hoog et al. 2016), type species: *Blastomyces dermatitidis* Gilchrist & W.R. Stokes, terrestrial, pathogenic to humans, canids, felines and other animals, also reported from soil, Africa, India, North America, *Blastomyces* Gilchrist & W.R. Stokes is an illegitimate genus (Art. 53.1) but, due to its wide use in medical literature, most modern authors prefer this name instead of any of its synonyms (Seifert et al. 2011), and a proposal of conservation against an earlier homonym, *Blastomyces* Costantin & Rolland, has been published (de Hoog et al. 2016), see Saccante & Woods (2010; clinical and laboratory aspects), Brown et al. (2013; phylogeny, new species), Kirk et al. (2013; genus accepted), ex-epitype strain of the type species = CBS 674.68, sequences available at GenBank from Peterson & Sigler (1998) and Untereiner et al. (2002).

Blastophorella Boedijn 1937, *Ascomycota* genera *incertae sedis*, one species, type: *B. smithii* Boedijn, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South East Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Blastophorum Matsush. 1971, *Reticulascaceae*, *Glomerellales*, *Sordariomycetes*, five species, type: *B. truncatum* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, China, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2016; new species, China), cultures and sequences are unavailable, needs generic revision.

Blastophragma Subram. 1995, *Ascomycota* genera *incertae sedis*, four species, type: *B. subulatum* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Gao et al. (2015; new species), Xia et al. (2016; new species), Holotype of type: MUBL 3128 (on dead twigs from Peninsular Malaysia), cultures and sequences are unavailable, needs generic revision.

Blennoria Moug. & Fr. 1825, *Ascomycota* genera *incertae sedis*, four species, type: *B. buxi* Fr., coelomycetous, sexual morph unknown, saprobes and plant endophytes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Blennoriopsis Petr. 1920, *Ascomycota* genera *incertae sedis*, one species, type: *B. moravica* Petr., coelomycetous, sexual morph unknown, rarely reported and in case as saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Blennothallia Trevis. 1853, *Collemataceae*, *Peltigerales*, *Lecanoromycetes*, four species, type: need typification, lichenized, see Otálora et al. (2013a, 2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Bleptosporium Steyaert 1961, *Ascomycota* genera *incertae sedis*, four species, type: *B. montteae* Speg. ex Steyaert, coelomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Blodgettia Harv. 1858, *Ascomycota* genera *incertae sedis*, two species, type: *B. confervoides* Harv., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bloxamia Berk. & Broome 1854, *Helotiaceae*, *Helotiales*, *Leotiomyces*, 19 species, type: *B. truncata* Berk. & Broome, hyphomycetous, sexual morph unknown, saprobes, terrestrial, fresh water, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Spooren et al. (2014; new species), Guatimosim et al. (2016; new species, DNA, phylogeny), cultures and sequences are available but lacks for the type species.

Blumeria Golovin ex Speer 1974 (= *Oidium* Link 1824 *fide* Braun and Cook 2012), *Erysiphaceae*, *Erysiphales*, *Leotiomyces*, one species, type: *B. graminis* (DC.) Speer, asexual morphs hyphomycetous, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Braun and Cook (2012; taxonomy), sequences of non-type material of the type are available, neotype of type: Germany, Bonn, Botanical garden Poppelsdorf, on *Triticum aestivum*, 25 June 1869, Körnicke, in herb. De Candolle (G 00122110), cultures and sequences are available.

Blumeriella Arx 1961 (= *Microgloeum* Petr. 1922; = *Phloeosporella* Höhn. 1924 *fide* Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomyces*, seven species, type: *B. jaapii*

(Rehm) Arx, asexual morphs *Microgloeum*, *Phloeospora*, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

Boeremia Aveskamp, Gruyter & Verkley 2010, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, eleven species, type: *B. exigua* (Desm.) Aveskamp, Gruyter & Verkley, asexual morph coelomycetous, saprobes or plant pathogenic, widespread, see Aveskamp et al. (2010; taxonomy, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Chen et al. (2015; phylogeny), ex-type strains of type: CBS 101207 (*Boeremia exigua* var. *pseudolilacis*), CBS 443.94 (*Boeremia exigua* var. *heteromorpha*), CBS 100167 (*Boeremia exigua* var. *populi*).

Boerlagiomyces Butzin 1977, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, c. 9 species, type: *B. velutinus* (Penz. & Sacc.) Butzin, asexual morph coelomycetous, saprobes, aquatic, Australia, India, Indonesia, Philippines and USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Boonmee et al. (2011, 2014); Wijayawardene et al. (2014; outline), sequences are available.

Bogoriella Zahlbr. 1928, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, 29 species, type: *B. subpersicina* Zahlbr., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Nelsen et al. (2014a; phylogeny), Aptroot and Lücking (2016; taxonomy), Lücking et al. (2016c; phylogeny), Lücking et al. (2016; classification), sequences are available.

Bogoriella Zahlbr. 1928, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, 29 species, type: *B. subpersicina* Zahlbr., lichenized, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Nelsen et al. (2014a; taxonomy), Aptroot and Lücking (2016; new species), Lücking et al. (2016c; taxonomy), Lücking et al. (2016; classification), sequences are available but lacks for the type:.

Bombardia (Fr.) P. Karst. 1873, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *B. bombardia* (Batsch) J. Schröt., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariomycetes*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Bombardiastrum Pat. 1893, *Sordariomycetes* genera *incertae sedis*, one species, type: *B. andinum* Pat., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Bombardiella Höhn. 1909, *Sordariales*, genera *incertae sedis*, *Sordariomycetes*, one species, type: *B. caespitosa* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Bombardioida C. Moreau ex N. Lundq. 1972, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, four species, type: *B. bombardioides* (Auersw.) C. Moreau ex C. Moreau, asexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks the type:.

Bommerella Marchal 1885, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *B. trigonospora* Marchal, asexual morph scopulariopsis-like, saprobes, from soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), type species have been transferred to *Chaetomium* (fide Index Fungorum 2016).

Bonanseja Sacc. 1906, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, one species, type: *B. mexicana* Sacc., asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bonaria Bat. 1959, *Dothideomycetes* genera *incertae sedis*, one species, type: *B. lithocarpi* (V.A.M. Mill. & Bonar) Bat., asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013) did not accept as a genus in *Micropeltidaceae*, Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bondiella Piroz. 1972, *Mesnieraceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *B. palmicola* Piroz., asexual morph unknown, saprobes, terrestrial, Tanzania, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Boothiella Lodhi & Mirza 1962, *Chaetomiaceae*, *Sordariales*, *Sordariomyces*, one species, type: *B. tetraspora* Lodhi & J.H. Mirza, asexual morph unknown, saprobes, from soil, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Boreoplaca Timdal 1994, *Ophioparmaceae*, *Umbiliciales*, *Lecanoromyces*, one species; type: *B. ultrafrigida* Timdal, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bendiksby and Timdal (2013; phylogeny), Miądlikowska et al. (2014; taxonomy), Lücking et al. (2016; classification), holotype of the type species O-L-127, sequences are available.

Borinquenotrema Mercado-Díaz, Lücking & Parnmen 2014, *Graphidaceae*, *Ostropales*, *Lecanoromyces*, one species, type: *B. sorediocarpum* Mercado-Díaz, Lücking & Parnmen, lichenized, terrestrial, see Lumbsch et al. (2014; taxonomy), Lücking et al. (2016; classification), holotype of the type: UPR, Mercado-Díaz 883, sequences are available.

Botryandromyces I.I. Tav. & T. Majewski 1976, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, two species, type: *B. heteroceri* (Maire) I.I. Tav. & T. Majewski, asexual morph unknown, parasitic on Heteroceridae beetles, semi-aquatic, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence is available but lacks for the type species.

Botryobambusa Phook., J.K. Liu & K.D. Hyde 2012, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, one species, type: *B. fusicocum* R. Phookamsak, J.K. Liu & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Thailand, see Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), holotype and ex-type culture of the type: MFLU 11-0179, MFLUCC 11-0143.

Botryochora Torrend 1914, *Dothideomycetes* genera *incertae sedis*, one species, type: *B. nigra* (Torrend) Torrend, asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothioraceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Botryodeorsum T.P. Devi, N. Mathur, Chowdhry, Jasvir Singh & O. Prakash 2006, *Ascomycota* genera *incertae sedis*, one species, type: *B. indicum* T.P. Devi, N. Mathur, Chowdhry, Jasvir Singh & O. Prakash, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see ex-type strains of type: ITCC 6034; Holotype of type: HCIO 46,384 (On leaf sheath of rice collected from glass house, Div. of plant Pathology, IARI, New Delhi, Date, 13.11.04 Coll., Jasvir Singh), (Seifert et al. 2011 treated this genus as a synonym of *Botryosporium* Corda 1831).

Botryoderma Papendorf & H.P. Upadhyay 1969, *Ascomycota* genera *incertae sedis*, four species, type: *B. lateritium* Papendorf & H.P. Upadhyay, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Botryodiplodina Dias & Sousa da Câmara 1954, *Ascomycota* genera *incertae sedis*, one species, type: *B. mori* Dias & Sousa da Câmara, coelomycetous, sexual morph unknown, saprobes, terrestrial, Portugal, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Botryohyphoxylon Samuels & J.D. Rogers 1986 (= *Iledon* Samuels & J.D. Rogers 1986 fide Wijayawardene et al. 2014), one species, type: *B. nigra* (Torrend) Torrend, asexual morph coelomycetous, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Rossman et al. (2015; nomenclature), cultures and sequences are unavailable.

Botryola Bat. & J.L. Bezerra 1964, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, six species, type: *B. tetrasperma* Bat. & J.L. Bezerra, asexual morph unknown, saprobes, lichenicolous, terrestrial, saprobes, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Botryolepraria Canals, Hern.-Mar., Gómez-Bolea & Llimona 1997, *Verrucariales* genera *incertae sedis*, *Eurotiomycetes*, two species, type: *B. lesdainii* (Hue) Canals, Hern.-Mar., Gómez-Bolea & Llimona, lichenized, see Kukwa and Pérez-Ortega (2010; taxonomy), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lecanoromycetes*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Botryomonilia Goos & Piroz. 1975, *Ascomycota* genera *incertae sedis*, four species, type: *B. scheeleae* Goos & Piroz., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Botryosphaeria Ces. & De Not. 1863 (= *Fusicoccum* Corda 1829; = *Dichomera* Cooke 1878 fide Wijayawardene et al. 2014, 2016; Rossman et al. 2016), Botryosphaeriaceae, Botryosphaeriales, *Dothideomycetes*, eleven species, type: *B. dothidea* (Moug. Fr.) Ces. & De Not., asexual morph coelomycetous, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2012; accepted as a genus in *Botryosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; taxonomy, phylogeny), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy), Dissanayake et al. (2016; taxonomy), cultures and sequences are available, needs generic revision.

Botryosporium Corda 1831, *Sordariomycetes* genera *incertae sedis*, seven species, type: *B. diffusum* (Grev.) Corda, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Choi et al. (2014; pathogens, DNA), cultures and sequences are available but lacks for the type., needs generic revision.

Botryostroma Höhn. 1911, *Ascomycota* genera *incertae sedis*, two species, type: *B. inaequale* (G. Winter) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, America (tropical) see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Botryozyma Shann & M.Th. Smith emend. Lachance & Kurtzman 2013, *Trigonopsidaceae*, *Saccharomycetales*, *Saccharomycetes*, four species, type: *B. nematodophila* Shann & M.T. Smith, asexual reproduction by budding (multilateral), ?saprophytic, from *Panagrellus* nematodes or associated with *Drosophila* flies, Northwestern USA, Italy, see Kirk et al. (2013; genus accepted), Lachance and Kurtzman (2013; re-visited, generic revision), cultures and sequences are available.

Botrytis P. Micheli ex Pers. 1794 (= *Botryotinia* Whetzel 1945 *vide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, three species, type: *B. cinerea* Pers., asexual morph hyphomycetous, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

Boubovia Svrček 1977, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, five species, type: *B. luteola* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species.

Boudiera Cooke 1877, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, ten species, type: *B. areolata* Cooke & W. Phillips, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

Boudierella Sacc. 1895, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *B. cana* Marchal & É.J. Marchal, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bouvetiella Øvstedal 1986, *Lecanoromycetes* genera *incertae sedis*, one species; type: *B. pallida* Øvstedal, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Brachiosphaera Nawawi., 1976, *Aliquandostipitaceae*, *Jahnulales*, *Dothideomycetes*, two species, type: *B. tropicalis* Nawawi, isolated from river foam: Peninsular Malaysia, see Seifert et al. (2011; morphology), Suetrong et al. (2011), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sexual morph unknown, cultures and sequences are available for authentic strains SS2523, E192–1.

Brachyalaria Réblová & W. Gams 2011, *Helotiales*, genera *incertae sedis*, *Leotiomyces*, one species, type: *B. straminea* Réblová & W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Réblová and Gams (2011; morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), ex-type culture of the type: CBS 175.74.

Brachycephala J.S. Monteiro, Gusmão & R.F. Castañeda 2015, *Ascomycota* genera *incertae sedis*, one species, type: *B. exotica* J.S. Monteiro, Gusmão & Castañeda-Ruiz, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Monteiro et al. (2015; morphology), holotype of the type: HUEFS 210446, cultures and sequences are unavailable, compare with *Acarocybellina*, *Brachysporiella* and *Kramabeeja*.

Brachyconidiella R.F. Castañeda & W.B. Kendr. 1990 *Ascomycota* genera *incertae sedis*, *Dothidiomycetes*, one species, type: *B. monilispora* R.F. Castañeda & W.B. Kendr., sexual morph unknown, saprobes, terrestrial, Cuba, see Castañeda-Ruiz & Kendrick (1990b; morphology), holotype of the type: INIFAT C88/300, sequences are available, compare with *Brachyconidiellopsis* and *Matsushimaea*.

Brachyconidiellopsis Decock, R.F. Castañeda & Adhikari 2004, *Microascaceae*, *Microascales*, *Sordariomycetes*, two species, type: *B. fimicola* Decock, R.F. Castañeda & Adhikari, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline),

Maharachchikumbura et al. (2015; outline, phylogeny), holotype of the type: MUCL 44677, cultures and sequences are available.

Brachydesmiella G. Arnaud ex S. Hughes 1961, *Ascomycota* genera *incertae sedis*, eight species, type: *B. biseptata* G. Arnaud ex S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Brachyphoris Juan Chen, L.L. Xu, B. Liu & Xing Z. Liu 2007, *Orbiliaceae*, *Orbiliiales*, *Orbiliomycetes*, five species, type: *B. oviparasitica* (G.R. Stirling & Mankau) Juan Chen, L.L. Xu, B. Liu & Xing Z. Liu, saprobes, on nematode eggs, on soil, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are available, needs generic revision.

Brachysporiella Bat. 1952, *Incertae sedis*, Sordariales, Sordariomycetes, fifteen species, type: *B. gayana* Bat., hyphomycetous, sexual morph *Ascotaiwania* Sivan. & H.S. Chang 1992, saprobes, widespread (incl. Hawaii, Kwazulu-Natal, Venezuela, India, Southern Africa, Ningxia), see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), molecular data available only for proteases (Oestergaard et al. 2010; protein hydrolysate), GenBank Numbers: CQ859532, CQ859337, HV965195, DI234550, needs generic revision.

Brachysporiellina Subram. & Bhat 1989, *Ascomycota* genera *incertae sedis*, two species, type: *B. pulneyensis* Subram. & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Brachysporiopsis Yanna, W.H. Ho & K.D. Hyde 2004, *Ascomycota* genera *incertae sedis*, one species, type: *B. chinensis* Yanna, W.H. Ho & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Brachysporium Sacc. 1886 (= *Cryptadelphia* Réblová & seifert 2004 *vide* Réblová et al. 2016), *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, twelve species, type: *B. obovatum* Keissl., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; nomenclature), cultures and sequences are available.

Bradymyces Hubka, Réblová, Selbmann & M. Kolařík 2014, *Trichomeriaceae*, *Chaetothyriales*, *Eurotiomycetes*, three species, type: *B. oncorhynchi* Hubka, Řehulka Réblová, & M. Kolařík, sexual morph unknown, cold-blooded, water vertebrates opportunist, rock-inhabiting, see Hubka et al. (2014; taxonomy, phylogeny), Réblová et al. (2016; new species), holotype and strains of the type: PRM 861507 CBS 133066 = CCF 4369 = CCFEE 6134

Bramhamyces Hosag. 2009, *Dothideomycetes* genera *incertae sedis*, one species, type: *B. ilicis* Hosag. & Chandrapr., sexual morph unknown, epiphytes, terrestrial, India, see Hosagoudar & Chandraprabha (2009; protologue, accepted as an anamorphic genus in *Asterinaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes* genera *incertae sedis*), holotype of type: HClO 48300, cultures and sequences are unavailable.

Brasilicia Lücking, Kalb & Sérus. 2008, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, six species, type: *B. brasiliensis* (Müll. Arg.) Lücking, Kalb & Sérus., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.

Brasiliomyces Viégas 1944, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, four species, type: *B. malvastri* Viégas, asexual morphs unknown, biotrophic, obligate plant pathogens, terrestrial, Africa, Asia, South America, Hawaii, see Lumbsch and Huhndorf (2010; outline), Divarankhooon et al. (2011; phylogeny), Braun and Cook (2012; taxonomy), Kirk et al. (2013; genus accepted), sequences of non-type material of the type species are available, holotype of type: Brazil, São Paulo Province, Mogí-Mirim, on *Malvastrum coromandelianum*, 27 Feb. 1941, A.P. Viégas (IACM 3719).

Braunomyces V.A. Melnik & Crous 2014, *Ascomycota* genera *incertae sedis*, one species, type: *B. dictyosporus* V.A. Melnik & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Vietnam, see Mel'nik and Crous (2011; taxonomy), Wijayawardene et al. (2016; outline, taxonomy), holotype of the type: HAL 2606 F, cultures and sequences are unavailable, needs generic revision.

Brefeldiella Speg. 1889, *Trichopeltinaceae*, *Dothideomycetes* family *incertae sedis*, four species, type: *B. brasiliensis* Speg., asexual morph unknown, epiphytes, appearance as thallus on leaf, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Trichopeltinaceae*), Wijayawardene et al. (2014; outline), need recollecting and sequencing to verify generic placement.

Brefeldiopycnis Petr. & Cif. 1932, *Ascomycota* genera *incertae sedis*, one species, type: *B. membranacea* Petr. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Brefeldochium Verkley 2005, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *B. pruinatum* Verkley, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline, taxonomy), cultures available for the type: CBS 160.92.

Brenesiella Syd. 1929, *Sordariomycetes*, genera *incertae sedis*, one species, type: *B. erythroxyli* Syd., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Brettanomyces Kufferath & van Laer 1921, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, six species, type: *B. bruxellensis* Kufferath & van Laer, asexual reproduction is either by multilateral budding or, rarely, by bipolar budding on a narrow base, saprophytes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), cultures and sequences are available.

Brevicatenospora R.F. Castañeda, Minter & Saikawa 2006 *Ascomycota* genera *incertae sedis*, one species, type: *B. enteroproliferata* R.F. Castañeda, Minter & Saikawa, hyphomycetous, sexual morph unknown, saprobes, aquatic (fresh water), Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: INIFAT C04/111, cultures and sequences are unavailable, compare with *Annellophora*, *Acrogenospora*, *Belemnospora*, *Sporidesmiella* and *Repetophragma*.

Brevistachys L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *B. variabilis* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22431, CBS 141057.

Brianaria S. Ekman & M. Svensson 2014, *Psoraceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *B. sylvicola* (Flot. ex Körb.) S. Ekman & M. Svensson, lichenized, terrestrial, see Ekman and Svensson (2014; taxonomy), Lücking et al. (2016; classification), type specimen UPS-L-133138 (lectotype), sequences are available.

Briancoppinsia Diederich, Ertz, Lawrey & van den Boom 2012, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *B. cytospora* (Vouaux) Diederich, Ertz, Lawrey & van den Boom, coelomycetous, sexual morph unknown, lichenicolous, non-lichenized, terrestrial, Europe, North America, see Diederich et al. (2012; morphology, phylogeny), Wijayawardene et al. (2017; outline), sequences are available.

Briania D.R. Reynolds 1989, *Meliolinaceae*, *Dothideomycetes*, families *incertae sedis*, one species, type: *B. fruticetum* D.R. Reynolds, sexual morph unknown, saprobes, terrestrial, Hawaiian Island, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Brigantiaea Trevis. 1853, *Brigantieaceae*, *Teloschistales*, *Lecanoromycetes*, 29 species; type: *B. tricolor* (Mont.) Trevis., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Briosia Cavara 1888, *Ascomycota* genera *incertae sedis*, six species, type: *B. ampelophaga* Cavara, hyphomycetous, plant pathogen, widespread, see Hyde et al. (2011' outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted); cultures or cultures and sequences are unavailable, needs generic revision.

Brobdingnagia K.D. Hyde & P.F. Cannon 1999, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *B. nigeriensis* (Sivan. & Okpala) Hyde & Cannon, asexual morph unknown, pathogens, saprobes, terrestrial, Australia, Sierra Leone, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of *Brobdingnagia nigeriensis* subsp. *corneri* IMI 390a.

Brodoa Goward 1987, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *B. oroarctica* (Krog) Goward, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Brooksia Hansf. 1956 (= *Hiospira* R.T. Moore *fide* Wijayawardene et al. 2014, Rossman et al. 2015), *Dothideomycetes* genera *incertae sedis*, one species, three variety, type: *B. tropicalis* Hansf., hyphomycetous, on leaf as parasite, common in tropical regions, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; nomenclature), Rossman et al. (2015; nomenclature), sequences unavailable, need recollecting to verify generic placement.

Broomella Sacc. 1883, *Bartaliniaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *B. vitalbae* (Berk. & Broome) Sacc., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Li et al. (2015; taxonomy), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: MFLUCC 15-0023 (*fide* Li et al. 2015).

Brownliella S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, four species, type: need typification data, lichenized, terrestrial, see Kondratyuk et al. (2013, 2015b; taxonomy), Lücking et al. (2016; classification), sequences are available.

Bruceomyces Rikkinen 2012, *Lecanorales* genera *incertae sedis*, *Lecanoromycetes*, four species, type: *B. castoris* (Rikkinen) Rikkinen, lichenized, terrestrial, see Tuovila et al. (2012; taxonomy), cultures and sequences are unavailable.

Brunneiapiospora K.D. Hyde, J. Fröhl. & Joanne E. Taylor 1998, *Clypeosphaeriaceae*, *Xylariales*, *Sordariomycetes*, six species, type: *B. javensis* K.D. Hyde, J. Fröhl. & Joanne E. Taylor, asexual morphs unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Vitoria et al. (2011; new species), Crous et al. (2012; new species, New Zealand), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified species.

Brunneiperidium Daranagama, Camporesi & K.D. Hyde 2015, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, asexual morph hyphomycetous, only known for *B. gracilentum*, saprobes, terrestrial, Italy, Europe, two species, all the species have molecular data, see Daranagama et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2016; outline), ex-type strains of type: MFLUCC 14-0011; holotype MFLU 14-0229.

Brunneocarpos Giraldo & Crous 2016, *Mycocaliciaceae*, *Mycocaliciales*, *Eurotiomycetes*, one species, type: *B. banksiae* Giraldo & Crous, asexual morph unknown, saprobes, Australia, see Crous et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22633, CPC 29841.

Brunneoclavispora Phook. & K.D. Hyde 2015, *Halotthiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *B. bambusae* Phookamsak & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 11-0213, MFLUCC 11-0177.

Brunneodinemasporium Crous & R.F. Castañeda 2012, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *B. brasiliense* Crous & Castañeda, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Crous et al. (2012; morphology, phylogeny), Maharachchikumbura et al. (2015; classification, phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), ex-type strains of type: CPC 112007; holotype CBS H-20948.

Brunneomycosphaerella Dissan., J.K. Liu & K.D. Hyde 2015, *Capnodiales* genera *incertae sedis*, one species, type: *B. laburni* Dissanayake., J. K. Liu & K. D. Hyde, saprobes, terrestrial, Italy, see Liu et al. (2015; taxonomy, phylogeny), holotype MFLU 14-0808, sequences are available.

Brunneosphaerella Crous 2009, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *B. protearum* (Syd. & P. Syd.) Crous., asexual morph coelomycetous, saprobes, terrestrial, South Africa, see Crous et al. (2009; morphology; phylogeny), Schoch et al. (2009; morphology; phylogeny), Crous et al. (2011; new species, morphology), Hyde et al. (2013; accepted as in *Mycosphaerellaceae*), Wijayawardene et al. (2014; accepted as in *Mycosphaerellaceae*), epitype CBS H-20335, ex-epitype culture CBS 130597 = CPC 16368.

Brunneosporella Ranghoo & K.D. Hyde 2001, *Papulosaceae*, *Diaportheomycetidae* families *incertae sedis*, *Sordariomycetes*, one species, type: *B. aquatica* Ranghoo & K.D. Hyde, one species, asexual morph unknown, saprobes, aquatic, Hong Kong, see Lumbsch and Huhndorf (2010; outline, as a genus in *Annulatasceae*), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Papulosaceae*), holotype of the type: HKU (M) 5251.

Brunnipila Baral 1985, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *B. clandestina* (Bull.) Baral, asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are available but lacks for the type species.

Brycekendrickia Nag Raj 1973, *Ascomycota* genera *incertae sedis*, one species, type: *B. indica* Nag Raj., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Nag Raj et al. (1973; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable.

Brycekendrickomyces Crous & M.J. Wingf. 2009, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *B. acaciae* Crous & Wingf, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Indonesia, see Crous et al. (2009; morphology, phylogeny), holotype and ex-type strains of type: CBS H-20198, CPC 15078 = CBS 124104.

Bryobilimbia Fryday, Printzen & S. Ekman 2014, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, six species, type: *B. hypnorum* (Lib.) Fryday, Printzen & S. Ekman, lichenized, see Fryday et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Bryocaulon Kärnefelt 1986, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *B. divergens* (Ach.) Kärnefelt, lichenized, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Bryocentria Döbbeler 2004, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, eight species, type: *B. brongniartii* (P. Crouan & H. Crouan) Döbbeler, sexual morph unknown, saprobes, epiphytes, terrestrial, cosmopolitan, see Döbbeler (2010; new species), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Bryochiton Döbbeler & Poelt 1978, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, four species, type: *B. monascus* Döbbeler & Poelt, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available for unidentified species, needs generic revision.

Bryoclaviculus L. Ludw., P.R. Johnst. & Steel 2013, *Leotiomyces* genera *incertae sedis*, one species, type: *B. campylopi* P.R. Johnst., asexual morph unknown, saprobes, terrestrial, New Zealand, see Johnston et al. (2013; taxonomy, DNA), holotype of the type: OTA 062197, cultures and sequences are available.

Bryodina Hafellner 2001, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *B. rhypariza* (Nyl.) Hafellner, with ascomata, terrestrial (bryophilous), Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.

Bryodiscus B. Hein, E. Müll. & Poelt 1971, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *B. grimmiae* B. Hein, E. Müll. & Poelt, with ascomata, terrestrial (muscolous), temperate, see Lumbsch and Huhndorf (2010; outline, accepted as separate genus), Baloch et al. (2013; DNA), sequences are available for one species, but not the type (Baloch et al. 2013), synonym of *Sphaeropezia*, see Baloch et al. (2013).

Bryoglossum Redhead 1977, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, two species, type: *B. gracile* (P. Karst.) Redhead, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available for the type: DAOM178087.

Bryogomphus Lücking, W.R. Buck, Sérus. & L.I. Ferraro 2005, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *B. caribaeus* (W.R. Buck) Lücking, W.R. Buck, Sérus. & L.I. Ferraro, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Bryonora Poelt 1983, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, eleven species, type: *B. castanea* (Hepp) Poelt, with ascomata, terrestrial (bryophilous), bipolar, see Lumbsch and Huhndorf (2010; outline), sequences are available only for the type species.

Bryopelta Döbbeler & Poelt 1978, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *B. variabilis* Döbbeler & Poelt, asexual morph unknown, saprobes, terrestrial, Norway, Sweden, see Lumbsch and Huhndorf (2010; outline; accepted as a genus in *Dothideomycetes*), Kirk et al. (2013; genus accepted), Li et al. (2014; accepted as a genus in *Mycosphaerellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Bryoplaca Söchting, Frödén & Arup 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *B. sinapisperma* (DC.) Söchting, Frödén & Arup, lichenized, Northern Hemisphere and Antarctica, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Bryorella Döbbeler 1978, *Dothideomycetes* genera *incertae sedis*, ten species, type specie *B. acrogena* Döbbeler, asexual morph unknown, saprobes or parasitic, terrestrial, Europe (Italy, Austria, Poland, Sweden, Switzerland), See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Li et al. (2014; taxonomy), Wijayawardene et al. (2014; outline), sequences are available, needs generic revision.

Bryoria Brodo & D. Hawksw. 1977, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, c. 60 species, type: *B. trichodes* (Michx.) Brodo & D. Hawksw., widespread but mainly N Hemisphere, see Lumbsch and Huhndorf (2010; outline), Myllys et al. (2011, phylogeny), Kirk et al. (2013; genus accepted), Velmala et al. (2014; phylogeny), Jaklitsch et al. (2016; position), Lücking et al. (2016; classification), and sequences for many species now available, species concepts in sect. *Implexae* require revision, holotype of type: PC, sequences are available.

Bryoscyphus Spooner 1984, *Helotiaceae*, *Helotiales*, *Leotiomyces*, 19 species, type: *B. conocephali* (Boyd) Spooner, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

Bryosphaeria Döbbeler 1978, *Trematosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, nine species, type: *B. cinclidoti* (Racov.) Döbbeler, asexual morph unknown, terrestrial, Europe (Italy, Austria, Sweden, Yugoslavia), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Li et al. (2014; transferred to *Trematosphaeriaceae*), sequences are unavailable, needs generic revision.

Bryostigma Poelt & Döbbeler 1979, *Arthoniales* genera *incertae sedis*, *Arthoniomyces*, two species, type: *B. leucodontis* Poelt & Döbbeler, lichenized, see Sundin et al. (2012; taxonomy), Frisch et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Bryothele Döbbeler 1998, *Dothideomycetes* genera *incertae sedis*, one species, type: *B. mira* Döbbeler & Melnik, asexual morph unknown, saprobes or parasitic, terrestrial, America and Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences are unavailable, needs generic revision.

Budhanggurabania P. Wong, Khemmuk & R.G. Shivas 2015, *Magnaporthaceae*, *Magnaporthales*, *Sordariomyces*, one species, type: *B. cynodonticola* P. Wong, Khemmuk & R.G. Shivas, coelomycetous, saprobes, Australia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), epitype and ex-epitype culture of the type: BRIP 59305.

Buellia De Not. [nom.cons.] 1846, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 300 species, type: *B. disciformis* (Fr.) Mudd, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Prieto and Wedin (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Buelliastrum Zahlbr. 1930, family *incertae sedis*, order *incertae sedis*, subclass *incertae sedis*, *Lecanoromycetes*, two species, type: need typification data, lichenized, China, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Buelliella Fink 1935, *Asterinales* genera *incerte sedis*, *Dothideomycetes*, eleven species, type: *B. minimula* (Tuck.) Fink, lichenicolous, Asia, see Hafellner et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Pérez-Ortega and Etayo (2010; new species), van den Boom (2010; new species), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Ertz and Diederich (2015; phylogeny, accepted s *Asterinales*), sequences are available.

Buerenia M.S. Reddy & C.L. Kramer 1975, *Protomycetaceae*, *Taphrinales*, *Taphrinomyces*, three species, type: *B. cicutae* (Lindr.) M.S. Reddy & C.L. Kramer, asexual

morph unknown, ?saprobes or parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Buergenerula Syd. 1936, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, six species, type: *B. biseptata* (Rostr.) Syd., asexual morph harpophora-like and pyricularia-like, pathogen, marine and freshwater habitats, worldwide, see Jones et al. (2009, 2015; outline), Lumbsch and Huhndorf (2010; outline), Yuan et al. (2010; phylogeny), Al-Nasrawi and Hughes (2012; diversity), Kirk et al. (2013; genus accepted), Luo and Zhang (2013; phylogeny), Chen et al. (2014; mitoviruses), Hujslová et al. (2014; phylogeny), Klaubauf et al. (2014; phylogeny), Calado et al. (2015; diversity, ecology), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable.

Bulbilopycnis Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *B. caffra* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Transvaal, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bulbithecium Udagawa & T. Muroi 1990, *Hypocreales*, genera *incertae sedis*, *Sordariomycetes*, one species, type: *B. hyalosporum* Udagawa & T. Muroi, asexual morph acremonium-like, saprobes, India, see Lumbsch and Huhndorf (2010; outline), Giraldo et al. (2012; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 318.91.

Bulbocatenospora R.F. Castañeda & Iturr. 2000, *Ascomycota* genera *incertae sedis*, one species, type: *B. complanata* R.F. Castañeda, Iturr. & Decock, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Venezuela, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: MUCL 40705, cultures and sequences are unavailable, compare with *Piricauda*, *Chuppia*, *Neoarbuscula* and *Peyronelia*.

Bulbothrix Hale 1974, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 60 species, type: *B. semilunata* (Lyngé) Hale, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kirika et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Bulgaria Fr. 1822, *Phacidiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *B. inquinans* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, northern and southern temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; phylogeny), cultures available for the type: CBS 315.71.

Bulgariella P. Karst. 1885, *Helotiaceae*, *Helotiales*, *Leotiomyces*, four species, type: *B. pulla* (Fr.) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished).

Bulgariopsis Henn. 1902, *Helotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *B. moelleriana* Henn., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Bullanockia Crous 2016, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *B. australis* Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22879, CPC 28976.

Bullaserpens Bat., J.L. Bezerra & Cavalc. 1965, *Ascomycota* genera *incertae sedis*, one species, type: *B. bignoniacearum* Bat., J.L. Bezerra & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bullimyces A. Ferrer, A.N. Mill., C. Sarmiento & Shearer 2012, *Sordariomycetidae incertae*

sedis, three species, type: *B. communis* A. Ferrer, A.N. Mill., Sarmiento & Shearer, Costa Rica, see Ferrer et al. (2012; taxonomy), Cai et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype: AF281-1, ILL, cultures and sequences are available.

Bunodophoron A. Massal. 1861, *Sphaerophoraceae*, *Lecanorales*, *Lecanoromycetes*, 24 species, type: *B. australe* (Laurer) A. Massal., asexual morph coelomycetous, lichenized, terrestrial, mainly in the temperate rainforests of the Southern Hemispheres, rarely in oceanic areas of the Northern Hemisphere or in high-altitude rainforests in tropical or subtropical areas, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Burenia M.S. Reddy & C.L. Kramer 1975, *Protomycetaceae*, *Taphrinales*, *Taphrinomycetes*, three species, type: *B. cicutae* (Lindr.) M.S. Reddy & C.L. Kramer, asexual reproduction is unknown, plant parasitic, parasitic on Apiaceae, Europe, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable.

Bussabanomyces Klaubauf, Lebrun & Crous 2014, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *B. longisporus* (Bussaban) Klaubauf, Lebrun & Crous, hyphomycetous, sexual morph unknown, endophyte, terrestrial, Thailand, see Klaubauf et al. (2014; morphology, phylogeny), Maharachchikumbura et al. (2015; outline), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: BCC11377, CBS 125232.

Butleria Sacc. 1914, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, one species, type: *B. inaghatahani* Sacc., asexual morph unknown, parasitic, terrestrial, tropical, holotype of type: PAD 1677, See Li et al. (2011; morphology), Dissanayake et al. (2014; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Byrsomyces Cavalc. 1972, *Sordariomycetes* genera *incertae sedis*, one species, type: *B. olivaceus* Cavalc., asexual morph unknown, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), type material is not in good condition hence need to recollect and subject them to molecular analysis, Holotype of type species URM 27661 /Exs. 20057.

Byssosascus Arx 1971, *Myxotrichaceae*, *Leotiomycetes* families *incertae sedis*, two species, type: *B. striatosporus* (G.L. Barron & C. Booth) Arx, asexual morph unknown, saprobes, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: BF 24290, cultures available for type: UAMH 3572.

Byssocallis Syd. 1927, *Dothideomycetes* genera *incertae sedis*, two species, type: *B. phoebes* Syd., asexual morph unknown, parasitic on living leaves (*Phoebe tonduzii* Mez. and *Podocarpus elongate* L'Herit.), see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tubeufiaceae*), Hyde et al. (2013) and Boonmee et al. (2014) did not accept as a genus in *Tubeufiaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Byssocaulon Mont. 1835, *Chrysotrichaceae*, *Arthoniales*, *Arthoniomycetes*, six species, type: *B. niveum* Mont., lichenized, saxicolous or epiphytic, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Byssogene Syd. 1922, *Dothideomycetes* genera *incertae sedis*, two species, type: *B. amboinensis* Syd., asexual morph unknown, saprobes, terrestrial, Brazil and Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), da Silva (2016; taxonomy, phylogeny, accepted as a genus in *Saccardiaceae*), cultures and sequences are unavailable, needs generic revision.

Byssolecania Vain. 1921, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, seven species, type: *B. fuscolivida* Vain., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Byssoloma Trevis. 1853, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, possibly heterogeneous, c. 50 spp., type: *B. leprieurii* Trevis., sexual morph with apothecioid

ascomata usually having a byssoid margin, asexual morph coelomycetous, rarely campylidial, lichenized, terrestrial, mainly foliicolous in tropical rainforests, see Lücking (2008; morphology), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), holotype of type: Leprieur 1366 (PC), sequences are available but lacks for the type species.

Byssonectria P. Karst. 1881, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, eleven species, type: *B. obducens* P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lindemann et al. (2015; new species, DNA), cultures and sequences are available but lacks for the type:, needs generic revision.

Byssonygena Guarro, Punsola & Cano 1987, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *B. ceratinophila* Guarro, Punsola & Cano, asexual morph unknown, saprobes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), culture available for the type: IMI 370021.

Byssophytum Mont. 1848, *Ascomycota* genera *incertae sedis*, one species, type: *B. sulphureum* Mont., asexual morph unknown, lichenized, terrestrial, Java, Tahiti, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Byssosphaeria Cooke 1879, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, 25 species, type: *B. keithii* (Berk. & Broome) Cooke 1879, asexual morph *Pyrenochaeta* or *Chaetophoma*-like, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology, phylogeny), cultures and sequences of type species are unavailable, needs generic revision.

Byssotheciella Petr. 1923, *Sordariomycetes*, genera *incertae sedis*, two species, type: *B. tiliae* Petr., asexual morph unknown, saprobes, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Byssothecium Fuckel 1861, *Dothideomycetes* genera *incertae sedis*, eight species, type: *B. circinans* Fuckel, asexual morph coelomycetous, saprobes or parasites, terrestrial, freshwater or marine, worldwide, see Zhang et al. (2009) accepted as *Massarinaceae* but Zhang et al. (2012) showed it distinct from *Massarinaceae*, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Byssotrema M. Cáceres, Aptroot & Lücking 2014, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *B. mirabile* M. Cáceres, Aptroot & Lücking, lichenized, see Cáceres et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Caccobius Kimbr. 1967, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, c. six species, type: *C. minusculus* Kimbr., asexual morph unknown, coprophilous, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cacumisporium Preuss 1851, *Ascomycota* genera *incertae sedis*, seven species, type: *C. tenebrosus* Preuss, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, Europe, North America, see Wongsawas et al. (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cadophora Lagerb. & Melin 1927, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, 15 species, type: *C. fastigiata* Lagerb. & Melin, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Navarrete et al. (2011; associated with grapevine trunk diseases), Seifert et al. (2011; morphology), Day et al. (2012; new species), Wijayawardene et al. (2012,

2017; outline), Kirk et al. (2013; genus accepted), Travadon et al. (2015; new species), cultures and sequences are available.

Caeruleum Arcadia 2012, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, two species; type: *C. heppii* (Nägeli ex Körb.) K. Knudsen & Arcadia, lichenized, see Arcadia and Knudsen (2012; taxonomy), Lücking et al. (2016; classification), sequences unavailable.

Caespitotheca S. Takam. & U. Braun 2005, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, one species, type: *C. forestalis* (Mena) S. Takam. & U. Braun, asexual morphs hyphomycetous, biotrophic, obligate plant pathogens, terrestrial, South America (Argentina), see Lumbsch and Huhndorf (2010; outline), Braun and Cook (2012; taxonomy), sequences of non-type material of the type species are available.

Cainia Arx & E. Müll. 1955, *Cainiaceae*, *Xylariales*, *Sordariomycetes*, seven species, type species: *Cainia graminis* (Niessl) Arx & E. Müll., asexual morph coelomycetous, saprobic or pathogenic, terrestrial, temperate, see Kirk et al. (2008, 2013; genus accepted), Lumbsch & Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; phylogeny), cultures and sequences are available, reference specimens: CBS 136.62, MFLUCC 15-0540 = It 1462.

Cainiella E. Müll. 1957, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *C. johansonii* (Rehm) E. Müll., asexual morphs unknown, saprobes, terrestrial, Canada, Europe, see Lumbsch and Huhndorf (2010; outline), Kruys and Castlebury (2012; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Cainomyces Thaxt. 1901, *Laboulbeniales* genera *incertae sedis*, *Laboulbeniomycetes*, one species, type: *C. isomali* Thaxt., asexual morph unknown, saprobes, terrestrial, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Calathaspis I.M. Lamb & W.A. Weber 1972, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *C. devexa* I.M. Lamb & W.A. Weber, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Calcarispora Marvanová & Marvan 1963, *Incertae sedis*, one species, type: *C. hiemalis* Marvanová & Marvan, hyphomycetous, sexual morph unknown, aquatic, Europe and Canada, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Calcarisporium Preuss 1851, *Incertae sedis*, *Hypocreales*, *Sordariomycetes*, fifteen species, type: *C. arbuscula* Preuss, hyphomycetous, asexual morph of *Hypocreales*, saprobes, widespread (incl. Europe, Manitoba, Japan, Ghana, Thailand, Tanzania, Great Britain), see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Silder et al. (2013; Bioactive metabolites), Sun et al. (2016; *Calcarisporium cordycipiticola* sp. nov.), cultures and sequences are unavailable, needs generic revision.

Calceispora Matsush. 1975, *Ascomycota* genera *incertae sedis*, two species, type: *C. hachijoensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Calceomyces Udagawa & S. Ueda 1988, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *C. lacunosus* Udagawa & S.Ueda, asexual morph hyphomycetous, saprobes, terrestrial (collected from activated sludge), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, type material CBS 633.88 = NHL 2983.

Calenia Müll. Arg. 1890, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, 30 species, type: *C. depressa* Müll. Arg., lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Caleniopsis Vězda & Poelt 1987, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *C. laevigata* (Müll. Arg.) Vězda & Poelt, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Caleutypa Petr. 1934, *Sordariomycetes*, genera *incertae sedis*, two species, type: *C. maculans* Petr., saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Caliciopsis Peck 1883, *Coryneliaceae*, *Coryneliales*, *Eurotiomycetes*, 31 species, type: *C. pinea* Peck, asexual morph coelomycetous (phoma-like), parasites, pathogens, see Lumbsch and Huhndorf (2010; outline), Pratibha et al. (2010; new species), Garrido-Benavent et al. (2015; new species), Crous et al. (2016; new species, phylogeny), Wood et al. (2016; DNA, phylogeny), cultures available for the type: CBS 139.64.

Calicium Pers. 1794, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 30 species, type: *C. viride* Pers., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Prieto and Wedin (2016; classification), Lücking et al. (2016; classification), sequences are available.

Callebaea Bat. 1962, *Dothideomycetes*, genera *incertae sedis*, one species, type: *C. rutideae* (Hansf.) Bat., saprobes, terrestrial, Uganda, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Callerascus Whitton, K.D. Hyde & McKenzie 2012, *Ascomycota* genera *incertae sedis*, one species, type: *C. tunicaerulus* Whitton, K.D. Hyde & McKenzie, asexual morph unknown, saprobes, terrestrial, Australia, see Whitton et al. (2012; taxonomy holotype of the type: IFRD 9021, cultures and sequences are unavailable, needs generic revision.

Callistospora Petr. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *C. gaubae* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2016, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Callome Otálora & Wedin 2014, *Collemataceae*, *Peltigerales*, *Lecanoromycetes*, one species, type: *C. multipartita* (Sm.) Otálora, P.M. Jørg. & Wedin, lichenized, see Otálora et al. (2013a, 2014; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available.

Calloria Fr. 1836 (= *Cylindrocolla* Bonord. 1851; *Callorina* Korf 1971 *fide* Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomycetes*, five species, type: *C. fusarioides* (Berk.) Fr., asexual morph *Cylindrocolla*, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Seifert et al. (2011; morphology of asexual morph), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available but lacks for the type species.

Calloriopsis Syd. & P. Syd. 1917, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, five species, type: *C. gelatinosa* (Sacc.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Calogaya Arup, Frödén & Söchting 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 14 species, type: *C. biatorina* (A. Massal.) Arup, Frödén & Söchting; lichenized, see Arup et al. (2013; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available.

Calonectria De Not. 1867 (= *Cylindrocladium* Morgan 1892; *Candelospora* Rea & Hawley 1912 *fide* Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, type: *pyrochroa* (Desm.) Sacc., 248 species are listed in Index Fungorum (2016), type: *C. daldiniana* De Not., pathogenic to plants or isolated from soil, terrestrial, worldwide, see Lombard et al. (2010a, b, 2015a, b; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), ex-epitype of type: CBS 749.70; epitype: of the type: CBS H-15110.

Calongea Healy, Bonito & Trappe 2009, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *C. prieguensis* (Mor.-Arr., J. Gómez & Calonge) Healy, Bonito & Trappe, asexual morph unknown, saprobes, from soil, terrestrial, Europe, see Healy et al. (2009; taxonomy), holotype of the type: MA (Fungi) 33502, cultures and sequences are available.

Calongeomyces Hawksworth & Etayo 2011, *Ascomycota* genera *incertae sedis*, one species, type: *C. gibelluloides* (D. Hawksw. & Etayo) D. Hawksw. & Etayo (syn. *Calongia gibelluloides* D. Hawksw. & Etayo), coelomycetous, sexual morph unknown, parasymbiont on *Cladonia*, *Flavoparmelia*, *Pertusaria*, terrestrial, southern Europe, see Hawksworth and Etayo (2011; morphology, distinction of similar lichenicolous genera), holotype of the type: (K, M) 164014, J. Etayo & A. Etayo), cultures and sequences are unavailable.

Calopadia Vězda 1986, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, 27 species, type: *C. fusca* (Müll. Arg.) Vězda, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Calopadiopsis Lücking & R. Sant. 2002, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *C. tayabasensis* (Vain.) Lücking & R. Sant., lichenized, Argentina, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Calophoma Q. Chen & L. Cai 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, six species, type: *C. clematidina* (Thüm.) Q. Chen & L. Cai, coelomycetous, saprobes, ?pathogens, terrestrial, The Netherlands, New Zealand, Switzerland, see Chen et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype and ex-epitype culture of the type: CBS H-16193, CBS 108.79.

Caloplaca Th. Fr. [nom.cons.] 1860, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 350 species, type: *C. cerina* (Hedw.) Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline), Arup et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Caloscypha Boud. 1885 (= *Geniculodendron* G.A. Salt 1974 *fide* Healy et al. 2016), *Caloscyphaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *C. fulgens* (Pers.) Boud., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: AFTOL-ID 152.

Calosphaeria Tul. & C. Tul. 1863 (= *Calosphaeriophora* Réblová, L. Mostert, W. Gams & Crous 2004 *fide* Réblová et al. 2016), *Calosphaeriaceae*, *Calosphaeriales*, *Sordariomycetes*, c. 30 species, type: *C. princeps* Tul. & C. Tul., asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Damm et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2015, 2016; phylogeny, nomenclature), cultures available but lacks for the type species.

Calosphaeriopsis Petr. 1941, *Sordariomycetes*, genera *incertae sedis*, one species, type: *C. huberiana* (Kirschst.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),

Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Calosporella J. Schröt. 1897, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *C. innesii* (Curr.) J. Schröt., asexual morph unknown, saprobes, terrestrial, Europe, see Voglmayr and Jaklitsch (2014; DNA, phylogeny), cultures and sequences are unavailable, ex-type and epitype of type: CBS 123810, WU 32161.

Calostilbe Sacc. & P. Syd. 1902 (= *Calostilbella* Höhn. 1919; *Xenostilbum* Petr. *fide* Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *C. striispora* (Ellis & Everh.) Seaver, asexual morph hyphomycetous, saprobes on wood and bark, commonly in tropical regions, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2015a; phylogeny); Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), lectotype of the type: NY, isolectotypes BPI 553210, 553211.

Calothyriopsis Höhn. 1919, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, two species, type: *C. conferta* (Theiss.) Höhn., saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Microthyriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Calotrichopsis Vain. 1890, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, three species, type: *C. insignis* Vain., lichenized, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Calvitimela Hafellner 2001, *Tephromelataceae*, *Lecanorales*, *Lecanoromycetes*, ten species, type: *C. armeniaca* (DC.) Hafellner, lichenized, see Bendiksby et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Calvolachnella Marinc., T.A. Duong & M.J. Wingf. 2016, *Chaetosphaeriales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *C. guaviyuensis* (Marinc. T.A. Duong, M.J. Wingf. & C.A. Perez) Marinc., T.A. Duong & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, Uruguay, see Hernández-Restrepo et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and culture ex-type culture of the type: PREM 60964, CBS 134695 = CMW 39055.

Calycella (Sacc.) Sacc. 1899, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *C. gelatinosa* (Sacc.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Calycellina Höhn. 1918 (= *Chaetochalara* B. Sutton & Piroz. 1965 *fide* Johnston et al. 2014), *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, c. 45 species, type: *C. punctiformis* (Grev.) Höhn., asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Seifert et al. (2011; morphology of asexual morph), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available but lacks for the type:.

Calycellinopsis W.Y. Zhuang 1990, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *C. xishuangbanna* W.Y. Zhuang, asexual morph unknown, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type:.

Calycidium Stirt. 1877, *Sphaerophoraceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *C. cuneatum* Stirt., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Calycidiaceae*), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), sequences are available.

Calycina Nees ex Gray 1821, *Pezizellaceae*, *Helotiales*, *Leotiomyces*, c. 30 species, type: *C. herbarum* (Pers.) Gray, asexual morph hyphomycetous, saprobes, cones scales, herbaceous stems and leaves, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Baral et al. (2013; genus accepted), Han et al. (2014; genus accepted), Baral and Rämä (2015; genus accepted), type in S herbarium, cultures and sequences are unavailable for the type of the type species, needs generic revision.

Calyptellopsis Svrček 1986, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, six species, type: *C. reticulata* (Vacek) Svrček, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Calyptra Theiss. & Syd. 1918, *Dothideomyces* genera *incertae sedis*, five species, type: *C. cordobensis* (Speg.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Calyptronectria Speg. 1909, *Melanommataceae*, *Pleosporales*, *Dothideomyces*, three species, type: *C. platensis* Speg., asexual morph unknown, saprobes, terrestrial, Argentina, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; taxonomy, phylogeny), cultures and sequences of type species are unavailable, needs generic revision.

Calyptrozyma Boekhout & Spaay 1995, *Eurotiomyces* genera *incertae sedis*, one species, type: *C. arxii* Boekhout & Spaay, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 354.92.

Camaroglobulus Speer 1986, *Ascomycota* genera *incertae sedis*, one species, type: *M. caespitosa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Camarographium Bubák 1916, *Pleosporales* genera *incertae sedis*, *Dothideomyces*, seven species, type: *C. stephensii* (Berk. & Broome) Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Crous et al. (2011; new species, key), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016, 2017; outline, taxonomy, new species), cultures and sequences are available but lacks for the type species, needs generic revision.

Camaropella Lar. N. Vassilyeva 1997, *Boloniaceae*, *Boliniales*, *Sordariomyces*, two species, type: *C. pugillus* (Schwein.) Lar. N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, North temperate zone, see Huhndorf and Miller (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Untereiner et al. (2013; phylogeny), Friebe and Wendelin (2014), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Camarops P. Karst. 1873, *Boloniaceae*, *Boliniales*, *Sordariomyces*, 20 species, type: *C. hypoxyloides* P. Karst., asexual morphs unknown, saprobes, terrestrial, worldwide, see Huhndorf and Miller (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Camaropycnis E.K. Cash 1945, *Ascomycota* genera *incertae sedis*, one species, type: *C. libocedri* E.K. Cash, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Camarosporellum Tassi 1902, *Ascomycota* genera *incertae sedis*, one species, type: *C. nervisequum* (Tassi) Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial,

USA, see Wijayawardene et al. (2012, 2016, 2017; taxonomy, outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Camarosporioides W.J. Li & K.D. Hyde 2016, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *C. phragmitis* W.J. Li & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Germany, see Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 16-1488, MFLUCC 13-0365.

Camarosporiopsis Abbas, B. Sutton & Ghaffar 2000, *Ascomycota* genera *incertae sedis*, one species, type: *C. capparis* (S. Ahmad) Abbas, Sutton & Ghaffar, coelomycetous, sexual morph unknown, one species, saprobes, Pakistan, see Wijayawardene et al. (2012, 2016, 2017; taxonomy, outline), sequences are unavailable, needs generic revision.

Camarosporium Schulzer 1870, *Pleosporineae* genera *incertae sedis*, *Pleosporales*, *Dothideomycetes*, more than 100 spp., type specie *C. quaternatum* Schulzer, coelomycetous, sexual morph cucurbitaria-like, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2014, 2016, 2017; taxonomy, phylogeny, outline), Liu et al. (2015, taxonomy, phylogeny), Tibpromma et al. (2017; taxonomy, phylogeny), sequences are available for 11 species, needs generic revision.

Camarosporula Petr. 1954 (= *Anthracostroma* Petr. 1954 *fide* Rossman et al. 2015), one species, type: *C. personii* (Henn.) Petr., asexual morph coelomycetous, saprobes, terrestrial, Australia, see Crous et al. (2011; phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures available for the type: CBS 116258.

Camarosporulum Tassi 1902, *Ascomycota* genera *incertae sedis*, one species, type: *C. ampelopsidis* Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cameronia Kantvilas 2012, *Cameroniaceae*, *Baeomycetales*, *Lecanoromycetes*, two species, type: *C. pertusarioides* Kantvilas, lichenized, see Kantvilas (2012; taxonomy), Lumbsch et al. (2012; taxonomy), Lücking et al. (2016; classification), sequences are available.

Camillea Fr. 1849, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, more than 41 species, type: *C. leprieurii* (Mont.) Mont., endophytes-saprobes, widespread and high in tropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Campoa Speg. 1921, *Parmulariaceae*, *Dothideomycetes*, families *incertae sedis*, two species, type: *C. pulcherrima* Speg., asexual morph unknown, saprobes, terrestrial, South America, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Camporesia W.J. Li & K.D. Hyde 2016, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *C. sambuci* W.J. Li & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-3905, MFLUCC 13-0203.

Camposporidium Nawawi & Kuthub. 1988, *Ascomycota* genera *incertae sedis*, three species, type: *C. cristatum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, terrestrial, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Camposporium Harkn. 1884, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 18 species, type: *C. antennatum* Harkn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology, accepted as a genus in *Leptosphaeriaceae*),

Wijayawardene et al. (2012, 2017; outline), Adamčík et al. (2015; new species), cultures available for the type: ICMP15321.

Camptomeriphila Crous & M.J. Wingf. 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *C. leucaenae* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22884, CPC 27608.

Camptomeris Syd. 1927, *Ascomycota* genera *incertae sedis*, seven species, type: *C. calliandrae* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Camptomyces Thaxt. 1894, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, eight species, type: *C. melanopus* Thaxt., asexual morph unknown, parasitic on Staphylinidae beetles, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Camptophora Réblová & Unter. 2013, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *C. hylomeconis* (Crous, de Hoog & H.D. Shin) Réblová & Unter., asexual morph unknown, from living leaves of *Hylomecon vernalis*, terrestrial, South Korea, see Réblová et al. (2013; genus accepted), Madrid et al. (2016; phylogeny), holotype and ex-type culture of the type: CBS H-19907, CBS 113311.

Camptosphaeria Fuckel 1870, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, four species, type: *C. sulphurea* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, need generic revision.

Campylocarpon Halleen, Schroers & Crous 2004, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *C. fasciculare* Schroers, Halleen & Crous, hyphomycetous, sexual morph unknown, pathogenic on *Vitis vinifera*, South Africa see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type of the type: Holotype CBS 6590, CBS 112613 = CPC 3970.

Campylospora Ranzoni. 1953, *Ascomycota* genera *incertae sedis*, five species, type: *C. chaetocladia* Ranzoni, hyphomycetous, sexual morph unknown, saprobes, endophytes, aquatic, Asia, Europe, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Marvanová and Laichmanová (2014; new species), cultures and sequences are available for authentic strains CCM F-17708, CCM F-10610, CCM F-10710, CCM F-10810.

Campylothelium Müll. Arg. 1883, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, six species, type: *C. puiggarii* Müll. Arg., lichenized, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Nelsen et al. (2014a; taxonomy), cultures available for the type: MPN268.

Canalisporium Nawawi & Kuthub 1989, *Savoryellaceae*, *Savoryellales*, *Sordariomycetes*, twelve species, type: *C. caribense* (Hol.-Jech. & Mercado) Nawawi & Kuthub., hyphomycetous, freshwater habitats except *C. microsporum* and *C. nigrum*, Africa.

Canariomyces Arx 1984, *Microascaceae*, *Microascales*, *Sordariomycetes*, one species, type: *C. notabilis* Arx, asexual morph unknown, saprobes, terrestrial, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline, phylogeny), holotype of the type: MUCL 44677, a sequence available but unpublished.

Canavirgella W. Merr., N.G. Wenner & Dreisbach 1996, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *C. banfieldii* W. Merr., N.G. Wenner & Dreisbach, asexual

morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cancellidium Tubaki 1975, *Sordariales* genera *incertae sedis*, two species, type: *C. applanatum* Tubaki, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Europe, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Zhao et al. (2013; China), Pratibha et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Candelabrum Beverw. 1951, *Ascomycota* genera *incertae sedis*, seven species, type: *C. spinulosum* Beverw, hyphomycetous, sexual morph unknown, on decaying leaves in water, aquatic, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Candelaria A. Massal. 1852, *Candelariaceae*, *Candelariales*, *Lecanoromycetes*, seven species, type: *C. concolor* (Dicks.) Arnold, lichenized, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Candelariella Müll.Arg. 1894, *Candelariaceae*, *Candelariales*, *Lecanoromycetes*, 50 species; type: *C. vitellina* (Hoffm.) Müll. Arg., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Candelina Poelt 1974, *Candelariaceae*, *Candelariales*, *Lecanoromycetes*, three species, type: *C. mexicana* (B. de Lesd.) Poelt, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Candelosynnema K.D. Hyde & Seifert 1992, *Ascomycota* genera *incertae sedis*, one species, type: *C. ranunculosporum* K.D. Hyde & Seifert, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Candida Berkhout 1923 (= *Lodderomyces* Van der Walt 1966), *Candidaceae*, *Saccharomycetales*, *Saccharomycetes*, 40 species, type species *C. tropicalis* var. *tropicalis* (Castell.) Berkhout, asexual reproduction by multilateral budding and formation of pseudohyphae and true hyphae, saprophytic, others pathogens or opportunistic pathogens of humans and animals, terrestrial, worldwide, phylogenetic analysis of gene sequences shows that there are about 40 species in the *Candida tropicalis* clade, the type species of the genus *Candida*, which also includes *C. albicans* and *Lodderomyces elongisporus*. Prior to DNA sequence analysis and changes in the Code of nomenclature for fungi (Melbourne Code), approximately 400 described anamorphic species were included in the genus *Candida*

Cannonia Joanne E. Taylor & K.D. Hyde 1999, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *C. australis* (Speg.) Joanne E. Taylor & K.D. Hyde, asexual morph unknown, saprobes, Argentina, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Canoparmelia Elix & Hale 1986, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 40 species; type: *C. texana* (Tuck.) Elix & Hale, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Leonardo et al. (2011; indicator for environmental pollution), Kirk et al. (2013; genus accepted), Kirika et al. (2016; phylogeny and circumscription), Lücking et al. (2016; classification), sequences are available.

Cantharomyces Thaxt. 1890, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 29 species, type: *C. bledii* Thaxt., asexual morph unknown, biotrophic, hosts are Dryopidae, Hydrophilidae, Limnichidae, and Staphylinidae (Coleoptera), widespread, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters and De Kesel (2013; morphology), cultures and sequences are unavailable, needs generic revision.

Capillataspora K.D. Hyde 1989, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. corticola* K.D. Hyde, asexual morph unknown, saprobes, collected from mangroves, see Lumbsch & Huhndorf (2009; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capillipes R. Sant. 1956, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. cavorum* R. Sant., asexual morph unknown, saprobes, terrestrial, Lapland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capillistichus Santam. 2004, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *C. tenellus* Santam., asexual morph unknown, parasitic on Hydrophilidae beetles, aquatic, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Capitofimbria L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomyces*, one species, type: *C. compacta* (R.F. Castañeda et al.) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS-H6584a, CBS 111739.

Capitorostrum Bat. 1957, *Ascomycota* genera *incertae sedis*, one species, type: *C. asteridiellae* Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Papua New Guinea, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capnobotryella Sugiy. 1987, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, five species, type: *C. renispora* Sugiy., hyphomycetous, sexual morph unknown, saprobes, Asia, Europe, North America, see Seifert et al. (2011; morphology), Sert et al. (2011, 2012; new species, Australia), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 214.90.

Capnobotrys S. Hughes 1970, *Metacapnodiaceae*, *Capnodiales*, *Dothideomycetes*, c. 20 species, type: *C. neesii* S. Hughes, hyphomycetous, sexual morph unknown, sooty mould on living plants, terrestrial, Asia, Australasia, Europe, North America, South America, North America, see Seifert et al. (2011; morphology), Hughes and Seifert (2012; new species), Wijayawardene et al. (2012, 2017; outline), Hyde et al. (2013; accepted as a genus in *Metacapnodiaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capnocheirides J.L. Crane & S. Hughes 1982, *Ascomycota* genera *incertae sedis*, one species, type: *C. rhododendri* (Kunze) J.L. Crane & S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Capnodiastrum Speg. 1886, *Ascomycota* genera *incertae sedis*, one species, type: *C. guaraniticum* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable thus placed in *Ascomycota incertae sedis* in here, needs generic revision.

Capnodinula Speg. 1918, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, four species, type: *C. trichodea* (Rehm) Speg., saprobes, terrestrial, See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capnodium Mont. 1849 (= *Polychaeton* (Pers.) Lév. 1846; = *Fumagospora* G. Arnaud 1911 *fide* Chomnunti et al. 2011; Hyde et al. 2013; Wijayawardene et al. 2014), *Capnodiaceae*,

Capnodiales, *Dothideomycetes*, one species, type: *C. citri* Berk. & Desm., asexual morph coelomycetous, sooty moulds, worldwide, see Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2011, 2014; taxonomy, nomenclature), Hyde et al. (2013; accepted as a genus in Capnodiaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), cultures and sequences are available.

Capnofrasera S. Hughes 2003, *Ascomycota* genera *incertae sedis*, one species, type: *C. dendryphioides* S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016, 2017; outline), cultures and sequences are unavailable thus placed in *Ascomycota incertae sedis* in here, needs generic revision.

Capnokyma S. Hughes 1975, *Euantennariaceae*, *Dothideomycetes*, families *incertae sedis*, two species, type: *C. corticola* S. Hughes, asexual morph unknown, saprobes, terrestrial, Australasia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Euantennariaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Caprettia Bat. & H. Maia 1965, *Monoblastiaceae*, *Monoblastiales*, *Dothideomycetes*, eight species, type: *C. amazonensis* Bat. & H. Maia, asexual morph coelomycetous, saprobes, thallus epiphyllous, worldwide, see Nelsen et al. (2009, 2011; taxonomy), Yeshitela et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

Capricola Velen. 1947, *Helotiales* genera *incertae sedis*, one species, type: *C. fuscidula* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Capronia Sacc. 1883, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, c. 60 species, type: *C. sexdecimspora* (Cooke) Sacc., asexual morphs hyphomycetous, parasitic (on fungi or lichens) or saprobes, terrestrial, worldwide, see Badali et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Untereiner et al. (2011; phylogeny), Friebes (2012; morphology), Diederich et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Gueidan et al. (2014; phylogeny), sequences are available.

Caproniella Berl. 1896, *Sordariomycetes*, genera *incertae sedis*, two species, type: *C. pleiospora* (Mouton) Berl., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Caproventuria U. Braun 1998, *Venturiaceae*, *Venturiales*, *Dothideomycetes*, two species, type: *C. hanliniana* (U. Braun & Feiler) U. Braun, asexual morph hyphomycetous, saprobes, soil-borne, Africa, Asia, Europe, New Zealand, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; phylogeny, accepted as a genus in *Venturiaceae*), Hyde et al. (2013; accepted as a genus in *Venturiaceae*), Wijayawardene et al. (2014; outline), strains of the type: ATCC 9601, IFM 52023, holotype of type: Germany, ascomata formed in culture, dried culture on SNA, 1994, F. Feiler (HAL 7623 F).

Capsicumyces Gamundí, Aramb. & Gaiotti 1979, *Ascomycota* genera *incertae sedis*, one species, type: *C. delicatus* Gamundí, Aramb. & Gaiotti, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capsulospora K.D. Hyde 1996, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, nine species, type: *C. frondicola* K.D. Hyde, asexual morph unknown, sexual morph ascomycetes,

saprobies on dead branches, Vanuatu, Brunei, Jawa, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capulatispora Thambugala, Kaz. Tanaka & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *C. sagittiformis* (Kaz. Tanaka & Hosoya) Thambugala & Hyde, asexual morph unknown, saprobies, terrestrial, Japan, see Thambugala et al. (2015b; morphology, phylogeny), holotype of type: TNS-F-12453, ex-type strains of type: JCM 15100.

Carassea S. Stenroos 2002, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, one species; type: *C. connexa* (Vain.) S. Stenroos, lichenized, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Carbacanthographis Staiger & Kalb 2002, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 28 species, type: *C. chionophora* (Redinger) Staiger & Kalb, lichenized, see Rivas Plata et al. 2012a, Lücking et al. (2016; classification), sequences are available.

Carbacanthographis Staiger & Kalb in Staiger (2002), *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 22 species, type: *C. chionophora* (Redinger) Staiger & Kalb, currently accepted, all with ascomata, two species with additional vegetative propagules (soredia and isidia), lichenized (*Trenthepohlia*), terrestrial (mainly corticolous), tropical, see Lücking et al. (2009; new species), Tripp et al. (2010; new species), Sharma et al. (2010; key), Rivas Plata et al. (2013; DNA, phylogeny), Lumbsch et al. (2014; tribe *Wirthiotremateae*), Sharma and Khadilkar (2011; new species), Kukwa et al. (2013; new species), sequences are available.

Carbomyces Gilkey 1954, *Carbomycetaceae*, *Pezizales*, *Pezizomycetes*, three species; type: *C. emergens* Gilkey, saprobies, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Moreno et al. (2012; re-visited, DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available for the voucher AH 39344 of the type species.

Carbonea (Hertel) Hertel 1983, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, c. 22 species, type: *C. atronivea* (Arnold) Hertel, lichenicolous or lichenized?, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Øvstedal (2012; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Carbonicola Bendiksby & Timdal (2013), *Carbonicolaceae*, *Lecanorales*, *Lecanoromycetes*, *Ascomycota*; three species; type: *C. anthracophila* (Nyl.) Bendiksby & Timdal; lichenized; temperate northern hemisphere, Australia, see Bendiksby & Timdal 2013, Lücking et al. (2016; classification), type specimen H-NYL-20375 p.p. (lectotype by Timdal 1984), sequences are available.

Carbosphaerella I. Schmidt 1969, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *C. pleosporoides* Schmidt, asexual morph unknown, saprobies, marine, Denmark, Germany, USA, Johnson et al. (1984; taxonomy), Sundari et al. (1996; morphology), Jones et al. (2015; outline), cultures and sequences are unavailable.

Caribaeomyces Cif. 1962, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *C. tetrasporus* (Toro) Cif., saprobies, terrestrial, Dominican Republic, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Microthyriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Carinispora K.D. Hyde 1992, *Phaeosphaeriaceae*, *Pleosporales*, *Pleosporomycetidae*, *Dothideomycetes*, two species, type: *C. nypae* K.D. Hyde, saprobies, marine habitat (collected from palm *Nypa fruticans*), See Lumbsch & Huhndorf (2009; outline), Kirk et al. (2013; genus accepted), only type sequence available, needs generic revision, Type material BCC 36316.

Carnegieispora Etayo 2009, *Ascomycota* genera *incertae sedis*, one species, type: *C. rimeliae* Etayo & Berger, coelomycetous, sexual morph unknown, parasymbiont on *Parmotrema*,

terrestrial, Azores, see Etayo and Berger (2009; morphology, distinction of similar lichenicolous genera), Wijayawardene et al. (2016; morphology), holotype of the type: LI, F. Berger 18380, cultures and sequences are unavailable.

Carneopezizella Svrček 1987, Helotiaceae, *Helotiales*, *Leotiomycetes*, one species, type: *C. salicicola* Svrček, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Holec et al. (2013; checklist), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, needs generic revision.

Carnia Bat. 1960, *Ascomycota* genera *incertae sedis*, one species, type: *C. tabebuiae* Bat. & Peres, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Carpophoromyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *C. cybocephali* Thaxt., asexual morph unknown, parasitic on Cybocephalidae beetles, terrestrial, Asia, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Carrismyces R.F. Castañeda & Heredia 2000, *Ascomycota* genera *incertae sedis*, one species, type: *C. proliferatus* Castañeda & Heredia, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Mexico, see Castañeda-Ruiz & Heredia (2000; morphology), holotype of the type: XAL CB736, cultures and sequences are unavailable, compare with *Bioconosporium*, *Oncopodiella*, *Pseudopetrakia* and *Septosporium*.

Caryophylloseptoria Verkley et al. 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *C. lychnidis* (Desm.) Verkley, Quaedvlieg & Crous, coelomycetous, sexual morph unknown, plant pathogenic, see Verkley et al. (2013; morphology, phylogeny), no ex-type culture available, reference material CBS H-21161, living culture CBS 109098, 109102.

Caryospora De Not. 1855, *Caryosporaceae*, *Pleosporales*, *Dothideomycetes*, six species, type: *C. putaminum* (Schwein.) De Not., saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Zopfiaceae*), Hyde et al. (2013; accepted as a genus in *Zopfiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Zopfiaceae*), Zhao and Zhao (2014; new species, China), Ariyawansa et al. (2015; new species, introduced *Caryosporaceae*), cultures and sequences are available but lacks for the type species, needs generic revision.

Caryosporella Kohlm. 1985, *Dothideomycetes*, genera *incertae sedis*, one species, type: *C. rhizophorae* Kohlm., asexual morph unknown, saprobes, marine aquatic, America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology; nomenclature; phylogeny), cultures available for the type: JK 5302A (fide Suetrong et al. 2009).

Caryosporella Kohlm. 1985, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *C. rhizophorae* Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Suetrong et al. (2009; phylogeny, morphology); Jones et al. (2009, 2015; classification); Besitulo et al. (2010; diversity); Zainuddin et al. (2010; antimicrobial activities); Zhang et al. (2012; morphology); Lee et al. (2012; checklist); Hyde et al. (2013; morphology, outline); Samón-Legrá et al. (2014; diversity); Tian et al. (2015; morphology, phylogeny), holotype and ex-isotype of type: J.K. 4523a (NY), J.K.4532b (IMS).

Casaresia Gonz. Frag., 1920, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *C. sphagnorum* Gonz. Frag, aquatic hyphomycetous, see Wijayawardene et al. (2012), Kirk et al. (2013; genus accepted), sexual morph: *Mollisia casaresiae* Webster, Shearer & Spooner, see Wijayawardene et al. (2012), cultures and sequences are unavailable.

Cashiella Petr. 1951, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *C. atra* Petr., asexual morph unknown, saprobes, terrestrial, North America, New Zealand, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type:.

Castanedaea W.A. Baker & Partr. 2001, *Ascomycota* genera *incertae sedis*, one species, type: *C. minor* (R.F. Castañeda) W.A. Baker & Partr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Castanediella M. Hern.-Restr., Crous & M.J. Wingf. 2015, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, nine species, type: *C. acaciae* Crous, M. Hern.-Restr. & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Crous et al. (2015, 2016; taxonomy), Crous et al. (2016; new species, phylogeny), Hernández-Restrepo et al. (2016; new species; phylogeny), holotype of the type species and ex-type culture of the type: CBS H-22225, CPC 24869 = CBS 139896.

Castanedomyces Cano, L.B. Pitarch & Guarro 2002, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *C. australiensis* Cano, L.B. Pitarch & Guarro., asexual morph unknown, saprobes, terrestrial, Australia, see Liang et al. (2009; phylogeny), cultures available for the type: IMI 370015.

Catabotrys Theiss. & Syd. 1915, *Catabotrydaceae*, *Amplistromatales*, *Sordariomycetes*, one species, type: *C. palmarum* (Pat.) Theiss. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Catapyrenium Flot. 1850, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, six species, type: *C. cinereum* (Pers.) Körb., lichenized; see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2010; species in in the Iberian Peninsula and the Balearic Islands), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Cataractispora K.D. Hyde, S.W. Wong & E.B.G. Jones 1999, *Annulatascales*, *Annulatascales*, *Sordariomycetes*, five species, type: *C. aquatica* K.D. Hyde, S.W. Wong & E.B.G. Jones, saprobes, aquatic, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Luo et al. (2015; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), Dayarathne et al. (2016a), holotype of type species HKU (M) 5239, cultures and sequences are available.

Catarraphia A. Massal. 1860, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *C. dictyoplaca* (Mont. & Bosch) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Catarrhospora Brusse 1994, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, two species, type: *C. mira* Brusse, lichenized, South Africa, see Lumbsch and Huhndorf (2010; outline), Schmall et al. (2011; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Catenarina Søchting, Søgaaard, Arup, Elvebakk & Elix 2014, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *C. desolata* Søchting, Søgaaard & Elvebakk, lichenized, see Søchting et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Catenocuneiphora Matsush. 2003, *Ascomycota* genera *incertae sedis*, one species, type: *C. mucosa* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Catenophoropsis Nag Raj & W.B. Kendr. 1988, *Ascomycota* genera *incertae sedis*, one species, type: *C. eucalypticola* Nag Raj & W.B. Kendr., coelomycetous, sexual morph

unknown, saprobes, terrestrial, Australasia, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Catenosubulispora Matsush. 1971, *Ascomycota* genera *incertae sedis*, one species, type: *C. honiaraensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South East Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Catenulomyces Egidi & de Hoog 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *C. convolutus* Egidi & Quaedvlieg, hyphomycetous, sexual morph unknown, rock-inhabiting, Spain, see Egidi et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014, 2017; outline, accepted as *Capnodiales* genera *incertae sedis*), ex-type cultures of the type species CBS 118609 = TRN9

Catenulostroma Crous & U. Braun 2007, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, five species, type: *C. protearum* (Crous & M.E. Palm) Crous & U. Braun, hyphomycetous, sexual morph ?teratosphaeria-like, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Teratosphaeriaceae*), Quaedvlieg et al. (2014; phylogeny, introduced new genus *Neocatenulostroma*), holotype and ex-type of the type: BPI 1107938, CPC 18276.

Catillaria A.Massal. 1852, *Catillariaceae*, *Lecanorales*, *Lecanoromycetes*, 150 species, type: *C. chalybeia* (Borrer) A. Massal., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Catillochroma Kalb 2007, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, seven species, type: *C. endochroma* (Fée) Kalb, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Miądlikowska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Catinaria Vain. [nom. cons.] 1922, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *C. atropurpurea* (Schaer.) Vězda & Poelt, lichenized, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Catinella Boud. 1907, *Dothideomycetes* genera *incertae sedis*, one or two species, type: *C. olivacea* (Batsch) Boud., asexual morph unknown, saprobes or parasitic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence are available only for the type specie, needs generic revision.

Catinopeltis Bat. & C.A.A. Costa 1957, *Ascomycota* genera *incertae sedis*, one species, type: *C. recifensis* Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Catolechia Flot. 1850, *Rhizocarpaceae*, *Rhizocarpales*, *Lecanoromycetes*, one species, type: *C. wahlenbergii* (Ach.) Flot., lichenized, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), type specimen UPS-ACH-L-244 (isotype), sequences are available.

Catulus Malloch & Rogerson 1978, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. aquilonius* Malloch & Rogerson, asexual morph unknown, saprobes, fungicolous, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences are unavailable, needs generic revision.

Caudatispora J. Fröhl. & K.D. Hyde 1995, *Chaetosphaeriales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *C. palmicola* J. Fröhl. & K.D. Hyde, asexual morph unknown, terrestrial, saprobes, America (tropical), see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariomycetidae*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available but lacks for the type species.

Caudella Syd. & P. Syd. 1916, *Micropeltidaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *C. oligotricha* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline) cultures and sequences are unavailable.

Caudospora Starbäck 1889, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *C. taleola* (Fr.) Starbäck, asexual morph unknown, terrestrial, saprobes, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cavaraella Speg. 1921, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, one species, type: *C. micraspis* (Berk. & M.A. Curtis) Speg., asexual morph unknown, saprobes, terrestrial, Cuba, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cavimalum Yoshim. Doi, Dargan & K.S. Thind 1977, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *C. indicum* Yoshim. Doi, Dargan & K.S. Thind, asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Cazia Trappe 1989, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *C. flexiascus* Trappe, asexual morph unknown, from soil, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available for voucher SOC 469 of the type species.

Cecidiomyces U. Braun & Zhurb. 2012, *Ascomycota* genera *incertae sedis*, one species, type: *C. santessonii* U. Braun & Zhurb, hyphomycetous, sexual morph unknown, terrestrial, lichenicolous, Australia, see Zhurbenko and Braun (2012; taxonomy), Wijayawardene et al. (2017; outline), holotype of type: UPS F-552770, cultures and sequences are unavailable.

Cecidioskyttea Etayo 2004, ?*Cordieritidaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. osorioi* Etayo, asexual morph coelomycetous, sexual morph stromatic and hairy and spores simple, parasymbiont on macrolichens belonging to *Parmeliaceae*, South America, see Etayo and Osorio (2004; morphology, distinction of similar lichenicolous genera), cultures and sequences are unavailable, holotype of the type: Hb. Osorio, H.S. Osorio & G. Geymonat 9639a.

Cecidonia Triebel & Rambold 1988, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, two species, type: *C. umbonella* (Nyl.) Triebel & Rambold, asexual morph unknown, lichenicolous, Europe, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Ceeveesubramaniomyces Pratibha, K.D. Hyde & Bhat 2005, *Ascomycota* genera *incertae sedis*, one species, type: *C. litseae* Pratibha, K.D. Hyde & Bhat 2005, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of type: GUBH P 198, cultures and sequences are unavailable.

Cejpia Velen. 1934, *Dermateaceae*, *Helotiales*, *Leotiomyces*, three species, type: *C. coerulea* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type:.

Celerioriella Crous 2015, *Phaeomoniellaceae*, *Phaeomoniellales*, *Eurotiomyces*, three species, type: *C. dura* (Damm & Crous) Crous, coelomycetous, sexual morph unknown, on living leaves, pathogens, terrestrial, South Africa, see Damm et al. (2010 as *Phaeomoniella dura* Damm & Crous, morphology), Crous et al. (2015, 2016; phylogeny), holotype and ex-type culture of type: CBS H-19999, CBS 120882.

Celoportha Nakab., Gryzenh., Jol. Roux & M.J. Wingf. 2006, *Cryphonectriaceae*, *Diaporthales*, *Sordariomyces*, two species, type: *C. dispersa* Nakab., Gryzenh., Jol. Roux & M.J. Wingf., asexual morph coelomycetous, pathogenic, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Crous et al. (2012; phylogeny), Vermeulen et al. (2013; new species, phylogeny), Chen et al. (2014; species from *Eucalyptus* and *Syzygium* trees in China and Indonesia), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), holotype and ex-epitype strain of the type: PREM 58896, CMW 9976.

Celothelium A.Massal. 1860, *Celotheliaceae*, *Phaeomoniellales*, *Eurotiomyces*, eight species, type: *C. socialis* (Zenker) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Gueidan et al. (2014b; taxonomy, DNA), Chen et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

Celtidia J.D. Janse 1897, *Zopfiaceae*, *Pleosporales*, *Dothideomyces*, one species, type: *C. duplicispora* J.D. Janse, marine habitat (root nodules of *Celtis* in Java), see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Zopfiaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cenangiopsis Rehm 1912, *Helotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *C. quercicola* (Romell) Rehm, asexual morph unknown, saprobes, terrestrial, China, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures available for the type: KL174, needs generic revision.

Cenangium Fr. 1818, *Helotiaceae*, *Helotiales*, *Leotiomyces*, c. 30 species, type: *C. ferruginosum* Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures available for the type: KL390, needs generic revision.

Cenangiumella J. Fröhl. & K.D. Hyde 2000, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. rattanicola* J. Fröhl. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Brunei, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Cenococcum Moug. & Fr. 1829, *Gloniaceae*, *Mytilinidiales*, *Dothideomyces*, nine species, type: *C. geophilum* Fr., coelomycetous, sexual morphs unknown, ectomycorrhizal, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as in *Gloniaceae*), Kirk et al. (2013; genus accepted), Peter et al. (2016; DNA, ectomycorrhizal), cultures and sequences are available.

Cenozosia A.Massal. 1854, *Ramalinaceae*, *Lecanorales*, *Lecanoromyces*, one species, type: *C. inanis* (Mont.) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.

Cephaliphora Thaxt. 1903, *Pezizales*, genera *incertae sedis*, four species, type: *C. tropica* Thaxt., hyphomycetous, sexual morph unknown, saprobes, on dung, soil, terrestrial, pantropical, temperate, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Cephaloascus Hanawa 1920, *Cephaloascaceae*, *Saccharomycetales*, *Saccharomycetes*, two species, type: *C. dispersa* Nakab., Gryzenh., Jol. Roux & M.J. Wingf., asexual reproduction by budding and blastoconidia, saprophytic, although one strain of *C. fragrans* was isolated from a human ear, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kurtzman and Robnett (2013; DNA, phylogeny), cultures and sequences are available.

Cephalophysis (Hertel) H. Kiliyas 1985, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *C. leucospila* (Anzi) H. Killas & Scheid., asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Arup et al. (taxonomy; 2013), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Cephalotheca Fuckel 1871, *Cephalothecaceae*, *Sordariomycetes*, families *incertae sedis*, six species, type: *C. sulfurea* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Cephalotrichum Link 1809, *Microascaceae*, *Microascales*, *Sordariomycetes*, 31 species, type: *C. stemonitis* (Pers.) Nees, hyphomycetous, sexual morph unknown, saprobes, soil, dung terrestrial, worldwide, see Jiang et al. (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), De Beer et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Sandoval-Denis et al. (2016; new species), cultures and sequences are available.

Ceramoclasteropsis Bat. & Cavalc. 1962, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. coumae* Bat. & Cavalc., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Capnodiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Ceramothyrium Bat. & H. Maia 1956, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, 34 species, type: *C. paiveae* Bat. & H. Maia, asexual morph hyphomycetous, *Stanhughesia* Constant., epiphytic, epiphyllous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2012; 2014 morphology, phylogeny), Kirk et al. (2013; genus accepted), Zeng et al. (2016; morphology, phylogeny), cultures and sequences of type species are unavailable, needs generic revision.

Ceratocarpia Rolland 1896, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, two species, type: *C. cactorum* Rolland, asexual morph unknown, saprobes, terrestrial, America, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tian et al. (2014; morphology; nomenclature), cultures and sequences are unavailable, needs generic revision.

Ceratocladium Corda 1839, *Ascomycota* genera *incertae sedis*, two species, type: *C. microspermum* Corda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceratocystis Ellis & Halst. 1890, *Ceratocystidaceae*, *Microascales*, *Sordariomycetes*, c. 70 species, type: *C. fimbriata* Ellis & Halst., asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), van Wyk et al. (2009, 2010; new species), Kajitani et al. (2011; new species, pathogens), Tarigan et al. (2011; new species, Indonesia), Duong et al. (2012; new species, phylogeny), Nkuekam et al. (2012; new species), Chen et al. (2013; species associated with Eucalyptus, China), Kirk et al. (2013;

genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2015; new species, phylogeny), cultures and sequences are available.

Ceratolenta Réblová 2013, *Sordariomycetidae*, genera *incertae sedis*, *Sordariomycetes*, eight species, type: *C. caudata* Réblová, asexual morph unknown, saprobes, Europe, see Réblová et al. (2013; taxonomy, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), holotype and ex-type cultures available for the type: PRM 899854, CBS 125234.

Ceratomyces Thaxt., 1892, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 32 species, type: *C. mirabilis* Thaxt., parasitic on Hydrophilidae and Staphylinidae beetles, terrestrial and aquatic, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence is available for the type: AF431764 (SSU).

Ceratophacidium J. Reid & Piroz. 1966, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *C. aristosporum* (Bonar) J. Reid & Piroz., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceratophoma Höhn. 1917, *Ascomycota* genera *incertae sedis*, one species, type: *C. rostrata* (Fuckel) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceratophorum Sacc. 1880, *Ascomycota* genera *incertae sedis*, two species, type: *C. helicospodium* (Sacc.) Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceratoportha Petr. 1925, *Melanconidaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *C. didymospora* Petr., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Ceratopycnis Höhn. 1915, *Ascomycota* genera *incertae sedis*, two species, type: *C. clematidis* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, new species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceratospermopsis Bat. 1951, *Ascomycota* genera *incertae sedis*, two species, type: need typification data, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae*), cultures and sequences are available but lacks for the type species, needs generic revision.

Ceratosphaerella Huhndorf, Greif, Mugambi & A.N. Mill. 2008, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *C. castillensis* (C.L. Sm.) Huhndorf, Greif, Mugambi & A.N. Mill., asexual morph hyphomycetous, saprobes, terrestrial, Costa Rica, Nicaragua, Puerto Rico, see Huhndorf et al. (2008; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015; outline), ex-type culture of type: SMH1865.

Ceratosphaeria Niessl 1876, *Magnaporthaceae*, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, twelve species, type: *C. lampadophora* (Berk. & Broome), asexual morph harpophora-like, saprobes, terrestrial, worldwide, see Huhndorf et al. (2008; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline), culture available for type: CBS 117555.

Ceratosporella Höhn. 1923, *Ascomycota* genera *incertae sedis*, 20 species (14 valid taxa as per Monteiro and Gusmao 2014), type: *C. bicornis* Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Seifert et al. (2011; morphology),

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Monteiro and Gusmao (2014; key to species), sequence available but lacks for the type species.

Ceratospodium Schwein. 1832, *Ascomycota* genera *incertae sedis*, c. 14 species, type: *C. fuscescens* Schwein, widespread, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus not accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Ceratostomella Sacc. 1878, *Sordariomycetidae*, genera *incertae sedis*, 18 species, type: need typification, asexual morph unknown, saprobes, terrestrial, temperate, see Réblová and Štěpánek (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Cercidospora Körb., 1865, *Dothideomycetes* genera *incertae sedis*, more than 100 species, type: *C. ulothii* Körb., on lichens, temperate, see Lumbsch & Huhndorf (2009; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Cercophora Fuckel 1870, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, 51 species, type: *C. mirabilis* Fuckel, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Catania et al. (2011; new species), Kirk et al. (2013; genus accepted), Kruys et al. (2015; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species), Dai et al. (2016; new species, phylogeny), cultures and sequences are available.

Cercosperma G. Arnaud ex B. Sutton & Hodges 1983, *Ascomycota* genera *incertae sedis*, two species, type: *C. arnaudii* B. Sutton & Hodges, hyphomycetous, sexual morph unknown, saprobes, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Cercospora Fresen. 1863, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, about 3000 described species (c. 700 accepted species), and 357 orthographic variants (Mycobank), type: *C. apii* Fresen., anamorphs of plant pathogenic genera *Mycosphaerella*, saprobes, plant pathogens, terrestrial, worldwide, see To-Anun et al. (2011; phylogeny, key), Seifert et al. (2011; morphology), Groenewald et al. (2013; phylogeny), Hesami et al. (2011; phylogeny, new species), Bakhshi et al. (2015; phylogeny), Groenewald et al. (2008; sexual reproduction), To-Anun et al. (2010; new species), Nguanhom et al. (2015; phylogeny), Braun and Crous (2016; nomenclature), sequences are available for most of the species, holotype of type: *Fungi rhen. 117*.

Cercosporella Sacc. 1880, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, c. 40 species, type: *C. cana* (Sacc.) Sacc., hyphomyceteous, sexual morph of mycosphaerella-like, saprobes, plant pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Braun (2013), Braun et al. (2015; new species, key), Braun and Urtiaga (2013; new species), Crous et al. (2014; new species), Kirschner (2009; differentiation from *Ramularia*), Zhang et al. (2013; secondary metabolites), Machado (2012; pathology), Videira et al. (2016; morphology, phylogeny), sequences of non-type material of the type species are available, lectotype K, non-European reference cultures CPC 19492, CPC 11461, CBS 113304, holotype of type: BPI 420584.

Cercosporidium Earle 1901, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 70 species, of which five are confirmed based on DNA, type: *C. euphorbiae* Tracy & Earle, hyphomycetous, sexual morph unknown, plant pathogenic, see Braun et al. (2013; morphology), Videira et al. (2017; morphology, phylogeny), resurrect the genus, and designate an epitype.

Cerion Masee 1901, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, two species, type: *C. coccineum* Masee & Rodway, asexual morph unknown, saprobes, terrestrial, Australia,

America (tropical), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceriphora Höhn. 1919, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type species: *C. palustris* (Sacc.) Höhn., Europe, doubtful genus, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Ceriospora Niessl 1876, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, 18 species, type species: *C. dubyi* Niessl., doubtful genus, see Kirk et al. (2008; 2013), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable.

Ceriosporopsis Barghoon & Linder 1944, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, four species, type: *C. halima* Linder, asexual morph not unknown, saprobes, marine, worldwide, see Jones et al. (2009, 2015; outline, phylogeny), Sakayaroj et al. 2011; new species, phylogeny), sequence data available for *C. halima* (BCC15553).

Cerodonthis Muthappa 1969, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. aurea* Muthappa, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cerothallia Arup, Frödén & Söchting 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, four species, type: *C. luteoalba* (Turner) Arup, Frödén & Söchting, lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Cesariella W. Rossi & Santam. 2008, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *C. graeca* W. Rossi & Santam., asexual morph unknown, parasitic on Carabidae beetles, terrestrial, Europe, Rossi and Santam (2008; taxonomy, did not explicitly state family level placement, but suggested very close relationship to *Laboulbenia*), Lumbsch and Huhndorf (2010; outline, accepted as *Laboulbeniales incertae sedis*), cultures and sequences are unavailable.

Cesatiella Sacc. 1878, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, four species, type species: *C. australis* Sacc. & Speg., see Kirk et al. (2008, 2013; genus accepted), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Cetradonia J.C. Wei & Ahti. 2002, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *C. linearis* (A. Evans.) J.C. Wei & Ahti., asexual morph unknown, lichenized, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Cetraria Ach. 1803 nom. cons., *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 21 species, type: *C. islandica* (L.) Ach., asexual morph unknown, epiphytic or saxicolous, widespread, see Thell et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Cetrariella Kärnefelt & A. Thell, 1993, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *C. delisei* (Bory ex Schaer.) Kärnefelt & A. Thell, asexual morph unknown, lichenized, terrestrial temperate and arctic regions of northern hemisphere, see Thell et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures unavailable, sequences are available.

Cetrariopsis Kurok., 1980, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *C. wallithiana* (Tayl.) Kurok., asexual morph unknown, lichenized, epiphytic, Asia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Parmeliaceae*), Kirk et al.

(2013; genus accepted), cultures and sequences are unavailable, needs phylogenetic assessment.

Cetrelia W.L. Culb. & C.F. Culb. 1968, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, c. 18 species, type: *C. cetrarioides* (Delise) W.L. Culb. & C.F. Culb., asexual morph unknown, lichenized, terrestrial or on lignum, widespread, see Lumbsch and Huhndorf (2010; outline), Crespo et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Cetreliaopsis M.J. Lai. 1980, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, seven species, type: *C. rhytidocarpa* (Mont. & Bosch) Lai, asexual morph unknown, lichenized, epiphytic, Australasia, see Lumbsch and Huhndorf (2010), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Ceuthodiplopora Died. 1912, *Ascomycota* genera *incertae sedis*, one species, type: *C. robiniae* (Roberge) Died., asexual morph coelomycetous, terrestrial, Czech Republic, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), sequences are unavailable, needs generic revision.

Ceuthosira Petr. 1924, *Ascomycota* genera *incertae sedis*, one species, type: *C. aesculicarpa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceuthosporella Petr. & Syd. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *C. sambuci* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chadefaudia Feldm.-Maz. 1957, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, six species, type: *C. marina* Feldm.-Maz., saprobes, ?marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline of marine genera), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Chadefaudiella Faurel & Schotter 1959, *Chadefaudiellaceae*, *Microascales*, *Sordariomycetes*, two species, type: *C. quezelii* Faurel & Schotter, saprobes, coprophilous, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Chadefaudiomyces Kamat, V.G. Rao, A.S. Patil & Ullasa 1974, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *C. indicus* Kamat, V.G. Rao, A.S. Patil & Ullasa, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Chaenocarpus Rebert. 1804, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *C. setosus* (Roth) Rebert., asexual morph unknown, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Chaenotheca (Th. Fr.) Th. Fr. 1860, *Coniocybaceae*, *Coniocybales*, *Coniocybomycetes*, c. 25 species, type: *C. trichialis* (Ach.) Th. Fr., asexual morph unknown, lichenized, epiphytic, widespread but mostly Northern Boreal, see Lumbsch and Huhndorf (2010, outline), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), sequences are available.

Chaenothecopsis Vain. 1927 (= *Catenomyces* Tibell & Constant. 1991), *Mycocaliciaceae*, *Mycocaliciales*, *Eurotiomycetes*, 27 species, type: *C. rubescens* Vain., asexual morph unknown, lichenicolous, fungicolous, saprobes, terrestrial, Europe, see Lumbsch and

Huhndorf (2010; outline), Tuovila et al. (2011; new species, Oregon), Kirk et al. (2013; genus accepted), Selva (2013; new species), Hawksworth et al. (2014; new species), Rikkinen et al. (2014; new species), cultures and sequences are available but lacks for the type:.

Chaetarthriomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, three species, type: *C. flexatus* Thaxt., asexual morph unknown, parasitic on Hydrophilidae beetles, aquatic, widespread, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2014a, Netherlands), cultures and sequences are unavailable.

Chaetasbolisia Speg. 1918, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, seven species, type: *C. erysiphoides* Griffon & Maubl., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see de Gruyter et al. (2009; DNA, phylogeny, Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 148.94.

Chaetendophragmia Matsush. 1971, *Ascomycota* genera *incertae sedis*, six species, type: *C. triangularis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetendophragmiopsis B. Sutton & Hodges 1978, *Ascomycota* genera *incertae sedis*, two species, type: *C. pulchra* Sutton & Hodges, hyphomycetous, sexual morph unknown, two species, saprobes, Brazil, see Sutton and Hodges (1978; morphology), Seifert et al. (2011; morphology), cultures and sequences are unavailable.

Chaetoamphisphaeria Hara 1918, *Sordariomycetes*, genera *incertae sedis*, two species, type: *C. japonica* Hara, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Chaetoblastophorum Morgan-Jones 1977, *Ascomycota* genera *incertae sedis*, one species, type: *C. ingramii* Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetocapnodium Hongsanan & K.D. Hyde 2015, *Capnodiaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *C. siamensis* Hongsanan & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Liu et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 14-0747, MFLUCC 13-0778.

Chaetoconis Clem. 1909, *Diaporthales*, genera *incertae sedis*, *Sordariomycetes*, one species, type: *C. polygoni* (Ellis & Everh.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, north temperate, see de Gruyter et al. (2009; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 405.95.

Chaetocrea Syd. 1927, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. parasitica* Syd., asexual morph unknown, fungicolous associated with black areas of fungi on leaves, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; excluded from *Tubeufiaceae*), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Chaetocystostroma Petr. 1920, *Ascomycota* genera *incertae sedis*, one species, type: *C. arundinacea* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetodiplis Clem. 1931, *Ascomycota* genera *incertae sedis*, one species, type: *C. hirta* (Sacc.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetodiplodia P. Karst. 1884, *Ascomycota* genera *incertae sedis*, nine species, type: *C. caulina* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Chaetodiplodina Speg. 1911, *Ascomycota* genera *incertae sedis*, two species, type: *C. graminicola* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetomastia (Sacc.) Berl. 1890, *Teichosporaceae*, *Pleosporales*, *Dothideomycetes*, ten species, type: *C. hirtula* (P. Karst.) Berl., asexual morph unknown, terrestrial, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Teichosporaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Chaetomella Fuckel 1870 (= *Zoellneria* Velen. 1934 *fide* Johnston et al. 2014), *Chaetomellaceae*, *Helotiales*, *Leotiomycetes*, six species, type: *C. oblonga* Fuckel, asexual morph coelomycetous, saprobes, in soil, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species, Zambia), Johnston et al. (2014; nomenclature), cultures available for the type: BPI 843552.

Chaetomidium (Zopf) Sacc. 1882, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, 16 species, type: *C. fimeti* (Fuckel) Zopf, asexual morph phialophora-like, saprobes, in soil, coprophilous, worldwide, see Greif et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; genus accepted), cultures available for the type: CBS 168.71.

Chaetomium Kunze, in Kunze & Schmidt (1817), *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, more than 150 spp., type species *C. globosum* Kunze, in Kunze & Schmidt (1817), asexual morph hyphomycetous, saprophytic fungus that primarily resides on plants, soil, straw, and dung, potential biological control agents, worldwide, Current taxonomic placement in *Chaetomiaceae* supported by molecular data, see Zhang et al. (2012a, b), Ahmed et al. (2014), Maharachchikumbura et al. (2016).

Chaetomyces Thaxt. 1938, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *C. pinophili* Thaxt., asexual morph unknown, parasitic on Staphylinidae beetles, terrestrial, North and South America, Rossi and Bergonzo (2008; Brazil), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Chaetonaevia Arx 1951, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *C. nannfeldtii* Arx, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetonectrioides Matsush. 1996, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. malaysiana* Matsush., saprobes, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2015), Maharachchikumbura et al. (2015, 2016), holotype of the type: 5T121 (Matsushima Fungus Collection, Kobe), cultures and sequences are unavailable, needs generic revision.

Chaetopeltaster Katum. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *C. japonicus* Katum., coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetophiophoma Speg. 1911, *Ascomycota* genera *incertae sedis*, one species, type: *C. trematis* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetophoma Cooke 1878, *Ascomycota* genera *incertae sedis*, c. 30 species, type: *C. quercifolia* Cooke, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetoplaca Syd. & P. Syd. 1917, *Ascomycota* genera *incertae sedis*, one species, type: *C. memecyli* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (2013, accepted as a genus in *Schizothyriaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Schizothyriaceae*), Phookamsak et al. (2015; taxonomy, transferred to *Ascomycota* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Chaetoplea (Sacc.) Clem. 1931, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, c. 17 species, type: *C. calvescens* (Fr.) Clem., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as *Phaeosphaeriaceae*), Phookamsak et al. (2014; morphology, accepted as *Leptosphaeriaceae*), Wijayawardene et al. (2014, 2016; outline, morphology of asexual morph), sequence data and cultures are unavailable.

Chaetopreussia Locq.-Lin. 1977, *Sporormiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *C. chadefaudii* Locq.-Lin., asexual morph unknown, saprobes, terrestrial, see Lumbsch and Huhndorf (2009; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as *Sporormiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Chaetopsina Rambelli 1956 (= *Chaetopsinectria* J. Luo & W.Y. Zhuang 2010 *vide* Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, 18 species, type: *C. fulva* Rambelli, hyphomycetous, asexual morph unknown, saprobes, terrestrial, worldwide, see Nagaraju et al. (2011; new species), Crous et al. (2013, 2014, morphology, new species), Lombard et al. (2015; DNA), Maharachchikumbura et al. (2016; outline), Rossman et al. (2016; nomenclature), Wijayawardene et al. (2017; outline), available cultures of type: CBS 142.56.

Chaetopsis Grev. 1825, *Ascomycota* genera *incertae sedis*, seven species, type: *C. wauchii* Grev., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetopyrena Pass. 1881, *Ascomycota* genera *incertae sedis*, two species, type: *C. poae* (Niessl) Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetorostrum Zelski, Raja, A.N. Mill. & Shearer 2011, *Annulatascaeae*, *Annulatascales*, *Sordariomycetes*, one species, type: *C. quincemilense* Zelski, Raja, A.N. Mill. & Shearer, asexual morph unknown, saprobes, aquatic, Peru, see Zelski et al. (2011; morphology), Maharachchikumbura et al. (2016; outline), holotype of the type: ILL 40822, cultures and sequences are unavailable.

Chaetosclerophoma Petr. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *C. coluteae* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Pakistan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetoscutula E. Müll. 1958, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *C. juniperi* E. Müll., asexual morph unknown, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Chaetoseptoria Tehon 1937, *Ascomycota* genera *incertae sedis*, one species, type: *C. vignae* Tehon, coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences and cultures are unavailable, needs generic revision.

Chaetosphaerella E. Müll. & C. Booth 1972 (= *Oedemium* Link 1824 *fide* Réblová et al. 2016), *Chaetosphaerellaceae*, *Coronophorales*, *Sordariomycetes*, 14 species, type: *C. phaeostroma* (Durieu & Mont.) E. Müll. & C. Booth, hyphomycetous, *Chaetosphaerella* sexual morph reported for *E. didymium* (= *E. atrum*) and *E. minus*, while *Acrogenotheca* sexual morph reported for *E. robustum*, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Réblová et al. (2016; nomenclature).

Chaetosphaeria Tul. & C. Tul. 1863, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetidae*, *Sordariomycetes*, more than 100 species, type: *C. innumera* Berk. & Broome ex Tul. & C. Tul., asexual morph complex, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Fernández et al. (2016), cultures and sequences are available, needs generic revision.

Chaetosphaerides Matsush. 2003, *Ascomycota* genera *incertae sedis*, one species, typ species: *C. ramichloridifera* Matsush., saprobes, terrestrial, Japan, see Maharachchikumbura et al. (2015, 2016; outline, accepted as *Sordariomycetidae* genera *incertae sedis*), holotype of the type: MFC 210, sequences and cultures are unavailable.

Chaetosphaeronema Moesz 1915, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, eleven species, type: *C. hispidulum* (Corda) Moesz, asexual morph coelomycetous, saprobes or plant pathogenic, widespread, see de Gruyter et al. (2010; phylogeny), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Quaedvlieg et al. (2013; phylogeny), Wijayawardene et al. (2012, 2017; outline) Kirk (2013; genus accepted), sequence are available.

Chaetosphaerulina I. Hino 1938, ?*Dothideomycete* genera *incertae sedis*, six species, type: *C. yasudai* I. Hino, asexual morph hyphomycetous, saprobes on dead wood, see Boonmee et al. (2011, 2014), cultures and sequences are unavailable.

Chaetosticta Petr. & Syd. 1925, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, three species, type: *C. perforata* (Ellis & Everh.) Petr. & Syd., asexual morph unknown, saprobes or parasitic, terrestrial, Europe, Japan, North America and South America, see, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), no sequence data available, need adequate sequence data, needs generic revision.

Chaetotheca Zokal 1890, *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, one species, type: *C. fragilis* Zokal, asexual morph unknown, terrestrial, on bile concretion, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs phylogenetic assessment.

Chaetothiersia B.A. Perry & Pfister 2008, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *C. vernalis* B.A. Perry & Pfister, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), holotype of the type: FH, Perry 492, cultures and sequences are available but lacks for the type species, needs generic revision.

Chaetothyria Theiss. 1913, *Micropeltidaceae*, *Dothideomycetes*, families *incertae sedis*, six species, type: *C. musarum* (Speg.) Theiss., asexual morph unknown, saprobes, terrestrial,

tropical, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Singtripop et al. (2016; new species, phylogeny), cultures available for the type: MFLUCC 15-0383.

Chaetothyriomyces Pereira-Carv., Inácio & Dianese 2009, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *C. brasiliensis* Pereira-Carv., Inácio & Dianese, asexual morph unknown, epiphytic, terrestrial, Brazil, see Pereira et al. (2009; morphology), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetothyríotheccium Hongsanan & K.D. Hyde 2014, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *C. elegans* Hongsanan & K.D. Hyde, asexual morph unknown, epiphytes, Thailand, see Hongsanan et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Chaetothyrium Speg. 1888, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, 66 species, type: *C. guaraniticum* Speg., asexual morph coelomycetous, *Merismella* Syd., epiphytic, sooty moulds, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2012; morphology; phylogeny), Wijayawardene et al. (2012; 2016; outline; phylogeny; coelomycetous taxa), Kirk et al. (2013; genus accepted), Liu et al. (2015; morphology; phylogeny), cultures and sequences are available for some species, needs generic revision.

Chalara (Corda) Rabenh. 1844, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, c. 100 species, type: *C. fusidioides* (Corda) Rabenh., hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, cosmopolitan, see Kowalski and Holdenrieder (2009; pathogens), Koukol (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2016; taxonomy, phylogeny), cultures and sequences are available.

Chalarodendron C.J.K. Wang & B. Sutton 1984, *Ascomycota* genera *incertae sedis*, one species, type: *C. fuscum* C.J.K. Wang & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Chalarodes McKenzie 1991, *Ascomycota* genera *incertae sedis*, two species, type: *C. bisetis* McKenzie, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chalazion Dissing & Sivertsen 1975, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *C. sociabile* Dissing & Sivertsen, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: FH, Perry 492, cultures and sequences are available but lacks for the type:, needs generic revision.

Chamaeascus L. Holm, K. Holm & M.E. Barr 1993, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *C. arcticus* L. Holm et al., see Senanayake et al. (2015), Maharachchikumbura et al. (2015, 2016; phylogeny outline).

Chamaeleomyces Sigler 2010, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *C. granulomatis* Sigler, asexual morph unknown, reptile pathogen, terrestrial, America, see Sigler et al. (2010; taxonomy), Schmidt et al. (2012; outline), Schmidt (2015; reptile pathogens), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Chantransiopsis Thaxt. 1914, *Ascomycota* genera *incertae sedis*, three species, type: *C. decumbens* Thaxt., coelomycetous, sexual morph unknown, entomogenous, terrestrial, Java, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chapeckia M.E. Barr 1978, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *C. nigrospora* (Peck) M.E. Barr, asexual morphs unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kruijs and Castlebury (2012; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for the type: CBS 125532.

Chapsa A. Massal. (1860), *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 62 species, type: *C. indica* A. Massal., asexual morph unknown, lichenized fungi, terrestrial, tropical, see Mangold et al. (2009; key Australia), Rivas Plata et al. (2010a; key), Sipman et al. (2012; key, Costa Rica), Rivas Plata et al. 2012a, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Characonidia Bat. & Cavalc. 1965, *Ascomycota* genera *incertae sedis*, one species, type: *C. ingae* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Charcotiana Søchting, Garrido-Benavent & Arup in Søchting et al. 2014, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *C. antarctica* Søchting et al., asexual morph unknown, lichenized, saxicolous, Antarctica, see Søchting et al. (2014b; phylogeny), Lücking et al. (2016; classification), sequences are available.

Charomyces Seifert 1987, *Ascomycota* genera *incertae sedis*, one species, type: *C. amphimelas* Seifert, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Hawaiian Island, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences and cultures are unavailable, needs generic revision.

Charonectria Sacc. (1880), *Hyponectriaceae*, *Xylariales*, *Xylariomycetidae*, *Sordariomycetes*, two species, type: *C. sceptri* (P. Karst.) Lowen, temperate regions, dead leaves or lichenicolous, no sequence data, need recollection and sequence data. See See Kirk et al. (2013), Maharachchikumbura et al. (2015, 2016; phylogeny outline).

Chasakopama Manohar., Bagyanaryana, N.K. Rao & Kunwar 2009, *Ascomycota* genera *incertae sedis*, one species, type: *C. velgodensis* Manohar., Bagyanaryana, N.K. Rao & Kunwar, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Manoharachary et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of type: IMI 296874, sequence data are unavailable.

Cheilaria Lib. 1830, *Ascomycota* genera *incertae sedis*, one species, type: *C. agrostidis* Lib., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), isotype of the type: IMI 152241, sequence and cultures are unavailable, needs generic revision.

Cheiroidea W.A. Baker & Morgan-Jones 2009, *Ascomycota* genera *incertae sedis*, one species, type: *C. triarmata* (Whitton, McKenzie & K.D. Hyde) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial (on *Pandanus*), Mauritius, see Gams et al. (2009; morphology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: HKU(M) 13034 as *Acrodictys triarmata* Whitton et al. *vide* Whitton et al. 2009, sequence data are cultures unavailable, needs generic revision.

Cheiromyceopsis Mercado & J. Mena 1988, *Ascomycota* genera *incertae sedis*, one species, type: *C. echinulata* Mercado & J. Mena, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), sequences and cultures are unavailable, needs generic revision.

Cheiromycina B. Sutton 1986, *Ascomycota* genera *incertae sedis*, type: *C. flabelliformis* B. Sutton, five species, hyphomycetous, sexual morph unknown, saprobes, lichenized, Austria, Russia, Sweden, see Diederich et al. (2008; taxonomy), Wang and Seifert et al. (2011; morphology), An et al. (2012; morphology), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of the type: IMI288326.

Cheiropolyschema Matsush. 1980, *Ascomycota* genera *incertae sedis*, two species, type: *C. formosana* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, Taiwan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: MFC-6717, sequences and cultures are unavailable, needs generic revision.

Cheirospora Moug. & Fr. 1825, *Helotiales*, genera *incertae sedis*, *Leotiomyces*, two species, type: *C. botryospora* (Mont.) Berk. & Broome, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Crous et al. (2015c; morphology, phylogeny, DNA), Wijayawardene et al. (2016; morphology, phylogeny, outline), reference specimens available for type: MFLU 15–3550, cultures available: CPC 24603 = CBS 139999, CPC 24605, CPC 24607, CPC 24611.

Chevalieropsis Arnaud. 1923 (= *Chevalieria* Arnaud 1920), *Parodiopsidaceae*, *Dothideomycetes* genera *incertae sedis*, two species, type: *C. ctenotricha* (Pat. & Har.) G. Arnaud, asexual morph hyphomycetous, see Kirk et al. (2013; genus accepted), sequences are unavailable, need recollecting to verify generic placement.

Chiastospora Riess 1852, *Ascomycota* genera *incertae sedis*, one species, type: *C. parasitica* Riess, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chikaneea B. Sutton 1973, *Ascomycota* genera *incertae sedis*, one species, type: *C. holleroniae* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, Canada, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), sequences are unavailable.

Chimaeroscypha Raitv. 2004, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. echinatula* (Raitv. & Huhtinen) Raitv., asexual morph unknown, saprobes, terrestrial, Tadjikistan, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable.

Chiodecton Ach. 1814, *Roccellaceae*, *Arthoniales*, *Arthoniomyces*, c. 24 species, type: *C. sphaerale* Ach., lichenized, corticolour or saxicolour, worldwide, see Ertz et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Chionomyces Deighton & Piroz. 1972, *Ascomycota* genera *incertae sedis*, seven species, type: *C. meliolicola* (Cif.) Deighton & Piroz., hyphomycetous, sexual morph unknown, saprobes, worldwide (tropical), see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), sequences and cultures are unavailable, needs generic revision.

Chirleja Lendemer & B.P. Hodk. 2012, *Icmadophilaceae*, *Pertusariales*, *Lecanoromyces*, one species, type: *C. buckii* Lendemer & B.P. Hodk., asexual morph unknown, lichenized, terrestrial, South America, see Lendemer and Hodkinson (2012; taxonomy), Lücking et al. (2016; classification), sequences are available.

Chithramia Nag Raj 1988, *Ascomycota* genera *incertae sedis*, one species, type: *C. elegantissima* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2016, 2017; morphology, outline), Kirk et al. (2013; genus accepted), holotype of the type: BPI 71492, sequences and cultures are unavailable, needs generic revision.

Chitonomyces Peyr. 1873, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, 98 species, type: *C. melanurus* Peyr., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Goldmann and Weir (2012; phylogeny), Kirk et al. (2013; genus accepted), Haelewaters et al. (in review; DNA, review), sequences are available for type: (SSU, LSU).

Chitonospora E. Bommer, M. Rousseau & Sacc. (1891), *Phlogicylindriaceae*, *Xylariales*, *Xylariomycetidae*, *Sordariomycetes*, single species, type: *C. ammophila* E. Bommer, M.

Rousseau & Sacc., from dead grasses, Europe, no sequence data. Senanayake et al (2015) classified into Amphisphaeriales, genera *insertae sedis*, need sequence data for the clear classification. See Kirk et al. (2013), Maharachchikumbura et al. (2015) and Senanayake et al. (2015: phylogeny outline).

Chlamydomyces Bainier 1907, *Ascomycota* genera *incertae sedis*, two species, type: *C. diffusus* Bainier, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences and cultures are unavailable, needs generic revision.

Chlamydopsis Hol.-Jech. & R.F. Castañeda 1986, *Ascomycota* genera *incertae sedis*, one species, type: *C. proliferans* Hol.-Jech. & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: INIFAT C84/140, sequences and cultures are unavailable, compare with *Acrodictys*, *Ashtaangam* and *Petrakia*.

Chlamydorubra K.B. Deshp. & K.S. Deshp. 1966, *Ascomycota* genera *incertae sedis*, one species, type: *C. verrucosa* K.B. Deshp. & K.S. Deshp., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences and cultures are unavailable, needs generic revision.

Chlamydotubeufia Boonmee & K.D. Hyde. 2011, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, five species, type: *C. huaikangplaensis* Boonmee & K.D. Hyde, saprobes on decaying wood, Thailand, asexual morph hyphomycetous, see Boonmee et al. (2011, 2012; taxonomy), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype and ex-type strains of the type: MFLUCC 10-0926, MFLU 10-0972.

Chlorencoelia J.R. Dixon 1975, *Hemiphacidiaceae*, *Helotiales*, *Leotiomyces*, four species, type: *C. versiformis* (Pers.) J.R. Dixon, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ren and Zhuang (2014; new species, China), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

Chloridium Link 1809, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, c. five new species, type: *C. viride* Link, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable for type species, needs generic revision.

Chloroepilichen Etayo 2010, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *C. rolffii* Etayo, asexual morph unknown, lichenicolous, terrestrial, Southern America, see Etayo (2010; description and distinction of similar lichenicolous genera), cultures and sequences are unavailable, not reviewed, holotype of the type: UPS, R. Santesson & G. Thor P75:5.

Chloroscypha Seaver 1931, *Gelatinodiscaceae*, *Helotiales*, *Leotiomyces*, 14 species type: *C. seaveri* Rehm ex Seaver, asexual morph sporodochia-like (Carpenter 1976), endophytic, weak pathogen and saprobes, on leaves of *Cupressaceae* (rarely *Taxodiaceae*), widespread in temperate areas, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype in NY herbarium (NY00915009), living cultures and sequences are unavailable for the type of the type species.

Chlorospleniella P. Karst. 1885, *Helotiales*, genera *incertae sedis*, *Leotiomyces*, one species, type: *C. fennica* (P. Karst.) Sacc. ex Clem. & Shear, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013;

genus accepted), Ren and Zhuang (2014; new species, China), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

Chlorosplenium Fr. 1849, *Dermateaceae*, *Helotiales*, *Leotiomyces*, five species, type: *C. chlora* (Schwein.) M.A. Curtis, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Chlorostroma A.N. Mill., Lar. N. Vassiljeva & J. D. Rogers. (2007), *Xylariaceae*, *Xylariales*, *Xylariomycetidae*, *Sordariomyces*, inhabitants of *Hypoxylon* stromata, three species, type: *C. subcubisporum* A.N. Mill. et al., no sequence data available, need further information for the asexual stage, Maharachchikumbura et al. (2016) placed the genus with conidial states not belong to nodulosporium-like or geniculosporium-like or with unknown conidial states in the *Xylariaceae*. See Miller et al. (2007), Maharachchikumbura et al. (2016: phylogeny outline).

Chlorovibrissa L.M. Kohn 1989, ?*Vibrissaceae*, *Helotiales*, *Leotiomyces*, four species type: *C. bicolor* (G.W. Beaton & Weste) L.M. Kohn, asexual morph phialophora-like (Sandoval-Leiva et al. 2014), aquatic or semi-aquatic on wood and twigs, Australasia, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Sandoval-Leiva et al. (2014; DNA), holotype in MELU herbarium, living cultures or cultures and sequences are unavailable for the type of the type species.

Choanatiara DiCosmo 1984, *Ascomycota* genera *incertae sedis*, two species, type: *C. lunata* DiCosmo & Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, Canada, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Choiromyces Vittad. 1831, *Tuberaceae*, *Pezizales*, *Pezizomyces*, type: *C. meandriiformis* Vittad., asexual morph unknown, saprobes, hypogeous, terrestrial, worldwide, see Wedén et al. (2009; edible truffle *Choiromyces venosus* in Sweden), Bonito et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Moreno et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Chondroderris Maire 1937, *Helotiales*, genera *incertae sedis*, *Leotiomyces*, one species, type: *C. nevadensis* Maire, asexual morph unknown, saprobes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Choreospora Constant. & R. Sant. 1987, *Ascomycota* genera *incertae sedis*, two species, type: *C. tibellii* Constant. & R. Sant., hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chrimofulvea Marbach 2000, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, four species, type: *C. dialyta* (Nyl.) Marbach, asexual morph unknown, lichenized, epiphytic, North and South America, see Lücking et al. (2016; classification), sequences are available.

Chromatochlamys Trevis. 1860, *Thelenellaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *C. muscicola* (Ach.) Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Chromendothia Lar.N. Vassiljeva 1993, *Cryphonectriaceae*, *Diaporthales*, *Sordariomyces*, two species, type: *C. appendiculata* Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, temperate north-eastern Asia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2016; phylogeny, outline), holotype of type: VLA P-2939, sequences are available for *C. citrina* (fide Castlebury et al. 2002).

Chroodiscus (Müll. Arg.) Müll. Arg. 1890, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 14 species, type: *C. coccineus* (Leight.) Müll. Arg., lichenized (*Trenthepohlia* or *Phycopeltis*), terrestrial (foliicolous), tropical, see Papong et al. (2009a; DNA), Parnmen et al. (2012;

DNA), Sipman et al. (2012; key), Rivas Plata et al. (2013; DNA), Lumbsch et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Chrysachne Cif. 1938, *Ascomycota* genera *incertae sedis*, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chrysofolia Crous & M.J. Wingf. 2015, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *C. colombiana* Crous, Rodas & M.J. Wingf., coelomycetous, saprobes, Colombia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22238, CPC 24986.

Chrysoportha Gryzenh. & M.J. Wingf. 2004 (= *Chrysoporthella* Gryzenh. & M.J. Wingf. 2004 fide Maharachchikumbura et al. 2015, 2016), *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, eight species, type: *C. cubensis* (Bruner) Gryzenh. & M.J. Wingf., asexual morph coelomycetous, one species, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Chungu et al. (2010; new species), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BPI 631857, cultures and sequences are available.

Chrysosporium Corda 1833, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, c. 70 species, type: *C. corii* Corda (= *Chrysosporium merdarium* (Link) J.W. Carmich. fide Seifert et al. 2011), hyphomycetous, terrestrial, saprobes on keratinous substrates, but also reported from other sources, including dung, soil and foodstuffs, several species are opportunistic pathogens of vertebrates including humans, cosmopolitan, highly polyphyletic, distributed in at least three different orders of *Ascomycota* see Pitt et al. (2013; reallocation of some xerophilic species, with comments on the polyphyly of the genus), Crous et al. (2016; new species, phylogeny), cultures and sequences properly representing the type species are unavailable, needs phylogenetic assessment, *Chrysosporium* is tentatively considered herein as a member of *Onygenaceae* following de Hoog et al. (in press).

Chrysothrix Mont. 1852, *Chrysotrichaceae*, *Arthoniales*, *Arthoniomycetes*, 14 species, type: *C. noli-tangere* (Mont.) Mont., asexual morph unknown, lichenized, saxicolous or epiphytic, widespread, see Nelsen et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Laundon (2012, conserved against *Alysphaeria*), Sundin et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Chuppia Deighton 1965, *Ascomycota* genera *incertae sedis*, one species, type: *C. sarcinifera* Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), sequences and cultures unavailable, needs generic revision.

Ciboria Fuckel 1870, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, c. 21 species, type: *C. caucus* (Rebent.) Fuckel, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

Ciborinia Whetzel 1945, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, 16 species, type: *C. bifrons* (Whetzel) Whetzel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Cicadocola Brain 1923, *Ascomycota* genera *incertae sedis*, one species, type: *C. cicadarum* (Šulc) Bain, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), sequences and cultures unavailable, needs generic revision.

Ciferria Gonz. Frag. 1925, *Ascomycota* genera *incertae sedis*, one species, type: *C. coccothrinacis* Gonz. Frag., coelomycetous, sexual morph unknown, saprobes, terrestrial,

South Africa, see Wijayawardene et al. (2012, 2017; outline), sequences and cultures unavailable, needs generic revision.

Ciferrina Petr. 1932, *Ascomycota* genera *incertae sedis*, one species, type: *C. pulchella* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence data and cultures are unavailable, needs generic revision.

Ciferriopeltis Bat. & H. Maia 1965, *Ascomycota* genera *incertae sedis*, one species, type: *C. domingensis* (Petr. & Cif.) Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliella Sacc. & P. Syd. 1902, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *C. epidendri* (Rehm) Sacc. & P. Syd., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliochora Höhn. 1919, *Ascomycota* genera *incertae sedis*, two species, type: *C. longiseta* (Racib.) Höhn. coelomycetous, sexual morph unknown, saprobes, terrestrial, Dominican Republic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliochorella Syd. 1935, *Pestalotiopsidaceae*, *Amphisphaeriales*, *Sordariomyces*, four species, type: *C. mangiferae* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Allegrucci et al. (2011; morphology, new species), Wijayawardene et al. (2012, 2016, 2017; morphology, phylogeny, outline), Kirk et al. (2013; genus accepted), Tangthirasunun et al. (2015; morphology, DNA, phylogeny), available specimens and cultures of type: MFLU 13-0264, MFLUCC 12-0310 = ICMP 20052.

Ciliofusospora Bat. & J.L. Bezerra 1963, *Sordariomyces*, genera *incertae sedis*, one species, type: *C. oenocarpi* Bat. & J.L. Bezerra, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Ciliolarina Svrček 1977, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. laricina* (Raitv.) Svrček, asexual morph hyphomycetous (septonema-like), saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Filippova (2012; records from west Siberia), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliophora Petr. 1929, *Ascomycota* genera *incertae sedis*, two species, type: *C. cryptica* Petr. coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliophorella Petr. 1940, *Ascomycota* genera *incertae sedis*, two species, type: *C. insignis* Petr. coelomycetous, sexual morph unknown, saprobes, terrestrial, Austria, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cilioplea Munk 1953, *Dothideomycetes*, genera *incertae sedis*, one species, type: *C. coronata* (Niessl) Munk, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Lophiostomataceae), Hyde et al. (2013) did not accept as a genus in Lophiostomataceae, Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes, genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Cliosculum Kirschst. 1941, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. invisibile* Kirschst., asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch

and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliosporella Petr. 1927, *Ascomycota* genera *incertae sedis*, two species, type: *C. selenospora* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Austria, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciposia Marbach 2000, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *C. wheeleri* (R.C. Harris) Marbach, asexual morph unknown, lichenized, epiphytic, North America, see Lücking et al. (2016; classification), sequences are unavailable.

Circinaria Link 1809, *Megasporaceae*, *Pertusariales*, *Ostropomycetidae*, *Lecanoromycetes*, 25 species, type: *Urceolaria hoffmannii* (Ach.) Ach., lichenized, see Nordin et al. (2010; phylogeny), Sohrabi et al. (2013a; phylogeny), Lücking et al. (2016; classification), sequences are available.

Circinoconiopsis A. Hern.-Gut. 2013, *Ascomycota* genera *incertae sedis*, one species, type: *C. amazonica* A. Hern. Gut., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Hernández-Gutiérrez (2013; morphology), holotype of the type: MG 203121, sequences and cultures unavailable.

Circinoconis Boedijn 1942, *Ascomycota* genera *incertae sedis*, one species, type: *C. paradoxa* Boedijn, hyphomycetous, sexual morph unknown, saprobes, terrestrial, East Indies, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Circinoniesslia Samuels & M.E. Barr 1997, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. nectriae* Samuels & M.E. Barr, asexual morph unknown, saprobes or fungicolous, terrestrial, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BPI, Samuels 8028, cultures and sequences are unavailable, needs generic revision.

Circinotrichum Nees 1816, *Ascomycota* genera *incertae sedis*, 2 new species, type: *C. maculiforme* Nees, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; morphology, cultures available for type species CBS 122758, CPC 24566).

Cirrenalia Meyers & R.T. Moore 1960, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, 14 species, type: *C. macrocephala* (Kohlm.) Meyers & R.T. Moore, hyphomycetous, sexual morph unknown, saprobes, aquatic, terrestrial, worldwide, see Abdel-Wahab et al. (2010; phylogeny, key), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available MUCL 15736.

Cirrosporium S. Hughes 1980, *Eurotiomycetes*, genera *incertae sedis*, one species, type: *C. novae-zelandiae* S. Hughes, coelomycetous, sexual morph unknown, saprobes, terrestrial, New Zealand, see Réblova and Seifert (2012; morphology, phylogeny), Wijayawardene et al. (2012, 2016, 2017; morphology, phylogeny, outline), Kirk et al. (2013; genus accepted), holotype of the type: PDD 36101, cultures available CBS 123236, ICMP 18891.

Cirsosia G. Arnaud 1918, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, 15 species, type: *C. manaosensis* (Henn.) G. Arnaud, asexual morph coelomycetous (= homalopeltis-like *fide* Hofmann 2009), epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; taxonomy, keys), Wijayawardene et al. (2014; outline), placement in *Asterinaceae* supported by morphology, isotype of type: K(M) 176510, cultures and sequences are unavailable, needs generic revision.

Cirsosina Bat. & J.L. Bezerra 1960, *Dothideomycetes*, genera *incertae sedis*, two species, type: *C. rhododendri* Bat. & J.L. Bezerra, asexual morph unknown, saprobes, terrestrial,

Europe, Bomeo, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Cirsosiopsis Butin & Speer 1979, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, one species, type: *C. violacescens* Butin & Speer, asexual morph unknown, epiphytes, terrestrial, Brazil, see Hofmann (2009; review, accepted as a genus in *Microthyriaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; did not accepted as a genus in *Microthyriaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, *genera incertae sedis*), Wu et al. (2014; review, transferred to *Parmulariaceae*) placement in *Parmulariaceae* supported by morphology, holotype of type: ZT Myc 4325, cultures and sequences are unavailable, needs generic revision.

Cissococcomyces Brain 1923, *Ascomycota* genera *incertae sedis*, one species, type: *C. natalensis* Brain, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Cistella Quél. 1886, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, c. 45 species, type: *C. dentata* (Pers.) Quél., asexual morph unknown, erroneously linked with *Phialophora*-like anamorph (*Cistella rubescens* = *Hyphodiscus hymeniophilus*, saprobes on wood, dead herbaceous stems, fallen leaves, needles and cones, widespread, mainly in temperate zones, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; taxonomy), Baral et al. (2015; taxonomy), holotype of type: not located, for typification details see (Spooner 1987), cultures and sequences are unavailable for the type of the type species, needs generic revision.

Citeromyces Santa María 1957, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, five species, type: *C. matritensis* (Santa María) Santa María, saprobes, terrestrial, worldwide, see Kurtzman (2011, 2012; new species), Casaregola et al. (2013; new species), cultures and sequences are available.

Civisubramaniana Vittal & Dorai 1986, *Ascomycota* genera *incertae sedis*, two species, type: *C. eucalypti* Vittal & Dorai hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: IMI 298300, cultures and sequences are unavailable, needs generic revision.

Cladia Nyl. 1870, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, c. 25 species, type: *Cladia aggregata* (Sw.) Nyl., asexual morph unknown, lichenized, terrestrial, austral or widespread, see Parmen et al. (2010; generic delimitation), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lecanoraceae*), Lumbsch et al. (2010; generic delimitation), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Cladidium Hafellner 1984, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *C. thamnitis* (Tuck.) Hafellner (= *Cladidium bolanderi* (Tuck) B.D. Ryan), asexual morph unknown, lichenized, saxicolous, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Cladobotryum Nees 1816, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, 41 species, type: *C. varium* Nees, hyphomycetous, sexual morph unknown, pathogens, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Pöldmaa (2011; new species from tropics), Back et al. (2012; pathogenicity on mushroom), Kim and Lee (2012; pathogenicity, Korea), Wijayawardene et al. (2012, 2017; outline), Gea and Navarro (2016; pathogenicity), cultures and sequences are available.

Cladochasiella Marvanová 1997, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *C. divergens* Marvanová, hyphomycetous, sexual morph unknown, saprobes, aquatic, Czech Republic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017;

outline), Baschien et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), holotype and ex-type of the type: PRM 842967, CCM F-13489.

Cladoconidium Bandoni & Tubaki 1985, *Ascomycota* genera *incertae sedis*, one species, type: *C. articulatum* Bandoni & Tubaki, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, Canada, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Cladographium Peyronel 1918, *Ascomycota* genera *incertae sedis*, one species, type: *C. rivulorum* Peyronel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable.

Cladonia P. Browne 1756, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, c. 550 species, type: *C. subulata* (L.) F.H. Wigg., asexual morph unknown, lichenized, terricolous or on lignum, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lecanoraceae*), Ahti (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Cladoniicola Diederich, van den Boom & Aptroot 2001, *Pezizomycotina*, genus *incertae sedis*, one species, type: *C. staurospora* Diederich, van den Boom & Aptroot, asexual morph unknown, lichenicolous, terrestrial, temperate, see Etayo (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Cladophialophora Borelli 1980, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, 35 species, type: *C. carrionii* (Trejos) de Hoog, Kwon-Chung & McGinnis, hyphomycetous, mostly terrestrial, but also reported from mangrove environments, mainly saprobes associated with soil and plant material but a few species are lichenicolous, endophytic or plant-pathogenic, several species cause infections in animals, including humans, cosmopolitan, although the type species belongs in *Herpotrichiellaceae*, some species are related to other families of *Chaetothyriales*, see de Hoog et al. (2000, 2007; clinically-relevant species, lectotypification and phylogeny of *C. carrionii*), Crous et al. (2007, 2011, 2013a; new species, pathogenicity to plants), Badali et al. (2008, 2009; outline, new species), Diederich et al. (2013; lichenicolous species), Feng et al. (2013; new species), Seyedmousavi et al. (2013; pathogenicity to animals), Gueidan et al. (2014; phylogeny), Madrid et al. (2016; new species, comments about the polyphyly of the genus), Usui et al. (2016; new species), ex-type strain of the type: = CBS 160.54, sequences are available at GenBank from de Hoog et al. (2007).

Cladoriella Crous 2006, *Dothideomycetes*, genera *incertae sedis*, three species, type: *C. eucalypti* Crous, hyphomycetous, sexual morph unknown, saprobes or ?pathogens, terrestrial, Australia, South Africa, see Cheewangkoon et al. (2009; morphology, new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), holotype and ex-type strain of the type: CBS H-18043, CPC 10953–10955 = CBS 115898–115890.

Cladorrhinum Sacc. & Marchal 1885, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, eight species, type: *C. foecundissimum* Sacc. & Marchal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Madrid et al. (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Carmaran et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), available cultures of type: BCCM 6980.

Cladosphaera Dumort. 1822, *Ascomycota* genera *incertae sedis*, one species, type: *C. cespitosa* (Tode) Dumort., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cladosporiella Deighton 1965, *Ascomycota genera incertae sedis*, five species, type: *C. cercosporicola* Deighton, hyphomycetous, sexual morph unknown, saprobes, fungicolous, terrestrial, Africa, Asia, Caribbean, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cladosporiopsis S.C. Ren & X.G. Zhang 2012, *Ascomycota genera incertae sedis*, one species, type: *C. ovata* S.C. Ren & X.G. Zhang, hyphomycetous, sexual morph unknown, saprobes, fungicolous, terrestrial, China, see Ren et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Cladosporium Link 1816 (= *Davidiella* Crous & U. Braun 2003 *fide* Wijayawardene et al. 2014; Rossmann et al. 2015), *Cladosporiaceae*, *Capnodiales*, *Dothideomycetes*, c. 300 species, type: *C. herbarum* (Pers.) Link, sexual morph *Davidiella*, saprobes, endophytes, animal, human and plant pathogens, worldwide, see Seifert et al. (2011; morphology), Bensch et al. (2012, 2015; taxonomy), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Cladosporiaceae*), Sandoval-Denis et al. (2016; taxonomy), lectotype of type: *Sine loco, sine dato* (L 910.225-733), epitype: CBS-H 19853; ex epitype culture, CBS 121621.

Clandestinotrema Rivas Plata, Lücking & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Ostropomycetidae*, *Lecanoromycetes*, 17 species, type: *C. clandestinum* (Ach.) Rivas Plata, Lücking & Lumbsch, lichenized, see Rivas Plata et al. (2012a; taxonomy), Lumbsch et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Clasteropycnis Bat. & Cavalc. 1963, *Ascomycota genera incertae sedis*, one species, type: *C. coumae* Bat. & Cavalc., sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clasterosphaeria Sivan. 1984, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, two species, type: *C. cyperi* Sivan., asexual morph clasterosporium-like, saprobes, terrestrial, India, Malayasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: IMI 56878, cultures and sequences are unavailable, needs generic revision.

Clasterosporium Schwein. 1832, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, ten species, type: *C. caricinum* Schwein., sexual morph ?clasterosphaeria-like, saprobes, terrestrial, worldwide, see Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision, sexual-aseexual link was not confirmed.

Clathroconium Samson & H.C. Evans 1982, *Ascomycota genera incertae sedis*, one species, type: *C. arachnicola* Samson & H.C. Evans, hyphomycetous, sexual morph unknown, entomopathogens, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Clathroporina Müll.Arg. 1882, *Porinaceae*, *Ostropales*, *Lecanoromycetes*, 25 species, type: *C. endochrysea* (C. Bab.) Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Clathrosphaerina Beverw. 1951, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *C. zalewskii* Beverw., sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clathrospora Rabenh. 1857, *Diademaceae*, *Pleosporales*, *Dothideomycetes*, more than 40 species, type: *C. elyanae* Rabenh., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence data available for three species, type sequence data are available: CBS 161.51; CBS 196.54, needs generic revision.

Clathrosporium Nawawi & Kuthub. 1987, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *C. intricatum* Nawawi & Kuthub., sexual morph unknown, saprobes, aero-aquatic, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Claurouxia D. Hawksw. 1988, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *C. chalybeioides* (Nyl.) D. Hawksw., asexual morph unknown, lichenized, saxicolous, Europe, North America, see Gilbert and Hawksworth (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Claussenomyces Kirschst. 1923 (= *Dendrostilbella* Höhn. 1905 *vide* Johnston et al. 2014), *Helotiaceae*, *Helotiales*, *Leotiomycetes*, 19 species, type: *C. jahnianus* Kirschst., asexual morph *Dendrostilbella*, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012; outline and asexual morph), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), sequence data are available for unidentified *Claussenomyces* species.

Clauzadea Hafellner & Bellem. 1984, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, five species, type: *C. monticola* (Ach.) Hafellner & Bellem., asexual morph unknown, lichenized, saxicolous, widespread, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Fryday et al. (2014; systematics), Lücking et al. (2016; classification), sequences are available.

Clauzadeana Cl. Roux 1984, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *C. instratula* (Nyl.) Cl. Roux, asexual morph unknown, lichenized, saxicolous, Asia, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Clauzadella Nav.-Ros. & Cl. Roux 1996, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *C. gordensis* Nav.-Ros. & Cl. Roux, asexual morph unknown, terrestrial, lichenized, on *Verrucaria viridula* (Schrad.) Ach., France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Clauzadeomyces Diederich 1994, *Ascomycota* genera *incertae sedis*, one species, type: *C. verrucosus* Diederich, hyphomycetous, sexual morph unknown, lichenicolous, non-lichenized, terrestrial, Belgium (Ardennes), see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: LG, Lambinon, 22 Aug. 1965, cultures and sequences are unavailable, needs generic revision.

Clavariana Nawawi 1976, *Ascomycota* genera *incertae sedis*, one species, type: *C. aquatica* Nawawi, hyphomycetous, sexual morph unknown, in river foam, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Clavascidium Breuss 1996, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, eight species, type species: *C. umbrinum* (Breuss) Breuss, asexual morph coelomycetous, terrestrial, lichenized, occurring on soil, rocks and mosses, America, Asia, Europe, see Gueidan et al. (2009; phylogeny, proposal to synonymize *Clavascidium* with *Placidium* A. Massal.), Prieto et al. (2010, 2012; morphology, reinstatement of *Clavascidium* as a distinct genus), sequences of the type material of the type species are unavailable, but sequences of non-type material are available from Gueidan et al (2007).

Clavatispora Boonmee & K.D. Hyde 2013, *Venturiales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *C. thailandica* Boonmee & K.D. Hyde, asexual morph hyphomycetous, saprobes, terrestrial, Thailand, see Boonmee et al. (2013; taxonomy),

sequence data available, holotype and ex-type living culture of the type: MFLU 10-0038, MFLUCC 10-0107 = BCC 38863 = IFRD 2170.

Clavatisporella K.D. Hyde 1995, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *C. musicola* K.D. Hyde, asexual morph unknown, saprobes, Irian Jaya (Papua), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), holotype of the type: BRIP 22403, cultures and sequences are unavailable, needs generic revision.

Clavatospora Sv. Nilsson ex Marvanová & Sv Nilsson 1971, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, three species, type: *C. longibrachiata* (Ingold) Sv. Nilsson ex Marvanová & Sv. Nilsson, hyphomycetous, sexual morph corollospora-like, saprobes, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), needs revision since genus shown to be polyphyletic, reference cultures of type: UMB-1109.13.

Clavatospora Sv. Nilsson ex Marvanová & Sv. Nilsson 1971, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, three species, type: *C. longibrachiata* (Ingold) Sv. Nilsson ex Marvanová & Sv. Nilsson, hyphomycetous, sexual morph unknown, saprobes, aquatic, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline).

Claviceps Tul. 1853 (= *Sphacelia* Lév. 1827; *Ustilagopsis* Speg. 1880 *vide* Rossman et al. 2016), *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, 56 species, type: *C. purpurea* (Fr.) Tul., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Pažoutová et al. (2011, 2015; new species), Kirk et al. (2013; genus accepted), Kolařík (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures and sequences are available.

Claviradulomyces P.R. Johnst., D.C. Park, H.C. Evans, R.W. Barreto & D.J. Soares 2010, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *C. dabeicola* P.R. Johnst., D.C. Park, H.C. Evans, R.W. Barreto & D.J. Soares, asexual morph (putative) pycnidial on branches of vascular plants, Africa, South America, see Evans et al. (2010; taxonomy), Barreto et al. (2012; phylogeny), cultures and sequences are available.

Clavispora Rodrigues de Miranda 1979, *Metschnikowiaceae*, *Saccharomycetales*, *Saccharomycetes*, 20 species, type: *C. lusitaniae* Rodrigues de Miranda, asexual reproduction by budding, saprophytic, from cacti, agave, processed dates and other high osmotic environments, occasionally an opportunistic human pathogen, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Cleistocystis Sousa da Câmara 1931, *Ascomycota genera incertae sedis*, one species, type: *C. rosarum* Sousa da Câmara, coelomycetous, sexual morph unknown, saprobes, terrestrial, Portugal, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cleistoiodophanus J.L. Bezerra & Kimbr. 1976, *Ascobolaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *C. conglutinatus* J.L. Bezerra & Kimbr., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Cleistonium Speer 1986, *Ascomycota genera incertae sedis*, one species, type: *C. parasiticum* Speer, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2014) accepted as a genus in *Gloniaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline, accepted as *Ascomycota genera incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Cleistophoma Petr. & Syd. 1927, *Ascomycota genera incertae sedis*, two species, type: *C. suberis* (Prill. & Delacr.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes,

terrestrial, North America, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cleistosphaera Syd. & P. Syd. 1916, *Parodiopsidaceae*, *Dothideomycetes* family *incertae sedis*, one species, type: *C. macrostegia* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, S. America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as in *Parodiopsidaceae*, key), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Cleistothelebolus Malloch & Cain 1971, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *C. nipigonensis* Malloch & Cain, asexual morph unknown, coprophilous, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Clematidis Tibpromma, Camporesi & K.D. Hyde 2016, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *C. italica* Tibpromma, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 14–0669, MFLUCC 15–0084.

Clematomyces Thaxt. 1900, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, five species, type: *C. pinophili* Thaxt., asexual morph unknown, biotrophic, Asia, West Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Clibanites (P. Karst.) P. Karst. 1871, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. paradoxa* (P. Karst.) P. Karst., asexual morph unknown, saprobes on wood, Finland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision, holotype in H.

Cliostomum Fr. 1825, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, c. 25 species, type: *C. corrugatum* (Ach.) Fr., asexual morph unknown, lichenized, epiphytic, world-wide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Printzen (2014; phylogeny and relationships), Lücking et al. (2016; classification), sequences are available.

Clohesyomyces K.D. Hyde 1993, *Ascomycota* genera *incertae sedis*, one species, type: *C. aquaticus* K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, aquatic, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BRIP 20092, cultures and sequences are unavailable, needs generic revision.

Clohiesia K.D. Hyde 1995, *Annulatascaceae*, *Annulatascales*, *Sordariomycetes*, three species, type: *C. corticola* K.D. Hyde, sexual morph unknown, saprobes, terrestrial, China, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BRIP 21485, cultures available for *Clohiesia corticola* HKUCC 3712 *fide* Ranghoo et al. (1999).

Clonophoromyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *C. grenadinus* Thaxt., asexual morph unknown, biotrophic, West Indies, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015; notes), cultures and sequences are unavailable.

Clypeispora A.W. Ramaley 1991, *Ascomycota* genera *incertae sedis*, one species, type: *C. angustifoliorum* A.W. Ramaley, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), holotype of the type: BPI 1102631, cultures and sequences are unavailable, needs generic revision.

Clypeocerospora Sousa da Câmara 1946, *Sordariomycetes* genera *incertae sedis*, one species, type: *C. rubi* Sousa da Câmara, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Clypeochorella Petr. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *C. orientalis* (Sacc. & Penz.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeococcum D. Hawksw. 1977, *Polycoccaceae*, *Trypetheliales*, *Dothideomycetes*, eleven species, type: *C. cladonema* (Wedd.) D. Hawksw., on lichens, widespread, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Dacampicaeae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Ertz et al. (2015; sequences two species, but not the type species), Jaklitsch et al. (2016; phylogeny, accepted as a genus in *Dacampicaeae*), holotype of type: PC.

Clypeoloculus Kaz. Tanaka & K. Hiray. 2015, *Morosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *C. akitaensis* Kaz. Tanaka & K. Hiray., asexual morph unknown, saprobes, aquatic, Japan, see Tanaka et al. (2015; morphology, phylogeny), holotype and ex-type strain of the type: HHUF 27557, CBS 139681.

Clypeolum Speg. 1881, *Ascomycota* genera *incertae sedis*, eight species, type: *C. atroareolatum* Speg., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeopatella Petr. 1942, *Ascomycota* genera *incertae sedis*, one species, type: *C. cylindrospora* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Rhodes, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeophialophora Bat. & Peres 1962, *Ascomycota* genera *incertae sedis*, one species, type: *C. erythroxyli* Bat. & Peres, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeoporthe Höhn. 1919, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *C. monocarpa* Höhn., asexual morphs unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

ClypeoportHELLA Petr. 1924, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *C. brencklei* Petr., asexual morphs unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Clypeopycnis Petr. 1925, *Ascomycota* genera *incertae sedis*, three species, type: *C. aeruginascens* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeopyrenis Aptroot 1991, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, two species, type: *C. microsperma* (Müll. Arg.) Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Clypeoseptoria F. Stevens & P.A. Young 1925, *Ascomycota* genera *incertae sedis*, three species, type: *C. rockii* F. Stevens & P.A. Young, coelomycetous, sexual morph unknown, saprobes, terrestrial, Hawaii, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeosphaerella Guatimosim, R.W. Barreto & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *C. quasiparkii* (Cheew., K.D. Hyde & Crous) Guatimosim, R.W. Barreto & Crous, asexual morph unknown, plant pathogenic, see

Guatimosim et al. (2016; morphology, phylogeny), holotype CBS H-22088, isotype VIC 42607, culture ex-type CPC 24705.

Clypeosphaeria Fuckel 1870, *Clypeosphaeriaceae*, *Amphisphaeriales*, *Sordariomycetes*, c. 30 species, type: *C. notarisii* Fuckel, asexual morph unknown, saprobes (dead wood and bark), terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable for type species, needs generic revision.

Clypeosphaerulina Sousa da Câmara 1939, *Sordariomycetes*, genera *incertae sedis*, one species, type: *C. vincae* (Sousa da Câmara) Sousa da Câmara, asexual morph unknown, saprobes, terrestrial, Portugal, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Clypeostagonospora Punith. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *C. muhlenbergiae* Punith., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeostroma Theiss. & Syd. 1914, *Dothideomycetes* genera *incertae sedis*, two species, type: *C. spilomeum* (Berk.) Theiss. & Syd., asexual morph unknown, saprobes, Australasia, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Coccidiascus Chatton emend. Lushbaugh, Rowton & McGhee 1976, *Saccharomycetales* genera *incertae sedis*, *Saccharomycetes*, one species, type: *C. legeri* Chatton, asexual reproduction by budding, perhaps parasitic on *Drosophila* spp., found within the intestinal epithelial cells of *Drosophila*, possibly worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coccidioides G.W. Stiles 1896, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, two species, type: *C. immitis* G.W. Stiles, sexual morph unknown, saprobes, terrestrial, southern USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Coccidomyces Buchner 1912, *Saccharomycetidae* genera *incertae sedis*, *Saccharomycetes*, one species, type: *C. pierantonii* Buchner, asexual morphs unknown, in insects, terrestrial, Germany, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coccinonectria L. Lombard & Crous 2015, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *C. pachysandricola* (B.O. Dodge) L. Lombard & Crous, asexual morph hyphomycetous, saprobes, France, USA, see Lombard et al. (2015; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), available cultures of the type: CBS 501.63 476.92

Cocciscia Norman 1870, *Dothideomycetes* genera *incertae sedis*, two species, type: *C. hammeri* Norman, asexual morph unknown, saprobes, Scandinavia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Coccocarpia Pers. 1827, *Coccocarpiaceae*, *Peltigerales*, *Lecanoromycetes*, c. 25 species, type: *C. molybdaea* Pers., asexual morph unknown, lichenized, epiphytic or epiphyllous, worldwide tropical-subtropical, see Wedin et al. (2009; systematics), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Coccochora Höhn. 1909, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. quercicola* (Henn.) Höhn., asexual morph unknown, saprobes, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Coccodiella Hara 1910, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, 21 species, type: *C. arundinariae* Hara, asexual morph unknown, biotrophic, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for *C. melastomatum* CMU78543, *C. miconiae* ppMP 1342.

Coccodinium A. Massal. 1860, *Coccodiniaceae*, *Ascomycota* family *incertae sedis*, two species, type: *C. bartschii* A. Massal., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Coccodiniaceae*), cultures and sequences are unavailable, needs generic revision, Hyde et al. (2013) excluded family from *Dothideomycetes*.

Coccodothis Theiss. & Syd. 1914, *Asterinales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *C. sphaeroidea* (Cooke) Theiss. & Syd., asexual morph unknown. Epiphytes, terrestrial, Georgia, see Hofmann (2009; review, accepted as a genus in *Parmulariaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Parmulariaceae*), Hyde et al. (2013; excluded from *Parmulariaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), placement in *Asterinales* supported by morphology, cultures and sequences are unavailable.

Coclogloeum Petr. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *C. microsporum* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coccoidea Henn. 1900, *Coccoideaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *C. quercicola* Henn. & Shirai, asexual morph unknown, saprobes, Japan, India, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Coccoideaceae*, morphology), cultures and sequences are unavailable, needs generic revision.

Coccoidella Höhn. 1909, *Coccoideaceae*, *Dothideomycetes* families *incertae sedis*, seven species, type: *C. scutula* (Berk. & M.A. Curtis) Höhn., asexual morph unknown, saprobes, America, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Coccoideaceae*), cultures and sequences are unavailable, needs generic revision.

Coccomyces De Not. 1847, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, 118 species, type: *C. coronatus* (Schumach.) De Not., asexual morph unknown, pathogens, worldwide, see Marinowitz et al. (2008; new species, morphology), Jia et al. (2011; new species, morphology), Li et al. (2014; new species, morphology), Moreno-Rico et al. (2014; new species, morphology), Wang et al. (2014; new species, morphology), Li et al. (2015; new species, morphology), sequence data available for *C. dentatus* and *C. strob*, needs generic revision.

Coccomycetella Höhn 1917, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *C. belonospora* (Nyl.) Höhn, asexual morph unknown, epixylic, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Baloch et al. (2013; systematics), Kirk et al. (2013; genus accepted), sequences are available.

Cocconia Sacc. 1889, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, c 25 species, type: *C. placenta* (Berk. & Broome) Sacc., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013;

accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), placement in *Parmulariaceae* supported by morphology, unknown, cultures and sequences unavailable.

Coccostromella Petr. 1968, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, one species, type: *C. puttemansii* (Henn.) Petr., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline, accepted as *Dothideaceae*), Hyde et al. (2013; accepted as a genus in *Dothideaceae*), Thambugala et al. (2014; excluded from *Dothideaceae* and placed *Botryosphaeriaceae*), Wijayawardene et al. (2014; outline, taxonomy), cultures and sequences are unavailable, needs generic revision.

Coccotrema Müll. Arg. 1888, *Coccotremataceae*, *Pertusariales*, *Lecanoromycetes*, 16 species, type: *C. antarcticum* Müll.Arg., asexual morph unknown, lichenized, terricolous, saxicolous or epiphytic, world-wide in arctic and subantarctic areas, see Lumbsch and Huhndorf (2010), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available

Cochliomyces Speg. 1912, *Euceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *C. argentinensis* Speg., asexual morph unknown, biotrophic, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Cocoicola K.D. Hyde 1995, *Phaeochoraceae*, *Phyllachorales*, *Sordariomycetes*, five species, type: *C. cylindrospora* (C. Booth & D.E. Shaw) K.D. Hyde, saprobes, worldwide, see Lumbsch and Huhndorf (2010), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Codinaea Maire 1937, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, c. 80 species, type: *C. monocarpa* Höhn., hyphomycetous, sexual morphs unknown, saprobes, terrestrial, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Carneiro de Almeida et al. (2014; new species, Brazil), Crous et al. (2014, 2015; new species), Granados et al. (2014; new species, Costa Rica), Maharachchikumbura et al. (2015, 2016; outline), Xia et al. (2015; new species, China), Barbosa et al. (2016; new species, Brazil), Oliveira et al. (2016; new species, Brazil, aquatic), cultures and sequences are available.

Codonmyces Calatayud & Etayo 1999, *Ascomycota* genera *incertae sedis*, one species, type: *C. lecanorae* Calat. & Etayo, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: VAB (lich.) 15404, cultures and sequences are unavailable, needs generic revision.

Coelodictyosporium Thambugala & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *C. pseudodictyosporium* (Qing Tian, Camporesi & K.D. Hyde) Thambugala & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Italy, all species has sequence data, see Thambugala et al. (2015b; phylogeny); Wijayawardene et al. (2016; morphology, phylogeny), holotype of type: MFLU 14-0737, ex-type strains of type: MFLUCC 13-0451.

Coelopogon Brusse & Kärnefelt 1991, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *C. abraxas* Brusse, lichenized, south temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Coenogonium Ehrenb. ex Nees 1820, *Coenogoniaceae*, *Ostropales*, *Lecanoromycetes*, 90 species, type: *C. linkii* Ehrenb., lichenized, see Baloch et al. (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; DNA), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Colemaniella Agnihothr. 1974, *Ascomycota* genera *incertae sedis*, one species, type: *C. ossoorii* Agnihothr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see

Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Colensoniella Hafellner 1979, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *C. torulispora* (W. Phillips) Hafellner, asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tian et al. (2014; morphology; nomenclature), cultures and sequences are unavailable, needs generic revision.

Coleodictyospora Charles 1929, *Ascomycota* genera *incertae sedis*, one species, type: *C. cubensis* Charles, hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coleophoma Höhn. 1907, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, more than 35 species, type: *C. crateriformis* (Durieu & Mont.) Höhn., coelomycetous, sexual morph unknown, pathogenic, saprobes or endophytic on a wide host range, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2016), holotype of type: FH 00304449.

Coleoseptoria Petr. 1940, *Ascomycota* genera *incertae sedis*, one species, type: *C. ephedrae* (Auersw.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Germany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coleosperma Ingold 1954, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *C. lacustre* Ingold, asexual morph unknown, saprobes, aquatic, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coleroa Rabenh. 1850, *Venturiaceae*, *Venturiales*, *Dothideomycetes*, eight species, type: *C. chaetomium* (Kunze) Rabenh., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; morphology, phylogeny), Hyde et al. (2013; accepted as in *Venturiaceae*, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data available for *Coleroa robertiani* CBS 458.64.

Colipila Baral & Guy García 2012, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *C. masdugwana* Baral & Guy Garcia, asexual morph unknown, saprobes, cosmopolitan, see Baral et al. (2012; taxonomy, phylogeny), holotype of the type: M-014088, cultures and sequences are available.

Colispora Marvan'ová 1988, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *C. elongata* Marvanová, hyphomycetous, sexual morph unknown, saprobes, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences and cultures available for *Colispora elongata* (F-08382 *fide* Baschien et al. 2013), needs generic revision.

Collema F.H.Wigg. [nom.cons.] 1780, *Collemataceae*, *Peltigerales*, *Lecanoromycetes*, 40 species, type: *C. lactuca* (Weber) Weber ex F.H. Wigg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Collematospora Jeng & Cain 1976, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, one species, type: *C. venezuelensis* Jeng & Cain, asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Collembolispora Marvanová & Pascoal 2003, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *C. barbata* Marvanová, Pascoal & Cássio, hyphomycetous,

sexual morph unknown, saprobes, aquatic, Portugal, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2012; new species, DNA, morphology), holotype and ex-type strains of the type: IMI 389661, UMB-088.01.

Collemopsidium Nyl. 1881, *Xanthopyreniaceae*, *Collemopsidiales*, *Dothiideomyceta incertae sedis*, +40 spp. (but the number could be higher), type: *C. iocarpum* (Nyl.) Nyl., molecular data suggest that the number of marine species has been largely underestimated (Pérez-Ortega et al. 2016), asexual morph coelomycetous, lichen-forming fungi, associated with cyanobacteria, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016, classification), Pérez-Ortega et al. (2016, phylogeny), lectotype of type: H-NYL 42858.

Colletoconis de Hoog & Aa 1978, *Ascomycota* genera *incertae sedis*, one species, type: *C. aecidiophila* (Speg.) de Hoog, Aa & U.P. Singh, coelomycetous, sexual morph unknown, saprobes, fungicolous, Argentina, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Colletogloeum Petr. 1953, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *C. sissoo* (Syd.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Crous et al. (2009; taxonomy, phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline), Zhao and Zhao (2012; new species, China), cultures and sequences are available for unidentified species, needs generic revision.

Colletotrichum Corda. 1831 (= *Glomerella* Spauld. & H. Schrenk 1903 *fide* Réblová et al. 2015), *Glomerellaceae*, *Glomerellales*, *Sordariomycetes*, more than 100 spp., type: *C. lineola* Corda, coelomycetous sexual morph *Glomerella*, pathogens, endophytes, saprobes, terrestrial and aquatic worldwide, many species have molecular data including the epitype or neotype, sequence data available for accepted species, see Hyde et al. (2009a,b, 2014; phylogeny, species number), Cannon et al. (2012; phylogeny), Crouch (2014), Damm et al. (2012a,b, 2013, 2014; species complexes, phylogeny), Weir et al. (2012), Liu et al. (2015), ex-epitype strains of type: CBS 125337, epitype of type: CBS H-20362.

Collodiscula I. Hino & Katum. 1955 (= *Acanthodochium* Samuels et al. 1987 *fide* Réblová et al. 2016), *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *C. japonica* I. Hino & Katum., asexual morph hyphomycetous (*Acanthodochium*), saprobes, Japan, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch and Voglmayr (2012; phylogeny) Wijayawardene et al. (2012, 2017; outline), Stadler et al. (2013; one name), Li et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline, one name), Réblová et al. (2016; nomenclature), cultures and sequences are available for type: *Collodiscula japonica* *fide* Jaklitsch and Voglmayr (2012).

Collophorina Damm & Crous, *gen. nov.* MBxxxx

≡ *Collophora* Persoonia 24: 64. 2010. nom. illeg., [ICN (Melbourne) Art. 53.1], non *Collophora* Mart. 1830 (*Apocynaceae*).

Leotiomyces genera *incertae sedis*, seven species, coelomycetous, sexual morph unknown, endophytes, saprobes, plant pathogens, Balears, Pacific Northwest regions, South Africa, Germany, Iran, see Damm et al. (2010; morphology, phylogeny), Gramaje et al. (2012; new species, phylogeny), Wijayawardene et al. (2012, 2017; outline), Xie et al. (2013; new species)

Type: *Collophorina rubra* (Damm & Crous) Damm & Crous

See Damm et al. (2010) for illustrations, description and diagnosis.

Holotype: South Africa, Western Cape Province, Paarl, from wood of *Prunus persica*, 10 Jun. 2004, U. Damm, holotype CBS H-19992, ex-type strains of the type: CBS 120873 = STE-U 6109.

Other species included:

Collophorina aceris (J. Xie, G.A. Strobel & B. Geary) Damm & Crous, *comb. nov.*
MycoBank MBxxxx

≡ *Collophora aceris* J. Xie, G.A. Strobel & B. Geary, *Microbial Ecology* 66(4): 787. 2014.

Collophorina africana (Damm & Crous) Damm & Crous, *comb. nov.* MycoBank MBxxxx

≡ *Collophora africana* Damm & Crous, *Persoonia* 24: 65. 2010.

Collophorina capensis (Damm & Crous) Damm & Crous, *comb. nov.* MycoBank MBxxxx

≡ *Collophora capensis* Damm & Crous, *Persoonia* 24: 67. 2010.

Collophorina hispanica (Gramaje, Armengol & Damm) Damm & Crous, *comb. nov.*
MycoBank MBxxxx

≡ *Collophora hispanica* Gramaje, Armengol & Damm, *Persoonia* 28: 9. 2011.

Collophorina paarla (Damm & Crous) Damm & Crous, *comb. nov.* MycoBank MBxxxx

≡ *Collophora paarla* Damm & Crous, *Persoonia* 24: 67. 2010.

Collophorina pallida (Damm & Crous) Damm & Crous, *comb. nov.* MycoBank MBxxxx

≡ *Collophora pallida* Damm & Crous, *Persoonia* 24: 69. 2010.

Collophorina rubra (Damm & Crous) Damm & Crous, *comb. nov.* MycoBank MBxxxx

≡ *Collophora rubra* Damm & Crous, *Persoonia* 24: 69. 2010.

Notes: The genus *Collophora* Damm & Crous is invalid, being a later homonym of the plant genus *Collophora* Mart. 1830. It is therefore validated here as *Collophorina* gen. nov. Species of the genus are associated with black spots and dark brown to black streaking of the xylem tissues of woody plant hosts, and can cause wood necrosis (Gramaje et al. 2012; Arzanlou et al. 2016) and it was also collected from air samples (Fischer et al. 2016).

Collostroma Petr. 1947, *Ascomycota genera incertae sedis*, one species, type: *C. gelatinosum* Petr., coelomycetous, sexual morph unknown, saprobes, Austria, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Colonomyces R.K. Benj. 1955, *Euceratomycetaceae, Laboulbeniales, Laboulbeniomycetes*, two species, type: *C. appendiculatus* R.K. Benj., asexual morph unknown, biotrophic, USA, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Colpoma Wallr. 1833, *Rhytismataceae, Rhytismatales, Leotiomycetes*, 14 species, type: *C. quercinum* (Pers.) Wallr., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lantz et al. (2011; phylogeny), Lee et al. (2016; antifungal properties), cultures and sequences are unavailable, available cultures for type: Lantz 368 (UPS).

Columnodomus Petr. 1941, *Ascomycota genera incertae sedis*, one species, type: *C. microsporus* Petr. coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Columnomyces R.K. Benj. 1955, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, two species, type: *C. grenadinus* Thaxt., asexual morph unknown, biotrophic, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Columnothyrium Bubák 1916, *Ascomycota genera incertae sedis*, one species, type: *C. myriospermum* (C. Massal.) Bubák, coelomycetous, sexual morph unknown, saprobes,

Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coma Nag Raj & W.B. Kendr. 1972 (= *Ascocoma* H.J. Swart 1987 *vide* Jhonston et al. 2014; Wijayawardene et al. 2016), *Phacidiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *C. circularis* (Cooke & Masee) Nag Raj & W.B. Kendr., coelomycetous, sexual morph *Ascocoma*, saprobes, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jhonston et al. (2014; nomenclature), Wijayawardene et al. (2016; outline, one name, morphology), available specimens for type: BRIP 14753, cultures and sequences are unavailable, needs generic revision.

Comatospora Piroz. & Shoemaker 1971, *Ascomycota* genera *incertae sedis*, one species, type: *C. suttonii* Piroz. & Shoemaker, coelomycetous, sexual morph unknown, saprobes, Canada, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Combea De Not. 1846, *Opegraphaceae*, *Arthoniales*, *Arthoniomyces*, two species, type: *C. mollusca* (Ach.) Nyl., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Roccellaceae*), Kirk et al. (2013; genus accepted), Ertz and Tehler (2011; taxonomy, placed in *Opegraphaceae*), Lücking et al. (2016; classification), sequences are available.

Comesella Speg. 1923, *Dothideomyces* genera *incertae sedis*, one species, type: *C. anomala* (Berk. & M.A. Curtis) Speg., asexual morph unknown, saprobes, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Comesia Sacc. 1884, *Helotiales* genera *incertae sedis*, three species, type: *C. felicitatis* (P. Crouan & H. Crouan) Sacc., asexual morph unknown, saprobes, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Comminutispora A.W. Ramaley 1996 (= *Hyphospora* A.W. Ramaley 1996 *vide* Wijayawardene et al. 2014; Rossman et al. 2015), *Dothideomyces* genera *incertae sedis*, one species, type: *C. agavacearum* A.W. Ramaley, asexual morph hyphomycetous (*Hyphospora*), saprobes, USA, see Lumbsch and Huhndorf (2010; outline; accepted as *Planistromellaceae*), Hyde et al. (2013; did not accept as *Planistromellaceae*); Wijayawardene et al. (2014; outline, nomenclature), Rossman et al. (2015; nomenclature), holotype of the type: BPI 802958, cultures and sequences are unavailable, needs generic revision.

Comocephalum Syd. 1939, *Ascomycota* genera *incertae sedis*, one species, type: *C. vismiae* Syd., coelomycetous, sexual morph unknown, saprobes, Ecuador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Comoclathris Clem. 1909, *Pleosporaceae*, *Pleosporales*, *Dothideomyces*, 26 species, type: *C. lanata* Clem., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline; accepted as a genus in *Diademaceae*), Hyde et al. (2013; accepted as *Diademaceae*) Wijayawardene et al. (2014; outline; accepted as a genus in *Diademaceae*), Ariyawansa et al. (2015; morphology, accepted as *Pleosporaceae*), Li et al. (2016; new species, Russia), holotype of the type: COLO 62872, sequences are available.

Complexipes C. Walker 1979, *Ascomycota* genera *incertae sedis*, two species, type: *C. moniliformis* C. Walker, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology, accepted as a genus in *Otiaceae*, *Pezizales*), Wijayawardene et al. (2012; outline, accepted as a genus in *Pyronemataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; transferred to *Ascomycota* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Compositrema Rivas Plata, Lücking & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *C. cerebriforme* J.E. Hern. & Lücking, lichenized, see Rivas Plata et al. (2012b), Kraichak et al. (2014), Lücking et al. (2016; classification), sequences are available.

Compsocladium I.M. Lamb 1956, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *C. archboldianum* I.M. Lamb, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Compsomyces Thaxt. 1894, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, seven species, type: *C. verticillatus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Condylospora Nawawi 1976, *Ascomycota* genera *incertae sedis*, four species, type: *C. spumigena* Nawawi, hyphomycetous, saprobes, on decaying leaves, aquatic, Brazil, Malaysia, Poland, Puerto Rico, Republic of Cameroon, Venezuela, Vietnam, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Fiuza et al. (2015a; first record from Amazon), sequence data available for one species, compare with *Angulospora*, isotype of type: IMI 193709.

Coniambigua Etayo & Diederich 1995, *Ascomycota* genera *incertae sedis*, one species, type: *C. phaeographidis* Etayo & Diederich, hyphomycetous, sexual morph unknown, lichenicolous, non-lichenized, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2016, 2017; morphology, outline), Kirk et al. (2013; genus accepted), holotype of the type: MA (Lich.), Etayo 4215, sequence data of type species is unavailable.

Coniangium Fr. 1821, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, four species, type: *C. vulgare* Fr., lichenized, see Lumbsch and Huhndorf (2010; outline), Sundin et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Coniarthonia Grube 2001, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, seven species, type: *C. pyrnhula* (Nyl.) Grube, lichenized, see Lumbsch and Huhndorf (2010; outline), Aptroot et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available but lacks for the type.

Conicomycetes R.C. Sinclair, Eicker & Morgan-Jones 1983, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, four species, type: *C. transvaalensis* R.C. Sinclair, Eicker & Morgan-Jones, hyphomycetous, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species, morphology, DNA), sequence data available for *C. pseudotransvaalensis* (HHUF 29956 fide Liu et al. 2015).

Conidiascus Holterm. 1898, *Saccharomycetes* genera *incertae sedis*, one species, type: *C. paradoxus* Holterm., asexual morphs unknown, terrestrial, Java, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Conidiotheca Réblová & L. Mostert 2007, *Togniniaceae*, *Togniniales*, *Sordariomycetes*, one species, type: *C. tympanoides* (M.E. Barr) Réblová & L. Mostert, asexual morph unknown, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), holotype of the type: holotype of *Romellia tympanoides*, NY.

Coniella Höhn. 1918 (= *Schizoparme* Shear 1923; *Pilidiella* Petr. & Syd. 1927 fide Alvarez et al. 2016), *Schizoparmeaceae*, *Diaporthales*, *Sordariomycetes*, 29 species, type: *C. pulchella* Höhn., coelomycetous, sexual morph *Schizoparme*, saprobes, pathogens, terrestrial, widespread, see Crous et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), Alvarez et al. (2016; revision, nomenclature, treated

Schizoparme and *Pilidiella* as synonyms), Wijayawardene et al. (2016; morphology, phylogeny), cultures and sequences are available.

Coniobrevicolla Réblová 1999, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, one species, type: *C. larsenii* Réblová, asexual morph unknown, terrestrial, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Coniocarpon DC. 1805, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, five species, type: *C. cinnabarinum* DC., lichenized, see Sundin et al. (2012; taxonomy), Frisch et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Coniocessia Dania García, Stchigel, D. Hawksw. & Guarro 2006, *Conioceciaceae*, *Xylariales*, *Sordariomycetes*, five species, type: *C. nodulisporioides* (D. Hawksw.) Dania García, Stchigel, D. Hawksw. & Guarro, asexual morph hyphomycetous (nodulisporium-like), terrestrial, saprobes, coprophilous, from soil, Jordan, Iran, Spain, see Lumbsch and Huhndorf (2009; outline), Asgari and Zare (2011; new species, DNA), Senanayake et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: IMI 204247 (as *Coniochaeta nodulisporioides* D. Hawksw.), sequence data and cultures available.

Coniochaeta (Sacc.) Cooke 1887, *Coniochaetaceae*, *Coniochaetales*, *Sordariomycetes*, 78 species, type: *C. ligniaria* (Grev.) Cooke, asexual morph lecythophora-like, terrestrial, aquatic, saprobes, coprophilous, widespread, see Damm et al. (2010; South Africa, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; phylogeny), ex-type cultures are unavailable but none-type cultures are available.

Coniolarrella Dania García, Stchigel & Guarro 2006, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, eight species, type: *C. limonispora* (Ellis & Everh.) Checa, Arenal & J.D. Rogers, asexual morph rhinoclaadiella-like, saprobes, worldwide, see Checa et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Zare et al. (2010; new species, morphology), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), type: of holotype IRAN 12363F (as *Coniochaeta gamsii* Asgari & Zare), sequence data available.

Conioscypha Höhn. 1904 (= *Conioscyphascus* Réblová & Seifert 2004 *vide* Maharachchikumbura et al. 2016; Réblová et al. 2016), *Conioscyphaceae*, *Conioscyphales*, *Sordariomycetes*, 12 species, type: *Conioscypha lignicola* Höhn., sexual morph *Conioscyphascus*, saprobes, terrestrial, worldwide, see Réblová and Crous et al. (2014; new species, DNA), Zelski et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Réblová et al. (2016; phylogeny), cultures and sequences are available.

Conioscyphopsis Goh & K.D. Hyde 1998, *Ascomycota* genera *incertae sedis*, one species, type: *C. australiensis* Goh & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coniothyria Syd. & P. Syd. 1912, *Ascomycota* genera *incertae sedis*, one species, type: *C. agavicola* (Speg.) Syd., coelomycetous, sexual morph unknown, saprobes, subtropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coniothyrium Corda 1840, *Coniothyriaceae*, *Pleosporales*, *Dothideomycetes*, c. 50 species, type: *C. palmarum* Corda, coelomycetous, terrestrial, pathogens, saprobes, worldwide, see de Gruyter et al. (2013; phylogeny, generic concept), Crous et al. (2013, 2016; new species), Hyde et al. (2013; morphology), Verkley et al. (2014; phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), cultures and sequences are available, reference culture for type: CBS 400.71.

Coniozyma Crous 2008, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. leucospermi* (Crous & Denman) Crous, coelomycetous, terrestrial, pathogens, saprobes, South Africa, see Marinowitz et al. (2008; morphology), Wijayawardene et al. (2017; outline), holotype and ex-type cultures of the type: PREM 55348, CBS 114035 = STE-U 2852.

Conjunctospora Udagawa & Uchiy. 1999, *Ascomycota* genera *incertae sedis*, one species, type: *C. vesiculifera* Udagawa, Uchiy. & Kamiya, hyphomycetous, sexual morph unknown, saprobes, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: CBM, Uchiyama SUM3064, cultures and sequences are unavailable, needs generic revision.

Conlarium F. Liu & L. Cai 2012, *Sordariomycetes* genera *incertae sedis*, one species, type: *C. dupliciascosporum* F. Liu & L. Cai, sexual morph unknown, terrestrial, pathogens, saprobes, China, see Liu et al. (2012; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type cultures of the type: HMAS243129, CGMCC3.14939 = GD34-5-2.

Connorsia Malloch 1974, *Pseudeurotiaceae*, *Leotiomycetes* family *incertae sedis*, one species, type: *C. rilstonei* (C. Booth) Malloch, asexual morph unknown, saprobes, British Isles, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), available cultures of the type: CBS 537.74, AFTOL-ID 1264.

Conoideocrella D. Johnson, G.H. Sung, Hywel-Jones & Spatafora 2009, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, type: *C. luteoestrata* (Zimm.) D. Johnson, G.H. Sung, Hywel-Jones & Spatafora, two species, asexual morph unknown, saprobes, cosmopolitan, see Johnson et al. (2009; morphology, phylogeny), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Conoplea Pers. 1797, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, eleven species, type: *C. sphaerica* (Pers.) Pers., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Marinowitz et al. (2008; DNA), Rivera-Orduña et al. (2011; DNA), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Conostomatium Doweld 2013, *Ascomycota* genera *incertae sedis*, one species, type: *C. oenocarpi* (Bat. & J.L. Bezerra) Doweld, asexual morph unknown, fossil *Pteridospermae*, see Index Fungorum (2017).

Conostroma Moesz 1921, *Ascomycota* genera *incertae sedis*, three species, type: *C. didymum* (Fautrey & Roum.) Moesz (current name: *Colpoma quercinum* (Pers.) Wallr. *vide* Species Fungorum 2017), coelomycetous, sexual morph unknown, saprobes, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Zhao and Zhao (2012; new species, China), cultures and sequences are unavailable, needs generic revision.

Conotremopsis Vězda 1977, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *C. weberiana* Vězda, lichenized, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Consetiella Hol.-Jech. & Mercado 1982, *Ascomycota* genera *incertae sedis*, one species, type: *C. solida* (Berk. & M.A. Curtis) Hol.-Jech. & Mercado, hyphomycetous, sexual morph unknown, saprobes, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Constantinomyces Egidi & Onofri 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *C. virgultus* Egidi & Onofri, hyphomycetous, sexual morph unknown, rock-inhabiting, Spain, see Egidi et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype of the type: CBS 117930 = TRN 79.

Constrictolumina Lücking, M.P.Nelsen & Aptroot 2016, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, nine species, type: *C. cinchonae* (Ach.) Lücking, M.P. Nelsen & Aptroot, lichenized, see Nelsen et al. (2014a; taxonomy), Aptroot and Lücking (2016; taxonomy) Lücking et al. (2016c; taxonomy), Lücking et al. (2016; classification), sequences are available.

Cookeina Kuntze 1891, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, 13 species, type: *C. tricholoma* (Mont.) Kuntze, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Cookella Sacc. 1878, *Cookellaceae*, *Dothideomycetes* family *incertae sedis*, seven species, type: *C. microscopica* Sacc., asexual morph unknown, parasites, fungicolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Cooksonomyces H.J. Swart & D.A. Griffiths 1974, *Ascomycota* genera *incertae sedis*, one species, type: *C. banksiae* H.J. Swart & D.A. Griffiths, coelomycetous, sexual morph unknown, saprobes, Australia, see Kirk et al. (2008), however Kirk et al. (2013) did not accept, cultures and sequences are unavailable.

Cophinforma Doilom, J.K. Liu & K.D. Hyde 2012, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, three species, type: *C. eucalypti* Doilom, J.K. Liu & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, South Africa, USA, Thailand, see Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; taxonomy, new species, phylogeny), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), holotype and ex-type culture of the type: MFLU 12–0752, MFLUCC 11–0425.

Coppinsia Lumbsch & Heibel 1998, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, one species, type: *C. minutissima* Lumbsch & Heibel, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hodkinson and Lendemer (2011; taxonomy), Lücking et al. (2016; classification), sequences unavailable.

Coprobolus Cain & Kimbr. 1970, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, one species, type: *C. poculiformis* Cain & Kimbr., asexual morph unknown, coprophilous, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Copromyces N. Lundq. 1967, *Sordariaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *C. bisporus* N. Lundq., asexual morph unknown, coprophilous, terrestrial, Sweden, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Coprotiella Jeng & J.C. Krug 1976, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, one species, type: *C. gongylospora* Jeng & J.C. Krug, asexual morph unknown, coprophilous, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coprotus Korf & Kimbr. 1967, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, 29 species, type: *C. sexdecimsporus* (P. Crouan & H. Crouan) Kimbr. & Korf, asexual morph unknown, cup-fungus, saprobes or plant pathogenic, widespread, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Corallicola Volkm.-Kohlm. & Kohlm. 1992, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *C. nana* Volkm.-Kohlm. & Kohlm., asexual morph unknown, saprobes, marine, Belize, see Lumbsch and Huhndorf (2010; outline), Kirk et al.

(2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), ex-type cultures are unavailable, holotype of type: J.K. 5004 = 01594700, NYBG.

Corallocytostroma Y.N. Yu & Z.Y. Zhang 1980, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *C. oryzae* Y.N. Yu & Z.Y. Zhang, coelomycetous, saprobes or plant pathogenic, widespread, sequence data available only for *C. ornithocopreoides*, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline).

Corallomycetella Henn. 1904 (= *Rhizostilbella* Wolk 1914 *fide* Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, type: *C. heinsenii* Henn., three species, asexual morph hyphomycetous, terrestrial, saprobes, associated with diseased plants, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Grafenhan et al. (2011; DNA, phylogeny), Herrera et al. (2013; new species, revision), Kirk et al. (2013; genus accepted), Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures and sequences are available.

Corallonectria C. Herrera & P. Chaverri 2013, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. jatrophae* (Möller) C. Herrera & P. Chaverri, asexual morph hyphomycetous, terrestrial, saprobes, associated with diseased plants, cosmopolitan, see Herrera et al. (2013; new species, revision), Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Cordana Preuss 1851, *Cordanaceae*, *Cordanales*, *Sordariomycetes*, eight species, type: *C. pauciseptata* Preuss, hyphomycetous, saprobes or plant pathogenic, widespread, sequence data available for all species, see Kirk (2013; genus accepted), Hernández-Restrepo et al. (2014, 2015; phylogeny), Zelski et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), ex-type strains of type: IMI 232041a; holotype of type: CBS H-21148.

Cordierites Mont. 1840, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *C. guianensis* Mont., asexual morph unknown, saprobes, worldwide, see Kirk (2013; genus accepted), Lumbsch and Huhndorf (2010; outline), Peterson and Pfister (2010; DNA, phylogeny), cultures and sequences are available.

Coremiella Bubák & Krieg. 1912, *Ascomycota* genera *incertae sedis*, one species, type: *C. cystopodoides* Bubák & Krieg., hyphomycetous, sexual morph unknown, saprobes, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence data available for unidentified species, needs generic revision.

Coreomyces Thaxt. 1903, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 21 species, type: *C. corisae* Thaxt., asexual morph unknown, biotrophic, worldwide, see Lee and Na (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Coreomycetopsis Thaxt. 1920, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *C. oedipus* Thaxt., asexual morph unknown, biotrophic (on termites), West Indies, USA, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Corethromyces Thaxt. 1892, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 82 species, type: *Corethromyces cryptobii* Thaxt., asexual morph unknown, biotrophic, West Indies, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Corethrostroma Kleb. 1933, *Ascomycota* genera *incertae sedis*, one species, type: *C. laricis* Kleb., coelomycetous, sexual morph unknown, saprobes, Europe, see Kirk et al. (2013; genus accepted), sequence data available for unidentified species, needs generic revision.

Cornicularia (Schreb.) Ach. 1794, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *C. tristis* (Weber ex F.H. Wigg.) Hoffm., lichenized, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Corniculariella P. Karst. 1884, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. abietis* P. Karst., coelomycetous, sexual morph unknown, saprobes, worldwide, see Oliveira et al. (2010; new species, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence data available for *Corniculariella brasiliensis* but type species lack sequences, needs generic revision.

Cornipulvina Huhndorf, A.N. Mill., F.A. Fernández & Lodge 2005, *Boloniaceae*, *Boliniales*, *Sordariomyces*, one species, type: *C. ellipsoides* Huhndorf, A.N. Mill., F.A. Fernández & Lodge, asexual morphs unknown, saprobes, terrestrial, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Cornucopiella Höhn. 1915, *Ascomycota* genera *incertae sedis*, two species, type: *C. mirabilis* Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cornuntum Velen. 1947, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *C. fagineum* Velen., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cornutispora Piroz. 1973, *Ascomycota* genera *incertae sedis*, five species, type: *C. limaciformis* Piroz., coelomycetous, sexual morph unknown, lichenicolous, worldwide, see Etayo (2010; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cornutostilbe Seifert 1990, *Ascomycota* genera *incertae sedis*, five species, type: *C. medusa* Seifert, hyphomycetous, sexual morph unknown, from soil, saprobes, Indonesia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BO 14356.

Cornuvesica C.D. Viljoen, M.J. Wingf. & K. Jacobs 2000, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomyces*, four species, type: *C. falcata* (E.F. Wright & Cain) C.D. Viljoen, M.J. Wingf. & K. Jacobs, hyphomycetous, asexual morph chalara-like, from soil, saprobes, Europe, N. America, South Africa, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Marincowitz et al. (2015; new species, morphology, phylogeny), sequences are available for all species.

Corollospora Werderm. 1922 (= *Varicosporina* Meyers & Kohlm.; = *Halosigmoidea* Nakagiri et al. 2009 *fide* Réblová et al. 2016), *Halosphaeriaceae*, *Microascales*, *Sordariomyces*, 25 species, type: *C. maritima* Werderm., saprobes, marine, worldwide, see Abdel-Wahab et al. (2009; new species, phylogeny), Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016, nomenclature), cultures and sequences are available.

Coronatomyces Dania García, Stchigel & Guarro 2004, *Sordariales*, genera *incertae sedis*, *Sordariomyces*, one species, type: *C. cubensis* Dania García, Stchigel & Guarro, asexual morph unknown, saprobes, terrestrial, Cuba, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type culture of type: IMI 385316, FMR 7132.

Coronellaria (P. Karst.) P. Karst. 1870, *Dermateaceae*, *Helotiales*, *Leotiomyces*, four species, type: *C. delitschiana* (Auersw.) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coronopapilla Kohlm. & Volkm.-Kohlm. 1990, *Zopfiaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *C. avellina* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Jones et al. (2009, 2015; classification), Suetrong et al. (2009; morphology), Alias et al. (2010; diversity), Besitulo et al. (2010; diversity), Lee et al. (2012; checklist, Malaysia), Zhang et al. (2012; morphology), Hyde et al. (2013; morphology, outline), Wijayawardene et al. (2014b; outline), holotype and ex-isotype strain of type: J.K. 5144a (IMS), J.K.5144b (IMS 330805).

Coronophora Fuckel 1864, *Coronophoraceae*, *Coronophorales*, *Sordariomycetes*, five species, type: *C. gregaria* Fuckel, asexual morph unknown, saprobes, terrestrial, Europe, see Mugambi and Huhndorf (2010; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline; phylogeny), available cultures of type: ANM1555 (*fide* Mugambi and Huhndorf 2010).

Coronophorella Höhn. 1909, *Scortechiniaceae*, *Coronophorales*, *Sordariomycetes*, one species, type: *C. chaetomioides* (Penz. & Sacc.) Höhn., asexual morph unknown, saprobes, Indonesia, see Kirk et al. (2008; treated as a synonym of *Nitschkia*), Mugambi and Huhndorf (2010; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), available cultures of type: GKM1099 (*fide* Mugambi and Huhndorf 2010).

Coronoplectrum Brusse 1987, *Lecanorales* genera *incertae sedis*, *Lecanoromycetes*, one species, type: *C. namibicum* Brusse, lichenized, see Thell et al. (2012; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Corticifraga D. Hawksw. & R. Sant. 1990, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, seven species, type: *C. peltigerae* (Fuckel) D. Hawksw. & R. Sant., lichenicolous, terrestrial, widespread, asexual morph unknown, see Zhurbenko (2007, 2009; new species, review), Etayo and Sancho (2008; new species), Spribille et al. (2010; new species), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; outline), cultures and sequences are unavailable, holotype of type: ?G and isotypes K(M)-IMI and S.

Corticiruptor Wedin & Hafellner 1998, *Lecanoromycetes* genera *incertae sedis*, two species, type: *C. abeloneae* (P.M. Jørg.) Wedin & Hafellner, asexual morphs unknown, lichenicolous, terrestrial, Europe, see Etayo and Sancho (2008; new species), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable.

Corticorygma M. Cáceres, Feuerstein, Aptroot & Lücking 2014, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *C. stellatum* M. Cáceres, Feuerst., Aptroot & Lücking, lichenized, see Cáceres et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Corylomyces Stchigel, M. Calduch & Guarro 2006, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, type: one species, *C. selenosporus* Stchigel, M. Calduch & Guarro, asexual morph unknown, saprobes, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2016; outline), holotype and ex-type culture of type: ILLS 57506, FMR 8279.

Corylophomyces R.K. Benj. 1994, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 82 species, type: *C. cryptobii* Thaxt., asexual morph unknown, biotrophic, West Indies, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Corynascella Arx & Hodges 1975, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, seven species, type: *C. humicola* Arx & Hodges, asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Brink et al. (2012; DNA), Maharachchikumbura et al. (2015, 2016; outline), sequence data available for *C. inaequalis* (CBS 331.75, CBS 284.82 *fide* Brink et al. 2012), type species lack cultures and sequence data.

Corynecercospora V.K. Pal, Akhtar, N. Ahmad, Kamal & D.K. Agarwal 2006, *Ascomycota* genera *incertae sedis*, one species, type: *C. teraiensis* V.K. Pal, Akhtar, N. Ahmad, Kamal &

D.K. Agarwal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, temperate regions, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Corynecystis Brusse 1985, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *C. capensis* Brusse, lichenized, South Africa, see Tehler and Wedin (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Corynelia Ach. 1823, *Coryneliaceae*, *Coryneliales*, *Eurotiomycetes*, nine species, type species: *C. uberata* Fr., asexual morph unknown, but spermogonia often produced, terrestrial, parasitic on members of the plant family *Podocarpaceae*, Africa, Central and South America, Japan, Oceania, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wood et al. (2016; phylogeny, new species, proposal of the subclass *Coryneliomycetidae*), epitype: PREM 61207.

Coryneliella Har. & P. Karst. 1890, *Ascomycota* genera *incertae sedis*, one species, type: *C. consimilis* Har. & P. Karst., asexual morph unknown, saprobes, terrestrial, Mauritius, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Coryneliopsis Butin 1972, *Coryneliaceae*, *Coryneliales*, *Eurotiomycetes*, two species, type species: *C. cupulifera* Butin, asexual morph unknown, terrestrial, always associated with members of *Cyttaria* Berk. which parasitize *Nothofagus* spp., Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wood et al. (2016; morphotaxonomy), cultures and sequences are unavailable, needs generic revision.

Coryneliospora Fitzp. 1942, *Coryneliaceae*, *Coryneliales*, *Eurotiomycetes*, two species, type: *C. fructicola* (Pat.) Fitzp., asexual morph unknown, but spermogonia often produced, terrestrial, parasitic on fruits of *Rapanea* Aubl. and *Myrsine* L., China, India, New Guinea, South Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wood et al. (2016; morphotaxonomy), cultures and sequences are unavailable, needs generic revision.

Corynespora Güssow 1906 (= *Corynesporasca* Sivan. 1996 *fide* Rossman et al. 2015), *Corynesporascaceae*, *Pleosporales*, *Dothideomycetes*, more than 130 species, type: *C. mazei* Güssow, sexual morph *Corynesporasca*, saprobes, widespread, see Lumbsch and Huhndorf (2009; outline, sexual morph), Zhang et al. (2009; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Rossman et al. (2015; nomenclature), sequences are available for two species, type sequence data are not available, needs generic revision.

Corynesporella Munjal & H. S. Gill 1961, *Ascomycota* genera *incertae sedis*, ten species, type: *C. urticae* Munjal & H.S. Gill, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Zhang et al. (2012a, b; new species), Ma et al. (2012; new species), Xia et al. (2014; new species; key to species), cultures and sequences are unavailable.

Corynesporina Subram. 2009, *Ascomycota* genera *incertae sedis*, one species, type: *C. elegans* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Singapore, see Gams et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of type: MUBL 3523, cultures and sequences are unavailable.

Corynesporopsis P. M. Kirk 1981, *Ascomycota* genera *incertae sedis*, 15 species, type: *C. quercicola* (Borowska) P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Castaneda et al. (2010; new species), Seifert et al. (2011; morphology), Ma et al. (2010, 2010; new species, China), Wijayawardene et al. (2012, 2017; outline), Hernández-Restrepo et al. (2014; new species), Xia et al. (2013; new species),

Kirschner (2015; new species), Xia et al. (2014; new species), cultures and sequences are available but lacks for the type species.

Coryneum Nees 1816 (= *Pseudovalsa* Ces. & De Not. 1863 *vide* Rossman et al. 2015), *Pseudovalsaceae*, *Diaporthales*, *Sordariomycetes*, c. 30 species, type: *C. umbonatum* Nees, sexual morph *Pseudovalsa*, pathogens, saprobes, terrestrial, temperate regions, see Wijayawardene et al. (2012, 2016, 2017; outline, morphology, new species), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures and sequences are unavailable.

Coscinocladium Kunze 1846, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, two species, type: *C. occidentale* Kunze, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Cosmariospora Sacc. 1880, *Ascomycota* genera *incertae sedis*, one species, type: *C. bizzozeriana* Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cosmospora Rabenh. 1862, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, c. 50 species, type: *C. coccinea* Rabenh., asexual morph acremonium-like, on fruiting bodies and stromata of other fungi or isolated from soil, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), lectotype of the generic type: BPI, designated by Rossman et al. (1999), cultures and sequences are available.

Costanettoa Bat. & J.L. Bezerra 1963, *Ascomycota* genera *incertae sedis*, one species, type: *C. caryotae* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Crandallia Ellis & Sacc. 1897, *Ascomycota* genera *incertae sedis*, four species, type: *C. juncicola* Ellis & Sacc., coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, ?worldwide, see Marinowitz et al. (2008; new species), Wijayawardene et al. (2012, 2017; outline), Rossman et al. (2016; new combinations for pathogens), cultures and sequences are unavailable, needs generic revision.

Craneomyces Morgan-Jones, R.C. Sinclair & Eicker 1987, *Ascomycota* genera *incertae sedis*, one species, type: *C. verrucosus* Morgan-Jones, R.C. Sinclair & Eicker, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Craspedodidymum Hol.-Jech. 1972, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, twelve species, type: *C. elatum* Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Ma et al. (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Mel'nik et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Crassiparies Matsumura, K. Hiray. & Kaz. Tanaka 2016, *Pleosporales incertae sedis*, *Dothideomycetes*, one species, type: *C. quadrisporus* Matsumura, K. Hiray. & Kaz. Tanaka, asexual morph unknown, saprobes, terrestrial, Japan, see Li et al. (2016; morphology, phylogeny), holotype and ex-type strain of the type: HHUF 30409, MAFF 245408.

Crassoascus Checa, Barrasa & A.T. Martínez 1993, *Clypeosphaeriaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *C. fusisporus* Checa, Barrasa & A.T. Martínez asexual morph unknown, saprobes, terrestrial, Argentina, Spain, see Lumbsch and Huhndorf (2010;

outline), Catania and Romero (2012; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: MA-Fungi 26331, cultures and sequences are unavailable, needs generic revision.

Crassochaeta Réblová 1999, *Chaetosphaerellaceae*, *Coronophorales*, *Sordariomycetes*, two species, type: *C. nigrita* (Sacc.) Réblová, asexual morph unknown, saprobes, terrestrial, Argentina, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype of the type: K37405, cultures and sequences are available, needs generic revision.

Cratiria Marbach 2000, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 20 species, type: *C. lauricassiae* (Fée) Marbach, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Crauatamyces Viégas 1944, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. eupatorii* Viégas, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Creodiplodina Petr. 1957, *Ascomycota* genera *incertae sedis*, one species, type: *C. fusispora* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Creographa A. Massal. 1860, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 30 species, type: *C. brasiliensis* A. Massal., lichenized, see Rivas Plata et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Creonecte Petr. 1949, *Ascomycota* genera *incertae sedis*, one species, type: *C. biparasitica* Petr., coelomycetous, sexual morph unknown, fungicolous (on *Uredo*), terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Creoseptoria Petr. 1937, *Ascomycota* genera *incertae sedis*, one species, type: *C. watzlii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Caucasus, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Creosphaeria Theiss. 1910, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *C. sassafras* (Schwein.) Y.M. Ju, F. San Martín & J.D. Rogers, asexual morph unknown, saprobes, terrestrial, Argentina, Spain, see Lumbsch and Huhndorf (2010; outline), Raja et al. (2011; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Sir et al. (2016; DNA), cultures and sequences are available.

Creothyriella Bat. & C.A.A. Costa 1957, *Ascomycota* genera *incertae sedis*, one species, type: *C. sideroxyfoliae* Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cresponea Egea & Torrente 1993, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, 21 species; type: *C. premnea* (Ach.) Egea & Torrente, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015, phylogeny), Lücking et al. (2016; classification, accepted as a genus in *Opegraphaceae*), sequences re available.

Cresporhaphis M.B. Aguirre 1991, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, two species, type: *C. wienkampii* (J. Lahm ex Hazsl.) M.B. Aguirre, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Harda (2014; new species; morphology), cultures and sequences are unavailable, needs generic revision.

Cribropeltis Tehon 1933, *Ascomycota* genera *incertae sedis*, one species, type: *C. citrullina* Tehon, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Criella (Sacc.) Henn. 1900, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *C. austrocaledonica* (Crié) Sacc. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Crinigera I. Schmidt 1985, *Ascomycota* genera *incertae sedis*, one species, type: *C. maritima* I. Schmidt, asexual morph unknown, marine, temperate, on wood, saprobes, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Crinitospora B. Sutton & Alcorn 1985, *Stilbosporaceae*, *Diaporthales*, *Sordariomyces*, one species, type: *C. pulchra* B. Sutton & Alcorn, coelomycetous, sexual morph unknown, saprobes, Australia, Thailand, see Kirk et al. (2013; genus accepted), Crous et al. (2014; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), epitype and ex-epitype culture of type: CBS H-21729, CBS 138014.

Criserosphaeria Speg. 1912, *Helotiales*, genera *incertae sedis*, *Leotiomyces*, one species, type: *C. phyllostictoides* Speg., asexual morph unknown, saprobes, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cristula Chenant. 1920, *Ascomycota* genera *incertae sedis*, one species, type: *C. integra* Chenant., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011) did not accept the genus, Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cristulariella Höhn. 1916 (= *Nervostroma* Narumi & Y. Harada 2006 *vide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, five species, type: *C. depraedans* (Cooke) Höhn., hyphomycetous, sexual morph *Nervostroma*, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, sexual morph), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Cho et al. (2016; DNA, pathogens), cultures and sequences are available.

Crocellina Tehler & Ertz 2014, *Roccellaceae*, *Arthoniales*, *Arthoniomyces*, one species, type: *C. cinerea* (Müll. Arg.) Tehler & Ertz, lichenized, see Ertz et al. (2014; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.

Crocicreas Fr. 1849, *Helotiaceae*, *Helotiales*, *Leotiomyces*, five species, type: *C. gramineum* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, widespread (esp. north temperate), see Lumbsch and Huhndorf (2010; outline), Whitton et al. (2012; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type species, needs generic revision.

Crocodia Link 1833, *Lobariaceae*, *Peltigerales*, *Lecanoromyces*, five species; type: *C. aurata* (Ach.) Link, lichenized, see Galloway and Elix (2013; taxonomy), Moncada et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Crocynia (Ach.) A.Massal. [nom.cons.] 1860, *Ramalinaceae*, *Lecanorales*, *Lecanoromyces*, three species, type: *L. gossypina* (Sw.) Ach., lichenized, tropical, see Ekman et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Crotone Theiss. & Syd. 1915, *Dothideomyces* genera *incertae sedis*, one species, type: *C. drimydis* (Lév.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Kirk et al.

(2013; genus accepted), Wijayawardene et al. (2014; outline, as *Dothideomycetes* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Crucellisporiopsis Nag Raj 1983, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, three species, type: *C. gelatinosa* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, Venezuela, New Zealand, Zambia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species, morphology, DNA), holotype of type: PDD 41405, sequence data available for *C. marquesiae* P.W. Crous (holotype CBS H-21977, culture ex-type CPC 22539 = CBS 138895 *fide* Crous et al. (2014)

Crucellisporium M.L. Farr 1968, *Helotiales* genera *incertae sedis*, *Leotiomyces*, three species, type: *C. selaginellae* M.L. Farr, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, Tanzania, see Marinowitz et al. (2010; new species, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequencea are available for *C. umtamvunae* Marinc. et al. (*fide* Marinowitz et al. 2010), needs generic revision.

Cruentotrema Rivas Plata, Papong, Lumbsch & Lücking 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *C. cruentatum* (Mont.) Rivas Plata, Lumbsch & Lücking, asexual morph unknown, lichenized, terrestrial, tropical, placement in *Graphidaceae* supported by molecular data, see Sipman et al. 2012 (key), Rivas Plata et al. (2012a; taxonomy), Lumbsch et al. (2014, 2016), Kalb et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Crumenella P. Karst. 1890, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. myricae* (P. Karst.) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequencea are unavailable, needs generic revision.

Crumenulopsis J.W. Groves 1969 (= *Digitosporium* Gremmen 1953 *fide* Johnston et al. 2014), *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. pinicola* (Rebent.) J.W. Groves, asexual morph *Digitosporium*, saprobes, terrestrial, Europe, North America, see Johnston et al. (2014; nomenclature) Chalkley (2015; morphology), Pärtel et al. (2016; DNA), Wijayawardene et al. (2016; morphology of *Digitosporium*).

Crustodiplodina Punith. 1988, *Ascomycota* genera *incertae sedis*, one species, type: *C. integra* Chenant., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Crustospathula Aptroot 1998, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *C. cartilaginea* Aptroot, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Crustospathula Aptroot 1998, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *C. cartilaginea* Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Crutarndina Parnmen, Lücking & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *C. petractoides* (P.M. Jørg. & Brodo) Parnmen, Lücking & Lumbsch, lichenized, see Parnmen et al. (2012; taxonomy), Lücking et al. (2016; classification), sequences are available.

Cryomyces Selbmann, de Hoog, Mazzaglia, Friedmann & Onofri 2005, MB500192. For diagnosis see *Studies in Mycology* 51: 19 (2005). *Dothideomycetes* genera *incertae sedis*, rock-inhabiting fungus; conidia acrogenous, produced by schyzolitic secession, teleomorph unknown, type species *C. antarcticus* Selbmann, de Hoog, Mazzaglia, Friedmann & Onofri, MB500193. For diagnosis see *Studies in Mycology* 51: 19 (2005). Holotype CBS 116301. From sandstone, Linnaeus Terrace, McMurdo Dry Valleys, Southern Victoria Land,

Antarctica; = CCFEE 534 (NCBI accession numbers: DQ028269 (ITS), DQ066713 (SSU)), taxonomic species delimitation supported by molecular data.

Additional species: *C. minteri* Selbmann, de Hoog, Mazzaglia, Friedmann & Onofri, MB500194. For diagnosis see Studies in Mycology 51: 21 (2005); *C. montanus* Isola & Zucconi, MB802901 and *C. funiculosus* Selbmann & de Hoog, MB802893, described from the Alps (Selbmann *et al.*, 2014). These last two taxa were invalidly published, since the holotypes are missing in the original publication [ICN (Melbourne) Art. 40]; the two species are here validated as follows:

Cryomyces montanus Isola & Zucconi *sp. nov.*, MB819850. For diagnosis see Fungal Diversity 65(1): 177 (2014). Holotype: CBS 135221. From rock, Val de la Mare, Passo dello Stelvio, Italy; =CCFEE 5476. Culture preserved in liquid nitrogen and in dried condition (NCBI accession numbers: KC315849 (ITS), GU250352 (SSU), GU250394 (LSU), GU250434 (mtSSU)), taxonomic species delimitation supported by molecular data.

Cryomyces funiculosus Selbmann & de Hoog *sp. nov.*, MB819849. For diagnosis see Fungal Diversity 65(1): 175 (2014). Holotype: CBS 134687. From rock, Colle delle Pisse, Monte Rosa, Italy; = CCFEE 5554. Culture preserved in liquid nitrogen and in dried condition (NCBI accession number: KC315848 (ITS)), taxonomic species delimitation supported by molecular data.

Cryphonectria (Sacc.) Sacc. & D. Sacc. 1905, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *N. parasitica* D. Sacc., asexual morphs coelomycetous, saprobes, terrestrial, worldwide, see Gryzenhout *et al.* (2009; new species, revision), Lumbsch and Huhndorf (2010; outline), Braganca *et al.* (2011; new species), Maharachchikumbura *et al.* (2015, 2016; taxonomy, phylogeny, outline), cultures and sequences are available.

Cryptandromyces Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 13 species, type: *C. geniculatus* Thaxt., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk *et al.* (2013; genus accepted), cultures and sequences are unavailable.

Cryptascoma Ananthap. 1988, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *C. bisetula* Ananthap., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura *et al.* (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Cryptendoxyla Malloch & Cain 1970, *Cephalothecaceae*, *Sordariomycetes*, families *incertae sedis*, one species, type: *C. hypophloia* Malloch & Cain, asexual morph hyphomycetous (chalara-like), from soil, on human as pathogen, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Lysková *et al.* (2014; DNA, human pathogen), Maharachchikumbura *et al.* (2015, 2016; outline, phylogeny), living cultures and sequence data available CBS 796.84, CBS 508.70, CBS 138.78.

Crypthonia Frisch & G. Thor 2010, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, c. 15 species, type: *C. polillensis* (Vain.) Frisch & G. Thor, lichenized, widespread tropical, see Frisch and Thor (2010; taxonomy), Menezes *et al.* (2013; taxonomy, key), Kirk *et al.* (2013; genus accepted), Frisch *et al.* (2014; systematics), Lücking *et al.* (2016; classification), sequences are available but lacks for the type.

Cryptoascus Petri 1909, *Sordariomycetes* genera *incertae sedis*, two species, type: *C. oligosporus* Petri, saprobes or pathogens, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura *et al.* (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cryptoceuthospora Petr. 1921, *Ascomycota* genera *incertae sedis*, two species, type: *C. moravica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene *et al.* (2012, 2017; outline), Kirk *et al.* (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptocline Petr. 1924, *Dermateaceae*, *Helotiales*, *Leotiomyces*, 15 species, type: *C. effusa* Petr., coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptocoryneopsis B. Sutton 1980, *Ascomycota* genera *incertae sedis*, one species, type: *C. umbraculiformis* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of the type: IMI 234264a.

Cryptocoryneum Fuckel 1870, *Pleosporales incertae sedis*, *Dothideomycetes*, 20 species, type: *C. fasciculatum* Fuckel, hyphomycetous, dictyosporium-like, sexual morph unknown, saprobes, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), da Silva et al. (2015; morphology), Hashimoto et al. (2016; morphology, phylogeny), holotype of the type: PRM 155688, type species lacks cultures, seven species have sequence data.

Cryptodictyon A. Massal. 1860, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, two species, type: *P. holleana* Mont. & Bosch, lichenized, see Lumbsch and Huhndorf (2010; outline), Schnull et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Cryptodiscus Corda 1838, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, nine species; type: *C. pallidus* (Pers.) Corda, lichenized, see Baloch et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Cryptohymenium Samuels & L.M. Kohn 1987, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *C. pycnidiophorum* Samuels & L.M. Kohn, asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptolechia A. Massal. 1853, *Gyalectaceae*, *Ostropales*, *Lecanoromycetes*, 13 species, type: *C. carneolutea* (Turner) A. Massal., with ascomata, lichenized (*Trentepohlia*), terrestrial (corticolous or rarely lignicolous), mainly tropical, rarely noted in the Northern Hemisphere see Mangold (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kalb et al. (2012; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016, classification), sequences are available of material determined to the genus level (*vide* Mangold 2008).

Cryptoleptosphaeria Petr. 1923, *Diaporthales* genera *incertae sedis*, one species, type: *C. moravica* Petr., asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cryptomeliola S. Hughes & Piroz. 1997, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, three species, type: *C. orbicularis* (Berk. & M.A. Curtis) S. Hughes & Piroz., asexual morph produced from the hyphae, saprobes, terrestrial, Cuba, Kenya, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hongsanant et al. (2015; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cryptometrion Gryzenh. & M.J. Wingf. 2010, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *C. aestuescens* Gryzenh. & M.J. Wingf., asexual morphs coelomycetous, pathogens, terrestrial, North Sumatra, Indonesia, see Gryzenhout et al. (2010; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; taxonomy, phylogeny, outline), holotype and culture ex-type of the type: CMW 22535.

Cryptomycella Höhn. 1925, *Ascomycota* genera *incertae sedis*, one species, type: *C. pteridis* (Kalchbr.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptomyces Grev. 1825, *Cryptomycetaceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *C. wauchii* Grev., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Cryptomycina Höhn. 1917, *Sordariomyces*, genera *incertae sedis*, one species, type: *C. pteridis* (Rebent.) Höhn., asexual morph ? *Cryptomycella*, saprobes, terrestrial, North Temperate, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cryptoniesslia Scheuer 1993, *Niessliaceae*, *Hypocreales*, *Sordariomyces*, one species, type: *C. setulosa* Scheuer, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cryptopezia Höhn. 1919, *Helotiales* genera *incertae sedis*, one species, type: *C. mirabilis* Höhn., asexual morph unknown, saprobes, terrestrial, Samoa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), living cultures or cultures and sequences are unavailable, needs generic revision.

Cryptophaea Van den Broeck & Ertz 2016, *Arthoniaceae*, *Arthoniales*, *Arthoniomyces*, one species, type: *C. phaeospora* Van den Broeck & Ertz, asexual morph unknown, lichenized, terrestrial, Democratic Republic of the Congo, see Van den Broeck and Ertz (2016; morphology, phylogeny), Lücking et al. (2016, classification), holotype and ex-type strain of type: Van den Broeck 5964 (BR).

Cryptophiale Piroz. 1968, *Ascomycota* genera *incertae sedis*, 18 species, type: *C. kakombensis* Piroz., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology, accepted as a genus in *Chaetosphaeriaceae*, *Chaetosphaeriales*), Whitton et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptophialoidea Kuthub. & Nawawi 1987, *Ascomycota* genera *incertae sedis*, three species, type: *C. secunda* (Kuthub. & B. Sutton) Kuthub. & Nawawi, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, Malaysia, see Delgado et al. (2012; new species, Cuba), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), living cultures or cultures and sequences are unavailable, needs generic revision.

Cryptosphaerella Sacc. 1882, *Scortechiniaceae*, *Coronophorales*, *Sordariomyces*, c. 15 species, type: *C. nitschkei* (Auersw.) Sacc., asexual morph unknown, saprobes, terrestrial, Cuba, Malaysia, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; DNA, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available (*vide* Mugambi and Huhndorf 2010).

Cryptosphaeria Ces. & De Not. 1863, *Diatrypaceae*, *Xylariales*, *Sordariomyces*, c. 13 species, type: *C. millepunctata* Grev., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Trouillas et al. (2015; new species, USA, DNA, Phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available (*vide* Trouillas et al. 2015).

Cryptosporella Sacc. 1877 (= *Disculina* Höhn. 1916 *vide* Rossman et al. 2015), *Diaporthales* genera *incertae sedis*, *Sordariomyces*, c. 26 species, type: *C. hypoderma* (Fr.) Sacc., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010;

outline), Mejia et al. (2008, 2011; new species, DNA, Phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available (*fide* Mejia et al. 2018, 2011).

Cryptosporium Kunze 1817, *Ascomycota* genera *incertae sedis*, 25 species, type: *C. atrum* Kunze, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptostroma P.H. Greg. & S. Waller 1952, *Ascomycota* genera *incertae sedis*, one species, type: *C. corticale* (Ellis & Everh.) P.H. Greg. & S. Waller, hyphomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptothecia Stirt. 1877 nom. cons., *Arthoniaceae*, *Arthoniales*, *Arthoniomyces*, c. 65 species, type: *C. subnidulans* Stirt., asexual morph unknown, lichenized, epiphytic and foliicolous, widespread, pantropical to subtropical, see Ertz et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Frisch et al. (2014; phylogeny: genus *Myriostigma* reinstated for the *Cryptothecia candida* group), Jagadeesh Ram and Sinha (2016; world key), Lücking et al. (2016; classification), sequences are available.

Cryptothele Th. Fr. 1866, *Lichinaceae*, *Lichinales*, *Lichinomyces*, six species, type: *C. permiscens* (Nyl.) Th. Fr., asexual morph unknown, lichenized, saxicolous, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Cryptovalsa Ces. & De Not. ex Fuckel 1870, *Diatrypaceae*, *Xylariales*, *Sordariomyces*, 24 species, type: *C. protracta* (Pers.) De Not., asexual morph coelomycetous, saprobes, pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline; as *Sordariomyces*, genera *incertae sedis*), Trouillas et al. (2010; pathogens), Senanayake et al. (2015; outline), Li et al. (2016; coelomycetous asexual morph), Maharachchikumbura et al. (2016; outline), cultures and sequences are available.

Cryptumbellata Udagawa & Uchiy. 1999, *Ascomycota* genera *incertae sedis*, one species, type: *C. terricola* Udagawa & Uchiy., hyphomycetous, sexual morph unknown, saprobes, terrestrial, China, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ctenomyces Eidam 1880, *Arthrodermataceae*, *Onygenales*, *Eurotiomyces*, one species, type: *C. serratus* Eidam, asexual morph hyphomycetous, saprobes, terrestrial, common on keratinous substrates, especially feathers, also occurring in soil and on dung, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Guarro et al. (2012; morphology), van den Brink et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), de Hoog et al. (in press; phylogeny, outline), ex-neotype strain of the type: = CBS 187.61, sequences are available from de Hoog et al. (in press).

Ctenosporium R. Kirschner 2006, *Ascomycota* genera *incertae sedis*, one species, type: *C. pectinatum* R. Kirschner, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Panama, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Cubasina R.F. Castañeda 1986, *Ascomycota* genera *incertae sedis*, two species, type: *C. albofusca* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: INIFAT C85/154, cultures and sequences are unavailable, needs generic revision.

Cucujomyces Speg. 1917, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 20 species, type: need typification, asexual morph unknown, biotrophic, worldwide, see Rossi and Weir (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Cucullosporella K.D. Hyde & E.B.G. Jones 1986, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *C. mangrovei* (K.D. Hyde & E.B.G. Jones) K.D. Hyde & E.B.G. Jones, asexual morph unknown, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), cultures and sequences are available.

Cucurbitaria Gray 1821, *Cucurbitariaceae*, *Pleosporales*, *Dothideomycetes*, type: *C. berberidis* (Pers.) Gray, asexual morph coelomycetous, with *Pyrenochaeta*-like asexual morph, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Doilom et al. (2013; taxonomy, typification), Hyde et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), ex-epityp type strains of type: CB1 = CBS 130007 = MFLUCC11-0384; Epitype of type: MFLU 12-0111.

Cucurbitopsis Bat. & Cif. 1957, *Sordariomycetes*, genera *incertae sedis*, one species, type: *C. ramulorum* Bat., Nascim. & Cif., asexual morph unknown, saprobes, pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable.

Cudonia Fr. 1849, *Cudoniaceae*, *Rhytismatales*, *Leotiomycetes*, nine species, type: *C. circinans* (Pers.) Fr., asexual morph unknown, saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (*fide* Wang et al. 2006), cultures available for type: AFTOL-ID 353 (*fide* Lutzoni et al. 2004).

Cudoniella Sacc. 1889, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, 31 species, type: *C. queletii* (Fr.) Sacc., asexual morph hyphomycetous (*Tricladium?*), saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hustad and Miller (2011; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available available, type lacks sequence data.

Cudoniopsis Speg. 1925, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *C. pusilla* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Culbersonia Essl. 2000, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, two species; type: *C. americana* Essl., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are unavailable.

Culicidospora R.H. Petersen 1960, *Ascomycota* genera *incertae sedis*, two species, type: *C. aquatica* R.H. Petersen, hyphomycetous, sexual morph unknown, saprobes, aquatic, Newfoundland, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Culicinomyces Couch, Romney & B. Rao 1974, *Ascomycota* genera *incertae sedis*, two species, type: *C. clavisporus* Couch, Romney & B. Rao, hyphomycetous, sexual morph unknown, on mosquitos, aquatic, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence data available for *Culicinomyces bisporalis* Sigler, Frances & C. Panter (*fide* Lee et al. 2001), type lacks sequence data.

Cumulozpora I. Schmidt 1985, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, one species, type: *C. marina* I. Schmidt, hyphomycetous, sexual morph unknown, saprobes, marine,

worldwide, see Abdel-Wahab et al. (2010; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cupulina Dougoud, Van Vooren & M. Vega 2015, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *C. montana* Dougoud, Van Vooren & M. Vega, asexual morph unknown, saprobes, terrestrial, Europe, see Dougoud et al. (2015; morphology, taxonomy), holotype and isotype of the type: G00262366 (herbarium Geneva), R. Dougoud RD32.43.544.13.

Cupulomyces R.K. Benj. 1992, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *C. lasiochili* (Thaxt.) R.K. Benj., asexual morph unknown, biotrophic, Grenada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Curreya Sacc. 1883 *Cucurbitariaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *C. conorum* (Fuckel) Sacc., asexual morph coelomycetous, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Doilom et al. (2013; accepted as a genus in *Cucurbitariaceae*), Hyde et al. (2013; accepted as a genus in *Cucurbitariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), ex-holotype type strains of type: S F8461.

Curucispora Matsush. 1981, *Ascomycota genera incertae sedis*, three species, type: *C. ponapensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Curvatispora V.V. Sarma & K.D. Hyde 2001, *Sordariomycetes*, *genera incertae sedis*, one species, type: *C. singaporensis* V.V. Sarma & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Singapore, see Sarma and Hyde (2001; morphology), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Curviyadiella Decock & Crous 2006, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. cignea* (Decock & Crous) Decock & Crous, asexual morph hyphomycetous, saprobes, terrestrial, French Guiana, see Crous et al. (2006; morphology, DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline), Lombard et al. (2015; taxonomy, DNA, phylogeny), Maharachchikumbura et al. (2016; outline), holotype and ex-type cultures of the type: MUCL 40269, CPC 1595 = CBS 109167.

Curvularia Boedijn 1933 (= *Pseudocochliobolus* Tsuda, Ueyama & Nishih. 1978 *vide* Wijayawardene et al. 2014; Rossman et al. 2015), *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, more than 100 species, type: *C. lunata* (Wakker) Boedijn, asexual morph hyphomycetous, pathogenic or saprobes on plant or humans, terrestrial, worldwide, see Seifert et al. (2011; morphology), Manamgoda et al. (2012, 2014; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Ariyawansa et al. (2015; taxonomy, phylogeny), Rossman et al. (2015; nomenclature), sequence data available for more than 50 species, ex-neotype strains of type: CBS 730.96.

Curvulariopsis M.B. Ellis 1961, *Ascomycota genera incertae sedis*, one species, type: *C. cymbisperma* (Pat.) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, Ecuador, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cuspidatispora Shearer & Bartolata 2006, *Sordariales genera incertae sedis*, *Sordariomycetes*, one species, type: *C. xiphiago* Shearer & Bartolata, asexual morph unknown, saprobes, aquatic, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: ILL, Shearer A184-1, cultures and sequences are available.

Custingophora Stolk, Hennebert & Klopotek 1968, *Gondwanamycetaceae*, *Microascales*, *Sordariomycetes*, eight species, type: *C. olivacea* Stolk, Hennebert & Klopotek, sexual morph unknown, saprobes, terrestrial, worldwide, see Kolarik and Hulcr (2009; new species), Nagaraju et al. (2011; new species), Crous et al. (2013; new species, DNA), Dubey and Moonambeth (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type: CBS 335.68 (fide Jacobs et al. 2005).

Cyanoannulus Raja, J. Campb. & Shearer 2003, *Annulatascales*, *Annulatascales*, *Sordariomycetes*, one species, type: *C. petersenii* Raja, J. Campb. & Shearer, see Cai et al. (2014; phylogeny), Boonyuen et al. (2012; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: R044-1, ILL 86218, cultures and sequences are available.

Cyanochyta Höhn. 1915, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. cyanogena* (Speg.) Höhn, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cyanodiscus E. Müll. & M.L. Farr 1971, *Saccardiaceae*, *Pezizomycotina*, families *incertae sedis*, two species, type: *C. occidentalis* E. Müll. & M.L. Farr, asexual morph unknown, saprobes, terrestrial, sub tropical regions, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cyanonectria Samuels & P. Chaverri 2009, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *C. cyanostoma* (Sacc. & Flageolet) Samuels & P. Chaverri, asexual morph hyphomycetous, saprobes, terrestrial, French Guiana, see Samuels et al. (2009; morphology), Schroers et al. (2011; DNA, phylogeny), Lombard et al. (2015; taxonomy, DNA, phylogeny), Maharachchikumbura et al. (2016; outline), cultures and sequences are available.

Cyanopatella Petr. 1949, *Ascomycota* genera *incertae sedis*, one species, type: *C. iranica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Iran, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cyanophomella Höhn. 1918, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. acervalis* (Sacc.) Höhn, asexual morph coelomycetous, saprobes, Rhenogovia, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cyanoporina Groenh. 1951, *Pezizomycotina* genera *incertae sedis*, one species, type: *C. granulosa* Groenh., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as in *Pyrenotrichaceae*), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences unavailable, needs a revision.

Cyanopulvis J. Fröhl. & K.D. Hyde 2000, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *C. australiensis* J. Fröhl. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences unavailable, needs a revision.

Cyanopyrenia H. Harada 1995, *Ascomycota* genera *incertae sedis*, one species, type: *C. japonica* H. Harada, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: HIRO, Harada 3444, cultures and sequences unavailable, needs a revision.

Cyathicula De Not. 1864, *Helotiaceae*, *Helotiales*, *Leotiomyces*, c. 30 species, type: *C. coronata* (Bull.) De Not., asexual morph *Glarea* (Jaklitsch et al. 2016), saprobes on leaves, culms, herbaceous stems and wood, widespread, Kirk et al. (2013; did not accept), accepted in Jaklitsch et al. (2016), cultures and sequences are unavailable for the type.

Cyberlindnera Minter 2009, *Phaffomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, 30 species, type: *C. americana* (Wickerham) Minter, asexual reproduction is by multilateral budding and formation of pseudohyphae and true hyphae, saprophytic, one species is an opportunistic human and animal pathogen, see Minter (2009; taxonomy), cultures and sequences are available.

Cyclaneusma DiCosmo, Peredo & Minter 1983, *Leotiomyces* genera *incertae sedis*, two species, type: *C. minus* (Butin) DiCosmo, Peredo & Minter, asexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), cultures and sequences are available.

Cyclodomus Höhn. 1909, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, three species, type: *C. umbellulariae* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cyclomarsonina Petr. 1965, *Ascomycota* genera *incertae sedis*, one species, type: *C. cedrelae* (T.S. Ramakr. & K. Ramakr.) Petr., sexual morph unknown, saprobes, terrestrial, India, see coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cyclopeltella Petr. 1953, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *C. orbicularis* Petr., saprobes, terrestrial, Phillipines, see Petrak (1953; morphology), Wijayawardene et al. (2012, 2014; outline, reduced under *Cyclopeltis*), Hyde et al. (2013; accepted as *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Rossmann et al. (2015; nomenclature), cultures and sequences are unavailable, needs generic revision.

Cycloshizon Henn. 1902, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, c. 13 species, type: *C. brachylaenae* (Rehm) Henn., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), placement in *Parmulariaceae* supported by morphology, cultures and sequences are unavailable.

Cyclostomella Pat. 1896, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, four species, type: *C. disciformis* Pat., epiphytes, terrestrial, worldwide, no molecular data, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Cyclothea Theiss. 1914 nom. cons. prop., *Dothideomycetes*, genera *incertae sedis*, nine species, type: *C. miconiae* (P. Syd.) Theiss., asexual morph unknown, saprobes, worldwide, Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; nomenclature), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Cyclothyrium Petr. 1923, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *C. ulmigenum* (Berk.) Petr., coelomycetous, ?sexual morph thyridaria-like (see Sutton (1977, 1980; morphology; sexual morph of *Cyclothyrium juglandis* as *Thyridaria rubronotata* (Berk. & Br.) Sacc.), saprobes, terrestrial, worldwide, see Damm et al. (2008; phylogeny), de Gruyter et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, morphology, phylogeny), cultures and sequences are available.

Cylindrocarpotylus R. Kirschner & Oberw. 1999, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. gregarius* (Bres.) R. Kirschner & Oberw., hyphomycetous, sexual morph unknown, in bark beetle galleries, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cylindrocladiella Boesew. 1982 (= *Nectricladiella* Crous & C. L. Schoch 2000 *vide* Maharachchikumbura et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, eight species, type: *C. parva* (P.J. Anderson) Boesew., soil-borne fungi, pathogenic and/or saprobes of various plant hosts and substrates, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2012, 2015), Maharachchikumbura et al. (2015, 2016; outline), ex-epitype of type: CBS 114524 = ATCC 28272 = CPC 2370; holotype: of the type: ATCC 28272.

Cylindrodendrum Bonord. 1851, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, three species, type *C. album* Bonord., sexual morph unknown, saprobes, pathogenic or isolated from soil, marine, fresh-water and terrestrial, worldwide, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2012, 2015), Maharachchikumbura et al. (2015, 2016; outline), ex-epitype of the type: CBS 301.83 = ATCC 46842 = IMI 255534; isotype specimens CBS H-3483A = CBS H-3483B = CBS H-3483C.

Cylindrogloeum Petr. 1941, *Ascomycota* genera *incertae sedis*, one species, type: *C. arcticum* Petr., coelomycetous, sexual morph unknown, saprobes, Lapland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cylindromyces Manohar., D.K. Agarwal & N.K. Rao 2004, *Ascomycota* genera *incertae sedis*, one species, type: *C. striatus* Manohar., D.K. Agarwal & N.K. Rao, hyphomycetous, sexual morph unknown, saprobes, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cylindrophoma (Berl. & Voglino) Höhn. 1978, *Ascomycota* genera *incertae sedis*, one species, type: *C. smilacina* (Desm.) Höhn., coelomycetous, sexual morph unknown, saprobes, Italy, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cylindroseptoria Quaedvl., Verkley & Crous 2013, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, two species, type: *C. ceratoniae* Quaedvlieg, Verkley & Crous, saprobes, terrestrial, Spain, see Quaedvlieg et al. (2013; morphology, DAN, phylogeny), Wijayawardene et al. (2014; outline, phylogeny), holotype and ex-type strains of the type: CBS H-21301, CBS 471.69.

Cylindrosporella Höhn. 1916, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, three species, type: *C. carpini* (Lib.) Höhn., saprobes, terrestrial, Spain, see Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision. cultures and cultures and sequences are unavailable.

Cylindrosympioides Crous & M.J. Wingf. 2016, *Venturiales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *C. brabejum* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22594, CPC 25934.

Cylindrosympodium (de Hoog) W.B. Kendr. & R.F. Castañeda 1990, *Ascomycota* genera *incertae sedis*, twelve species, type: *C. variabile* (de Hoog) W.B. Kendr. & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Netherlands, see Seifert et al. (2011; morphology), Castaneda-Ruiz et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: CBS-H 1634, sequence data, available, compare with *Mirandina*, *Parasympodiella*, *Solosympodiella* and *Subulispora*.

Cylindrothyrium Maire 1907, *Ascomycota* genera *incertae sedis*, one species, type: *C. subericola* Maire, coelomycetous, sexual morph unknown, saprobes, France, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cylindrotrichum Bonord. 1851 (= *Reticulascus* Réblová & W. gams 2011 *vide* Maharachchikumbura et al. 2016; Réblová et al. 2016), 14 species, type: *C. oligospermum* (Corda) Bonord., hyphomycetous, sexual morph *Reticulascus*, Europe, see Réblová et al. (2011, 2016; sexual morph, DNA, morphology, phylogeny, nomenclature), Seifert et al. (2011; morphology), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), cultures available for type: CBS 561.77, CBS 570.76, CBS 557.74.

Cylindroxylum Bat. & Cif. 1963, *Ascomycota* genera *incertae sedis*, one species, type: *C. virginianum* Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cymostachys L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *C. fabispora* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22433, CBS 136180.

Cyniclomyces van der Walt & D.B. Scott 1971, *Saccharomycetaceae*, *Saccharomycetales*, pe *Saccharomycetes*, one species, type: *C. guttulatus* (C.P. Robin) van der Walt & D.B. Scott, asexual reproduction is by multilateral budding, saprophyte, stomach and intestines of rabbits and certain other herbivores, worldwide, see Lumbsch and Huhndorf (2010; outline), Kurtzman and Robnett (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available.

Cyphelium Ach. 1815, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, seven species, type: *C. tigillare* (Ach.) Ach., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), vPrieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; taxonomy), sequences are available.

Cyphellophora G.A. de Vries 1962, *Cyphellophoraceae*, *Chaetothyriales*, *Eurotiomycetes*, 25 species, type: *C. laciniata* G.A. de Vries, hyphomycetous, sexual morph unknown, saprobes, terrestrial, southern USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Réblová et al. (2013; new species), Feng et al. (2014; new species), Gao et al. (2015; new species), Crous et al. (2016; new species), Madrid et al. (2016; new species), cultures and sequences are available.

Cyphellophoriella Crous & A.J. Sm. 2015, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *C. pruni* Crous & A.J. Sm., hyphomycetous, saprobes, USA, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22255, CPC 25120.

Cyrtidium Vain. 1921, *Ascomycota* genera *incertae sedis*, one species, type: *C. naevium* Vain., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline; accepted as *Dothideomycetes* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014) excluded from *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.

Cyrtidula Minks 1876, *Ascomycota* genera *incertae sedis*, one species, type: no typification data, asexual morph unknown, saprobes, Italy, see Lumbsch and Huhndorf (2010; outline; accepted as *Dothideomycetes* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014) excluded from *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.

Cyrtopsis Vain. 1921, *Ascomycota* genera *incertae sedis*, one species, type: *C. fumosa* Vain., asexual morph unknown, saprobes, Italy, see Lumbsch and Huhndorf (2010; outline;

accepted as *Dothideomycetes* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014) excluded from *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.

Cystocoleus A. Massal. 1849, *Cystocoleaceae*, *Capnodiales*, *Dothideomycetes*, one species; type: *C. ebeneus* (Dillwyn) Thwaites, lichenized, lichenicolous, terrestrial, see Muggia et al. (2008; taxonomy), Nelsen et al. (2009; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tian et al. (2014; morphology; nomenclature), Lücking et al. (2016; classification), sequences are available.

Cystodendron Bubák 1914, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *C. dryophilum* (Pass.) Bubák, hyphomycetous, sexual morph unknown, saprobes, Europe, see Grunig et al. (2009; DNA), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Selçuk et al. (2014; Turkey), cultures and sequences are available for unidentified species, needs generic revision.

Cystodium Fée 1837, *Ascomycota* genera *incertae sedis*, one species, type: need typification, asexual morph unknown, saprobes, Italy, see Lumbsch and Huhndorf (2010; outline; accepted as *Dothideomycetes* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014) excluded from *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.

Cystotheca Berk. & M.A. Curtis 1860 (\equiv *Sphaerotheca* sect. *Cystotheca* = *Lanomyces* = *Sphaerotheca* auct. p.p. *vide* Braun and Cook 2012), *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, nine species, type: *C. wrightii* Berk. & M.A. Curtis, sexual and hyphomycetous asexual morphs, biotrophic, obligate plant pathogens, terrestrial, Asia and North America, asexual morph: *Setoidium* (R.T.A. Cook, A.J. Inman & C. Billings) R.T.A. Cook & U. Braun, see Cook et al. (1997; morphology, scanning electron microscopy), Saenz & Taylor (1999; phylogeny), Hirata et al. (2000; phylogeny), Mori et al. (2000; phylogeny), To-anun et al. (2005; phylogeny), Braun and Cook (2012; taxonomy), Meeboon et al. (2012; new species, phylogeny), sequences of non-type material of the type species are available from Mori et al (2000) and To-anun et al. (2005), lectotype of *C. wrightii*: Japan, Ryukyu Island (Loo-Choo Islands), on *Quercus* cf. *stenophylla*, C. Wright coll., Herb. Of U.S. Pacific Expl. Exped. (K(M) 168934), sequences of non-type material of the type species are available from Mori et al (2000) and To-anun et al. (2005).

Notes: *Setoidium* was originally described as *Oidium* subgen. *Setoidium* R.T.A. Cook, A.J. Inman & C. Billings, typified by *Oidium japonicum* Syd. (Cook et al. 1997), this subgenus was subsequently raised to genus status by Braun and Cook (2012), but no binomial in *Setoidium* was given to the type species. *Oidium japonicum* is the asexual morph of *C. wrightii* (Braun and Cook 2012) and under unitary nomenclature, the genus *Setoidium* should be considered as synonym of *Cystotheca*. In addition, two names in *Setoidium* which lack a *Cystotheca* sexual state are known. The generic affinity of *S. castanopsidis* Meeboon & S. Takam. has been proven by means of molecular sequence data, justifying the reallocation of this species to *Cystotheca*. However, the combination *S. murrayae* (Hosag., U. Braun & Rabindran) U. Braun & R.T.A. Cook was only based on morphological similarity and has not yet been confirmed by sequence data, precluding a reallocation to *Cystotheca* in the current state. The respective synonymy and a new combination are introduced as follows:

***Cystotheca wrightii* Berk. & M.A. Curtis, Proc. Amer. Acad. Arts 4:130. 1860**

= *Oidium japonicum* Syd., Mém. Herb. Boissier 4:6. 1900.

***Cystotheca castanopsidis* (Meeboon & S. Takam.) Meeboon & S. Takam., comb.**

nov.

IndexFungorum: XXXXX

Basionym: *Setoidium castanopsidis* Meeboon & S. Takam., Mycoscience 54:275.

2012.

Cystotricha Berk. & Broome 1850, *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, type: *C. striola* Berk. & Broome, coelomycetous, sexual morph unknown, saprobes, British Isles, see Wu et al. (1998), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Cystotrichiopsis Abbas, B. Sutton & Ghaffar 2001, *Ascomycota* genera *incertae sedis*, coelomycetous, sexual morph unknown, one species, type: *C. salvadorae* Abbas, Sutton & Ghaffar, saprobes, terrestrial, Pakistan, see Abbas et al. (2001; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: UCMH 759 (IMI 322594), cultures and sequences are unavailable, genus need revision.

Cytodiscula Petr. 1931, *Ascomycota* genera *incertae sedis*, one species, type: *C. carnea* Petr., coelomycetous, sexual morph unknown, saprobes, Madeira, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytogloeum Petr. 1925, *Ascomycota* genera *incertae sedis*, one species, type: *C. tiliae* Petr., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytomelanconis Naumov 1951, *Melanconidaceae*, *Diaporthales*, *Sordariomyces*, one species, type: *C. systema-solare* Naumov, asexual morph coelomycetous, saprobes, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cytonaema Höhn. 1914, *Ascomycota* genera *incertae sedis*, two species, type: *C. spinella* (Kalchbr.) Höhn., coelomycetous, asexual morph unknown, saprobes, Austria, South Africa, see Marincowitz et al. (2008; morphology, new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytoplacosphaeria Petr. 1920, *Ascomycota* genera *incertae sedis*, two species, type: *C. rimosa* Petr., coelomycetous, asexual morph unknown, saprobes, Europe, Hong Kong, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytoplea Bizz. & Sacc. 1885, *Roussoellaceae*, *Pleosporales* family *incertae sedis*, *Dothideomyces*, five species, type: *C. arundinacea* (Sacc.) Petr. & Syd., coelomycetous, asexual morph roussoella-like, saprobes, Europe, Hong Kong, see, Wijayawardene et al. (2012, 2014, 2016; outline, morphology, nomenclature), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Cytophaera Died. 1916, *Ascomycota* genera *incertae sedis*, two species, type: *C. mangiferae* Died., coelomycetous, asexual morph unknown, saprobes, Asia, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytophora Ehrenb. 1818 (= *Valsa* Fr. 1825; = *Valsella* Fuckel 1870; = *Leucostoma* (Nitschke) Höhn. 1917; = *Valseutypella* Höhn. 1919; = *Leucocytophora* (Höhn.) Höhn. 1927 *fide* Rossman et al. 2015), *Valsaceae*, *Diaporthales*, *Sordariomyces*, c. 120 species, type: *C. chrysosperma* (Pers.) Fr., coelomycetous, sexual morph *Valsa*, saprobes, pathogens, worldwide, see Fotouhifar et al. (2010; phylogeny), Fan et al. (2015; morphology, pathogens, China), Liu et al. (2015; new species), Rossman et al. (2015; nomenclature), Yang et al. (2015; pathogens, China), Crous et al. (2016; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Cytosporella Sacc. 1884, *Ascomycota* genera *incertae sedis*, 32 species, type: *C. sycina* (Sacc.) Sacc., coelomycetous, sexual morph unknown, saprobes, temperate regions, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytostagonospora Bubák 1916, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *C. photiniicola* Bubák, coelomycetous, sexual morph unknown, saprobes, temperate regions, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2013; DNA, phylogeny), cultures and sequences are available for *Cytostagonospora martiniana* (CBS 135102), type lacks sequence data, needs generic revision.

Cyttaria Berk. 1842, *Cyttariaceae*, *Cyttariales*, *Leotiomyces*, type: *C. darwinii* Berk., asexual morph unknown, saprobes, south temperate regions, see Lumbsch and Huhndorf (2010; outline), Peterson and Pfister (2010; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Cyttariella skottsbergii Palm, *Ascomycota* genera *incertae sedis*, one species, type: *C. skottsbergii* Palm., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, cultures and sequences are unavailable, needs generic revision.

Dacampia A. Massal. 1853, *Dacampiaceae*, *Dothideomycetes*, families *incertae sedis*, 14 species, type: *D. hookeri* (Borrer) A. Massal., lichenicolous, or saprobes, terrestrial, Europe, see Halici et al. (2008, 2009; new species), Brackel (2010; new species), Zhurbenko (2012; new species), Hyde et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), Ertz et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, available cultures for type: Hafellner 81840 (GZU), Hafellner 75980 (GZU), Hafellner 74269 (GZU), Hafellner 73897 (GZU) (*vide* Ertz et al. 2015),

Dacryoma Samuels 1988, *Nectriaceae*, *Hypocreales*, *Sordariomyces*, two species, type *D. album* Samuels, sexual morph unknown, saprobes on palms, terrestrial, Indonesia Peru, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), holotype of the type: BO, isotype NY.

Dactylaria Sacc. 1880, *Helotiales* genera *incertae sedis*, *Leotiomyces*, c. 100 species recorded in *indexfungorum*, type: *D. purpurella*, hyphomycetous, saprobes, pathogens, parasites, terrestrial and aquatic, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Magalhães et al. (2014), Crous et al. (2016; new species, phylogeny), few sequence available for this genus but not available for the type, sexual morph hypomyces-like reported for *D. mycophila*, needs generic revision.

Dactylella Grove 1884, *Orbiliaceae*, *Orbiliales*, *Orbiliomyces*, type: *D. minuta* Grove, c. 70 species, hyphomycetous, ?sexual morph *Orbilina*, saprobes, terrestrial, worldwide, see Yu and Zhang (2009; new species), Zhang et al. (2010; new species), Qin et al. (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Dactylifera Alcorn 1927, *Ascomycota* genera *incertae sedis*, one species, type: *D. australiensis* Alcorn, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dactylina Nyl. 1860, *Parmeliaceae*, *Lecanorales*, *Lecanoromyces*, two species, type: *D. arctica* (Richardson) Nyl., asexual reproduction by small lateral lobules and sexual by apothecia (rarely developed), lichenized, terricolous, circumpolar, arctic-alpine Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures available for the type: AFTOL 225 (*vide* Miadlikowska et al. 2006).

Dactylospora Körb. 1855, *Dactylosporaceae*, *Eurotiomyces* *incertae sedis*, c. 50 species, type: *D. floerkei* Körb., asexual morph unknown, on lichens, hepatics or saprobes, terrestrial

or marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Diederich et al. (2013), Pang et al. (2014), sequence data available for for species, ex-type cultures and holotype unavailable.

Dactylosporium Harz 1871, *Ascomycota* genera *incertae sedis*, two species, type: *D. macropus* (Corda) Harz, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Daldinia Ces. & De Not. 1863 (= *Annellosporium* M.L. Davey 2010; = *Versiomyces* Whalley & Watling 1989 *fide* Réblová et al. 2016), *Xylariaceae*, *Xylariales*, *Sordariomycetes*, c. 40 species, type: *D. concentrica* (Bolton) Ces. & De Not., asexual morph hyphomycetous, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Sri-Indrasudhi et al. (2010; new species), Kirk et al. (2013; genus accepted), Stadler et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; nomenclature), Kuhnert et al. (2017; new species, revision), cultures and sequences are available.

Dangeardiella Sacc. & P. Syd. 1899, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *D. macrospora* (J. Schröt.) Sacc. & P. Syd., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; transferred to *Pleosporales*, genera *incertae sedis*), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Danielozyma Kurtzman & Robnett 2014, *Metschnikowiaceae*, *Saccharomycetales*, *Saccharomycetes*, two species, type: *D. ontarioensis* (Kurtzman & Robnett) Kurtzman & Robnett, asexual reproduction by multilateral budding and from formation of pseudohyphae and true hyphae, saprophyte, in insect frass from various tree species, see Kurtzman and Robnett (2014; taxonomy), cultures and sequences are available.

Darkera H.S. Whitney, J. Reid & Piroz. 1975, *Phacidiaceae*, *Phacidiales*, *Leotiomycetes*, five species, type: *D. parca* H.S. Whitney, J. Reid & Piroz., asexual morph coelomycetous, pathogens, terrestrial, Europe, Cuba, see Kirk et al. (2013; genus accepted), Crous et al. (2015; revision, morphology, DNA, phylogeny), cultures and sequences are available.

Dasyscyphella Tranzschel 1898, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *D. cassandrae* Tranzschel, asexual morph unknown, saprobes, terrestrial, Asia, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Dasysphaeria Speg. 1912, *Sordariomycetes*, genera *incertae sedis*, one species, type: *D. andicola* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable, needs generic revision.

Dasysticta Speg. 1912, *Ascomycota* genera *incertae sedis*, two species, type: *D. sapindophila* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Davidgallowaya Aptroot 2007, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetidae*, one species, type: *D. cornutispora* Aptroot, asexual morph, unknown, terrestrial, New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Arne et al. (2012; review, phylogeny, taxonomy), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Davidsoniella Z.W. de Beer, T.A. Duong & M.J. Wingf. 2014, *Ceratocystidaceae*, *Microascales*, *Sordariomycetes*, one species, type: *D. virescens* (R.W. Davidson) Z.W. de Beer, T.A. Duong & M.J. Wingf., asexual morph hyphomycetous, endophyte, terrestrial,

Thailand, have sequence data, see de Beer et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Davisiella Petr. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *D. elymina* (Davis) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Davisomycella Darker 1967, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, ten species, type: *D. ampla* (Davis) Darker, asexual morph unknown, saprobes, endophytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequence available for *Davisomycella medusa* BPI842078 (*fide* Ganley et al. 2004).

Davisoniella H.J. Swart 1988, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomyces*, one species, type: *D. eucalypti* H.J. Swart, coelomycetous, sexual morph teratosphaeria-like, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2014, 2017), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dawsicola Döbbeler 1981, *Helotiales* genera *incertae sedis*, one species, type: *D. neglecta* Döbbeler, asexual morph unknown, saprobes, endophytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dawsomyces Döbbeler 1981, *Dothideomyces* genera *incertae sedis*, two species, type: *D. mirabilis* Döbbeler, asexual morph unknown, saprobes, endophytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Dawsophila Döbbeler 1981, *Dothideomyces* genera *incertae sedis*, two species, type: *D. pygmaea* Döbbeler, asexual morph unknown, saprobes, endophytes, terrestrial, New Guinea, New Zealand, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Deakozyma Kurtzman & Robnett 2014, *Trichomonascaceae*, *Saccharomycetales*, *Saccharomyces*, one species, type: *D. indianensis* Kurtzman & Robnett, asexual reproduction by multilateral budding and from formation of pseudohyphae and true hyphae, saprophyte, rotting wood, insect eggs, Indiana, Michigan, USA, see Kurtzman and Robnett (2014; taxonomy), cultures and sequences are unavailable.

Dearnessia Bubák 1916, *Ascomycota* genera *incertae sedis*, one species, type: *D. apocyni* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Canada, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Debaryomyces Lodder & Kreger-van Rij 1952, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomyces*, 15 species, type: *D. indianensis* Kurtzman & Robnett, asexual reproduction by multilateral budding and some species may also form poorly developed pseudohyphae, saprophytic, but several of the species are opportunistic pathogens of humans, soil, sea and fresh water, high osmotic foods such as cheese and sausages, bees, tree exudates, spoiled sake, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Decaisnella Fabre, 1878, *Pleosporales* genera *incertae sedis*, *Dothideomyces*, 13 species, type: *D. spectabilis* Fabre, asexual morph unknown, terrestrial and marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomyces* genera *incertae sedis*), sequences are available only one species, need recollection to verify generic placement.

Decorospora Inderb., Kohlm. & Volkm.-Kohlm. 2002, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *D. gaudefroyi* (Pat.) Inderb., Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pleosporaceae*), Wijayawardene et al. (2014; outline), Jones et al. (2015; outline), cultures and sequences are available.

Degelia Arv. & D.J. Galloway 1981, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, 22 species, type: *D. gayana* (Mont.) Arv. & D.J. Galloway, most species produce asci in apothecia, two produce vegetative propagules (soredia), lichenized, epiphytic or on mossy rocks, Southern hemisphere, in humid regions, see Wedin et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Spribille & Muggia (2013; phylogeny), Ekman et al. (2014; phylogeny, *Degelia* is heterogeneous and excluded the section *Amphiloma* as the genus *Pectenia*), Lücking et al. (2016; classification), need generic revision.

Degeliella P. M. Jørg 2004, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *D. rosulata* (P.M. Jørg. & D.J. Galloway) P.M. Jørg., asexual morph unknown, lichenized, epiphytic or on mossy rocks, Gondwana distribution, Australia (Tasmania), southernmost South America, See Lumbsch and Huhndorf (2010; outline), Ekman et al. (2014; phylogeny, non-monophyly of the genus), Jørgensen and Andersen (2015; showed that the name *Degeliella* was superfluous and that *Psoromaria* (type: *P. versicolor*) should be taken up for the genus, which is still likely to be non-monophyletic), Lücking et al. (2016; classification), sequence available for voucher Galloway 840b (BG) of the type (unpublished).

Deichmannia Alstrup & D. Hawksw. 1990, *Ascomycota genera incertae sedis*, one species, type: *M. caespitosa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Deightoniella S. Hughes 1952, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, 20 species, type: *D. africana* S. Hughes, hyphomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Klaubauf et al. (2014; phylogeny), Maharachchikumbura et al. (2016; outline), Zhang et al. (2016; nomenclature), cultures and sequences are available for *Deightoniella roumeguerei* (CBS 128780), needs generic revision.

Dekkera Van der Walt 1964, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, five species, type: *D. bruxellensis* Van der Walt, saprophytic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Delastria Tul. & C. Tul. 1843, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *D. rosea* Tul. & C. Tul., asexual morph unknown, hypogeous, Europe (southern), Northern America, see Lumbsch and Huhndorf (2010; outline), Alvarado et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Delitschia Auersw. 1866, *Delitschiaceae*, *Pleosporales*, *Dothideomycetes*, 52 species, type: *D. didyma* Auersw., asexual morph unknown, commonly occurs as coprophilous and saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; morphology and phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), holotype of the type: L 1950, cultures available for type: UME 31411,.

Delortia Pat. & Gaillard 1888, *Ascomycota genera incertae sedis*, one species, type: *D. palmicola* Pat. & Gaillard, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Delphinella (Sacc.) Kuntze, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, eight species, type: *D. strobiligena* (Desm.) Sacc. ex E. Müll. & Arx, asexual morph unknown, saprobes or pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothioraceae*), Kirk et al. (2013; genus accepted), Thambugala et al. (2014b; accepted as a genus in *Dothideaceae*), Wijayawardene et al. (2014; outline), holotype of type: PC 0084688.

Delpinoella Sacc. 1899, *Sordariomycetes* genera *incertae sedis*, one species, type: *D. insignis* Sacc. & Trotter, asexual morph unknown, saprobes, terrestrial, Canada, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Delpinoia Kuntze 1891, *Ascodichaenaceae*, *Rhytismatales*, *Leotiomycetes*, two species, type: *D. lusitanica* (Pass. & Thüm.) Kuntze, asexual morph unknown, saprobes, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Delpontia Penz. & Sacc. 1901, ? *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *D. pulchella* Penz. & Sacc., asexual morph unknown, saprobes, on fern stalks, Java, see Lumbsch and Huhndorf (2010; outline: doubtful position), cultures and sequences are unavailable, needs generic revision.

Deltopyxis Baral & G. Marson 2012, *Ascomycota* genera *incertae sedis*, one species, type: *D. triangulispora* Baral & G. Marson, saprobes, terrestrial, Luxembourg, see Baral and Marson (2012; taxonomy), a sequence is available.

Dematiocladium Allegr., Aramb., Cazau & Crous 2005, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type *D. celtidis* Allegr., Aramb., Cazau & Crous, saprobes, terrestrial, Argentina, China, see Wijayawardene et al. (2012, 2017; outline), Crous et al. (2014; new species), ex-type: CBS 115994; holotype of the type: LPS 47255, isotype CBS 9921.

Dematiopleospora Wanasinghe, Camporesi, E.B.G. Jones & K.D. Hyde 2014, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, four species, asexual morph unknown, saprobes, terrestrial, see Wanasinghe et al. (2014a; morphology, phylogeny), Hyde et al. (2016; new species), ex-type strains of type: MFLUCC 13–0612 = ICMP 20198; Holotype of type: MFLU 14–0033.

Dematioscypha Svrček 1977 (= *Schizocephalum* Preuss 1852; *Haplographium* Berk. & Broome 1859 *vide* Johnston et al. 2014), *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *D. dematiicola* (Berk. & Broome) Svrček, asexual morph hyphomycetous, saprobes, Europe, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), Johnston et al. (2014; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequence data available for *Haplographium delicatum*.

Dencoeliopsis Korf 1971, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *D. johnstonii* (Berk.) Korf, asexual morph unknown, saprobes, terrestrial, USA, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dendrioscoticta Moncada & Lücking 2013, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, five species, type: *D. wrightii* (Tuck.) Moncada & Lücking, lichenized, see Moncada et al. (2013a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Dendroclathra Voglmayr & G. Delgado 2001, *Ascomycota* genera *incertae sedis*, one species, type: *Dendroclathra caeruleofusca* Voglmayr & G. Delgado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dendrodomus Bubák 1915, *Ascomycota* genera *incertae sedis*, one species, type: *D. annulatus* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dendrographa Darb. 1895, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, six species, type: *D. leucophaea* (Tuck.) Darb., lichenized, corticolous and saxicolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; phylogeny and taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Dendrophoma Sacc. 1880, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, c. 100 species, type: *D. cytisporoides* Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2008; treated as a synonym of *Dinemasporium*), Crous et al. (2012; reinstated the genus, DNA, phylogeny), Liu et al. (2015; new species), Maharachchikumbura et al. (2016; outline), epitype and ex-epitype of the type: CBS H-12004, CBS 223.95.

Dendrosphaera Pat. 1907, *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, one species, type: *D. eberhardtii* Pat. asexual morph hyphomycetous, terrestrial, probably mycorrhizal, Asia, see Houbraken et al. (2011; morphotaxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs phylogenetic assessment.

Dendrospora Ingold 1943, *Ascomycota* genera *incertae sedis*, ten species, type: *D. erecta* Ingold, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North temperate, subtropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Duarte et al. (2014; DNA), cultures and sequences are available, needs generic revision.

Dendrosporium Plakidas & Edgerton ex J.L. Crane 1972, *Ascomycota* genera *incertae sedis*, three species, type: *D. lobatum* Plakidas & Edgerton ex J.L. Crane, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Dendryphiella Bubák & Ranoj. 1914, *Dictyosporiaceae*, *Pleosporales*, *Dothideomycetes*, nine species, type: *D. interseminata* (Berk. & Ravenel) Bubák, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2014, 2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

Dendryphion Wallr. 1833, *Torulaceae*, *Pleosporales*, *Dothideomycetes*, 66 species, type: *D. comosum* Wallr., hyphomycetous, sexual morph unknown, saprobes, worldwide, see Kirk et al. (2013; genus accepted), Crous et al. (2015; phylogeny), sequences are available for five species, needed generic placement.

Dendryphiosphaera Lunghini & Rambelli 1978, *Ascomycota* genera *incertae sedis*, four species, type: *D. taiensis* Lunghini & Rambelli, hyphomycetous, sexual morph unknown, Ivory coast, pantropical, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Deniquelata Ariyaw. & K.D. Hyde 2013, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *D. barringtoniae* Ariyawansa & K.D. Hyde, asexual morph unknown, pathogens, terrestrial, Thailand, see Ariyawansa et al. (2013, 2014; morphology, DNA, phylogeny), Hyde et al. (2013; phylogeny), Wijayawardene et al. (2014; outline, phylogeny), holotype and ex-type of the type: MFLU 12-0303, MFLUCC 12-0257.

Dennisiella Bat. & Cif. 1962, *Coccodiniaceae*, *Dothideomycetes* family *incertae sedis*, seven species, type: *D. babingtonii* (Berk.) Bat. & Cif., asexual morph microxyphium-like, saprobes,

terrestrial, tropical regions, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as genera in *Coccodiniaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dennisiodyscus Svrcek 1976, *Dermateaceae*, *Helotiales*, *Leotiomyces*, ten species, type: *D. prasinus* (Quél.) Svrček, asexual morph unknown, saprobes, terrestrial, Europe, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Dennisiopsis Subram. & Chandrash. 1977, *Thelebolaceae*, *Thelebolales*, *Leotiomyces*, two species, type: *D. octospora* Subram. & Chandrash., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Dennisographium Rifai 1977, *Ascomycota* genera *incertae sedis*, two species, type: *D. epispheariae* Rifai, hyphomycetous, sexual morph unknown, Java, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Denticularia Deighton 1972, *Ascomycota* genera *incertae sedis*, seven species, type: *D. modesta* (Syd.) Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dentocircinomyces R.F. Castañeda & W.B. Kendr. 1990, *Ascomycota* genera *incertae sedis*, one species, type: *D. occidentalis* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of the type: INFAT C88/114, cultures and sequences are unavailable, compare with *Cryptumbellata*, *Hansfordia* and *Redbia*.

Derexia Naras. 1970, *Ascomycota* genera *incertae sedis*, one species, type: *D. lecanii* (Zimm.) Naras., hyphomycetous, sexual morph unknown, on *Lecanium viride*, India, Indonesia, Java, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Dermapteromyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, three species, type: *D. ctenophorus* Thaxt., asexual morph unknown, biotrophic, America (tropical), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Dermateopsis Nannf. 1932, *Dermateaceae*, *Helotiales*, *Leotiomyces*, two species, type: *D. tabacina* (Cooke) Nannf., asexual morph unknown, saprobes, terrestrial, temperate regions, see Gamundí (1986; morphology, new species), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable.

Dermatiscum Nyl. 1867, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, three species, type: *D. thunbergii* (Ach.) Nyl., asexual morph is coelomycetous, lichenized, saxicolous, South Africa, Madagascar, St. Helena, see Aptroot (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available for the type: AF540507 (ITS).

Dermatocarpon Eschw. 1824, *Verrucariaceae*, *Verrucariales*, *Eurotiomyces*, c. 20 species, type: *D. miniatum* (L.) W. Mann, asexual morph coelomycetous, terrestrial, lichenized, on rocks and soil, cosmopolitan, see Amtoft (2008; new species, regional monograph, Ozark highlands, USA), Gueidan et al. (2009; phylogeny, outline), Prieto et al. (2012; phylogeny), Şenkardeşler et al. (2014; lectotypification), Lücking et al. (2016; classification), sequences

of the type material of the type are unavailable, but sequences of non-type material are available from Gueidan et al. (2007).

Dermatodothella Viégas 1944, *Polystomellaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *D. multiseptata* Viégas, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, as *Dothideomycetes*, genera *incertae sedis*), Ariyawansa et al. (2013; morphology, accepted as *Polystomellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Dermatodothis Racib. ex Theiss. & Syd. 1914, *Dothideomycetes* genera *incertae sedis*, six species, type: *D. javanica* Racib., asexual morph unknown, saprobes, terrestrial, Asia, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Dermea Fr. 1825 (= *Sphaeronaema* Fr. 1815; = *Foveostroma* DiCosmo 1978 *vide* Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomycetes*, c. 25 species, type: *D. cerasi* (Pers.) Fr., asexual morphs *Sphaeronaema* and *Foveostroma*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Johnston et al. (2014; nomenclature, new comb.), cultures and sequences are available.

Dermiscellum Hafellner, Mayrhofer, & Poelt 1979, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *D. catawbense* (Willey) Hafellner & Poelt, asexual morph is coelomycetous, lichenized, saxicolous, North America, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; taxonomy), cultures and sequences are unavailable, needs generic revision.

Descalsia A. Roldán & Honrubia 1989, *Ascomycota* genera *incertae sedis*, one species, type: *D. cruciata* A. Roldán & Honrubia, hyphomycetous, sexual morph unknown, aquatic, isolated from Spanish streams, South western Europe, Spain, Northwest Portugal, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype strain of type: = IMI 328087, sequences are unavailable, needs generic revision.

Desertella Mouch. 1979, *Ascomycota* genera *incertae sedis*, two species, type: *D. globulifera* Mouch., hyphomycetous, sexual morph unknown, from soil, submerged wood in river, Egypt, USA, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures are unavailable, unverified sequences are available (KR230020-KR230041), needs generic revision.

Deshpandiella Kamat & Ullasa 1973, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *D. jambolana* (T.S. Ramakr., Sriniv. & Sundaram) Kamat & Ullasa, asexual morph unknown, biotrophic, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Desmazierella Lib. 1829 (= *Verticicladium* Preuss 1851 *vide* Healy et al. 2016), *Chorioactidaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *D. acicola* Lib., asexual morph *Verticicladium*, saprobes, terrestrial, India, see Pfister et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Martinović et al. (2016; DNA, phylogeographic structure), cultures and sequences are available.

Desmidiospora Thaxt. 1891, *Ascomycota* genera *incertae sedis*, three species, type: *D. myrmecophila* Thaxt., hyphomycetous, sexual morph unknown, terrestrial, saprobes, North America, Canada, Northwest Territories, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Devriesia Seifert & N.L. Nick. 2004, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, 24 species, type: *D. staurophora* (W.B. Kendr.) Seifert & N.L. Nick., asexual morph

hyphomycetous, saprobes, terrestrial, India, see Schoch et al. (2009; new species, phylogeny), Crous et al. (2010, 2012; new species, DNA), Frank et al. (2010; new species, DNA, phylogeny), Li et al. (2012; new species, China), Egidi et al. (2014; new species, DNA, phylogeny), cultures and sequences are available.

Dexhowardia J.J. Taylor 1970, *Ascomycota* genera *incertae sedis*, one species, type: *D. tetraspora* J.J. Taylor, hyphomycetous, sexual morph unknown, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), ex-type culture of type: CBS 968.70, ATCC 18997, MUCL 18901, UM 5625-M, sequences are unavailable, needs generic revision.

Diaboliumbilicus I. Hino & Katum. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *D. mirabilis* I. Hino & Katum., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Diachora Jul. Müll. 1893 (= *Diachorella* Höhn. 1918 *fide* Maharachchikumbura et al. 2016; Réblová et al. 2016), *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, six species, type: *D. onobrychidis* (DC.) Jul. Müll., asexual morph *Diachorella*, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Diacrochordon Petr. 1955, *Sordariomycetes* genera *incertae sedis*, six species, type: *D. rehmii* Petr. 1955, asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable.

Diadema Shoemaker & C.E. Babc. 1989, *Diademaceae*, *Pleosporales*, *Dothideomycetes*, nine species, type: *D. tetramerum* Shoemaker & C.E. Babc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Ariyawansa et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Diademosa Shoemaker & C.E. Babc. 1992, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *D. californiana* (M.E. Barr) Shoemaker & C.E. Babc., asexual morph unknown, saprobes on herbaceous, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014; generic placement), Wijayawardene et al. (2014; outline), sequences unavailable, needed generic placement.

Diademospora B.E. Soderstr. & Bååth 1979, *Ascomycota* genera *incertae sedis*, one species, type: *D. ramigera* B.E. Söderstr. & Bååth, hyphomycetous, sexual morph unknown, from forest soil, coniferous, Sweden, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), ex-type strain of type: = CBS 427.76, IMI 203569, ATCC 42210, needs generic revision.

Dialaceniopsis Bat. 1959, *Ascomycota* genera *incertae sedis*, one species, type: *D. landolphiae* Bat., coelomycetous, sexual morph unknown, from *Landolphia ugandensis*, Uganda, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Dialhypocrea Speg. 1919, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *D. puiggariana* Speg., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2014), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable.

Diamantinia A.N. Mill., Læssøe & Huhndorf 2003, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *D. citrina* A.N. Mill., Læssøe & Huhndorf, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline),

Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type cultures of type: SP, Buck 26886.

Diandromyces Thaxt. 1918, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *D. chilensis* Thaxt., asexual morph unknown, biotrophic, Chile, Ecuador, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species, Ecuador), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Dianesea (F. Stevens) Inácio & P.F. Cannon 2002, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. palmae* (F. Stevens) Inácio & P.F. Cannon, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), Jayasiri et al. (2016a, re-described type), sequences are unavailable, needs generic revision.

Diaphorographis A.W. Archer & Kalb 2009, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *D. queenslandica* Kalb & A.W. Archer, asexual morph unknown, lichenized, terrestrial, tropical, see Kalb et al. (2009; taxonomy), Lumbsch and Huhndorf 2010 (outline), Rivas Plata et al. (2012a; taxonomy), Kirk et al. 2013 (genus accepted), sequences are unavailable.

Diaphoromyces Thaxt. 1926, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *D. marginatus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Diaportha Nitschke 1870 (= *Phomopsis* (Sacc.) Bubák 1905 *vide* Maharachchikumbura et al. 2016; Rossmann et al. 2015), *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, more than 125 species, type: *D. eres* Nitschke, asexual morph coelomycetous, endophytes, pathogens, saprobes, associate with wide host range, worldwide, see Udayanga et al. (2011, 2014; review, nomenclature, phylogeny), Gomes et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Rossmann et al. (2015; nomenclature), Crous et al. (2016; taxonomy, phylogeny), holotype and culture ex-epitype of type: BPI 892912, AR5193,

Diaporthella Petr. 1924, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *D. aristata* (Fr.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, North America, Eastern Asia, see Lumbsch and Huhndorf (2010; outline), Gomes et al. (2013; DNA), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the cultures.

Diarimella B. Sutton 1980, *Ascomycota* genera *incertae sedis*, three species, type: *D. setulosa* B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, Canada, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 103785, cultures and sequences are unavailable, genus need revision.

Diatractium Syd. & P. Syd. 1921, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *D. cordiae* (F. Stevens) Syd. & P. Syd., asexual morph unknown, pathogens, terrestrial, Central and South America, see Palmateer et al. (2008; DNA, pathogens), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are available.

Diatrypasimilis J.J. Zhou & Kohlm. 2016, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *D. australiensis* J.J. Zhou & Kohlm., asexual morph unknown, saprobes, on mangroves, Central and South America, see Palmateer et al. (2008; DNA, pathogens), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline; taxonomy), Index Fungorum (2017; validate the genus), cultures and sequences are available.

Diatrype Fr. 1849 (= *Libertella* Desm. 1830 *vide* Réblová et al. 2016), *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, cf. 60 species, type: *D. disciformis* (Hoffm.) Fr., asexual morph *Libertella*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Liu

et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline; taxonomy), Senanayske et al. (2015; phylogeny, outline), Réblová et al. (2016; nomenclature), cultures and sequences are available.

Diatrypella (Ces. & De Not.) De Not. 1863, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, c. 35 species, type: *D. verruciformis* (Ehrh.) Nitschke, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline; taxonomy), Mehrabi et al. (2015 ; Iran), Senanayske et al. (2015; phylogeny, outline), Crous et al. (2016; new species, phylogeny), de Almeida et al. (2016; new species, phylogeny), cultures and sequences are available.

Diatrypoidiella Manohar., Kunwar & D.K. Agarwal 2005, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *D. lignicola* Manohar., Kunwar & D.K. Agarwal, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline; taxonomy), holotype of the type: HClO 43762, cultures and sequences are unavailable.

Dibaeis Clem. 1909, *Icmadophilaceae*, *Pertusariales*, *Lecanoromycetes*, 13 species, type: *D. rosea* (Pers.) Clem., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2015; phylogeny), Lücking et al. (2016; classification), , culture available for the type: AFTOL-ID 358 (*vide* Lutzoni et al. 2014).

Dibeloniella Nannf. 1932, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *Dibeloniella vossii* (Rehm) Nannf., asexual morph phialophora-like., saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Dicarpella Syd. & P. Syd. 1921, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *D. lignicola* Manohar., Kunwar & D.K. Agarwal, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, taxonomy), cultures and sequences are available.

Dicephalospora Spooner 1987, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *D. calochroa* (Syd.) Spooner, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Liu et al. (2016; DNA, new species), cultures and sequences are available.

Dichelostroma Bat. & Peres 1963, *Ascomycota* genera *incertae sedis*, one species, type: *D. powellii* Bat. & Peres, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), data inadequate, cultures and sequences are unavailable.

Dichlaena Durieu & Mont. 1849, *Aspergillaceae*, *Eurotiales*, *Eurotiomycetes*, four species, type: *D. lentisci* Durieu & Mont., asexual morph hyphomycetous, terrestrial, saprobes, occurring on decaying plant material, wood and dung, Algeria, Brazil, India, Italy, Mauritania, USA, see Houbraken and Samson (2011), cultures and sequences are unavailable, needs phylogenetic assessment.

Dicholobodigitus G.P. White & Illman 1988, *Ascomycota* genera *incertae sedis*, one species, type: *D. niger* G.P. White & Illman, hyphomycetous, sexual morph unknown, on rotten wood of *Pinus contorta*, Canada, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dichosporidium Pat. 1903, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, eight species, type: *D. glomeratum* (Pat.) Pat., asexual morph unknown, lichenized, widespread (tropical), corticolous (occasionally saxicolous), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Dichotomophthora Mehrl. & Fitzp. ex P.N. Rao 1966, *Ascomycota* genera *incertae sedis*, four species, type: *D. portulacae* Mehrl. & Fitzp. ex P.N. Rao, hyphomycetous, sexual morph unknown, on living leaves and stems of *Portulacca oleracea*, Hawaii, USA, widespread (esp. tropical), see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Dichotomophthoropsis M.B. Ellis 1971, *Ascomycota* genera *incertae sedis*, two species, type: *D. nymphaeorum* (F.V. Rand) M.B. Ellis, hyphomycetous, sexual morph unknown, plant pathogen, India, USA, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), reference strain of *Dichotomophthoropsis nymphaeorum* = ATCC 64770, ATCC 204261-204266, sequences are unavailable, needs generic revision.

Dichotophora Whitton, K.D. Hyde & McKenzie 2012, *Ascomycota* genera *incertae sedis*, two species, type: *D. setiramosa* Whitton, McKenzie & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Whitton et al. (2012; outline), Wijayawardene et al. (2017; outline), holotype of the type: IFRD 9016, cultures and sequences are unavailable, needs generic revision.

Diulonomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *D. eumicrophilus* Thaxt., asexual morph unknown, biotrophic, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Dicranidion Harkn. 1885, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, four species, type: *D. fragile* Harkn., asexual morph unknown, saprobes, terrestrial, USA, see Kirk et al. (2013; genus accepted), data inadequate, cultures and sequences are available.

Dictyoarthrinium S. Hughes 1952, *Apiosporaceae*, *Xylariales*, *Sordariomycetes*, six new species, type: *D. quadratum* S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread (tropical), see Kirk et al. 2008, Somrithipol (2007; morphology, key to species), Seifert et al. (2011; outline), Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), Crous and Groenewald (2013; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable for type species, needs generic revision.

Dictyoasterina Hansf. 1947, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. conopharyngiae* Hansf., asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; accepted as genus in *Venturiaceae*), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dictyocatenulata Finley & E.F. Morris 1967, *Lecanoromycetes* genera *incertae sedis*, one species, type: *D. alba* Finley & E.F. Morris, hyphomycetous, sexual morph unknown, saprobes, Karnataka, India, widespread, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), An et al. (2012; phylogenetic revision), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Dictyochaeta Speg. 1923, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, c. 80 species, type: *D. fuegiana* Speg., hyphomycetous, sexual morph unknown, saprobes, terrestrial/aquatic, widespread, see Seifert et al. (2011; outline), Hyde et al. (2011; outline), Li et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Silva and Gusmão (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for type species, needs generic revision.

Dictyocoprotus J.C. Krug & R.S. Khan 1991, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *C. nipigonensis* Malloch & Cain, asexual morph unknown, coprophilous, terrestrial, Mexico, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Dictyocyclus Sivan., W.H. Hsieh & Chi Y. Chen 1998, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, one species, type: *D. hydrangeae* Sivan., W.H. Hsieh & Chi Y. Chen, asexual morph unknown. Epiphytes, terrestrial, Taiwan, no molecular data, see Hofmann (2009; review, accepted as a genus in *Parmulariaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Parmulariaceae*), Hyde et al. (2013; review, keys, accepted as a genus in *Parmulariaceae*), Dissanayake et al. (2014; taxonomy, accepted as a genus in *Myriangiaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Myriangiaceae*), placement in *Myriangiaceae* supported by morphology, holotype of type: IMI 371179, cultures and sequences unavailable.

Dictyodesmium S. Hughes 1951, *Ascomycota* genera *incertae sedis*, four species, type: *D. ulmicola* (Ellis & Kellerm.) S. Hughes, hyphomycetous, sexual morph unknown, on living leaves of *Ulmus fulva*, USA; France, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dictyodochium Sivan. 1984, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. prinsepiae* Sivan., asexual morph unknown, saprobes, terrestrial, Africa, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*, genera *incertae sedis*), data inadequate, cultures and sequences are unavailable.

Dictyographa Müll. Arg. 1893, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *D. arabica* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline, treated as a synonym of *Opegrapha*), Ertz and Tehler (2011; taxonomy), Lücking et al. (2016; classification), sequences are available.

Dictyomeridium Aptroot, M.P. Nelsen & Lücking 2016, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, seven species, type: *D. proponens* (Nyl.) Aptroot, M.P. Nelsen & Lücking, asexual morph unknown, lichenized, terrestrial, tropical, see Aptroot and Lücking (2016; taxonomy), Lücking et al. 2016, sequences are available.

Dictyonella Höhn. 1909, *Saccardiaceae*, *Ascomycota* families *incertae sedis*, seven species, type: *D. erysiphoides* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), data inadequate, cultures and sequences are unavailable.

Dictyopeltella Bat. & I.H. Lima 1959, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, two species, type: *D. domingensis* (Petr. & Cif.) Bat. & I.H. Lima, asexual morph unknown, saprobes, terrestrial, tropical see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Dictyopeltis Theiss. 1913, *Dothideomycetes* genera *incertae sedis*, six species, type: *D. vulgaris* (Racib.) Theiss., asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline, as a genus in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*, genera *incertae sedis*), data inadequate, cultures and sequences are unavailable.

Dictyophrynella Bat. & Cavalc. 1964, *Ascomycota* genera *incertae sedis*, one species, type: *D. bignoniacearum* Bat. & Cavalc., hyphomycetous, sexual morph unknown, lichenicolous, Brazil, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Dictyopolyschema M.B. Ellis 1976, *Ascomycota* genera *incertae sedis*, one species, type: *D. pirozynskii*, hyphomycetous, sexual morph unknown, saprobes on dead twigs of *Picea*, Great

Britain, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), ex-type culture of type: = IMI 89652, sequences are unavailable, needs generic revision.

Dictyoportha Petr. 1955, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, three species, type: *D. ahmadii* Petr., asexual morph unknown, saprobes, terrestrial, Pakistan, Taiwan, see Voglmayr and Jaklitsch (2008; DNA, transferred *Dictyoportha acerophila* M.E. Barr to *Prosthecium*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), data inadequate, cultures and sequences are available (*vide* Voglmayr and Jaklitsch 2008).

Dictyorostrella U. Braun 1999, *Ascomycota* genera *incertae sedis*, one species, type: *D. caricicola* (U. Braun & Melnik) U. Braun, hyphomycetous, terrestrial, foliicolous, Asia (Far East of Russia), North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: (DAOM), isotype: HAL 1645 F, cultures and sequences are unavailable.

Dictyospiropes M.B. Ellis 1976, *Ascomycota* genera *incertae sedis*, one species, type: *D. ziziphi* M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dictyosporella Abdel-Aziz 2015, *Annulatascales*, *Annulatascales*, *Sordariomycetes*, one species, type: *D. aquatica* Abdel-Aziz, asexual morph unknown, saprobes, aquatic, Egypt, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22127, MD1302.

Dictyosporium Corda 1836, *Dictyosporiaceae*, *Pleosporales*, *Dothideomycetes*, c. 50 species, type species *D. elegans* Corda, hyphomycetous, saprobes/terrestrial, aquatic, widespread, see Crous et al. (2009; new species), Hyde et al. (2011; outline), Seifert et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species), Boonmee et al. (2016; new species), cultures available for type species NBRC 32502.

Dictyostomiopelta Viégas 1944, *Dothideomycetes*, genera *incertae sedis*, one species, type: *D. manihoticola* Viégas, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, as a genus in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable.

Dictyothyriella Speng. 1924, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. bauhiniae* (Rehm) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, Cape Horn, see Lumbsch and Huhndorf (2010; outline, as a genus in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable.

Dictyothyrina Theiss. 1913, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. fecunda* (Sacc.) Theiss., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable.

Dictyothyrium Theiss. 1912, *Dothideomycetes* genera *incertae sedis*, two species, type: *D. chalybeum* (Rehm) Theiss., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline, as a genus in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable.

Diddensiella Péter, Dlačny & Kurtzman 2012, *Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, three species, type: *D. caesifluorescens* G. Péter, Dlačny & Kurtzman,

asexual reproduction is by multilateral budding, saprophytic, rotten wood and forest litter, worldwide, see Péter et al. (2012; taxonomy), sequences are available.

Didonia Velen. 1934, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, five species, type: needs typification, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Didymascella Maire & Sacc. 1903, *Hemiphacidiaceae*, *Helotiales*, *Leotiomyces*, five species, type: *D. oxycedri* Maire & Sacc., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for *Didymascella thujina*.

Didymascus Sacc. 1896, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, one species, type: *D. metkinoffi* Sacc., asexual morph unknown, saprobes, terrestrial, Siberia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Didymella Sacc. 1880, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, c. 100 species, type: *D. exigua* (Niessl) Sacc., asexual morph coelomycetous, saprobes, pathogens, terrestrial, worldwide, see de Gruyter et al. (2009; phylogeny), Aveskamp et al. (2010; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Didymellaceae*, taxonomy), Wijayawardene et al. (2014; outline), Chen et al. (2015; phylogeny, new species, taxonomy), Liu et al. (2015; new species), cultures and sequences are available.

Didymellocamarosporium Wijayaw., Camporesi, D.J. Bhat & K.D. Hyde 2016, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *D. tamaricis* Wijayaw., Camporesi, D.J. Bhat & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2016, 2017; taxonomy, phylogeny, outline), holotype and ex-type culture of the type: MFLU 15–3548, MFLUCC 14–0241.

Didymellopsis (Sacc.) Clem. & Shear 1931, *Xanthopyreniaceae*, *Didymellopsis*, *Dothideomycetes*, five species, type: *D. latitans* (Nyl.) Sacc. ex Clem. & Shear, asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, family placed as *Ascomycota* family *incertae sedis*), Kirk et al. (2013; genus accepted), Zhurbenko et al. (2015; new species), holotype of type: H–NYL 42670.

Didymobotryum Sacc. 1886, *Ascomycota* genera *incertae sedis*, one species, type: *D. rigidum* (Berk. & Broome) Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline, under *Magnaporthaceae*), Maharachchikumbura et al. (2015, 2016; outline, treated as *Ascomycota incertae sedis*), cultures available for type: JCM 8837.

Didymochaetina Bat. & J.L. Bezerra 1965, *Ascomycota* genera *incertae sedis*, one species, type: *D. galactiae* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, terrestrial, Jamaica, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Didymochora Höhn. 1918, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. betulina* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Jamaica, see Wijayawardene et al. (2012, 2014; outline, listed under *Mycosphaerellaceae* and *Dothideomycetes*, genera *incertae sedis* respectively), cultures and sequences are unavailable, needs generic revision.

Didymocoryne Sacc. & Trotter 1913, *Helotiales* genera *incertae sedis*, *Leotiomyces*, type: *D. striata* (Ellis & Everh.) Sacc. & Trotter, asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; reduced *D. solitaria* (Rehm) Sacc. & Trotter under

Ascocoryne albida (Berk.) Seifert, cultures and sequences are unavailable, needs generic revision.

Didymocrea Kowalski 1965, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *D. sadasivanii* (T.K.R. Reddy) Kowalski, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genera in *Didymosphaeriaceae*), Ariyawansa et al. (2014; accepted as a genera in *Didymosphaeriaceae*, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures available for type: CBS 438.65.

Didymocrytidium Vain. 1921, *Dothideomycetes* genera *incertae sedis*, two species, type: need typification, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Didymocrytis Vain. 1921, *Dothideomycetes* genera *incertae sedis*, two species, type: *D. consimilis* Vain., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Didymolepta Munk 1953, *Dothideomycetes* genera *incertae sedis*, two species, type: *D. winteriana* (Sacc.) Munk, asexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Didymopleella Munk 1953, *Dothideomycetes* genera *incertae sedis*, four species, type: *Didymopleella cladii* (P. Larsen & Munk) Munk, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Didymosphaeria Fuckel (1870) [1869-70], *Didymosphaeriaceae*, *Massarineae*, *Pleosporales*, *Dothideomycetes*, 25 species, type: *D. futilis* (Berk. & Broome) Rehm, asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014a, b; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species, needs generic revision..

Didymosporina Höhn. 1916, *Ascomycota* genera *incertae sedis*, one species, type: *D. aceris* (Lib.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Didymostilbe Henn. 1902, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, eight species, type: *D. coffeae* Henn., hyphomycetous, saprobes, terrestrial, Asia, see Kirk et al. (2013; did not accept as valid genus), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Bionectriaceae*), Lombard et al. (2016; phylogeny), cultures and sequences are available, needs generic revision.

Didymothozetia Rangel 1915, *Ascomycota* genera *incertae sedis*, one species, type: *D. mimosoensis* Rangel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Diedickeia Syd. & P. Syd. 1913, *Ascomycota* genera *incertae sedis*, three species, type: *D. singularis* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Diffractella Guarro, P.F. Cannon & Aa 1991, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *D. curvata* (Fuckel) Guarro, P.F. Cannon & Aa, asexual

morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Digitodochium Tubaki & Kubono 1989, *Ascomycota* genera *incertae sedis*, one species, type: *D. rhodoleucum* Tubaki & Kubono, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Digitomyces Mercado, M. Caldusch & Gené 2003, *Ascomycota* genera *incertae sedis*, one species, type: *D. verrucosus* (Tzean & J.L. Chen) Mercado, M. Caldusch & Gené, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Digitopodium U. Braun, Heuchert & K. Schub. 2005, *Ascomycota* genera *incertae sedis*, one species, type: *D. hemileiae* (Steyaert) U. Braun, Heuchert & K. Schub., hyphomycetous, sexual morph unknown, terrestrial, fungicolous, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision, holotype of the type: BPI 426854.

Digitoramispora R.F. Castañeda & W.B. Kendr. 1990, *Ascomycota* genera *incertae sedis*, three species, type: *D. caribensis* R.F. Castaneda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C89/167, cultures and sequences are unavailable, compare with *Acrodictys*, *Acrodictyopsis*, *Cheiroidea* and *Cryptocoryneopsis*.

Digitosarcinella S. Hughes 1984, *Englerulaceae*, *Dothideomycetes*, families *incertae sedis*, three species, type: *D. caseariae* S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Digitothyrea P. P. Moreno & Egea 1992, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, three species, type: *D. rotundata* (Büdel, Henssen & Wessels) P.P. Moreno & Egea, asexual morph unknown, lichenized, Africa, Central America, saxicolous, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Dilophospora Desm. 1840 (= *Lidophia* J. Walker & B. Sutton 1974 *vide* Rossman et al. 2016), *Dothideomycetes* genera *incertae sedis*, c. two species, type: *D. graminis* Desm., coelomycetous, sexual morph formerly named in *Lidophia*, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Diluviicola K.D. Hyde, S.W. Wong & E.B.G. Jones 1998, *Annulatascales*, *Annulatascales*, *Sordariomycetes*, type: *D. capensis* K.D. Hyde, S.W. Wong & E.B.G. Jones, asexual morph unknown, saprobes, fresh water, Brunei, see, Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; accepted as a genus in *Annulatascales*), cultures and sequences are unavailable, needs generic revision.

Dimastigosporium Faurel & Schotter 1965, *Ascomycota* genera *incertae sedis*, two species, type: *D. musimonum* Faurel & Schotter, coelomycetous, sexual morph unknown, saprobes, terrestrial, Sahara, India, see Yadav and Bhat (2009; new species, India), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dimelaena Norman 1852, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, c. ten species, type: *D. oreina* (Ach.) Norman, asexual morph unknown, lichenized, lichenicolous, saxicolous, on siliceous or basaltic rocks, world-wide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Knudsen et al. (2013; key), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny; showed that *Dimelaena* is non-monophyletic as currently circumscribed), cultures available for the type: MP31 (*fide* Prieto and Wedin 2016).

Dimeriella Speg. 1908, *Parodiopsidaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *D. hirtula* Speg., asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Dimerina Theiss. 1912, *Ascomycota* genera *incertae sedis*, c. ten species, type: *D. strychni* (Henn.) Theiss., asexual morph unknown, saprobes, terrestrial, Sahara, India, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dimerium (Sacc. & P. Syd.) McAlpine 1903, *Parodiopsidaceae*, *Dothideomycetes* families *incertae sedis*, type: *D. pulveraceum* (Speg.) Theiss., see Hyde et al. (2013; accepted as a genus in *Parodiopsidaceae*), Kirk et al. (2013; did not accept as a valid genus), data inadequate, needs generic revision.

Dimeromyces Thaxt. 1896, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 114 species, type: *D. africanus* Thaxt., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species, Ecuador), Kirk et al. (2013; genus accepted), Rossi et al. (2015; new species, Ecuador), cultures and sequences are unavailable.

Dimerosporiella Speg. 1908, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, seven species, type *D. paulistana* Speg, on living leaves, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype LPS, cultures and sequences are unavailable.

Dimidiographa Ertz & Tehler 2011, *Roccellographaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *D. loandensis* (Nyl.) Ertz, Bungartz & Tehler, sexual morph with lirelliform ascomata, coelomycetous, lichenized, terrestrial, tropical, see Ertz and Tehler (2011; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available for three species.

Dimorphiopsis Crous 2013, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *D. brachystegiae* Crous, coelomycetous or hyphomycetous, sexual morph unknown, Zambia, see Crous et al. (2013; morphology, DNA), Wijayawardene et al. (2014, 2016; outline, morphology, phylogeny), holotype and ex-type strains of the type: CBS H-21430, CPC 22679, 22680 = CB 136422.

Dimorphiseta L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *D. terrestris* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22442, CBS 127345.

Dimorphomyces Thaxt. 1893, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 27 species, type: *Dimorphomyces denticulatus* Thaxt., asexual morph unknown, parasites, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species), cultures and sequences are unavailable, needs generic revision.

Dimorphospora Tubaki 1958, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *D. foliicola* Tubaki, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, needs generic revision.

Dimorphotricha Spooner 1987, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *D. australis* Spooner, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dinemasporium Lév. 1846, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomyces*, 35 species, type: *D. graminum* (Lib.) Lév., coelomycetous, sexual morph unknown, saprobes, worldwide, see Crous et al. (2012, 2014; new species, morphology, phylogeny), Hashimoto et al. (2015a; morphology, phylogeny), Liu et al. (2015; morphology, phylogeny), Wijayawardene et al. (2016, 2017; morphology, outline), isotype, epitype and ex-epitype strain of the type: K(M) 175981, CBS H-20952, CBS 828.84.

Dingleya Trappe 1979, *Tuberaceae*, *Pezizales*, *Pezizomyces*, six species, type: *D. verrucosa* Trappe, asexual morph unknown, pathogens, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Dioicomycetes Thaxt. 1901, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, 32 species, type: *D. anthici* Thaxt., asexual morph unknown, parasitism, terrestrial, worldwide, see Santamaria (2002; revision), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bernardi et al. (2014; Ecuador), cultures and sequences are available for unidentified species, needs generic revision.

Diorygma Eschw. 1824, *Graphidaceae*, *Ostropales*, *Lecanoromyces*, 71 species, type: *D. hieroglyphica* (Pers.) Staiger & Kalb, asexual morph unknown, lichenized, terrestrial, tropical, see Archer (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2012; DNA, phylogeny), Rivas Plata et al. (2012a; taxonomy), Kirk et al. 2013 (genus accepted), Feuerstein et al. (2014; key), Lumbsch et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type.

Diphymyces I.I. Tav. 1985, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, 32 species, type: *D. appendiculatus* (Thaxt.) I.I. Tav., asexual morph unknown, parasitism, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Rossi and Santamaria (2010; new species), Kirk et al. (2013; genus accepted), Haelewaters et al. (2014; new species), cultures and sequences are available for unidentified species, needs generic revision.

Diplacella Syd. 1930, *Gnomoniaceae*, *Diaporthales*, *Sordariomyces*, 32 species, type: *D. paullinae* (Gonz. Frag. & Cif.) Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified species, needs generic revision.

Diplocarpa Masee 1895, *Cordieritidaceae*, *Helotiales*, *Leotiomyces*, one species, type: *D. curreyana* Masee, asexual morph unknown, fungicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dermateaceae*), Kirk et al. (2013; genus accepted), Pärtel et al. (2014; DNA, phylogeny, treated as a genus in *Cordieritidaceae*), cultures and sequences are available, cultures available for type: KL317.

Diplocarpon F.A. Wolf 1912 (= *Entomosporium* Lév. 1857; = *Bostrichonema* Ces. 1867; = *Marssonina* Magnus 1906; = *Entomopeziza* Kleb. 1914 *fide* Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomyces*, seven species, type: *D. rosae* F.A. Wolf, asexual morph *Entomosporium*; *Marssonina*, pathogens, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

Diplochorina Gutner 1933, *Dothideomyces* genera *incertae sedis*, one species, type: *D. naumovii* Gutner, asexual morph unknown, saprobes, terrestrial, USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available for unidentified species, needs generic revision.

Diplocladiella G. Arnaud ex M.B. Ellis 1976, *Ascomycota* genera *incertae sedis*, one species, type: *D. scalaroides* G. Arnaud ex M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Diplococcium Grove 1885, *Helotiales* genera *incertae sedis*, 6 new species, type species *D. spicatum* Grove, hyphomycetous, sexual morph *Helminthosphaeria*, saprobes, terrestrial, widespread, see Shenoy et al. (2010; phylogeny, polyphyletic), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Hernández-Restrepo et al. (2012, new species, key), Isitua et al. (2012, on gold jewelry) Ma et al. (2012a, new species), Ma et al. (2012b, new record from China), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), da Silva et al. (2014; new species), de Almeida (2015, new species), Maharachchikumbura et al. (2016; outline, accepted as a genus in *Helminthosphaeriaceae*), cultures available for type species CBS 162.47, CBS 852.73.

Diplodia Fr. 1834, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, 23 species, type: *D. mutila* (Fr.) Mont., holomorph, asexual morph coelomycetous, endophytes, pathogens, saprobes, associated with cankers, dieback and fruit rot, worldwide, see Phillips et al. (2008, 2013; morphology, phylogeny), Liu et al. (2012; morphology, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Alves et al. (2014; morphology, phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), holotype and culture ex-epitype of type: BPI 599153 and CBS 136014,

Diplodinis Clem. 1931, *Ascomycota* genera *incertae sedis*, one species, type: *D. rostrupi* (Vestergr.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Scandinavia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Diplodinula Tassi 1902, *Ascomycota* genera *incertae sedis*, one species, type: need typification, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Diplogelasinospora Cain 1961, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, three species, type: *D. princeps* Cain, asexual morph unknown, saprobes, terrestrial, Asia, North America, see Cai et al. (2006; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as genus in *Lasiosphaeriaceae*), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species, DNA), Maharachchikumbura et al. (2016; outline, accepted as a genus in *Chaetomiaceae*), cultures and sequences are available.

Diplogramma Müll. Arg. 1891, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *D. australiensis* Müll. Arg., lichenized, Australia, epiphytic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; treated as a synonym of *Opegrapha*), sequences are unavailable

Diploicia A. Massal. 1852, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, four species, type: *D. canescens* (Dicks.) A. Massal., asexual morph unknown, lichenized, corticolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Bungartz et al. (2016; generic concept, key to all species; discussed the distinction from *Diplotomma*, but showed both are distinct), Lücking et al. (2016; classification), Prieto and Wedin (2016; taxonomy), sequence are available for voucher MAF 8656 of the type.

Diplolaeviopsis Giralt & D. Hawksw. 1991, *Cordieritidaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *D. ranula* Giralt & D. Hawksw., on lichens, sexual morph unknown, see Kirk et al. (2013; genus accepted), Suija et al. (2015; position), Pärtel et al. (2016;

phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of type: BCC-Lich 4120.

Diplomyces Thaxt. 1895, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *D. actobianus* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Diplonaevia Sacc. 1889, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, 23 species, type: *D. caricum* (Auersw.) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Diploöspora Grove 1916, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *D. rosea* Grove, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Diploplenodomus Died. 1912, *Ascomycota* genera *incertae sedis*, two species, type: *D. malvae* Died. ex Died., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Diplopodomyces W. Rossi & Balazuc 1977, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *D. callipodos* W. Rossi & Balazuc, asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Santamaria et al. (2014; new species), cultures and sequences are unavailable.

Diploschistella Vain. 1926, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *D. urceolata* Vain., lichenized, pantropical, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Diploschistes Norman 1852, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 33 species, type: *D. scruposus* (Schreb.) Norman, asexual morph coelomycetous, lichenized (young states sometimes parasitic), on rocks, soil or over mosses and other lichens, worldwide, see Lumbsch and Huhndorf (2010; outline), Fernández-Brime et al. (2013; phylogeny), Mangold et al. (2009; key, Australia), Rivas Plata et al. (2010a; key), Rivas Plata et al. (2012a; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures available for the type: AFTOL-ID 98 (*vide* Lutzoni et al. 2004).

Diplosporonema Höhn. 1917, *Ascomycota* genera *incertae sedis*, one species, type: *D. delastrei* (Lacroix) Höhn. ex Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Diplotomma Flot. 1849, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 30 species, type: *D. alboatrum* (Hoffm.) Flot., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Diplozythiella Died. 1916, *Ascomycota* genera *incertae sedis*, one species, type: *D. bambusina* Died., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dipodascopsis Batra & P. Millner emend. Kurtzman, Albertyn & Basehoar-Powers 2007, *Lipomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, three species, type: *D. uninucleata* (Biggs) L.R. Batra & Millner, asexual reproduction by multilateral budding and pseudohyphae may be present, saprophytic, soil, wood, fruit fly, Canada, USA, Europe, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kurtzman and Robnett (2013; DNA, phylogeny), sequences are available.

Dipodascus de Lagerheim 1892, *Dipodascaceae*, *Saccharomycetales*, *Saccharomycetes*, ten species, type: *D. albidus* Lagerh., asexual reproduction present (arthroconidia, chlamydospores may be formed), saprophytic, insects, insect galleries in pine trees, fluxes from trees, mushroom gills, cacti, worldwide, see Nagahama et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Dipodomycetes Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *D. monstruosus* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Diporothea C.C. Gordon & C.G. Shaw 1961, *Diporotheaceae*, *Ascomycota* families *incertae sedis*, two species, type: *D. rhizophila* C.C. Gordon & C.G. Shaw, asexual morph unknown, saprobes, terrestrial, aquatic, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of type: WSP 48900, cultures and sequences are unavailable.

Dipyrgis Clem. 1909, *Ascomycota* genera *incertae sedis*, one species, type: data inadequate asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dirina Fr. 1825, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, 24 species, type: *D. ceratoniae* (Ach.) Fr., asexual morph unknown, lichenized, saxicolous and corticolous, worldwide (coastal regions of mediterranean and subtropical climates), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tehler et al. (2013; phylogeny and taxonomy); Lücking et al. (2016; classification, but recording only 13 species), sequences are available.

Dirinaria (Tuck.) Clem. 1909, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 35 species; type: *D. picta* (Sw.) Clem. & Shear, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Dirinastrum Müll.Arg. 1893, *Caliciaceae*, *Teloschistales*, *Lecanoromycetes*, three species; type: *D. australiense* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Bungartz et al. (2011; phylogeny), Lücking et al. (2016; classification, treated as a genus in *Roccellaceae*), sequences are unavailable.

Diromma Ertz & Tehler 2014, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *D. dirinellum* (Nyl.) Ertz & Tehler, sexual morph with apothecioid ascomata, asexual morph unknown, lichenized, terrestrial, Mediterranean and Canary Islands, see Ertz et al. (2014; morphology, phylogeny), Lücking et al. (2016; classification), lectotype and ex-type strain of type: Dufour (H-NYL4756).

Discina (Fr.) Fr. 1849, *Discinaceae*, *Pezizales*, *Pezizomycetes*, 20 species, type: *D. perlata* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Discinella Boud. 1885, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, twelve species, type: *D. boudieri* (Quél.) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Disciotis Boud. 1885, *Morchellaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *D. venosa* (Pers.) Arnould, asexual morph unknown, saprobes, terrestrial, worldwide, see Andersen et al. (2001), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),

Methven et al. (2013; DNA, phylogeny), Carris et al. (2016; mitosporic stage; DNA, phylogeny), cultures and sequences are available.

Discocainia J. Reid & A. Funk 1966, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, type: *D. treleasei* (Sacc.) J. Reid & A. Funk, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Li et al. (2014; new species, Japan), cultures and sequences are available.

Discocolla Prill. & Delacr. 1894, *Ascomycota* genera *incertae sedis*, one species, type: *D. pyrina* Prill. & Delacr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, north temperate, see Seifert et al. (2011), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Discocurtisia Nannf. 1983, *Dermateaceae*, *Helotiales*, *Leotiomyces*, twelve species, type: *D. arundinariae* (Berk. & M.A. Curtis) Nannf., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Discogloeum Petr. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *D. veronicarum* (Ces.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Discomycella Höhn. 1912, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *D. tjobodensis* Höhn., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Discomycetoidea Matsush. 1993, *Ascomycota* genera *incertae sedis*, one species, type: *D. aequatorialis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Discorehmia Kirschst. 1936, *Helotiaceae*, *Helotiales*, *Leotiomyces*, five species, type: *Discorehmia eburnea* Kirschst., asexual morph unknown, saprobes, terrestrial, North America, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Discosia Lib. ex Durieu & Mont. 1849, *Sporocadaceae*, *Xylariales*, *Sordariomyces*, six species, type: *D. strobilina* Lib., coelomycetous, sexual morphs unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012, 2016, 2017; taxonomy, outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Senanayake et al. (2015; new species, phylogeny), Jaklitsch et al. (2016; phylogeny), cultures and sequences are available.

Discosiellina Subram. & K.R.C. Reddy 1972, *Ascomycota* genera *incertae sedis*, one species, type: *D. longiciliata* (Agnihotr.) Subram. & K.R.C. Reddy, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Discosphaerina Höhn. 1917, *Hyponectriaceae*, *Xylariales*, *Sordariomyces*, eleven species, type: *D. discophora* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Discosporina Höhn. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *D. deplanata* (Höhn.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Discotheciella Syd. & P. Syd. 1917, *Ascomycota* genera *incertae sedis*, one species, type: *D. bakeri* (Syd. & P. Syd.) Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes,

terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Discozythia Petr. 1922, *Ascomycota* genera *incertae sedis*, one species, type: *D. bakeri* (Syd. & P. Syd.) Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Disculooides Crous, Pascoe, I.J. Porter & Jacq. Edwards 2012, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *D. eucalypti* Crous, Pascoe, I.J. Porter & Jacq. Edwards, coelomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Crous et al. (2012; morphology, phylogeny), Maharachchikumbura et al. (2015; classification, phylogeny), Crous et al. (2016; new species, phylogeny), ex-type strains of type: CPC 17650; holotype CBS H-20935.

Dissitimurus E.G. Simmons, McGinnis & Rinaldi 1987, *Ascomycota* genera *incertae sedis*, one species, type: *D. exedruss* E.G. Simmons, McGinnis & Rinaldi, hyphomycetous, sexual morph unknown, on human, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dissoconium de Hoog, Oorschot & Hijwegen 1983, *Dissoconiaceae*, *Capnodiales*, *Dothideomycetes*, type: *D. aciculare* de Hoog, Oorschot & Hijwegen, hyphomycetous, sexual morph mycosphaerella-like, saprobes, pathogens, terrestrial, worldwide, see Crous et al. (2009; taxonomy, phylogeny), Seifert et al. (2011; morphology), Hyde et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2014; outline, phylogeny), cultures and sequences are available.

Distocercospora N. Pons & B. Sutton 1988, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *D. pachyderma* (Syd. & P. Syd.) N. Pons & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, ?pathogens, terrestrial, South Africa, India, New Zealand, Philippines, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Verma and Rai (2014; morphology, new species), Braun et al. (2014; morphology and typification), neotype S-F37683, epitype MUMH11476, duplicate: CBS H-21733; ex-epitype cultures: MUCC1716, CBS 138247.

Distolomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *D. fijianus* Thaxt., asexual morph unknown, parasites, terrestrial, Asia, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Distopyrenis Aptroot 1991, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, eight species, type: *D. americana* Aptroot, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Distorimula F. San Martín, P. Lavínn & Esqueda 1999, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *D. mexicana* F. San Martín, P. Lavín & Esqueda, asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: FSM, Esqueda 3693, cultures and sequences are unavailable.

Distoseptispora K.D. Hyde, McKenzie & Maharachch. 2016, *Distoseptisporaceae*, *Diaportheomycetidae*, *Sordariomycetes*, six species, type: *D. fluminicola* McKenzie, H.Y. Su, Z.L. Luo & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, aquatic, China, Thailand, see Hyde et al. (2016; new species), Doilom et al. (2016; species on Tectonia), Su et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: HKAS84006, MFLUCC 15–0417.

Distothelia Aptroot 2005, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, three species; type: *D. isthmospora* Aptroot, lichenized, see Lumbsch and Huhndorf (2010; outline), Aptroot & Lücking (2016; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Ditopella De Not. 1863, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *D. fusispora* De Not., asexual morph unknown, saprobes, terrestrial, Europe, see Mejia et al. (2008, 2011; DNA, phylogeny), Sogonov et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for *D. ditopa*.

Ditopellina J. Reid & C. Booth 1967, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *D. saccardoana* (Traverso & Spessa) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Ditopellopsis J. Reid & C. Booth 1967, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *D. clethrae* J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, North America, see Mejia et al. (2008, 2011; DNA, phylogeny), Sogonov et al. (2008; DNA, phylogeny), transferred *Ditopellopsis racemula* (Cooke & Peck) M.E. Barr to *Gnomoniopsis*, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified *Ditopellopsis* sp.

Diutina Khunnamwong, Lertwattanasakul, Jindamorakot, Limtong & Lachance 2015, *Saccharomycetales* genera *incertae sedis*, *Saccharomycetes*, eight species, type: *D. rugosa* (Anderson) Khunnamwong, Jindamorakot, Limtong & Lachance, asexual reproduction by multilateral and pseudohyphae are produced, sexual reproduction unknown, saprophytic, but some species are common clinical isolates, rice leaf, bee, soil, soybean factory, clinical, worldwide, see Khunnamwong et al. (2015; taxonomy), sequences are available.

Diversimorbus S.F. Chen & Jol. Roux 2013, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *D. metrosideri* S.F. Chen bis & Jol. Roux, with coelomycetous asexual morph, saprobes, terrestrial, South Africa, have sequence data, see Chen et al. (2013; morphology, phylogeny), Maharachchikumbura et al. (2015; outline), holotype of the type: PREM 60741, ex-type strain of type: CMW37322.

Divinia Cif. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *D. diatricha* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Dominican Republic, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dixomyces I.I. Tav. 1985, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *D. perpendicularis* (Thaxt.) I.I. Tav., asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Dolabra C. Booth & W.P. Ting 1964, *Chaetothyriomycetidae* genera *incertae sedis*, *Eurotiomycetes*, one species, type: *D. nepheliae* C. Booth & W.P. Ting, asexual morph coelomycetous (*vide* Rossman et al. 2010), saprobes, pathogens, terrestrial, Malaysia, see Lumbsch and Huhndorf (2010; outline, as *Dothideomycetes*, genera *incertae sedis*), Rossman et al. (2010, 2012; *Eurotiomycetes* genera *incertae sedis*, DNA, phylogeny, asexual morph), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Dolichocarpus R. Sant. 1949, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *D. chilensis* R. Sant., asexual morph unknown, lichenized, saxicolous and epiphytic, Chile and Saint Helena, see Aptroot (2008; taxonomy), Ertz and Tehler (2011; phylogenetic position), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Doliomyces Steyaert 1961, *Bartaliniaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *D. senegalensis* (Speg.) Steyaert, sexual morph unknown, saprobes, terrestrial, India, South America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as in *Amphisphaeriaceae*), Wijayawardene et al. (2016; placed in *Bartaliniaceae* based on morphology), cultures and sequences are unavailable.

Domingoella Petr. & Cif. 1932, *Ascomycota* genera *incertae sedis*, four species, type: *D. asterinarum* Petr. & Cif., hyphomycetous, sexual morph unknown, on fungi, terrestrial, Pantropical, Australasia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Donadinia Bellem. & Mel.-Howell 1990, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, four species, type: *D. helvelloides* (Donadini, Berthet & Astier) Bellem. & Mel.-Howell, sexual morph unknown, saprobes, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Carbone et al. (2013, 2014; new species; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Doratomyces Corda 1829, *Microascaceae*, *Microascales*, *Sordariomycetes*, two species, type: *D. neesii* Corda, sexual morph unknown, saprobes, terrestrial, worldwide, see Zhang and Pang (2009; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline, phylogeny), Sandoval-Denis et al. (2016; phylogeny), cultures and sequences are available.

Dothichiza Lib. ex Roum. 1880, *Dothideomycetes*, genera *incertae sedis*, 15 species, type: *D. populea* Sacc. & Briard, sexual morph unknown, saprobes, terrestrial, worldwide, see Zalar et al. (2008; DNA, phylogeny), Wijayawardene et al. (2012, 2014; outline, accepted as *Dothioraceae*, and *Dothideomycetes*, genera *incertae sedis* respectively), Kirk et al. (2013; genus accepted), Gonzalez-Menendez et al. (2016; DNA), Hyde et al. (2013) and Thambugala et al. (2014) excluded from *Dothioraceae*, cultures and sequences are available.

Dothidasteroma Höhn. 1909, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, five species, type: *D. pterygotae* (Berk. & Broome) Höhn., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Parmulariaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Parmulariaceae*), Hyde et al. (2013; review, keys, excluded from *Parmulariaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Parmulariaceae*), placement in *Parmulariaceae* supported by morphology, cultures and sequences are unavailable.

Dothidasteromella Höhn. 1910, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. sepulta* (Berk. & M.A. Curtis) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hyde et al. (2013) did not accept as a genus in *Asterinaceae*, Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Dothidea Fr. 1818, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, around 500 spp. (the actual number of species could be less than 100), type: *D. sambuci* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Thambugala et al. (2014b; morphology, phylogeny), Wijayawardene et al. (2014; outline), ex-type strains of type: DAOM 231303, epitype of type: GZU 78–2002.

Dothidella Speg. 1880, *Polystomellaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *D. australis* Speg., sexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Dothideodiplodia Murashk. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *D. agropyri* Murashk., coelomycetous, sexual morph unknown, saprobes, terrestrial, USSR, see Wijayawardene et al. (2012, 2017; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dothidotthia Höhn. 1918, *Dothidotthiaceae*, *Pleosporales*, *Dothideomycetes*, c. ten species, type: *D. symphoricarpi* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, temperate, see Phillips et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, phylogeny), epitype of the type: and ex-epitype BPI 871823, CPC 12929 = CBS 119687.

Dothiopeltis E. Müll. 1957, *Leptopeltidaceae*, *Dothideomycetes* families *incertae sedis*, cf. one species, type: *D. arunci* E. Müll., asexual morph idriella-like, saprobes, terrestrial, Switzerland, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Dothiora Fr. (1849), *Dothideaceae*, *Dothideales*, *Dothideomycetes*, more than 50 species, type: *D. pyrenophora* (Fr.) Fr., asexual morph coelomycetous, hormonema-like synasexual morph, dothichiza or hormonema-like, saprobes or pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothioraceae*), Hyde et al. (2013; accepted as a genus in *Dothioraceae*), Kirk et al. (2013; genus accepted), Thambugala et al. (2014b), Crous et al. (2016), cultures and sequences are available.

Dothiorella Sacc. 1880, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, 24 species, type: *D. pyrenophora* Sacc., holomorph, asexual morph coelomycetous, endophytes, pathogens, saprobes, associated with wide range of woody hosts, worldwide distribution, See Phillips et al. (2008, 2013; morphology, phylogeny), Liu et al. (2012, phylogeny), Dissanayake et al. (2016, morphology, phylogeny), Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), holotype and culture ex-epitype of type: IMI 63581b and CBS 115038,

Dothioropsis Riedl 1974, *Ascomycota* genera *incertae sedis*, one species, type: *D. corni* Riedl, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Mel'nik and Minter (2006; UK), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dothistroma Hulbary 1941, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *D. pini* Hulbary, coelomycetous, sexual morph mycosphaerella-like, plant pathogenic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Braun et al. (2014; morphology and typification), epitype CBS H-12211, culture ex-epitype CMW 10951 = CBS 116487.

Dothivalsaria Petr. 1966, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. megalospora* (Auersw.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as genus in *Massariaceae*), Hyde et al. (2013; did not accept as a genus in *Massariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are available.

Drechmeria W. Gams & H.-B. Jansson 1985 (= *Haptocillium* W. Gams & Zare *vide* Maharachchikumbura et al. 2015), *Ophiocordycipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *D. coniospora* (Drechsler) W. Gams & H.-B. Jansson, sexual morph unknown, parasitic, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Spatafora et al. (2015; new species), Zhang et al. (2016; endoparasites of nematodes, DNA), cultures and sequences are available.

Drechslerella Subram. 1964, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, two species, type: *D. acrochaeta* (Drechsler) Subram., sexual morph unknown, parasitic, terrestrial, worldwide, see Castillo et al. (2010; biocontrol), Kirk et al. (2013; genus accepted), Liu et al. (2014; genomic studies), cultures and sequences are available.

Drepanomyces Thaxt. 1931, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *D. malayanus* Thaxt., asexual morph unknown, parasitic, terrestrial, Sumatra, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Drepanopeziza (Kleb.) Höhn. 1917 (= *Gloeosporium* Desm. & Mont. 1849; *Gloeosporidiella* Petr. 1921 fide Rossman et al. 2016), *Dermateaceae*, *Helotiales*, *Leotiomycetes*, five species, type: *D. ribis* (Rehm ex Kleb.) Höhn., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Drudeola Kuntze 1891, *Ascomycota* genera *incertae sedis*, one species, type: *D. sarraceniae* (Peck & Cooke) Kuntze, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Drumopama Subram. 1957, *Ascomycota* genera *incertae sedis*, one species, type: *D. girisa* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dryosphaera Jørgen Koch & E.B.G. Jones 1989, *Ascomycota* genera *incertae sedis*, three species, type: *D. navigans* Jørg. Koch & E.B.G. Jones asexual morph unknown, on wood associated with sand, marine, temperate and tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), cultures and sequences are unavailable.

Dualomyces Matsush. 1987, *Ascomycota* genera *incertae sedis*, two species, type: *D. asterinarum* Petr. & Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dubitatio Speg. 1882, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. dubitationum* Speg., asexual morph coelomycetous, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Massariaceae*), Hyde et al. (2013) excluded from *Massariaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Dubujiana D.R. Reynolds & G.S. Gilbert 2005, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. glandulifera* D.R. Reynolds & G.S. Gilbert, asexual morph coelomycetous, saprobes, terrestrial, Australia, see Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Duebenia Fr. 1849, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, five species, type: *D. rufa* Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dufourea Ach. 1809, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 23 species, type: *D. flammae* (L. f.) Ach., lichenized, see Arup et al. (2013; taxonomy), Kondratyuk et al. (2014b; taxonomy), Lücking et al. (2016; classification), sequences are available.

Dumontinia L.M. Kohn 1979, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, five species, type: *D. tuberosa* (Bull.) L.M. Kohn, asexual morph unknown, saprobes, terrestrial, temperate, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

Duosporium K.S. Thind & Rawla 1961, *Ascomycota* genera *incertae sedis*, one species, type: *D. cyperi* K.S. Thind & Rawla, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, China, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Duplicaria Fuckel 1870, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *D. empetri* (Pers.) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zou et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Li et al. (2015; DNA, Seashells), cultures and sequences are available but type lacks DNA.

Duplicariella B. Erikss. 1970, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *D. phyllodoce* B. Erikss., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Duradens Samuels & Rogerson 1990, *Sordariomyces* genera *incertae sedis*, one species type: *D. lignicola* Samuels & Rogerson, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Clypeosphaeriaceae*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, excluded from *Clypeosphaeriaceae* and placed in *Sordariomyces*, genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Durandiella Seaver 1932, *Dermateaceae*, *Helotiales*, *Leotiomyces*, ten species, type: *D. fraxini* (Schwein.) Seaver, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Durispora K.D. Hyde 1994, *Valsaceae*, *Diaporthales*, *Sordariomyces*, two species, type: *D. elaeidicola* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Malaysia, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Durotheca Læssøe, Srikitik., Luangsa-ard & M. Stadler 2013, *Xylariaceae*, *Xylariales*, *Sordariomyces*, four species, type: *D. depressa* Læssøe & Srikitikulchai, asexual morph nodulisporium-like, saprobes, terrestrial, Thailand, see Læssøe et al. (2013; morphology, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Li et al. (2016; new species, DNA), holotype and ex-type cultures of the type: BBH 18222, BBC 23016.

Dussiella Pat. 1890, *Clavicipitaceae*, *Hypocreales*, *Sordariomyces*, one species, type: *D. tuberiformis* (Berk. & Ravenel) Pat., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Dwayaangam Subram. 1978, *Orbiliaceae*, *Orbiliales*, *Orbiliomyces*, seven species, type: *D. quadridens* (Drechsler) Subram., sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Dwayabeeja Subram. 1958, *Ascomycota* genera *incertae sedis*, three species, type: *D. sundara* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dwayaloma Subram. 1957, *Ascomycota* genera *incertae sedis*, two species, type: *D. trina* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dwayalomella Brisson, Piroz. & Pauzé 1975, *Ascomycota* genera *incertae sedis*, one species, type: *D. vaccinii* Brisson, Piroz. & Pauzé, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dwibahubeeja N. Srivast., A.K. Srivast. & Kamal 1995, *Ascomycota* genera *incertae sedis*, one species, type: *D. indica* N. Srivast., A.K. Srivast. & Kamal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dwibeeja Subram. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *D. sundara* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dwiroopa Subram. & Muthumary 1986, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *D. ramya* Subram. & Muthumary, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Dwiroopella Subram. & Muthumary 1986, *Ascomycota* genera *incertae sedis*, one species, type: *D. sundara* Subram. & Muthumary, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dyfratomyces K.D. Hyde, K.L. Pang, Alias, Suetrong & E.B.G. Jones 2013, *Dyfratomycetaceae*, *Dyfratomycetales*, *Dothideomycetes*, four species, type: *D. tiomanensis* K.L. Pang, S.A. Alias, K.D. Hyde, Suetrong & E.B.G. Jones, asexual morph unknown, saprobes, on wood in aquatic or terrestrial environments, worldwide, see Hyde et al. (2013; phylogeny, morphology, outline), Pang et al. (2013; phylogeny, morphology), Shearer et al. (2014; review), Wijayawardene et al. (2014; outline), Jones et al. (2015; classification, marine), holotype of type: MFLU 13-00063.

Dyplolabia A. Massal. 1854, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *D. afzelii* (Ach.) A. Massal., asexual morph unknown, lichenized, terrestrial, tropical, see Rivas Plata et al. (2012a; taxonomy), Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted), Kalb et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Dyrithiopsis L. Cai, Jeewon & K.D. Hyde 2003 (= *Monochaetiopsis* L. cai et al. 2003 *fide* Maharachchikumbura et al. 2015; Réblová et al. 2016), *Bartaliniaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *D. lakefuxianensis* L. Cai, Jeewon & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Bartaliniaceae*), Réblová et al. (2016; nomenclature), Wijayawardene et al. (2012, 2017; outline), holotype of the type: HKU (M) 8280, cultures and sequences are available.

Dyrithium M.E. Barr 1994, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *D. lividum* (Fr.) M.E. Barr, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Dysrhynchis Clem. 1909, *Perisporiopsidaceae*, *Dothideomycetes* families *incertae sedis*, *Dothideomycetes*, seven species, type: *D. pulchella* (Sacc.) Clem., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Parodiopsidaceae*), Hyde et al. (2013; accepted as a genus in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Ebollia Minter & Caine 1980, *Ascomycota* genera *incertae sedis*, one species, type: *E. valdiviensis* (Speg.) Minter & Caine, coelomycetous, sexual morph unknown, saprobes, terrestrial, Chile, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ebullia K.L. Pang 2015, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *E. octonae* (Kohlm.) K.L. Pang, asexual morph unknown, saprobes, marine, Brunei, Hawaiian Islands, India, Taiwan, sequence data available, see Chu et al. (2015), Maharachchikumbura et al. (2016; outline), holotype of type: J.K. 4474a = 01271926, NYBG.

Echidnocymbium Brusse 1987, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *E. speciosum* Brusse, asexual morph coelomycetous, lichenized, saxicolous, South Africa, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Echidnodella Theiss. & Syd. 1918, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, 34 species, type: *E. linearis* (Syd. & P. Syd.) Syd., asexual morph unknown. Epiphytes, terrestrial, worldwide, no molecular data, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Hongsanan et al. (2014; taxonomy), Wijayawardene et al. (2014; outline), placement in *Asterinaceae* supported by morphology, cultures and sequences are unavailable, needs generic revision.

Echidnodes Theiss. & Syd. 1918, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, c. 17 species, type: *E. liturata* (Cooke) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and hunduf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Echidnodes*), Hongsanan et al. (2014; phylogeny), cultures and sequences are unavailable for type species, needs generic revision.

Echinoascotheca Matsush. 1995, *Phaeotrichaceae*, *Phaeotrichales*, *Dothideomycetes*, one species, type: *E. duploiformis* Matsush., asexual morph unknown, saprobes, terrestrial, Pakistan, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as genus in *Phaeotrichaceae*), Hyde et al. (2013; accepted as genus in *Phaeotrichaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Echinobotryum Corda 1831, *Microascaceae*, *Microascales*, *Sordariomycetes*, one species, type: *E. atrum* Corda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Echinocatena R. Campb. & B. Sutton 1977, *Ascomycota* genera *incertae sedis*, one species, type: *E. arthrinioides* R. Campb. & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 199279, cultures and sequences are unavailable, genus need revision.

Echinochondrium Samson & Aa 1975, *Ascomycota* genera *incertae sedis*, one species, type: *E. pulchrum* Samson & Aa, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Echinoconidiophorum Pereira-Carv. & Dianese 2009, *Ascomycota* genera *incertae sedis*, one species, type: *E. cerradense* Pereira-Carv. & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Echinodiscus Etayo & Diederich 2000, ?*Cordieritidaceae*, *Helotiales*, *Leotiomyces*, two species, type: *E. lesdainii* (Vouaux) Etayo & Diederich, asexual morph unknown, lichenicolous, non-lichenized, Eurasia, see Zhurbenko (2009; morphology, new species), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable but lacks for the type species.

Echinomyces Rappaz 1987, *Diatrypaceae*, *Xylariales*, *Sordariomyces*, two species, type: *E. obesa* (Syd.) Rappaz, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Echinoplaca Fée 1825, *Gomphillaceae*, *Ostropales*, *Lecanoromyces*, c. 40 species, type: *E. epiphylla* Fée, asexual morph unknown, lichenized, widespread (tropical), foliicolous (but a few species are corticolous), see Lücking et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Echinosphaeria A.N. Mill. & Huhndorf 2004, *Helminthosphaeriaceae*, *Sordariomycetidae*, families *incertae sedis*, *Sordariomyces*, seven species, type: *E. canescens* (Pers.) A.N. Mill. & Huhndorf, asexual morph unknown, saprobes, terrestrial, worldwide, see Bell and Mahoney (2008, 2016; new species), Declercq (2009; new species), Dhargalkar and Bhat (2009; new species), Bell (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miller et al. (2014; new species; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for type: SMH4666, TL5730.

Echinula Graddon 1977, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *E. asteriadiformis* Graddon, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Echria (N. Lundq.) Kruys, Huhndorf & A.N. Mill. 2015, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomyces*, two species, type: *E. macrotheca* (P. Crouan & H. Crouan) Kruys, Huhndorf & A.N. Mill., saprobes, marine, USA, see Kruys et al. (2015; phylogeny), cultures and sequences are available.

Ecteinomyces Thaxt. 1903, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *E. trichopterophilus* Thaxt., asexual morph unknown, parasites, terrestrial, America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2014; the Netherlands), cultures and sequences are unavailable.

Ectendomeliola Hosag. & D.K. Agarwal 2006, *Ascomycota* genera *incertae sedis*, two species, type: *E. walsurae* Hosag. & D.K. Agarwal, asexual morph produced from the hyphae, on living leaves, terrestrial, worldwide, see Hosagoudar and Archana (2010; new species, India), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanant et al. (2015; excluded from *Meliolaceae*), holotype of the type: HCIO 45237, cultures and sequences are unavailable.

Edenia M.C. González, Anaya, Glenn, Saucedo & Hanlin 2007, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomyces*, two species, type: *E. gomezpompae* M.C. González, Anaya, Glenn, Saucedo & Hanlin, asexual morph unknown, endophytes, human pathogens, terrestrial, Pakistan, Quintana Roo, see Crous et al. (2009; DNA, phylogeny), Hyde et al. (2013; outline, accepted as a genus in *Pleosporaceae*), Cui et al. (2013; DNA, human

pathogens), Sun et al. (2013; new species, endophytic), Wijayawardene et al. (2014; outline, accepted as a genus in *Pleosporaceae*), Ariyawansa et al. (2015; phylogeny, excluded from *Pleosporaceae* and placed in *Phaeosphaeriaceae*), Pili et al. (2015; endophytes, Kenya, DNA), Keilor Rojas-Jimenez et al. (2016; endophytes, DNA, Costa Rica), holotype of the type: MEXU 25346, cultures and sequences are available.

Edrudia W. P. Jord. 1980, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *E. constipans* (Nyl.) W.P. Jord., asexual morph unknown, lichenized, saxicolous, California, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Edwardiella Henssen 1986, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *E. mirabilis* Henssen, asexual morph unknown, lichenized, saxicolous, Marion Island, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Exxserohilum K.J. Leonard & Suggs 1974 (= *Setosphaeria* K.J. Leonard & Suggs 1974 *vide* Wijayawardene et al. 2014), *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, c. 30 species, type: *E. turcicum* (Pass.) K.J. Leonard & Suggs, hyphomycetous, sexual morph *Setosphaeria*, on grasses, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline, nomenclature), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2015; phylogeny), Rossman et al. (2015; nomenclature), cultures and sequences are available.

Effetia Bartoli, Maggi & Persiani 1984, *Sordariaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *E. craspedoconidica* Bartoli, Maggi & Persiani, asexual morph virgariella-like, from soil, terrestrial, Ivory Coast, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: horto botanico Roma105S, cultures and sequences are unavailable.

Eiglera Hafellner 1984, *Eigleraceae*, *Acarosporales*, *Lecanoromycetes*, two species, type: *E. flavida* (Hepp) Hafellner, asexual morph unknown, lichenized, saxicolous, Europe, North America, see Lumbsch and Huhndorf (2010; accepted as a genus in *Hymeneliaceae*, *Pertusariales*), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; the phylogenetic placement of *Eiglera* outside of the *Hymeneliaceae*, sister to *Acarosporaceae*, needs to be confirmed, which would justify the reinstatement of the family *Eigleraceae* belonging to the *Acarosporales*), Lücking et al. (2016; classification), sequences are available.

Eilifdahlia S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur 2014, *Teloschistaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *E. dahlia* (Elix, S.Y. Kondr. & Kärnefelt) S.Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A.S. Kondr. & Hur, asexual morph unknown, lichenized, epiphytic, Australia, South Africa, see Kondratyuk et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Eiona Kohlm. 1968, *Ascomycota* genera *incertae sedis*, asexual morph unknown, one species, type: *E. tunicata* Kohlm., on wood often associated with sand, temperate, no sequence data, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), cultures and sequences are unavailable, needs generic revision.

Elachopeltella Bat. & Cavalc. 1964, *Ascomycota* genera *incertae sedis*, two species, type: *E. sapindacearum* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Elaeodema Syd. 1922, *Ascomycota* genera *incertae sedis*, two species, type: *E. cinnamomi* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Sutton (1977; nomenclature), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Elaphomyces Nees 1820, *Elaphomycetaceae*, *Elaphomycetales*, *Eurotiomycetes*, apparently polyphyletic, c. 78 species, type: *E. granulatus* Fr., terrestrial, hypogeous, forming mycorrhizas with conifers and broad-leaved trees, cosmopolitan, see Zhang and Minter (2011; new species), Castellano et al. (2011, 2012a, 2012b, 2016; new species, phylogeny), Paz et al. (2012; new species), Buyck et al. (2016; phylogeny), cultures and sequences are available.

Elasticomyces Zucconi & Selbmann 2008, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *E. elasticus* Zucconi & Selbmann, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Antarctica, see Selbmann et al. (2008; morphology, phylogeny), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2012, 2014, 2017; outline), holotype and ex-type strain of the type: CBS H-20177, CBS 122538.

Elattopycnis Bat. & Cavalc. 1964, *Ascomycota* genera *incertae sedis*, one species, type: *E. protii* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Eleutherascus Arx 1971, *Ascodesmidaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *E. lectardii* (Nicot) Arx, asexual morph unknown, saprobes, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available for type: CBS 626.71.

Eleutheromycella Höhn. 1908, *Ascomycota* genera *incertae sedis*, one species, type: *E. mycophila* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Eleutheromyces Fuckel 1870, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *E. subulatus* (Tode) Fuckel, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; DNA, phylogeny), epitype and ex-epitype of the type: CBS H-12355, CBS113.86.

Elixia Lumbsch 1997, *Elixiaceae*, *Umbilicariales*, *Lecanoromycetes*, two species; type: *E. flexella* (Ach.) Lumbsch, lichenized, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Miądlkowska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available, type specimen UPS-ACH-L-1286 (syntype).

Elletevera Deighton 1969, *Ascomycota* genera *incertae sedis*, one species, type: *E. pulchrum* Samson & Aa, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Elliotinia L.M. Kohn 1979, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *E. kernerii* (Wettst.) L.M. Kohn, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures available for the type: KL402, specimen voucher TU:104529.

Ellisemia Subram. 1992, *Sordariomycetes* genera *incerte sedis*, 61 species and 02 varieties, type: *E. coronata* (Fuckel) Subram., sexual reported for *E. adscendens* (Berk.) Subram., saprobes, lichenicolous (e.g. *E. lichenicola*), terrestrial, aquatic, worldwide, see Ma et al. (2008; new species), Ma et al. (2010; new species), McKenzie (2010; new species), Ma et al. (2011; new species), Seifert et al. (2011; phylogeny), Rajeshkumar et al. (2012; new species), Delgado (2013; new species), Ren et al. (2013; new species), Xia et al. (2015; new species),

Santa Izabel et al. (2013; new combinations), cultures and sequences are available for few species (not from type material) but lacks for the type.

Ellisembiopsis T.S. Santa Izabel & Gusmão 2013, *Ascomycota* genera *incertae sedis*, two species, type: *E. brasiliensis* T.S. Santa Izabel & Gusmão, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, China, see Santa Izabel et al. (2013; morphology), holotype of the type: HUEFS 155102, cultures and sequences are unavailable.

Elmerinula Syd. 1934, *Dothideomycetes* genera *incertae sedis*, one species, type: *E. capnoides* Syd., asexual morph unknown, saprobes, terrestrial, Phillipines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Elongatopedicellata J.F. Zhang, J.K. Liu, K.D. Hyde & Z.Y. Liu 2015, *Roussoellaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *E. lignicola* J.F. Zhang, J.K. Liu, K.D. Hyde & Z.Y. Liu, asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-2717, MFLUCC 15-0642.

Elotespora R.F. Castañeda & Heredia 2010, *Ascomycota* genera *incertae sedis*, one species, type: *E. mexicana* R.F. Castaneda & Heredia, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Mexico, see Castañeda-Ruiz et al. (2010b; morphology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: XAL CB883, cultures and sequences are unavailable, compare with *Artocarpomyces*, *Colemaniella* and *Glomerobolus*.

Elsinoë Racib. 1900 (= *Sphaceloma* de Bary 1874 *fide* Wijayawardene et al. 2014; Rossman et al. 2015), *Elsinoaceae*, *Myriangiales*, *Dothideomycetes*, c. 30 species (known by cultures), type: *E. canavaliae* Racib., asexual morph coelomycetous (*Sphaceloma*), pathogens, saprobes, terrestrial, Phillipines, see Lumbsch and Huhndorf (2010; outline), Wang et al. (2009; pathogens), Chung (2011; pathogens), Cheewangkoon et al. (2009; phylogeny), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Rossman et al. (2015, 2016; nomenclature, new combinations), Crous et al. (2016; new species, phylogeny), cultures and sequences are available.

Elytroderma Darker 1932, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *E. deformans* (Weir) Darker, asexual morph unknown, endophytes, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available for unidentified species.

Emarcea Duong, Jeewon & K.D. Hyde 2004, *Xylariaceae*, *Xylariales*, *Sordariomyces*, three species, type: *E. castanopsidicola* Duong, Jeewon & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, Taiwan, see Li et al. (2009; new species, Taiwan), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015; new species; DNA), Maharachchikumbura et al. (2015, 2016; outline), isotypes of the type: MRC DLA 008, HKUM 17498, CMU H224410, PDD 78748, ex-type cultures of the type: CBS and HKUCC 10344.

Emblemospora Jeng & J.C. Krug 1976, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomyces*, one species, type: *E. monotrema* Jeng & J.C. Krug, asexual morph unknown, from soil, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are unavailable.

Embryonispota G.Z. Zhao 2014, *Pezizomycotina*, genera *incertae sedis*, one species, type: *E. bambusicola*, G.Z. Zhao, *****, sexual morph unknown, saprobes, terrestrial, China, see Zhao et al. (2013; taxonomy), cultures and sequences are unavailable.

Emericellopsis J.F.H. Beyma 1940, *Hypocreales* genera *incertae sedis*, *Sordariomyces*, twelve species, type: *E. terricola* J.F.H. Beyma, asexual morph hyphomycetous, endophytes, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Grum-

Grzhimaylo et al. (2013; new species), Kirk et al. (2013; genus accepted), Hyde et al. (2016; new species, hyphomycetous asexual morph), sequences are available.

Emilmuelleria Arx 1986, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *E. spirotricha* (R.K. Benj.) Arx, asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Emodomelanelia Divakar & A. Crespo 2010, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *E. masonii* (Essl. & Poelt) Divakar & A. Crespo, asexual morph unknown, lichenized, saxicolous, Asian endemic (mainland China, India, Nepal and Taiwan), see Crespo et al. (2010a; phylogeny and taxonomy), Lücking et al. (2016; classification), sequences are available.

Enantioptera Descals 1983, *Ascomycota* genera *incertae sedis*, two species, type: *E. tetralata* Descals, hyphomycetous, sexual morph unknown, in river foam, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Enarthromyces Thaxt. 1896, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *E. indicus* Thaxt., asexual morph unknown, parasites, saprobes, terrestrial, Asia, Africa, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Encephalographa A. Massal. 1854, *Melaspileaceae*, *Eremithallales*, *Dothideomycetes*, one species, type: *E. cerebrina* (DC.) A. Massal., asexual morph unknown, lichenized, saxicolous, Europe (southern), see Lumbsch and Huhndorf (2010; outline, doubtful position in *Arthoniomycetes*), Kirk et al. (2013; genus accepted), Ertz and Diederich (2015; phylogenetic position), Lücking et al. (2016; classification), sequences and cultures are available; the placement of all species but *E. elisae* in *Encephalographa* should be reassessed.

Enchnoa Fr. 1849, *Calosphaeriales* genera, *incertae sedis*, *Sordariomycetes*, one species, type: *E. lanata* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Nitschkiaceae*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Calosphaeriales* genera, *incertae sedis*), cultures and sequences are unavailable.

Enchylium (Ach.) Gray 1821, *Collemataceae*, *Peltigerales*, *Lecanoromycetidae*, *Lecanoromycetes*, nine species, type: [to be added], lichenized, see Otálora et al. (2013a, 2014; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available.

Encoelia (Fr.) P. Karst. 1871, *Cenangiaceae*, *Helotiales*, *Leotiomycetes*, 40 species, type: *E. furfuracea* (Roth) P. Karst., asexual morph unknown, endophytes, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel (2014, 2016; morphology, ultrastructure, DNA, phylogeny), cultures and sequences are available.

Encoeliopsis Nannf. 1932, *Mollisiaceae s. l.*, *Helotiales*, *Leotiomycetes*, four species, type: *E. rhododendri* (Ces. ex Rabenh.) Nannf., asexual morph unknown, endophytes, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Helotiaceae*), Kirk et al. (2013; genus accepted), Pärtel (2016; DNA, phylogeny), cultures available for type: KL118.

Endobotrya Berk. & M.A. Curtis 1874, *Ascomycota* genera *incertae sedis*, one species, type: *E. elegans* Berk. & M.A. Curtis, coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Endobotryella Höhn. 1909, *Ascomycota* genera *incertae sedis*, one species, type: *E. oblonga* (Fuckel) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Endocalyx Berk. & Broome 1876, *Apiosporaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *E. thwaitesii* Berk. & Broome, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Capdet and Romero (2010; Argentina), Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline, accepted as *Ascomycota* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Endocarpon Hedw. 1788, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, c. 70 species, type: *E. pusillum* Hedw., asexual morph coelomycetous, terrestrial and aquatic (maritime and freshwater), lichenized, occurring on rocks, soil and bark, cosmopolitan, see Gueidan et al. (2009; phylogeny, outline), Aptroot et al. (2008; regional monograph, Costa Rica), Yang and Wei (2008; new species), Giavarini and Fox (2009; regional monograph, Great Britain), Prieto et al. (2012; phylogeny), Joshi and Hur (2013a, b; new species), Lücking et al. (2016; classification), sequences are available.

Endocena Cromb. 1877, *Icmadophilaceae*, *Pertusariales*, *Lecanoromycetes*, one species, type: *E. informis* Cromb., asexual morph unknown, lichenized, terricolous, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Endococcus Nyl. 1855, *Dothideomycetes* genera *incertae sedis*, 34 species, type: *E. rugulosus* (Borrer ex Leight.) Nyl., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; outline, genus accepted), Kocourkova and Knudsen (2011; new species), Zhurbenko et al. (2012; new species), a culture and sequence is available, needs generic revision.

Endocolium Syd. 1937, *Ascomycota* genera *incertae sedis*, one species, type: *E. costaricanum* Syd., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Endoconidioma Tsuneda, Hambl. & Currah 2004, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, one species, type: *E. populi* Tsuneda, Hambl. & Currah, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, needs generic revision.

Endoconidiophora Münch 1907, *Ceratocystidaceae*, *Microascales*, *Sordariomycetes*, one species, type: *E. coerulescens* Münch, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012; outline, accepted as *Ascomycota* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Endoconospora Gjaerum 1971, *Ascomycota* genera *incertae sedis*, two species, type: *E. cerastii* Gjaerum, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Norway, India, see Wijayawardene et al. (2012; outline, accepted as *Ascomycota* genera *incertae sedis*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Endocoryneum Petr. 1922, ?*Didymellaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *E. loculosum* (Sacc.) Petr., asexual morph unknown, saprobes, terrestrial, Norway, India, see Wijayawardene et al. (2012, 2016; outline, accepted as *Ascomycota* genera *incertae sedis* and *Didymellaceae* respectively), Kirk et al. (2013; genus accepted), cultures and sequences are available for *D. festucae* Wijayaw. et al. (MFLUCC 14-0461), needs generic revision.

Endodothiora Petr. 1929, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, one species, type: *E. sydowiana* Petr., asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch

and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Endogenospora R.F. Castañeda, O. Morillo & Minter 2010, *Ascomycota* genera *incertae sedis*, type: *E. aspectabilis* R.F. Castañeda, O. Morillo & Minter, hyphomycetous, sexual morph unknown, one species, saprobes, terrestrial, Venezuela, see Castañeda-Ruiz et al., (2010c; morphology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: INIFAT C09/74, cultures and sequences are unavailable, compare with *Ascoconidium*, *Sporoschisma* and *Sporoschismopsis*.

Endohyalina Marbach 2000. Physciaceae, *Lecanorales*, *Lecanoromycetidae*, type: *E. rappii* (Imshaug ex R.C. Harris) Marbach, ten species, three varieties, asexual morph unknown, lichenized, terrestrial, corticolous, lignicolous, sometimes obligately lichenicolous, Australia, tropical to subtropical, see Giralt, M. et al. (2010; taxonomy, Elix and Kantvilas (2015; new records, new taxa), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Endomelanconiopsis E.I. Rojas & Samuels 2008, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, two species, type: *E. endophytica* E.I. Rojas & Samuels, coelomycetous, saprobes, terrestrial, South America, see Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; taxonomy, new species, phylogeny), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Endomelanconium Petr. 1940, *Ascomycota* genera *incertae sedis*, four species, type: *E. pini* (Corda) Petr., coelomycetous, sexual morph unknown, endophytes, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016, 2017; morphology; outline), cultures and sequences are unavailable.

Endomeliola S. Hughes & Piroz. 1994, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, one species, type: *E. dingleyae* S. Hughes & Piroz., asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: DAOM 167533, cultures and sequences are available for PDD:98304 (unpublished).

Endomyces Reess 1870, *Saccharomycetales* genera *incertae sedis*, *Saccharomycetes*, four species, type: *E. decipiens* (Tul. & C. Tul.) Reess, asexual reproduction is by pseudohyphae or septate hyphae or blastoconidia, parasite of mushrooms, grow on various mushrooms, worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Endophoma Tsuneda & M.L. Davey 2011, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *E. elongata* Tsuneda & M.L. Davey, coelomycetous, sexual morph unknown, saprobes (soil of bat cave), terrestrial, Canada, see Tsuneda et al. (2011; taxonomy, DNA, phylogeny), Chen et al. (2015; phoma-like taxa in *Didymellaceae*), holotype, and ex-type of the type: UAMH 11216.

Endophragmiopsis M.B. Ellis 1966, *Ascomycota* genera *incertae sedis*, one species, type: *E. pirozynskii* M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Endoplacodium Petr. 1949, *Ascomycota* genera *incertae sedis*, one species, type: *E. nigrescens* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Iran, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Endoramularia Petr. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *E. ulmi* Petr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Endoscypha Syd. 1924, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *E. perforans* Syd., asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available PDD:102231 (unpublished), needs generic revision.

Endosporoideus W.H. Ho, Yanna, K.D. Hyde & Goh 2005, *Ascomycota* genera *incertae sedis*, one species, type: *E. pedicellatus* W.H. Ho, Yanna, K.D. Hyde & Goh, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Hong Kong, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are unavailable, needs generic revision.

Endostilbum Malençon 1964, *Ascomycota* genera *incertae sedis*, one species, type: *E. cerasi* (Bourdot & Galzin) Malençon, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Morocco, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are unavailable, needs generic revision.

Endothia Fr. 1849, *Cryphonectriaceae*, *Diaporthales*, *Sordariomyces*, two species, type: *E. gyrosa* (Schwein.) Fr., asexual morphs unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Endotryblidium Petr. 1959, *Patellariaceae*, *Patellariales*, *Dothideomyces*, one species, type: *E. insculptum* (Cooke) Petr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), cultures and sequences are unavailable, needs generic revision.

Endoxyla Fuckel 1871, *Boliniaceae*, *Boliniales*, *Sordariomyces*, ten species, type: *E. operculata* (Nitschke) Sacc., asexual morphs unknown, saprobes, terrestrial, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Untereiner et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Endoxylina Romell 1892, *Sordariomyces* genera *incertae sedis*, seven species, type: *E. stellulata* Romell, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Vasilyeva (2010; new species; Russia), Kirk et al. (2013; genus accepted), Untereiner et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Endozythia Petr. 1959, *Ascomycota* genera *incertae sedis*, one species, type: *E. moravica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, former Yugoslavia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Enerthidium Syd. 1939, *Ascomycota* genera *incertae sedis*, one species, type: *E. canarii* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Wijayawardene et al. (2012, 2016; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Engelhardtella A. Funk 1973, *Ascomycota* genera *incertae sedis*, one species, type: *E. alba* A. Funk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Englerodithis Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, three species, type: *E. kilimandscharica* (Henn.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Parmulariaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Parmulariaceae*), Hyde et al. (2013; review, keys, excluded from *Parmulariaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences unavailable.

Engleromyces Henn. 1900, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *E. goetzei* Henn., asexual morph unknown, saprobes, terrestrial, Africa, Asia, see Lumbsch and Huhndorf (2010; outline), Whalley et al. (2010; new species. China), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Englerula Henn. 1904, *Englerulaceae*, *Dothideomycetes* families *incertae sedis*, six species, type: *E. macarangae* Henn., asexual morph coelomycetous, saprobes, epiphytic, terrestrial, Africa, India, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Englerulaceae*), Dai et al. (2014; morphology), cultures and sequences are unavailable, needs generic revision.

Enigmotrema Lücking (2012), *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *E. rubrum* Lücking, lichenized, see Sipman et al. (2012; taxonomy), Lücking et al. (2013; phylogeny), Lücking (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Enridescalsia R.F. Castañeda & Guarro 1998, *Ascomycota* genera *incertae sedis*, one species, type: *E. speciosa* R.F. Castaneda & Guarro, hyphomycetous, sexual morph unknown, saprobes, aquatic (fresh water), Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C95/96, cultures and sequences are unavailable, compare with *Xylomyces* and *Gonatobotrys*.

Enterocarpus Locq.-Lin. 1977, *Microascaceae*, *Microascales*, *Sordariomycetes*, two species, type: *E. uniporus* Locq.-Lin., asexual morph unknown, coprophilous, terrestrial, Sahara, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Enterodictyon Müll. Arg. 1892, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *E. indicum* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Enterographa Fée 1824, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, ± 60 species, type: *E. crassa* (DC.) Fée, sexual morph with punctiform or rounded to lirelliform ascomata, lichenized, rarely lichenicolous, terrestrial, world-wide with a preference for (sub)tropical regions, see Ertz and Tehler (2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015, phylogeny), Lücking et al. (2016; classification), sequences are available.

Enthallopycnidium F. Stevens 1925, *Ascomycota* genera *incertae sedis*, one species, type: *E. gouldiae* F. Stevens, coelomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Entoderma Hanula, Andreadis & M. Blackw. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *E. colletosporium* Hanula, Andreadis & M. Blackw., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Entodesmium Riess 1854, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, eight species, type: *E. rude* Riess, sexual morph unknown, saprobes, terrestrial, temperate, see Schoch et al. (2009; DNA, phylogeny), Hyde et al. (2013; outline, accepted as a genus in *Phaeosphaeriaceae*), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeriaceae*, phylogeny), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; new species, Russia, DNA, phylogeny), cultures available for the type: CBS 650.86.

Entoleuca Syd. 1922, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *E. callimorpha* Syd., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Entonaema Möller 1901, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, six species, type: *E. liquescens* Möller, asexual morph unknown, terrestrial, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Eoaleurina Korf & W.Y. Zhuang 1986, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *E. foliicola* (Henn.) Korf & W.Y. Zhuang, asexual morph unknown, saprobes, terrestrial, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Eopyrenula R.C. Harris 1973, *Dacampiaceae*, *Dothideomycetes*, families *incertae sedis*, three species, type: *E. leucoplaca* (Wallr.) R.C. Harris, sexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; outline, accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Dacampiaceae*), cultures and sequences are unavailable.

Eopyrenula R.C. Harris 1973, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, six species, type: *E. leucoplaca* (Wallr.) R.C. Harris, asexual morph unknown, lichenized, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Eosphaeria Höhn. 1917, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *E. uliginosa* (Kunze) Höhn., asexual morph hyphomycetous, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Eoterfezia G.F. Atk. 1902, *Eoterfeziaceae*, *Ascomycota* families *incertae sedis*, type: *E. parasitica* G.F. Atk., six species, asexual morph unknown, terrestrial, saprobes, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Epaphroconidia Calat. & V. Atienza 1995, *Ascomycota* genera *incertae sedis*, one species, type: *E. hawksworthii* Calat. & V. Atienza, coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Spain, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ephebe Fr. (1825), *Lichinaceae*, *Lichinales*, *Lichinomycetes*, *Ascomycota*; 13 species; type: *Ephebe lanata* (L.) Vain.; lichenized; see.

Ephebe Fr., 1825. *Lichinaceae*, *Lichinales*, *Lichinomycetidae*, 13 species, type: *E. lanata* (L.) Vain., asexual morph unknown, lichenized, terrestrial, corticolous, see Lumbsch and Huhndorf (2010; outline). Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Ephelidium C.W. Dodge & E.D. Rudolph 1955, *Ascomycota* genera *incertae sedis*, one species, type: *E. heardense* C.W. Dodge & E.D. Rudolph, coelomycetous, sexual morph

unknown, saprobes, terrestrial, Antarctica, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ephelis Fr. 1849, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, six species, type: *E. mexicana* Fr., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Hernández-Restrepo et al. (2016; DNA, new species), cultures and sequences are available.

Epibelonium E. Müll. 1963, *Saccardiaceae*, *Ascomycota* families *incertae sedis*, one species, type: *E. plagiochilae* (Gonz. Frag.) Döbbeler, asexual morph unknown, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Epibryon Döbbeler 1978, *Epibryaceae*, *Chaetothyriales*, *Eurotiomycetes*, c. 30 species, type: *E. plagiochilae* (Gonz. Frag.) Döbbeler, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; DNA, symbioses), Hyde et al. (2013; outline, accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Gueidan et al. (2014; phylogeny), cultures and sequences are available.

Epichloë (Fr.) Tul. & C. Tul. 1865 (= *Neotyphodium* Glenn, C.W. Bacon & Hanlin 1996 *vide* Rossman et al. 2016), *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, six species, type: *E. typhina* (Pers.) Tul. & C. Tul., sexual morph unknown, saprobes, endophytes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Young et al. (2014; endophytes), Hettiarachchige et al. (2015; endophytes), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures and sequences are available.

Epicladonia D. Hawksw. 1981, *Ascomycota* genera *incertae sedis*, four species, type: *E. sandstedei* (Zopf) D. Hawksw., on lichens, sexual morph unknown, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, topotype material of type: B (Krypt. Exs. Vindob. No. 1330b).

Epiclinium Fr. 1849, *Ascomycota* genera *incertae sedis*, two species, type: *E. pezizoideum* (Schwein.) Fr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Epicoccospora Budathoki & S.K. Singh 1995, *Ascomycota* genera *incertae sedis*, two species, type: *E. nepalensis* Budathoki & S.K. Singh, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Nepal, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Epicoccum Link 1816, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, c. ten species, type: *E. nigrum* Link, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Aveskamp et al. (2009, 2010; DNA, new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in *Didymellaceae*), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Chen et al. (2015; taxonomy, new species, DNA, phylogeny), ex-type cultures available for type: CBS 173.73.

Epicoleosporium Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *E. ramularioides* Videira, H.D. Shin & Crous, hyphomycetous, sexual morph unknown, plant pathogenic, see Videira et al. (2016; morphology, phylogeny), holotype KUS-F19603, isotype CBS H-22542, culture ex-type: CBS 141103 = CPC 10672.

Epicrea Petr. 1950, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, six species, type: *E. insignis* Petr., asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Epidermophyton Sabour. 1907, *Arthrodermataceae*, *Onygenales*, *Eurotiomycetes*, one species: *E. floccosum* (Harz) Langeron & Miloch., hyphomycetous, terrestrial, on human skin, one of the main etiological agents of dermatophytosis worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), neotype strain of the type: = CBS 230.76, sequences are available from de Hoog et al. (in press).

Epigloea Zukal 1889, *Epigloeeaceae*, *Ascomycota* families *incertae sedis*, 13 species, type: *E. bactrospora* Zukal, on algae, Europe, Antarctica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Epilichen Clem. 1909, *Rhizocarpaceae*, *Rhizocarpaceales*, *Lecanoromycetes*, three species; type: *E. scabrosus* (Ach.) Clem., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable. type specimen UPS-ACH-L-130 (isotype),

Epinephroma Zhurb. 2012, *Ascomycota* genera *incertae sedis*, two species, type: *E. kamchatica* Zhurb. & Stepanch., coelomycetous, lichenicolous, terrestrial, Russia, see Zhurbenko et al. (2012; morphology), cultures and sequences are unavailable, needs generic revision.

Epiphloea Trevis 1880, *Heppiaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *E. terrena* (Nyl.) Trevis., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline). Kirk et al. (2013; genus accepted), Yang et al. (2014; molecular, evolutionary study unpublished), cultures and sequences are unavailable.

Episclerotium L.M. Kohn 1984, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *E. sclerotiorum* (Rostr.) L.M. Kohn, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Episphaerella Petr. 1924, *Pseudoperisporiaceae*, *Dothideomycetes*, families *incertae sedis*, six species, type: *E. manihotis* (Henn.) Petr., asexual morph unknown, saprobes, terrestrial, USA, Africa, China, see Lumbsch and Huhndorf (2010; outline), Zhao and Zhao (2012; new species, China), Hyde et al. (2013; outline, accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Pseudoperisporiaceae*), cultures and sequences are available for *Episphaerella dodonaeae* PDD:104466 (unpublished).

Episporogoniella U. Braun 1994, *Ascomycota* genera *incertae sedis*, one species, type: *E. muscigena* (Speg.) U. Braun, hyphomycetous, sexual morph unknown, terrestrial, muscicolous, South America, see Seifert et al. (2011), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: LPS 12764, cultures and sequences are unavailable.

Epistigme Syd. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *E. nidulans* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Epithamnolia Zhurb. 2012, *Ascomycota* genera *incertae sedis*, two species, type: *E. karatyginii* Zhurb., asexual morph unknown, lichenicolous, terrestrial, South Africa, see Zhurbenko (2011; morphology, key), cultures and sequences are unavailable, needs generic revision.

Epithyrium (Sacc.) Trotter 1931, *Ascomycota* genera *incertae sedis*, two species, type: *E. resinae* (Sacc. & Berl.) Trotter, coelomycetous, sexual morph unknown, saprobes, terrestrial,

South Africa, see Wijayawardene et al. (2012, 2016, 2017; outline, morphology), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are unavailable, needs generic revision.

Eremascus Eidam 1877, *Eremascaceae*, *Onygenales*, *Eurotiomycetes*, two species, type: *E. albus* Eidam, asexual morph absent in the type species, but hyphomycetous in *E. terrestris* Asthana & Mahmud (Asthana & Mahmud 1944), terrestrial, saprobes, usually xerophilic, occurring on substrates with low water and high carbohydrate content, such as dried fruits, honey, jams, mustard and others, also reported from soil, Argentina, Australia, India, Western Europe, see Gueidan et al. (2008; phylogeny), Pitt and Hocking (2009; morphology, food spoilage), Wynns (2015; phylogeny, proposal of a segregate genus), material of the type species is lost (Harrold 1950) and neotypification is necessary, DNA sequences of non-type strains of *E. albus* are available from Berbee and Taylor (1992), Gueidan et al. (2008) and Wynns (2015).

Eremastrella S. Vogel, 1955 *Psoraceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *E. tobleri* S. Vogel, asexual morph unknown, lichenized, terrestrial, see Ekman, and Blaalid, (2011; molecular sequence), Lumbsch, and Huhndorf, (2011; list), Kirk et al. (2013; genus accepted), sequences are available.

Eremiomyces Trappe & Kagan-Zur 2005, *Tuberaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *E. echinulatus* (Trappe & Marasas) Trappe & Kagan-Zur, asexual morph unknown, saprobes, from soil, terrestrial, South Africa, Spain, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Pezizaceae*), Alvarado et al. (2011; new species, Spain, DNA, placed in *Tuberaceae*), cultures and sequences are available.

Eremithallus Lücking, Lumbsch & Umaña, 2008, *Melaspileaceae*, *Eremithallales*, *Dothideomycetes*, two species, type: *E. costaricensis* Lücking, Lizano & Chaves, asexual morph unknown, lichenized, terrestrial, corticolous, Costa Rica, see Lücking et al. (2008; molecular), Ertz and Diederich (2015; taxonomy), Lumbsch et al. (2016; taxonomy), sequences are available.

Eremomyces Malloch & Cain 1971, *Eremomycetaceae*, *Dothideomycetes* genera *incertae sedis*, two species, type: *E. bilateralis* Malloch & Cain, asexual morph hyphomycetous, saprobes, terrestrial, North America, Netherlands, see Malloch and Sigler (1988; asexual morph, morphology), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type, needs generic revision.

Eremothecella Syd. & P. Syd. 1917. *Arthoniaceae*, *Arthoniales*, *Arthoniomycetidae*, type: *E. calamicola* Syd. & P. Syd., eleven species, asexual morph unknown, lichenized, terrestrial, Australia, Netherland, see Lumbsch and Huhndorf (2010; outline). Kirk et al. (2013; genus accepted), Cáceres and Aptroot (2014; taxonomy), Lücking et al. (2016; classification), molecular and culture data unavailable.

Eremothecium Borzi emend. Kurtzman 1995, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, six species, type: *E. cymbalariae* Borzí, asexual reproduction is by budding cells are absent or present, and when present, budding is multilateral on a narrow base, enteroarthric conidia are infrequently produced by one species, pseudohyphae and true hyphae are generally present, plant pathogens, cotton, hazel nuts, tomatoes, mustard, insects, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Eriksonia Penz. & Sacc. 1898, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, five species, type: *E. pulchella* Penz. & Sacc., sexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Erikssonopsis M. Morelet 1971, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *E. ericae* (Fr.) M. Morelet, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Erinacellus T.Sprib., Muggia & Tønberg 2014, *Peltigerales* genera *incertae sedis*, *Lecanoromycetes*, two species, type: *E. dendroides* (Henssen) T. Sprib., Tønberg & Muggia, lichenized, see Spribille et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Eriocercospora Deighton 1969, *Dothideomycetes* genera *incertae sedis*, two species, type: *E. balladynae* (Hansf.) Deighton, hyphomycetous, sexual morph unknown, saprobes, mycoparasites, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Eriocercospora Rak. Kumar, A.N. Rai & Kamal ex U. Braun 1998, *Ascomycota* genera *incertae sedis*, one species, type: *E. indica* Rak. Kumar, A.N. Rai & Kamal ex U. Braun, hyphomycetous, sexual morph unknown, terrestrial, foliicolous, plant pathogenic, Asia, see Seifert et al. (2011), Wijayawardene et al. (2012, 2014; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 302747.

Erioderma Feé 1825, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, 40 species, type: *E. polycarpum* Fée, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Eriomyopsis Speg. 1911, *Ascomycota* genera *incertae sedis*, 13 species, type: *E. bomplandi* Speg., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Eriopezia (Sacc.) Rehm 1892, *Arachnopezizaceae*, *Helotiales*, *Leotiomyces*, 30 species, type: *E. caesia* (Pers.) Rehm, asexual morph unknown, saprobes, terrestrial, Europe, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Eriosphaeria Sacc. 1875, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, six species, type: *E. vermicularia* (Nees) Sacc., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Eriospora Berk. & Broome 1850, *Ascomycota* genera *incertae sedis*, one species, type: *E. leucostoma* Berk. & Broome, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, South America, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Eriospora Höhn. 1916, *Capnodiales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *E. calami* (Niessl) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Thailand, see Wijayawardene et al. (2012, 2014; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014; new species, DNA, phylogeny), cultures and sequences are available for *Eriospora bambusicola* D.Q. Dai et al. (ex-type MFLUCC 11-0436), needs generic revision.

Eriosporopsis Petr. 1947, *Ascomycota* genera *incertae sedis*, one species, type: *E. albida* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Eriothyrium Speg. 1887, *Ascomycota* genera *incertae sedis*, one species, type: *E. dubiosum* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Erispora Pat. 1922, *Ascomycota* genera *incertae sedis*, one species, type: *E. parasitica* Pat., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, holotype is lost (*vide* Rossman et al. 1999).

Ernakulamia Subram. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *E. cochinchensis* (Subram.) Subram, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South East Asia, see Capdet and Romero (2010; Argentina), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Erysiphe R. Hedw. ex DC. 1805 Fr. 1829 emend. Braun & Takamatsu 2000, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, 378 species in *Erysiphe* and 72 species in *Pseudoidium*, type: *E. polygoni* DC., hyphomycetous asexual morphs, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Braun and Cook (2012; taxonomy), Takamatsu et al. (2015a, b; phylogeny), lectotype of type: G 00122108, sequences of non-type material of the type species are available.

Erythrocarpon Zukul 1886, *Ceratostomataceae*, *Melanosporales*, *Sordariomycetes*, six species, type: *E. microstomum* Zukul, asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Erythrodecton G. Thor 1991, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, three species; type: *E. granulatum* (Mont.) G. Thor, lichenized, see Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Erythroglloeum Petr. 1953, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *E. hymenaeae* Gonz. Frag. & Cif. ex Petr., coelomycetous, sexual morph unknown, biotrophic, terrestrial, Costa Rica, South and Central America, see Crous et al. (2012; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), epitype and ex-epitype of the type: CBS H-20937, CPC 18819 = CBS 132185.

Erythromada Huhndorf, A.N. Mill., F.A. Fernández & Lodge 2005, *Chaetosphaeriales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *E. lanciospora* Huhndorf, A.N. Mill., F.A. Fernández & Lodge, asexual morphs unknown, saprobes, terrestrial, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Eschatogonia Trevis. 1853, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, seven species; type: *E. montagnei* Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), isotype of the type: UPS-L-129880, sequences are unavailable.

Escovopsioides H.C. Evans & J.O. Augustin 2012, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *E. nivea* H.C. Evans & J.O. Augustin, asexual morph hyphomycetous, on nest of leaf-cutting ants, terrestrial, Brazil, see Augustin et al. (2012; morphology, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), holotype IMI 501181; isotype DOA627-VIC 31754, cultures and sequences are available.

Escovopsis J.J. Muchovej & Della Lucia 1990, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *E. weberi* J.J. Muchovej & Della Lucia, hyphomycetous, sexual morph unknown, on nest of attine ants, terrestrial, worldwide, see Augustin et al. (2012; morphology, DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Masiulionis et al. (2015; new species), Meirelles et al. (2015; new species), cultures and sequences are available.

Esdipatilia Phadke 1981, *Ascomycota* genera *incertae sedis*, one species, type: *E. indica* Phadke, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: AMH4616, cultures and sequences are unavailable, needs generic revision.

Esfandiaromyces Ershad 1985, *Sordariomycetes*, genera *incertae sedis*, one species, type: *E. insignis* (Petr.) Ershad, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Esslingeriana Hale & M.J. Lai 1980, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *Esslingeriana idahoensis* (Essl.) Hale & M.J. Lai, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Esteya J.Y. Liou, J.Y. Shih & Tzean 1999, *Ascomycota* genera *incertae sedis*, one species, type: *E. vermicola* J.Y. Liou, J.Y. Shih & Tzean, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Taiwan, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Etayoa Diederich & Ertz 2014, *Phaeococcomycetaceae*, *Lichenostigmatales*, *Arthoniomycetes*, one species, type: *E. tryptethelii* (Flakus & Kukwa) Diederich & Ertz, both sexual and asexual morphs stromatic, lichenicolous, non-lichenized, on corticolous lichens, worldwide, see Ertz et al. (2014; morphology, phylogeny), cultures and sequences are available.

Etheiophora Kohlm. & Volkm.-Kohlm. 1989, *Etheiophoraceae*, *Torpedosporales*, *Sordariomycetes*, three species, type: *E. bijubata* Kohlm. & Volkm.-Kohlm., saprobes, marine, Atlantic Ocean, Pacific Ocean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for type.

Euacantho Theiss. 1917, *Scortechiniaceae*, *Coronophorales*, *Sordariomycetes*, two species, type: *E. usambarensis* (Rehm) Theiss., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; DNA), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for *Euacantho foveolata* (GKM1221 *fide* Mugambi and Huhndorf 2010), treated as a synonym of *Acanthonitschkea* Speg. in *Species Fungorum* (2016).

Euantennaria Speg. 1918, *Euantennariaceae*, *Dothideomycetes* families *incertae sedis*, six species, type: *E. tropicicola* Speg., saprobes, parasitic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Eubelonis Höhn. 1926, *Helotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *E. albosanguinea* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Eucalyptostroma Crous & M.J. Wingf. 2016, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *E. eucalypti* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22871, CPC 28764.

Eucantharomyces Thaxt. 1895, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, 26 species, type: *E. atrani* Thaxt., asexual morph unknown, parasites, saprobes, terrestrial,

worldwide, see Rossi and Ponziani (2008; new species), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Eucasphaeria Crous 2007, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *E. capensis* Crous, asexual morph coelomycetous, saprobes, terrestrial, South Africa, see Crous et al. (2007; morphology, DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Azeem et al. (2015; DNA), Crous et al. (2016; new species, phylogeny), holotype and the ex-type strains of the type: CBS-H19764, CPC 12796 = CBS 120028.

Euceramia Bat. & Cif. 1962, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *E. palmicola* Bat. & Cif., asexual morph unknown, epiphytic, epiphyllous, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Euceratomyces Thaxt. 1931, *Euceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *E. terrestris* Thaxt., asexual morph unknown, parasites, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species), cultures and sequences are unavailable, needs generic revision.

Eudarluka Speg. 1908, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, c. five species, type: *E. australis* Speg., asexual morph unknown, hyperparasitic associated with rust species (but not necessarily parasitic), terrestrial, worldwide, all species have sequence data, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), isotype of the type: S-F11420, cultures and sequences are available.

Eudimeriolum Speg. 1912, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, eight species, type: *E. elegans* Speg., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Euepixylon Füsting 1867, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *E. udum* (Pers.) Læssøe & Spooner, asexual morph unknown, saprobes, terrestrial, Europe, Eastern Russia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, Kirk et al. (2013) did not list as a valid genus.

Eugeniella Lücking, Sérus. & Kalb 2008, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, nine species, type: *E. psychotriae* (Müll. Arg.) Lücking, Sérus. & Kalb, lichenized, see Lücking (2008; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Euhaplomyces Thaxt. 1901, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *E. ancyrophori* Thaxt., asexual morph unknown, parasites, saprobes, terrestrial, worldwide, see Rossi and Ponziani (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Eumela Syd. 1925, *Pseudoperisporiaceae*, *Dothideomycetes*, families *incertae sedis*, one species, type: *E. chiococcae* Syd., asexual morph unknown, saprobes, terrestrial, Central America, all species have sequence data, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Eumonoicomycetes Thaxt. 1901, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two or three species, type: *E. californicus* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Rossi and Ponziani (2008; new species), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Euopsis Nyl. 1875, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, two species, type: *E. granatina* (Sommerf.) Nyl., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Eupelte Syd. 1924 (=Maurodothina G. Arnaud ex Piroz. & Shoemaker 1970; Pirozynskia Subram. 1972 *vide* Rossman et al. 2016), *Dothideomycetes* genera *incertae sedis*, four species, type: *E. amicta* Syd., asexual morph (= sporidesmium-like, *vide* Sivanesan 1984), epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, treated as a doubtful genus in *Asterinales*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), Rossman et al. (2016; nomenclature), holotype of type: IMI 240625, cultures and sequences are unavailable, needs generic revision.

Eupendiella Quaedvlieg & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *E. venezuelensis* (Crous & U. Braun) Quaedvl. & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Venezuela, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (phylogeny, nomenclature), holotype, ex-type strain of the type: CBS H-19934, CBS 106.75.

Euphoriomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 14 species, type: *E. bilateralis* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Lee et al. (2007; taxonomic notes, Korea), Rossi and Ponziani (2008; new species), Lumbsch and Huhndorf (2010; outline), Lee and Na (2011; new species, South Korea), cultures and sequences are unavailable.

Eupropelella Höhn. 1917, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *E. vaccinii* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Euryachora Fuckel 1870, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, five species, type: *E. sedi* (Link) Fuckel, asexual morph placosphaeria-like, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Eurytheca De Seynes 1878, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, one species, type: *E. monspeliensis* De Seynes, asexual morph unknown, saprobes, terrestrial, Trinidad, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dissanayake et al. (2014; morphology), Wijayawardene et al. (2014; outline), holotype of the type: F11411.

Eusynaptomyces Thaxt. 1931, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, five species, type: *E. borealis* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Rossi and Carolina Proaño Castro (2009; compare with *Rhachomyces*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Euteratosphaeria Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, asexual morph unknown, pathogens, terrestrial, Indonesia, have sequence data, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (phylogeny, nomenclature), holotype of the type: CBS H-19705, ex-type strain of type: CBS 118496.

Eutiarosporella Crous 2015, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, seven species, type: *E. tritici* (B. Sutton & Marasas) Crous, coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, cosmopolitan, see Crous et al. (2015; taxonomy, phylogeny), Thynne et al. (2015; new species, pathogens), Li et al. (2016; new species,

phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: PREM 60866, CMW 38423.

Eutypa Tul. & C. Tul. 1863, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, c. 35 epithets, type: *E. lata* (Pers.) Tul. & C. Tul., asexual morph coelomycetous, saprobes, pathogenic, terrestrial, widely distribute, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; morphology, phylogeny, new species), Dai et al. (2016; morphology, phylogeny, new species), de Almeida et al. (2016; new species), cultures and sequence are available, but lacks for type materials, need generic revision.

Eutypella (Nitschke) Sacc. 1875, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *E. cerviculata* (Fr.) Sacc., asexual morph unknown, saprobes, pathology, terrestrial, worldwide, see Carmarán et al. (2009; Argentina), Lumbsch and Huhndorf (2010; outline), Trouillas et al. (2010, 2011; new species, Australia), Fournier and Lechat (2011; new species), Isaka et al. (2011; endophytes, active compounds), Chacón et al. (2013; Panama, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Almeida et al. (2016; new species, Brazil), Jurc et al. (2016; pathogens), cultures and sequences are available.

Euzodiomyces Thaxt. 1900, *Euceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *E. lathrobii* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Evanidomus Caball. 1941, *Ascomycota* genera *incertae sedis*, one species, type: *E. valentinus* Caball., coelomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Everhartia Sacc. & Ellis 1882, *Ascomycota* genera *incertae sedis*, three species, type: *E. hymenuloides* Sacc. & Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Evernia Ach. 1809, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, ten species, type: *E. prunastri* (L.) Ach., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Everniicola D. Hawksw. 1982, *Ascomycota* genera *incertae sedis*, one species, type: *E. flexispora* D. Hawksw., coelomycetous, sexual morph unknown, on lichens, terrestrial, Europe and North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype material of type: E.

Everniopsis Nyl. 1860, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, one species; type: *E. trulla* (Ach.) Nyl., lichenized, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Eversia J.L. Crane & Schokn. 1977, *Ascomycota* genera *incertae sedis*, one species, type: *E. subopaca* (Cooke & Ellis) J.L. Crane & Schokn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Evlachovaea B.A. Borisov & Tarasov 1999, *Ascomycota* genera *incertae sedis*, one species, type: *E. kintrischica* B.A. Borisov & Tarasov, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Russia, see Rocha and Luz (2009; fungicides), Wijayawardene et al. (2012, 2017; outline), Humber et al. (2013; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Exarmidium P. Karst. 1873, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, nine species, type: *E. hysteriiforme* P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Excipularia Sacc. 1884, *Ascomycota* genera *incertae sedis*, two species, type: *E. fusispora* (Berk. & Broome) Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Russia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Excipulariopsis P.M. Kirk & Spooner 1982 (= *Kentingia* Sivan. & W.H. Hsieh 1989 *vide* Wijayawardene et al. 2014; Rossman et al. 2015), *Dothideomycetes*, genera *incertae sedis*, two species, type: *E. narsapurensis* (Subram.) Spooner & P.M. Kirk, hyphomycetous, sexual morph *Kentingia*, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline; sexual morph), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline, nomenclature), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures and sequences are unavailable, needs generic revision.

Exiliseptum R.C. Harris 1986, *Dothideomycetes*, genera *incertae sedis*, two species, type: *E. ocellatum* (Müll. Arg.) R.C. Harris, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Trypetheliaceae*), Hyde et al. (2013; excluded from *Trypetheliaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Exochalara W. Gams & Hol.-Jech. 1976, *Leotiomyces* genera *incertae sedis*, two species, type: *E. longissima* (Grove) W. Gams & Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, Europe, see Réblová et al. (2011; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available: (CBS 393.82 and CBS 980.73 *vide* Réblová et al. 2011).

Exophiala J.W. Carmich. 1966, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, polyphyletic, (the core of the genus belongs in *Herpotrichiellaceae*, but some species are related to other families of *Chaetothyriales*, such as *Chaetothyriaceae* and *Trichomeriaceae*), c. 41 species, type: *E. salmonis* J.W. Carmich., predominantly terrestrial, although some species occur in freshwater or sea environments, mostly saprobes associated with soil and plant material, but also occurring as endophytes or as opportunistic pathogens in a wide spectrum of animal hosts, including humans, certain species are common in harsh habitats such as rock surfaces or areas contaminated with aromatic hydrocarbons, cosmopolitan, see Zeng and de Hoog (2008; diagnostics of selected species), Crous et al. (2007a, 2007b, 2011; new species), Gueidan et al. (2008, 2014; phylogeny), Seyedmousavi et al. (2013; pathogenicity to various animals), Zupančič et al. (2016; species in indoor environments), Isola et al. (2013, 2016; species associated with polluted habitats and rock surfaces), Maciá-Vicente et al. (2016; new endophytic species), Madrid et al. (2016; phylogeny, some species from soil and river sediments). ex-type strain of the type species = CBS 157.67, sequences are available at GenBank from Untereiner & Naveau (1999) and de Hoog et al. (2011).

Exophoma Weedon 1926, *Ascomycota* genera *incertae sedis*, one species, type: *E. magnoliae* Weedon, coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Sutton (1977; nomenclature), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Exosporella Höhn. 1912, *Ascomycota* genera *incertae sedis*, one species, type: *E. symploci* Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Java, see Seifert et al.

(2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are unavailable, needs generic revision.

Exosporiella P. Karst. 1892 (= *Anomalemma* Sivan. 1983 *fide* Wijayawardene et al. 2014; Rossman et al. 2015), *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *E. fungorum* (Fr.) P. Karst., sexual morph *Anomalemma* Sivan., saprobes or fungicolous, terrestrial, commonly occur on *Corticium* species in Europe, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012; 2014; 2016; outline, nomenclature), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), Tian et al. (2015; morphology; nomenclature, phylogeny), cultures and sequences are unavailable for both sexual and asexual morphs, needs generic revision.

Exosporium Link 1809, *Ascomycota* genera *incertae sedis*, one species, type: *E. tiliae* Link, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Java, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are unavailable, needs generic revision.

Exosporodiella Ganie, Azam & A.H. Wani 2012, *Ascomycota* genera *incertae sedis*, one species, type: *Exosporodiella phoenicis* Ganie, Azam & A.H. Wani, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Ganie et al. (2012; morphology), holotype of the type: HClO 50058, cultures and sequences are unavailable, needs generic revision.

Extrawettsteinina M.E. Barr, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *E. minuta* M.E. Barr, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Pleosporaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; morphology, taxonomy), cultures or cultures and sequences are unavailable.

Extremus Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, hyphomycetous, two species, sexual morph unknown, rock-inhabiting, terrestrial, Antarctica, Spain, have sequence data, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), holotype of the type: CBS 118292, ex-type strain of type: CBS 118292.

Fabrella Kirschst. 1941, *Hemiphacidiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *F. tsugae* (Farl.) Kirschst., asexual morph unknown, saprobes, pathogens, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Fairmaniella Petr. & Syd. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *F. leprosa* (Fairm.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2016; outline, morphology, taxonomic notes), Kirk et al. (2013; genus accepted), holotype of the type: IMI 57994, cultures and sequences are unavailable, needs generic revision.

Falciformispora K.D. Hyde 1992, *Trematosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *F. lignatilis* K.D. Hyde, asexual morph unknown, saprobes on mangrove wood or pathogenic on human, Mexico, Senegal, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Trematosphaeriaceae*), Kirk et al. (2013; genus accepted), Ahmed et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), holotype of type species BRIP 16972, cultures and sequences are available.

Falcocladium S.F. Silveira, Alfenas, Crous & M.J. Wingf. 1994, *Falcocladiaceae*, *Falcocladiales*, *Sordariomyces*, four species, type: *F. multivesiculatum* S.F. Silveira, Alfenas, Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Cruz and Gusmão (2009; diversity), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Jones et al.

(2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: PREM 51541, cultures and sequences are available.

Fanniomyces T. Majewski 1972, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, two species, type: *F. ceratophorus* (Whisler) T. Majewski, asexual morph unknown, parasites, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Fantasmomyces DongHyeon Lee, Marinc., Z.W. de Beer, M.J. Wingf. 2016, *Sordariomyces* genera *incertae sedis*, one species, type: *F. hyalinus* DongHyeon Lee, Marinc., Z.W. de Beer, M.J. Wingf., asexual morph hyphomycetous, saprobes, terrestrial, South Africa, see Crous et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: PREM 61340, CBS 139038.

Farasanispora Abdel-Wahab, Bahkali & E.B.G. Jones 2016, *Pleosporales* genera *incertae sedis*, *Dothideomyces*, one species, type: *F. avicenniae* Abdel-Wahab, Bahkali & E.B.G. Jones, asexual morph unknown, saprobes, marine, Saudi Arabia, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22559, MF 1207.

Farnoldia Hertel 1983, *Lecideaceae*, *Lecideales*, *Lecanoromyces*, six species, type: *F. jurana* (Schaer.) Hertel, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Farriolla Norman 1884, *Ascomycota* genera *incertae sedis*, one species, type: *F. distans* Norman, asexual morph unknown, saprobes, terrestrial, Norway, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Farrowia D. Hawksw. 1975, *Chaetomiaceae*, *Sordariales*, *Sordariomyces*, four species, type: *F. longicollis* (Krzemien. & Badura) D. Hawksw., asexual morph botyotrichum-like, on cellulosic substrata, Europe, Asia and North America, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, lectotype of type: BPI-A 1212.

Fasciatispora K.D. Hyde 1991, *Xylariaceae*, *Xylariales*, *Sordariomyces*, eight species, type: *F. nypae* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, pantropical, see Hidayat et al. (2007; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; designate reference specimen and deposited cultures), Maharachchikumbura et al. (2015, 2016; outline), reference specimen and available cultures for type: MFLU 15-0042, MFLUCC 11-0382.

Fassia Dennis 1964, *Xylariaceae*, *Xylariales*, *Sordariomyces*, eight species, type: *F. scabrosa* Dennis, asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Faurelina Locq.-Lin. 1975, *Chadefaudiellaceae*, *Microascales*, *Sordariomyces*, four species, type: *F. fimigena* Locq.-Lin., asexual morph arthrographis-like, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Réblová et al. (2011; DNA), Rossman et al. (2012; DNA), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available *F. indica* (CBS 301.78 *fide* Réblová et al. 2011), *F. elongate* (Rossman et al. 2012).

Fauriea S.Y.Kondr., L.Lökös & J.-S.Hur 2016, *Teloschistaceae*, *Teloschistales*, *Lecanoromyces*, two species, type: *F. orientochinensis* S.Y. Kondr., X.Y. Wang & Hur, lichenized, see Kondratyuk et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Favostroma B. Sutton & E.M. Davison 1983, *Ascomycota* genera *incertae sedis*, one species, type: *F. crypticum* B. Sutton & E.M. Davison, coelomycetous, sexual morph unknown,

saprobies, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 266341, cultures and sequences are unavailable, genus need revision.

Feigeana Mies, Lumbsch & Tehler 1995, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *F. socotrana* Mies, Lumbsch & Tehler, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Felipes Frisch & G.Thor 2014, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *F. leucopellaeus* (Ach.) Frisch & G. Thor, lichenized, see Frisch et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Felisbertia Viégas 1944, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *F. melastomacearum* (Speg.) Viégas, asexual morph unknown, saprobies, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Fellhanera Vězda 1986, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, 97 species, type: *F. fuscata* (Müll. Arg.) Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Fellhaneropsis Sérus. & Coppins 1996, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, seven species, type: *F. myrtillicola* (Erichsen) Sérus. & Coppins, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Feltgeniomyces Dieder. 1990, *Ascomycota* genera *incertae sedis*, five species, type: *F. luxemburgensis*, hyphomycetous, lichenicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: Diederich 8477 (LG: holotype; IMI 335016, UPS, herb. Diederich: isotypes), cultures and sequences are unavailable, needs generic revision.

Fenestella Tul. & C. Tul. 1863, *Fenestellaceae*, *Dothideomycetes* families *incertae sedis*, c. two species, type: *F. princeps* Tul. & C. Tul., asexual morph unknown, saprobies or biotrophic or hemibiotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Fenestellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak and Hyde (2015; taxonomy), cultures and sequences are unavailable.

Fenestroconidia Calatayud & Etayo 1999, *Ascomycota* genera *incertae sedis*, one species, type: *F. caloplacae* Calat. & Etayo, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: VAB (lich.) 15301, cultures and sequences are unavailable, needs generic revision.

Ferrarisia Sacc. 1919, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, ten species, type: *F. philippina* Sacc., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), placement in *Parmulariaceae* is supported by morphology, cultures and sequences are unavailable.

Ferraroa Lücking, Sérus. & Vězda 2005, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *F. hyalina* (Lücking) Lücking, Sérus. & Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Fibrillithecis Frisch 2006, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 16 species, type: *F. vernicosa* (Zahlbr.) Frisch, asexual morph unknown, lichenized fungi, terrestrial, tropical, placement in *Graphidaceae* supported by molecular data, see Rivas Plata et al. (2010a; key), Rivas Plata et al. (2012a; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Filariomyces Shanor 1952, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, two species, type: *F. forficulae* Shanor, asexual morph unknown, parasites, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Filicupula Y.J. Yao & Spooner 1996, *Pezizales* genera *incertae sedis*, two species, type: *F. suboperculata* (Döbbeler & P. James) Y.J. Yao & Spooner, asexual morph unknown, parasites, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Filiella Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *F. pastinacae* (P. Karst.) Videira & Crous, hyphomycetous, sexual morph unknown, plant pathogenic, see Videira et al. (2016; morphology, phylogeny), cultures and sequences are available, neotype is in HAL.

Filosporella Nawawi 1976, *Helotiaceae*, *Helotiales*, *Leotiomyces*, six species, type: *F. aquatica* Nawawi, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Baschien et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Filsoniana S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetidae*, *Lecanoromycetes*, five species, type: *F. australiensis* (S.Y. Kondr., Kärnefelt & Filson) S.Y. Kondr., Kärnefelt, Elix, A. Thell & J.S. Hur, lichenized, see Kondratyuk et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Fimetariella N. Lundq. 1964, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomyces*, one species, type: *F. rabenhorstii* (Niessl) N. Lundq., asexual morph unknown, saprobes, terrestrial, Europe, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Finkia Vain. 1929, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *F. portoricensis* Vain., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Fischerula Mattir. 1928, *Morchellaceae*, *Pezizales*, *Pezizomyces*, two species, type: *F. macrospora* Mattir., asexual morph unknown, ectomycorrhizal, saprobes, terrestrial, Italy, USA, see Lumbsch and Huhndorf (2010; outline, accepted as *Morchellaceae*), Trappe et al. (2010; DNA, phylogeny), Alvarado et al. (2011; DNA, phylogeny, accepted as a genus in *Helvellaceae*), Healy et al. (2013; DNA, phylogeny, ectomycorrhizal), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; accepted as a genus in *Morchellaceae*), cultures and sequences are available.

Fissuricella Pore, D'Amatao & Ajello 1977, *Trichosporonaceae*, *Tremellales*, *Tremellomyces*, one species, type: *F. filamenta*, non-filamentous (yeast forming), arthroconidia present, sexual morph unknown, often associated with superficial trichosporonosis, but few cases of disseminated trichosporonosis were reported, human body and bovine mastitis, considered rare, worldwide, ITS sequence data available for ex-type strains, (note 2) the type: is considered a synonym of *Trichosporon asteroides* (see Guého et al. 1994), (note 4) clinical *Trichosporon* species were reviewed by Taj-Aldeen et al. (2009), Kirk et al. 2013 (genus accepted), ex-type strain of basionym (*Prototheca filamenta*) of type: CBS 7623 = ATCC 22432 = JCM 9196 = 45-681-69; Ex-type strains of synonym (*Parendomyces asteroides*) of type: CBS 2481 = IFM 48559 = IGC 3471 = JCM 2937 = UAMH 7656 = PYCC 3471.

Fissurina Fée 1824, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, over 150 species, type: *F. dumastii* Fée, asexual morph unknown, lichenized, terrestrial, mostly tropical, see Archer

(2009; key Australia), Lumbsch and Huhndorf 2010 (outline), Lücking et al. (2014, 2016), Kirk et al. (2013; genus accepted), sequences are available

Fissuroma Jian K. Liu, Phook., E.B.G. Jones & K.D. Hyde 2011, *Aigialaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *F. maculans* (Rehm) J.K. Liu, E.B.G. Jones & K.D. Hyde, asexual morph unknown, saprobes, Japan, Thailand, see Liu et al. (2011; morphology, DNA, phylogeny), Hyde et al. (2013; accepted as a genus in *Aigialaceae*), Wijayawardene et al. (2014; outline), holotype and ex-type of the type: MFLU 11-1143, MFLUCC 10-0886.

Fitzpatrickella Benny, Samuelson & Kimbr. 1985, *Coryneliaceae*, *Coryneliales*, *Eurotiomycetes*, one species: *F. operculata* Benny, Samuelson & Kimbr., asexual morph unknown, terrestrial, parasitic on fruits of *Drimys confertifolia* Phil., Juan Fernández Island, Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wood et al. (2016; morphotaxonomy), cultures and sequences are unavailable, needs phylogenetic assessment.

Flabellocladia Nawawi 1985, *Ascomycota* genera *incertae sedis*, four species, type: *F. gigantea*, hyphomycetous, from foam, aquatic, worldwide, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Fiuza and Gusmão (2013; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Flabellospora Alas. 1968, *Ascomycota* genera *incertae sedis*, six species, type: *F. crassa*, hyphomycetous, on submerged plant material, aquatic, worldwide, see Patil et al. (2010; morphology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Flagellosphaeria Aptroot 1995, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *F. polytrichospora* (Lucas & Sousa de Câmara) Aptroot, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable.

Flagellospora Ingold 1942, *Hypocreales*, *Leotiomycetes*, *Sordariomycetes*, six species, type: *F. curvula* Ingold, hyphomycetous, saprobes, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Baschien et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Lombard et al. (2014; phylogeny), cultures and sequences are available.

Flakea O.E.Erikss. 1992, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *F. papillata* O.E. Erikss., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Flammeascoma Phook. & K.D. Hyde 2015, *Anteagloniaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *F. bambusae* Phookamsak & K.D. Hyde, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, new species), Liu et al. (2015; taxonomy), holotype and ex-type culture of the type: MFLU 10-0061, MFLUCC 10-0551.

Flammispora Pinruan, Sakay., K.D. Hyde & E.B.G. Jones 2004, *Savoryellales*, genera *incertae sedis*, *Sordariomycetes*, two species, type: *F. bioteca* Pinruan, Sakay., K.D. Hyde & E.B.G. Jones, asexual morph unknown, saprobes, Thailand, USA, see Lumbsch and Huhndorf (2010; outline, as a genus in *Hypocreomycetidae*, genera *incertae sedis*), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type culture of the type: BBH WAH134, BCC13368.

Flammocladiella Crous, L. Lombard & R.K. Schumach. 2015, *Flammocladiaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *F. aceris* Crous, L. Lombard & R.K. Schumach., asexual morph coelomycetous, saprobes, Germany, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22263, CPC 24422.

Flavobathelium Lücking, Aptroot & G. Thor 1997, *Strigulaceae*, *Strigulales*, *Dothideomycetes*, one species, type: *F. epiphyllum* Lücking, Aptroot & G. Thor, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; DNA, phylogeny), Hyde et al. (2013; accepted as a genus in *Strigulaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Lücking et al. (2016; classification), cultures available for the type: MPN67 (*vide* Nelsen et al. 2011).

Flavocetraria Kärnefelt & A. Thell 1994, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *F. cucullata* (Bellardi) Kärnefelt & A. Thell, asexual morph, unknown, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Schmult et al. (2011; phylogeny), Lücking et al. (2016; classification), sequences are available.

Flavoparmelia Hale 1986, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 40 species, type: *F. caperata* (L.) Hale, asexual morph unknown, lichenized, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Flavoplaca Arup, Söchting & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 27 species, type: *F. citrina* (Hoffm.) Arup, Frödén & Söchting, asexual morph unknown, lichenized, terrestrial, widely distributed, see Arup et al. (2013; taxonomy), Helici et al. (2014; taxonomy, molecular), Helici (2015; new records), Vondrak and Malicek (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

Flavopunctelia (Krog) Hale 1984, seven species, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, type: *F. flaventior* (Stirt.) Hale, asexual morph unknown, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Schmult et al. (2011; phylogeny, molecular), Divakar et al. (2015; evolutionary study of family), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Flegographa A.Massal. 1860, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *F. leprieurii* (Mont.) A. Massal., lichenized, see Rivas Plata et al. (2013; taxonomy, reinstated the genus), Lücking et al. (2016; classification), sequences are available.

Flosculomyces B. Sutton 1978, *Ascomycota* genera *incertae sedis*, two species, type: *F. floridaensis* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, Ivory Coast, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: IMI 215981c, cultures and sequences are unavailable, genus need revision.

Fluctua Marbach 2000, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *F. megapotamica* (Malme) Marbach, lichenized, see Lücking et al. (2016; classification), sequences are unavailable.

Fluminicola S.W. Wong, K.D. Hyde & E.B.G. Jones 1999, *Papulosaceae*, *Diaportheomycetidae*, families *incertae sedis*, one species, type: *F. bipolaris* S.W. Wong, K.D. Hyde & E.B.G. Jones, asexual morph unknown, saprobes, Philippines, see Lumbsch and Huhndorf (2010; outline, as a genus in *Annulatascaceae*), Kirk et al. (2013; genus accepted), Réblová et al. (2013; placed in *Papulosaceae*), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Papulosaceae*), holotype of the type: HKU (M) 3127.

Fluviatispora K.D. Hyde 1994, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, three species, type: *F. tunicata* K.D. Hyde, saprobes, aquatic, Brunei, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016), cultures and sequences re unavailable, holotype of type: BRIP 21391.

Fluviostroma Samuels & E. Müll. 1980, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, one species, type: *F. wrightii* Samuels & E. Müll., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et

al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Fodinomyces Vázquez-Campos & Neilan 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *F. uranophilus* X. Vázquez-Campos, hyphomycetous, sexual morph unknown, from soil, terrestrial, Australia, see Vázquez-Campos et al. (2014; morphology, DNA, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS 136962.

Foliocryphia Cheew. & Crous 2009, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *F. eucalypti* Cheew. & Crous, coelomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Cheewangkoon et al. (2009; morphology, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type cultures of type: CBS H-20299, ex-type CPC 12494 = CBS 124779.

Follmannia C.W. Dodge 1967, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *F. rufa* C.W. Dodge, lichenized, see Arup et al. (2013; reinstated the genus), Lücking et al. (2016; classification), sequences are available.

Follmanniella Peine & B. Werner 1995, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *F. scutellata* Peine & B. Werner, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Fonsecaea Negroni 1936, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, eight species, type: *F. pedrosoi* (Brumpt) Negroni, hyphomycetous, mostly terrestrial, in soil and on plant material, but also reported from aquatic environments, most species are pathogenic to animals, ranging from crustaceans to humans, America, Asia, Europe and Africa, see Vicente et al. (2008, 2012; environmental reservoirs, new species), Najafzadeh et al. (2010, 2011a, 2011b; phylogeny, new species, molecular epidemiology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Seyedmousavi et al. (2013; pathogenicity to animals), de Azevedo et al. (2015; new species), ex-neotype strain of the type: = CBS 271.37, sequences are available at GenBank from de Hoog et al. (2004).

Fontanospora Dyko 1978, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *F. eccentrica* (R.H. Petersen) Dyko, hyphomycetous, sexual morph unknown, saprobes, aquatic, USA, see Baschien et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Forliomyces Phukhamsakda, Camporesi & K.D. Hyde 2016, *Sporormiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *F. uniseptata* Phukhamsakda, Camporesi & K.D. Hyde, coelomycetous, saprobes, terrestrial, Italy, see Phukhamsakda et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2016, 2017; taxonomy, outline), holotype and ex-type culture of the type: MFLU 16-0031, MFLUCC 15-0765.

Fouragea Trevis. 1880, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *F. filicina* (Mont.) Trevis., lichenized, see Frisch et al. (2014a; reinstated), Lücking et al. (2016; classification), sequences are available.

Foveostroma DiCosmo 1978, *Ascomycota* genera *incertae sedis*, six species, type: *F. drupacearum* (Lév.) DiCosmo, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Fracchiaea Sacc. 1873, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, three species, type: *F. heterogenea* Sacc., asexual morph unknown, lichenicolous, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; DNA), Vasilyeva et al. (2010; new species), Maharachchikumbura et al. (2015, 2016; outline),

cultures and sequences are available for *Fracchiaea broomeana* (SMH347 *vide* Mugambi and Huhndorf 2010).

Fragosphaeria Shear 1923, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, four species, type: *F. purpurea* Shear, asexual morph hyphomycetous, from soil, pathogens (human), worldwide, see Yaguchi et al. (2006; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type: CBS 133.34 *vide* Yaguchi et al. (2006).

Franwilsia S.Y. Kondr., Kärnefelt, Elix, A.Thell & Hur 2014, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *F. bastowii* (S.Y. Kondr. & Kärnefelt) S.Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A.S. Kondr. & Hur; lichenized, see Kondratyuk et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Fremineavia Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Frematomyces P.F. Cannon & H.C. Evans 1999, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *F. punctatus* P.F. Cannon & H.C. Evans, sexual morph unknown, saprobes, terrestrial, East Africa, Seychelles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Friedmanniomyces Onofri 1999, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *F. endolithicus* Onofri, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Antarctica, see Schoch et al. (2009; phylogeny), Selbmann et al. (2005, 2008, 2013; DNA, review, phylogeny), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Teratosphaeriaceae*), Kirk et al. (2013; genus accepted), Egidi et al. (2014; phylogeny), Ertz et al. (2014; phylogeny), Quaedvlieg et al. (2014; phylogeny), cultures available for the type: CBS 119427= CCFEE 524.

Frigidispora K.D. Hyde & Goh 1999, *Ascomycota* genera *incertae sedis*, six species, type: *F. colnensis* K.D. Hyde & Goh, coelomycetous, sexual morph unknown, saprobes, aquatic, British Isles, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Frigidopyrenia Grube 2005, *Ascomycota* genera *incertae sedis*, one species, type: *F. bryospila* (Nyl.) Grube, lichenized, subarctic, see Lumbsch and Huhndorf (2010; outline), accepted as a genus in *Xanthopyreniaceae*, Lücking et al. (2016; classification), sequences are unavailable.

Frondicola K.D. Hyde 1992, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, nine species, type: *F. tunitricuspis* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Brunei, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Frondisphaeria K.D. Hyde 1996, *Dothideomycetes* genera *incertae sedis*, two species, type: *F. palmicola* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Frondispora K.D. Hyde 1993, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *F. bicalcarata* (Ces.) K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Frutidella Kalb 1994, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *F. caesioatra* (Schaer.) Kalb, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Fujimyces Minter & Caine 1980, *Ascomycota* genera *incertae sedis*, two species, type: *F. oödes* (Bayl. Ell.) Minter & Caine, coelomycetous, sexual morph unknown, saprobes, terrestrial, British Isles, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI35344, cultures and sequences are unavailable, needs generic revision.

Fulgidea Bendiksby & Timdal 2013, *Umbilicariaceae*, *Umbilicariales*, *Lecanoromycetes*, two species, type: *F. oligospora* (Timdal) Bendiksby & Timdal, lichenized, see Bendiksby and Timdal (2013; taxonomy), Lücking et al. (2016; classification), sequences are available. holotype of type species: O-L-767,

Fuligomyces Morgan-Jones & Kamal 1984, *Rhytismatales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *F. macrosporus*, asexual morph hyphomycetous, saprobes (symptoms on leaves similar to sooty mould), terrestrial, India, (Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: AUA, IMI 248960, GPU (KA 69), cultures and sequences are unavailable, needs generic revision.

Fulvia Cif. 1954, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *F. fulva* (Cooke) Cif., hyphomycetous, sexual morph unknown, on *Lycopersicon esculentum*, plant pathogenic, see Videira et al. (2016; morphology, phylogeny), holotype BPI 426698, for epitypification see Videira et al. (2017).

Fulvocentrum E.B.G. Jones & Abdel-Wahab 2014, *Juncigenaceae*, *Torpedosporales*, *Sordariomycetes*, two species, type: *F. aegyptiaca* (Abdel-Wahab, El-Shar. & E.B.G. Jones) E.B.G. Jones & Abdel-Wahab, asexual morph undermined, marine, tropical/subtropical, see Jones et al. (2014, 2015; morphology, phylogeny, outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Fulvoflamma Crous 2006, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, *Leotiomycetes*, one species, type: *F. eucalypti* Crous, coelomycetous, sexual morph unknown, saprobes, endophytes, terrestrial, Spain, see Crous et al. (2006; DNA, morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type strains of the type: CBS H-18045, 1243 = CBS 118549.

Fulvophyton Ertz & Tehler 2011, *Roccellographaceae*, *Arthoniales*, *Arthoniomycetes*, nine species, type: *F. stalactinum* (Nyl.) Ertz & Tehler, sexual morph with punctiform or shortly lirellate ascomata, lichenized, terrestrial, tropical, see Ertz and Tehler (2011; morphology, phylogeny), Tehler et al. (2013, one new combination), Lücking et al. (2016; classification), sequences are available.

Fumagopsis Speng. 1911, *Ascomycota* genera *incertae sedis*, two species, type: *F. triglifoides*, hyphomycetous, sexual morph unknown, saprobes or plant pathogenic on plant leaves, terrestrial, known from Argentina and India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: in LPS, cultures and sequences are unavailable, needs generic revision.

Fumiglobus D.R. Reynolds & G.S. Gilbert 2006, *Capnodiaceae*, *Capnodiales*, *Dothideomycetes*, 15 species, type: *F. ficinus* (Bat., Nascim. & Cif.) D.R. Reynolds & G.S. Gilbert, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2014; outline), Bose et al. (2014; DNA, new species), cultures and sequences are available, needs generic revision.

Funbolia Crous & Seifert 2011, *Dothideomycetes* genera *incertae sedis*, one species, type: *F. dimorpha* Crous & Seifert, hyphomycetous, sexual morph unknown, saprobes, terrestrial,

USA, see Crous et al. (2011; morphology, DNA), Wijayawardene et al. (2012, 2014; outline), holotype and ex-type strains of the type: CBS H-20577, CPC 14170.

Funiliomyces Aptroot 2004, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *F. biseptatus* Aptroot, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available for the type: AY772015 (LSU) (fide Aptroot 2004).

Furcaspora Bonar 1965, *Ascomycota* genera *incertae sedis*, two species, type: *F. pinicola* Bonar, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, Australia, see Crous et al. (2007; new species, DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI35344, ex-type cultures and sequences are available for *Furcaspora eucalypti* Crous & Verkley (CPC 12556 = CBS 119111 fide Crous et al. 2007), needs generic revision.

Fusamen (Sacc.) P. Karst. 1890, *Ascomycota* genera *incertae sedis*, two species, type: *F. fungicola* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Fusariella Sacc. 1884, *Ascomycota* genera *incertae sedis*, 19 species, type: *F. atrovirens*, asexual morph hyphomycetous, on plants, leaf litter, dung and in soil, terrestrial, worldwide, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision.

Fusarium Link 1809 (= *Gibberella* Sacc. 1877 fide Maharachchikumbura et al. 2016; see Lombard et al. 2015 for all synonyms), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, c. 120 species, type: *F. sambucinum* Fuckel, hyphomycetous, sexual morph *Gibberella*, terrestrial, pathogens, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Lombard et al. (2015; phylogeny, taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Fuscidea V. Wirth & Vězda 1972, *Fuscideaceae*, *Umbilicariales*, *Lecanoromycetes*, 35 species, type: *F. aggregata* (Flot.) V. Wirth & Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Fuscoderma (D.J. Galloway & P.M. Jørg.) P.M. Jørg. & D.J. Galloway 1989, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, five species, type: *F. applanatum* (D.J. Galloway & P.M. Jørg.) P.M. Jørg. & D.J. Galloway, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Fuscolachnum J.H. Haines 1989, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *F. pteridis* (Alb. & Schwein.) J.H. Haines, asexual morph unknown, saprobes, epiphytes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Fuscopannaria P.M. Jørg. [nom. cons. prop.] 1994, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, 58 species, type: *F. leucosticta* (Tuck.) P.M. Jørg., lichenized, see Ekman et al. (2014; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Fuscophialis B. Sutton 1977, *Ascomycota* genera *incertae sedis*, four species, type: *F. brasiliensis* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil,

Cuba, Mauritius, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type:, cultures and sequences are unavailable, genus need revision.

Fuscocypha Svrcek 1987, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *F. acicularum* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Fuscostagonospora Kaz. Tanaka & K. Hiray. 2015, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *F. sasae* Kaz. Tanaka & K. Hiray., coelomycetous, saprobes, terrestrial, Japan, see Tanaka et al. (2015; morphology, phylogeny), Wijayawardene et al. (2016; taxonomy), holotype and ex-type strain of the type: HHUF 29106, CBS 139687.

Fusichalara S. Hughes & Nag Raj 1973, *Ascomycota* genera *incertae sedis*, two species, type: *F. dimorphospora* S. Hughes & Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline, treated as a genus in *Chaetosphaeriaceae*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; excluded from *Chaetosphaeriaceae* and placed in *Ascomycota* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Fusicladiella Höhn. 1919, *Ascomycota* genera *incertae sedis*, five species, type: *F. aronici* (Sacc.) Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology) and Wijayawardene et al. (2012; treated as *Mycosphaerellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Fusicladium Bonord. 1851, *Symptoventuriaceae*, *Venturiales*, *Dothideomycetes*, c. 75 species, type: *P. virescens* Bonord., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Braun (2009; new species), Seifert et al. (2011; morphology), Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures are available.

Fusicolla Bonord. 1851, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, eight species, type: *F. betae* Bonord., hyphomycetous, holomorph, diverse substrates and hosts, terrestrial and aquatic, worldwide, see Gräfenhan et al. (2011; DNA, phylogeny) Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species, phylogeny), cultures and sequences are available.

Fusoidiella Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *F. depressa* (Berk. & Broome) Videira & Crous, hyphomycetous, sexual morph mycosphaerella-like, plant pathogenic, see Videira et al. (2016; morphology, phylogeny), no ex-type strain available, authentic specimen (herb. K(M) 29181, on *Angelica sylvestris*, Great Britain).

Fusoidispora Vijaykr., Jeewon & K.D. Hyde 2005, *Annulatasceae*, *Annulatascales*, *Sordariomycetes*, one species, type: *F. aquatica* Vijaykr., Jeewon & K.D. Hyde, asexual morph unknown, saprobes, aquatic, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: HKU (M) 17484, cultures and sequences are available.

Fusticeps Webster & R.A. Davey 1980, *Ascomycota* genera *incertae sedis*, five species, type: *F. bullatus* Webster & R.A. Davey, hyphomycetous, sexual morph unknown, on plant litter in water, aquatic, Tropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Chuaseeharonnachai et al. (2014; key), holotype of type: IMI 245198, cultures and sequences are unavailable, needs generic revision.

Gaeumanniella Petr. 1952, *Ascomycota* genera *incertae sedis*, one species, type: *G. singularis* Petr., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gaeumannomyces Arx & D.L. Olivier 1952, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, c. 13 species, type: *G. graminis* (Sacc.) Arx & D.L. Olivier, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Luo et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Gaillardiella Pat. 1895, *Bertiaceae*, *Coronophorales*, *Sordariomycetes*, one species, type: *Gaillardiella pezizoides* Pat., asexual morph unknown, saprobes, terrestrial, South America, see Mugambi and Huhndorf (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline, phylogeny), cultures available for the type: GKM1245 (*vide* Mugambi and Huhndorf 2010).

Galactomyces Redhead & Malloch 1977, *Dipodascaceae*, *Saccharomycetales*, *Saccharomycetes*, five species, type: *G. geotrichum* (E.E. Butler & L.J. Petersen) Redhead & Malloch, asexual reproduction is present, saprophytic, soil, rotted fruit and other plant parts, tree exudates, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Galeoscypha Svrček & J. Moravec 1989, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *G. pileiformis* (Svrček) Svrček & J. Moravec, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Galiella Nannf. & Korf 1957, *Pezizales*, *Pezizomycetes*, eight species, type: *G. rufa* (Schwein.) Nannf. & Korf, asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Galiicola Tibpromma, Camporesi & K.D. Hyde 2015, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *Galiicola pseudophaeosphaeria* Tibpromma, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Ariyawansa et al. (2015; taxonomy, phylogeny), cultures available for type: MFLUCC 14-0524.

Gampsonema Nag Raj 1975, *Ascomycota* genera *incertae sedis*, one species, type: *G. exile* (Tassi) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gamsia M. Morelet 1969, *Microascaceae*, *Microascales*, *Sordariomycetes*, three species, type: *G. dimera* (W. Gams) M. Morelet, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Sandoval-Denis et al. (2016; DNA, phylogeny), cultures and sequences are available for *G. simplex* (CBS 546.69 *vide* Sandoval-Denis et al. 2016) and *G. aggregata* (CBS 251.69 *vide* Sandoval-Denis et al. 2016), needs generic revision.

Gamsylella M. Scholler, Hagedorn & A. Rubner 1999, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, type: *G. arcuata* (Scheuer & J. Webster) M. Scholler, Hagedorn & A. Rubner, cf. six species, hyphomycetous, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Gangliophora Subram. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *G. casuarinae* (Matsush.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Taiwan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gangliostilbe Subram. & Vittal 1976, *Ascomycota* genera *incertae sedis*, one species, type: *G. indica* Subram. & Vittal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017;

outline), Kirk et al. (2013; genus accepted), Ma et al. (2014; new species, China), cultures and sequences are unavailable, needs generic revision.

Garnaudia Borowska 1977, *Ascomycota* genera *incertae sedis*, three species, type: *G. elegans* Borowska, hyphomycetous, synanamorph selenosporella-like, on wood, bark and dead leaves, terrestrial, Cuba, Poland, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: WA 20592, cultures and sequences are unavailable, needs generic revision.

Gassicurtia Feé 1825, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 27 species, type: *G. coccinea* Fée, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Gaubaea Petr. 1942, *Ascomycota* genera *incertae sedis*, two species, type: *G. insignis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, central Asia, see Wijayawardene et al. (2012, 2016, 2017; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gastrumia Bat. 1960, *Ascomycota* genera *incertae sedis*, one species, type: *G. polystigmatis* Bat. & M.L. Farr, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Geisleria Nitschke 1861, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *G. sychnogonoides* Nitschke, lichenized, see Aptroot et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

Gelasinospora Dowding 1933, *Sordariaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *G. tetrasperma* Dowding, asexual morph unknown, saprobes, terrestrial, Ivory Coast, see Lumbsch and Huhndorf (2010; outline), Nygren et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available for type: ATCC 11345 (*vide* Hausner et al. 1993).

Gelatinipulvinella Hosoya & Y. Otani 1995 (= *Aureohyphozyma* Hosoya & Y. Otani *vide* Johnston et al. 2014), *Leotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *G. astraicola* Hosoya & Y. Otani, asexual morph hyphomycetous, saprobe, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), holotype of the type: TNS-F-52070.

Gelatinocrinis Matsush. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *G. roseus* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelatinodiscus Kanouse & A.H. Sm. 1940, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *G. flavidus* Kanouse & A.H. Sm., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelatinomyces N. Sanoamuang, W. Jitjak, S. Rodtong & A.J.S. Whalley 2013, *Leotiomycetes* genera *incertae sedis*, one species, type: *G. siamensis* N. Sanoamuang, W. Jitjak, S. Rodtong & A.J.S. Whalley, asexual morph hyphomycetous, saprobes, terrestrial, Thailand, see Sanoamuang et al. (2013; morphology, DNA, phylogeny), holotype and ex-type cultures of the type: K(M) 188078, CBS 135071, close to *Leotiomycetes* in phylogenetic analyses.

Gelatinopsis Rambold & Triebel 1990, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, cf. eight species, type: *G. geoglossi* (Ellis & Everh.) Rambold & Triebel, asexual morph unknown, saprobes, lichenicolous, terrestrial, worldwide, see Navarro-Rosinés et al. (2008; new species), Kocourková and Knudsen (2009; new species), Lumbsch and Huhndorf (2010;

outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelatinopycnis Dyko & B. Sutton 1979, *Ascomycota* genera *incertae sedis*, one species, type: *G. hartigiana* (Allesch.) Dyko & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelatinosporium Peck 1873, *Ascomycota* genera *incertae sedis*, one species, type: *G. betulinum* Peck, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelineostroma H.J. Swart 1988, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, one species, type: *Gelineostroma athrotaxis* H.J. Swart, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Geltingia Alstrup & D. Hawksw. 1990, *Helicogoniaceae*, *Phacidiales*, *Leotiomyces*, one species, type: *G. associata* (Th.Fr.) Alstrup & D. Hawksw., asexual morph unknown, on lichens, terrestrial, Arctic, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Odontotremataceae*), Kirk et al. (2013; genus accepted), Suija et al. (2014; phylogeny), Jaklitsch et al. (2016; position), holotype of type: UPS, cultures and sequences are unavailable, needs generic revision.

Geminispora Pat. 1893, *Phyllachoraceae*, *Phyllachorales*, *Sordariomyces*, two species, type: *G. mimosae* Pat., sexual morph unknown, saprobes, terrestrial, East Africa, Seychelles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Geminoarcus K. Ando 1993, *Ascomycota* genera *incertae sedis*, three species, type: *G. pachysporus* K. Ando, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gemmaspora D. Hawksw. & Halici 2007, *Verrucariaceae*, *Verrucariales*, *Eurotiomyces*, one species, type: *G. lecanorae* (Werner) D. Hawksw. & Halici, lichenicolous, Syria, Turkey and Uzbekistan, see Lumbsch and Huhndorf (2010; outline), Jaklitsch et al. (2016; position), holotype of type: BC and epitype ERC- MGH 02274, cultures and sequences are unavailable, needs generic revision.

Gemmina Raitv. 2004, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *G. gemmarum* (Boud.) Raitv., asexual morph unknown, saprobes, epiphytes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gemmulina Descals & Marvanová 1999, *Ascomycota* genera *incertae sedis*, one species, type: *G. botryosa* (Descals) Descals & Marvanová, asexual morph hyphomycetous, has a yeast-like phase, from foam in streams, aquatic, Canada and United Kingdom, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: IMI 254853, cultures and sequences are unavailable, needs generic revision.

Genea Vittad. 1831, *Pyronemataceae*, *Pezizales*, *Pezizomyces*, one species, type: *G. pileiformis* (Svrček) Svrček & J. Moravec, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Alvarado et al. (2014, 2016; new species, phylogeny), Kaounas et al. (2016; new species), cultures and sequences are available.

Geniculospora Sv. Nilsson ex Marvanová & Sv. Nilsson 1971, *Helotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *G. inflata* (Ingold) Sv. Nilsson ex Marvanová & Sv.

Nilsson, sexual morph unknown, saprobes, aquatic, worldwide, see Wijayawardene et al. (2012, 2017; outline), Duarte et al. (2012; DNA), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are available, needs generic revision.

Geocoryne Korf 1978, *Leotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *G. variispora* Korf, asexual morph unknown, saprobe, terrestrial, India, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Geodina Denison 1965, *Sarcoscyphaceae*, *Pezizales*, *Pezizomyces*, one species, type: *G. guanacastensis* Denison, asexual morph unknown, saprobe, terrestrial, Costa Rica, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Geoglossum Pers. 1794, *Geoglossaceae*, *Geoglossales*, *Geoglossomyces*, two species, type: *G. glabrum* Pers., asexual morph unknown, saprobe, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Arauzo and Iglesias (2014; new species), Loizides et al. (2015; new species), Crous et al. (2016; new species), cultures and sequences are available, needs generic revision.

Geomyces Traaen 1914, *Pseudeurotiaceae*, *Leotiomyces* family *incertae sedis*, four species, type: *G. auratus* Traaen, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Minnis and Lindner (2013; DNA, phylogeny), cultures and sequences are available for type: CBS 108.14 (Minnis and Lindner et al. 2013), needs generic revision.

Geopora Harkn. 1885, *Pyronemataceae*, *Pezizales*, *Pezizomyces*, c. 20 species, type: *G. cooperi* Harkn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Frank et al. (2011; new species), Kirk et al. (2013; genus accepted), Lluvia et al. (2014; new species), cultures and sequences are available.

Geopyxis (Pers.) Sacc. 1889, *Pyronemataceae*, *Pezizales*, *Pezizomyces*, one species, type: *G. carbonaria* (Alb. & Schwein.) Sacc., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Geosmithia Pitt 1979, *Hypocreales* genera *incertae sedis*, six species, type: *G. lavendula* (Raper & Fennell) Pitt, sexual morph unknown, saprobes, terrestrial, Ecuador, see Kolařík et al. (2010, 2011, 2015; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wu et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Geotrichum Link 1809, *?Dipodascaceae*, *Saccharomycetales*, *Saccharomyces*, three species, type: *G. candidum* Link, asexual morph present, saprophytic, soil, rotted fruit and other plant parts, tree exudates, worldwide, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Gesasha Abdel-Wahab & Nagahama 2011, *Halosphaeriaceae*, *Microascales*, *Sordariomyces*, three species, type: *G. peditatus* Abdel-Wahab & Nagah., saprobes, marine, Japan, asexual morph unknown, see Abdel-Wahab and Nagahama (2011; phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype of the type: IMI 397958.

Gibbago E.G. Simmons 1986, *Dothideomyces* genera *incertae sedis*, one species, type: *G. trianthemae* E.G. Simmons, sexual morph unknown, pathogens, terrestrial, USA, see Wijayawardene et al. (2012, 2014; outline), Akhta et al. (2013; pathogens, Pakistan), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Gibbera Fr. 1825, *Dothideomyces* genera *incertae sedis*, c. 28 species, type: *G. trianthemae* E.G. Simmons, sexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in

Venturiaceae), Hyde et al. (2013; excluded from *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are available.

Gibberidea Fuckel 1870, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. visci* Fuckel, sexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Gibbosporina Elvebakk, Hong & P.M. Jørg. 2016, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, 13 species, type: *G. boninensis* (Kurok.) Elvebakk & P.M. Jørg., lichenized, see Elvebakk et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Gibellia Sacc. 1885, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *G. dothideoides* Sacc. & Berl., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Gibellina Pass. 1886, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, three species, type: *G. cerealis* (Pass.) Pass., asexual morph unknown, pathogens, terrestrial, Asia, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for type: MF-C22704 (unpublished).

Gibellula Cavara 1894, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *G. pulchra* Cavara, hyphomycetous, sexual morph unknown, parasitic, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Han et al. (2013; new species, China), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for *Gibellula leiopus*.

Gibellulopsis Bat. & H. Maia 1959, *Plectosphaerellaceae*, *Glomerellales*, *Sordariomycetes*, two species, type: *G. piscis* Bat. & H. Maia, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Han et al. (2013; new species, China), Kirk et al. (2013; genus accepted), Hirooka et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Gigantospora B.S. Lu & K.D. Hyde 2003, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *G. gigaspora* B.S. Lu & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Gilkeya M.E. Sm., Trappe & Rizzo 2007, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *G. compacta* (Harkn.) M.E. Sm. & Trappe, asexual morph unknown, biotrophic, terrestrial, worldwide, see Gladdish et al. (2010; DNA), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

Gilletiella Sacc. & P. Syd. 1899, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. chusqueae* (Pat.) Sacc. & P. Syd., asexual morph coelomycetous (ascochyta-like), saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Gillotia Sacc. & Trotter 1913, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *G. orbicularis* (Syd. & P. Syd.) Sacc. & Trotter, asexual morph asteromella-like, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mycosphaerellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Gilmaniella G.L. Barron 1964, *Ascomycota genera incertae sedis*, nine species, type: *G. humicola*, hyphomycetous, from soil, dung, litter and bamboo, terrestrial, worldwide, see Dubey et al. (2011; new species, India), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Goh et al. (2013; new species, Malaysia), Kirk et al. (2013; genus accepted), ex-type strain of type: ATCC 16013 = O.A.C. 10076. = CBS 220.65 = IFO 9235, Holotype of type: O.A.C. 10076 (dried culture).

Gintarasia Kraichak, Lücking & Lumbsch 2013, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *G. megalophthalma* (Müll. Arg.) Kraichak, Lücking & Lumbsch, lichenized, terrestrial, tropical, see Kraichak et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Giulia Tassi 1904, *Ascomycota genera incertae sedis*, one species, type: *G. tenuis* (Sacc.) Tassi ex Sacc. & D. Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Glaphyriopsis B. Sutton & Pascoe 1987, *Ascomycota genera incertae sedis*, two species, type: *G. brunnea* B. Sutton & Pascoe, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Glarea Bills & Paláez 1999, *Helotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *G. lozoyensis* Bills & Paláez, sexual morph unknown, saprobes, terrestrial, Spain, see Wijayawardene et al. (2012; outline, listed as a genus in *Dermateaceae*), Chen et al. (2013; DNA, phylogeny, accepted as a genus in *Helotiaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are available for type: ATCC 20868.

Glaucotrema Rivas Plata & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *G. glaucophaenum* (Kremp.) Rivas Plata & Lumbsch, lichenized, see Rivas Plata et al. (2012b; taxonomy), Lücking et al. (2016; classification), sequences are available.

Glaxoa P.F. Cannon 1997, *Pleosporales genera incertae sedis*, one species, type: *G. pellucida* P.F. Cannon, asexual morph unknown, saprobes, terrestrial, UK, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tubeufiaceae*), Boonmee et al. (2014; accepted as genus in *Pleosporales genera incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, cultures and sequences are unavailable).

Glaziella Berk. 1880, *Glaziellaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *G. vesiculosa* Berk., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Glioannellodochium Matsush. 1989, *Ascomycota genera incertae sedis*, one species, type: *Glioannellodochium australiense* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: Matsushima, MFC-8A230, cultures and sequences are unavailable, needs generic revision.

Glioblastocladium Matsush. 1989, *Ascomycota genera incertae sedis*, one species, type: *G. australiense* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: Matsushima, MFC-8A329, cultures and sequences are unavailable, needs generic revision.

Gliocephalis Matr. 1899, *Pyxidiophoraceae*, *Pyxidiophorales*, *Laboulbeniomyces*, two species, type: *G. hyalina* Matr., asexual morph unknown, parasitic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (*fide* Jacobs et al. 2005).

Gliocephalotrichum J.J. Ellis & Hesselt. 1962, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, 13 species, type: *G. bulbilium* J.J. Ellis & Hesselt., hyphomycetous, sexual morph unknown, in soil, associated with post-harvest fruit spoilage of several important tropical fruit crops, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2014b 2015), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BPI 414619, ex-type of the type: CBS 242.62 = ATCC 22228 = IFO 9325 = IMI 096357 = MUCL 18575 = NRRL 2899 = QM 9007.

Gliocladiopsis S.B. Saksena 1954, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, ten species, type *G. sagariensis* S.B. Saksena., soil-borne fungi, worldwide, see Seifert et al. (2011; morphology), Lombard and Crous (2012), Wijayawardene et al. (2012, 2017; outline), Lombard et al. (2015; phylogeny), holotype of the type: CBS 199.55, ex-type of the type: CBS 199.55.

Gliomastix Guég. 1905, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, c. 25 species, type: *G. chartarum* (Cooke) Guég., hyphomycetous, sexual morph unknown, saprobes, in soil, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Summerbell et al. (2011; revision, phylogeny), Whitton et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Globoa Bat. & H. Maia 1962, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. toddaliae* Bat. & H. Maia, asexual morph unknown, saprobes, terrestrial, Uganda, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Globobotrys L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *G. sansevieriicola* (Crous & M.J. Wingf.) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Tanzania, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22220, CBS 138872.

Globoconidiopsis G.F. Sepúlveda, Pereira-Carv. & Dianese 2009, *Ascomycota* genera *incertae sedis*, one species, type: *G. cerradensis*, hyphomycetous, sexual morph unknown, superficial on leaf trichomes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of type: UB Mycol. Col. 9926, cultures and sequences are unavailable, needs generic revision.

Globoconidium G.F. Sepúlveda, Pereira-Carv. & Dianese 2009, *Ascomycota* genera *incertae sedis*, one species, type: *G. cerradense*, hyphomycetous, sexual morph unknown, superficial on leaf trichomes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of type: UB Mycol. Col. 8387, cultures and sequences are unavailable, needs generic revision.

Globonectria Etayo 2008, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *G. cochensis* Etayo, asexual morph unknown, lichenicolous, terrestrial, South America, see Etayo (2008; morphology, distinction of similar lichenicolous genera), holotype of the type: COL Etayo 15859, sequences are unavailable.

Globosphaeria D. Hawksw. 1990, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *G. jamesii* D. Hawksw., lichenicolous, terrestrial, Australia (Tasmania), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: NSW LI4339, sequences are unavailable.

Globulina Spég. 1889, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. toddaliae* Bat. & H. Maia, asexual morph unknown, saprobes, terrestrial, Uganda, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Gloeandromyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, five species (est. spp. 5+), type: *G. streblae* (Peyr.) Thaxt., asexual morph unknown, biotrophic, hosts are *Streblidae* (*Diptera: Hippoboscoidea*), neotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters (unpublished data), Haelewaters et al. (2015a; DNA), Haelewaters et al. (2017b; most recent species description), ribosomal sequence data available but not for the type:.

Gloeodiscus Dennis 1961, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. nigrorufus* (Berk.) Dennis, asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Gloeoheppia Gyeln. 1935, *Gloeoheppiaceae*, *Lichinales*, *Lichinomycetes*, five species, type: *G. turgida* (Ach.) Gyeln., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Gloeopeziza Zukai 1891, *Helotiaceae*, *Helotiales*, *Leotiomyces*, c. eight species, type: *G. rehmi* Zukai, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gloeosporidiella Petr. 1921, *Ascomycota* genera *incertae sedis*, one species, type: *G. ribis* (Lib.) Petr., coelomycetous, asexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gloeosporidina Petr. 1921, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *G. moravica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Gloeosporiella Cavara 1892, *Ascomycota* genera *incertae sedis*, one species, type: *G. rosicola* Cavara, hyphomycetous, asexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gloetinia M. Wilson, Noble & E.G. Gray 1954 (= *Endoconidium* Prill. & Delacr. *vide* Johnston et al. 2014), *Helotiales*, genera *incertae sedis*, *Leotiomyces*, two species, type: *G. temulenta* (Prill. & Delacr.) M. Wilson, Noble & E.G. Gray, asexual morph *Endoconidium*, saprobe, terrestrial, India, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available for unidentified species, needs generic revision.

Gloiosphaera Höhn. 1902, *Ascomycota* genera *incertae sedis*, two species, type: *G. globuligera* Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Glomerilla Norman 1869, *Verrucariaceae*, *Verrucariales*, *Eurotiomyces*, one species, type: *G. subtilis* Norman, lichenized, terrestrial, Norway, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Glomerobolus Kohlm. & Volkm.-Kohlm. 1996, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *G. gelineus* Kohlm. & Volkm.-Kohlm., saprobes, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMS, Kohlmeyer 5555, cultures and sequences are available, needs generic revision.

Glomerulophoron Frisch, Ertz & G.Thor 2015, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *G. mauritiae* Frisch, Ertz & G. Thor, lichenized, see Frisch et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

Gloniella Sacc. 1883, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, twelve species, type: *G. sardoa* Sacc. & Traverso, asexual morph unknown, saprobes, terrestrial/aquatic, cosmopolitan, see Boehm et al. (2009, overview of genus) Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Hysteriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences are unavailable, needs generic revision.

Gloniopsis De Not. 1847, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, seven species, type: *G. decipiens* De Not., asexual morph coelomycetous (apospheeria-like *fide* Lohman 1933a), saprobes, terrestrial, see Boehm et al. (2009, overview of genus), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data indicate this genus is polyphyletic (*fide* Boehm et al. 2009).

Glonium Muhl. ex Fr. 1823, *Gloniaceae*, *Mytilinidiales*, *Dothideomycetes*, c. 13 species, type: *G. stellatum* Mühl., asexual morph asteromella-like, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Gloniaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Glutinium Fr. 1849, *Ascomycota* genera *incertae sedis*, two species, type: *G. exasperans* Fr., hyphomycetous, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Glutinoglossum Hustad, A.N. Mill, Dentinger & P.F. Cannon 2013, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, two species, type: *G. glutinosum* (Pers.) Hustad, A.N. Mill., Dentinger & P.F. Cannon, asexual morph unknown, from soil, terrestrial, worldwide, see Hustad et al. (2013; morphology, taxonomy, DNA, phylogeny), Kirk et al. (2013; genus accepted), holotype of the type: 910.261-767 (L 0110938 [Persoon Herb.], cultures and sequences are available: ANM 2231.

Glyphis Ach. 1814, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, seven species, type: *G. cicatricosa* Ach., lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Glypholecia Nyl. 1853, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, one species; type: *G. candidissima* Nyl., lichenized, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Glyphopeltis Brusse 1985, *Psoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *G. eburina* Brusse, lichenized, Mediterranean Europe, South Africa, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Glyphopsis Aptroot 2014, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *G. aurantiodisca* Aptroot, lichenized, see Aptroot (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Gnomonia Ces. & De Not. 1863, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, c. 70 species, type: *G. vulgaris* Ces. & De Not., asexual morph unknown, saprobes, terrestrial, Europe, see Mejia et al. (2008; DNA, phylogeny), Sogonov et al. (2008; new species, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type.

Gnomoniella Sacc. 1881, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, c. 70 species, type: *G. tubaeformis* (Tode) Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Sogonov et al. (2008; DNA, phylogeny), Singh et al. (2009; new species, India), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type.

Godronia Moug. & Lév. 1846 (= *Sphaeronaema* Fr. *fide* Johnston et al. 2014), *Helotiaceae*, *Godroniaceae*, *Leotiomycetes*, c. 30 species, type: *G. muehlenbeckii* Moug. & Lév., asexual morph unknown, saprobes, terrestrial, worldwide, see Robideau et al. (2008; DNA), de Gruyter et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available but lacks for type, needs generic revision.

Godroniopsis Diehl & E.K. Cash 1929 (= *Sphaeronaema* Fr., *fide* Johnston et al. 2014), *Helotiaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *G. querneae* (Schwein.) Diehl & E.K. Cash, asexual morph ?*Sphaeronaema*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.

Golovinomyces (U. Braun) Heluta 1988 (= *Euoidium* Y.L. Paul & J.N. Kapoor 1985 *fide* Rossman et al. 2016), *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, c. 63 species, type: *G. cichoracearum* (DC.) Heluta, asexual morphs hyphomycetous, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Cunnington et al. (2010; phylogeny), Takamatsu et al. (2006, 2013; phylogeny), Braun and Cook (2012; taxonomy), Rossman et al. (2016; nomenclature), sequences of non-type material of the type species are available, lectotype of type: France, on *Scorzonera hispanica*, “*Erysiphe cichoracearum* ad.fl. fr. in *Scorzonera hispanica* [ex herb. de Candolle] (G 00298360).

Gomphillus Nyl. 1855, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, six species, type: *G. calycioides* (Delise ex Duby) Nyl., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Gonatobotrys Corda 1839, *Ceratostomataceae*, *Melanosporales*, *Sordariomycetes*, type: *G. simplex* Bonord., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision, Index Fungorum (2016) listed *Gonatobotrys* as a synonym of *Melanospora* Corda.

Gonatobotryum Sacc. 1880, *Ascomycota* genera *incertae sedis*, four species, type: *G. fuscum* (Sacc.) Sacc., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for *Gonatobotryum apiculatum* (unpublished) but lacks for type, needs generic revision.

Gonatophragmium Deighton 1969, *Acrospermaceae*, *Acrospermales*, *Dothideomycetes*, 15 species, type: *G. mori* (Sawada) Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Berger et al. (2014; new species, lichenicolous, Austria), Crous et al. (2014; new species, DNA), cultures and sequences are available, needs generic revision.

Gonatorrhodum Corda 1839, *Ascomycota* genera *incertae sedis*, one species, type: *G. speciosum* Corda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gondwania Søchting, Frödén & Arup 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, four species, type: *G. cribrosa* (Hue) Søchting, Frödén & Arup, lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Goniopila Marvanová & Descals 1985, *Ascomycota* genera *incertae sedis*, one species, type: *G. monticola* (Dyko) Marvanová & Descals, hyphomycetous, sexual morph unknown, saprobes, aquatic, USA, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for type: CCM F-11686, needs generic revision.

Goosia B. Song 2003, *Englerulaceae*, *Dothideomycetes* family *incertae sedis*, one species, type: *G. melastomatis* B. Song, asexual morph unknown, parasitic, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Dai et al. (2014; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Goosiella Morgan-Jones, Kamal & R.K. Verma 1986, *Ascomycota* genera *incertae sedis*, one species, type: *G. helicospora* Morgan-Jones, Kamal & R.K. Verma, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Goosiomycetes N.K. Rao & Manohar. 1989, *Ascomycota* genera *incertae sedis*, one species, type: *G. digitatus* N.K. Rao & Manohar., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gordonomyces Crous & Marinc. 2011, *Pleosporales*, genera *incertae sedis*, *Dothideomycetes*, one species, type: *G. mucovaginus* Crous & Marinc., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2011; morphology, DNA), Wijayawardene et al. (2012, 2014, 2016; outline, morphology, phylogeny), holotype and ex-type strains of the type: PREM 59592, CMW 22212.

Gorgadesia Tav. 1964, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *G. mira* Tav., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Gorgomyces M. Gönczöl & Révay 1985, *Leotiomycetes* genera *incertae sedis*, two species, type: *G. hungaricus* J. Gönczöl & Révay, hyphomycetous, sexual morph unknown, nematophagous, aquatic, Hungary, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Baschien et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), ex-type culture of the of the type: CCM F-12696.

Gorgoniceps (P. Karst.) P. Karst. 1871, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *G. aridula* (P. Karst.) P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gossypiothallon Aptroot 2014, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *G. appendisporum* Aptroot, lichenized, see Aptroot (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Govindua Bat. & H. Maia 1960, *Dothideomycetes*, genera *incertae sedis*, one species, type: *G. shoreae* Bat. & H. Maia, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Wu et al. (2011; transferred to *Asterinaceae*), Hyde et al. (2013) and Hongsanan et al. (2013) did not accept as *Asterinaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Dothideomycetes* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Gowardia Halonen, Myllys, Velmala & Hyvärinen 2009, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *G. nigricans* (Ach.) Halonen, Myllys, Velmala & Hyvärinen, lichenized, see Myllys et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Gracilistilbella Seifert 2000, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *G. clavulata* (Mont.) Seifert, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Graddonia Dennis 1955, *Helotiales* genera *incertae sedis*, *Leotiomyces*, seven species, type: *G. coracina* (Bres.) Dennis, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dermateaceae*), Hustad and Miller (2011; DNA, phylogeny), Raja et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available for type: ILLS60491.

Graddonidiscus Raitv. & R. Galán 1992, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, three species, type: *G. coruscatus* (Graddon) Raitv. & R. Galán, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Grahamiella Spooner 1981, *Helotiaceae*, *Helotiales*, *Leotiomyces*, three species, type: *G. dryadis* (Nannf. ex L. Holm) Spooner, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Grallomyces F. Stevens 1918, *Ascomycota* genera *incertae sedis*, one species, type: *G. portoricensis* F. Stevens, hyphomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Grandibotrys L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *G. pseudotheobromae* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Nepal, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22443, CBS 136170.

Grandigallia M.E. Barr, Hanlin, Cedeño, Parra & R. Hern. 1987, *Shiraiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *G. dictyospora* M.E. Barr, Hanlin, Cedeño, Parra & R. Hern., asexual morph unknown, saprobes, terrestrial, Venezuela., see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), Ariyawansa et al. (2013; accepted as a genus in *Shiraiaceae*), Hyde et al. (2013; accepted as a genus in *Shiraiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Granulomanus de Hoog & Samson 1978, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *G. araneorum* (Petch) de Hoog & Samson, hyphomycetous, sexual morph unknown, parasitic on Arachnida, terrestrial, British Isles, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for *Gibellula leiopus*.

Granulopyrenis Aptroot 1991, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomyces*, six species, type: *G. antillensis* Aptroot, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Graphidastra (Redinger) G. Thor 1991, *Roccellaceae*, *Arthoniales*, *Arthoniomyces*, four species, type: *G. multiformis* (Mont. & Bosch) G. Thor, lichenized, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Graphiopsis Trail 1889, *Cladosporiaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *G. chlorocephala* (Fresen.) Trail, hyphomycetous, terrestrial, Asia, Europe, North America, New Zealand, see Braun et al. (2008; nomenclature), Crous et al. (2009; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), ex-neotype strain of type: CBS 121523 = CPC 11969, neotype of type: HAL 1924 F.

Graphiothecium Fuckel 1870, *Ascomycota* genera *incertae sedis*, six species, type: *G. fresenii* Fuckel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Graphis Adans. 1763, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 500 species, type: *G. scripta* (L.) Ach., asexual morph unknown, lichenized, terrestrial, mostly tropical, see Lücking et al. (2008, 2009, 2016; key, Costa Rica, classification), Archer 2009 (key, Australia), Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted), Barcenás Peña et al. (2014; key), Rivas Plata et al. (2012a; taxonomy), Kraichak et al. (2015; taxonomy), sequences are available.

Graphium Corda 1837, *Graphiaceae*, *Microascales*, *Sordariomycetes*, three species, type: *G. penicillioides* Corda, hyphomycetous, sexual morph unknown, saprobes or from soil terrestrial, worldwide, see Cruywagen et al. (2010; new species, South Africa), Paciura et al. (2010; new species, China), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Kolařík et al. (2015; new species; Costa Rica), Wu et al. (2015; new species, China), Maharachchikumbura et al. (2015, 2016; outline), ex-type strain of the type: JCM 1049 (*fide* Okada et al. 2000).

Graphostroma Piroz. 1974, *Graphostromataceae*, *Xylariales*, *Sordariomycetes*, one species, type: *G. platystoma* (Schwein.) Piroz., asexual morph hyphomycetous (nodulisporium-like), saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Koukol et al. (2014; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for the type: AFTOL-ID 1249 (*fide* Zhang et al. 2006).

Graphyllum Clem. 1901, *Hysteriales* genera *incertae sedis*, eleven species, type: *G. chloës* Clem., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Diademaceae*), Hyde et al. (2013) did not accept as *Diademaceae*, Kirk et al. (2013; genus accepted), Almeida et al. (2014; DNA, new species, phylogenetic analyses showed that *G. caracolinense* D.A.C. Almeida et al. belongs to *Hysteriales*), Wijayawardene et al. (2014; accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are available only for *G. caracolinense*, needs generic revision.

Greeneria Scribn. & Viala 1887, *Diaporthales* genera *incertae sedis*, three species, type: *G. fuliginea* Scribn. & Viala, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, phylogeny), Tangthirasunun et al. (2014; DNA, phylogeny), cultures and sequence available for *G. saprophytica* (MFLUCC 12-0298 *fide* Tangthirasunun et al. 2014).

Gregarithecium Kaz. Tanaka & K. Hiray. 2015, *Dictyosporiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *G. curvisporum* Kaz. Tanaka & K. Hiray., asexual morph unknown, saprobes, terrestrial, Japan, see Tanaka et al. (2015; morphology, phylogeny), holotype and ex-type strain of the type: HHUF 30134, CBS 139688.

Gregatothecium L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *G. humicola* L. Lombard & Crous, hyphomycetous,

sexual morph unknown, saprobes, terrestrial, Papua New Guinea, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22445, CBS 205.96.

Gregorella Lumbsch 2005, *Arctomiaceae*, *Arctomiales*, *Lecanoromycetes*, one species, type: *G. humida* (Kullh.) Lumbsch, asexual morph coelomycetous, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Miądlikowska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Gremmeniella M. Morelet 1969 (= *Brunchorstia* Erikss 1891 *fide* Johnston et al. 2014), *Godroniaceae*, *Helotiales*, *Leotiomyces*, three species, type: *G. abietina* (Lagerb.) M. Morelet, asexual morph *Brunchorstia*, pathogens, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Laflamme and Smerlis (2012; DNA, new species, Canada), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

Griggsia F. Stevens & Dalbey 1919, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. cyathea* F. Stevens & Dalbey, asexual morph unknown, saprobes, terrestrial, West Indies, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Grimmicola Döbbeler & Hertel 1983, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *G. parasiticus* Döbbeler & Hertel, asexual morph unknown, saprobes, terrestrial, Marion Island, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Griphosphaerioma Höhn. 1918 (= *Labridella* Brenckle 1929 *fide* Maharachchikumbura et al. 2015; Wijayawardene et al. 2016), *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *G. symphoricarpi* (Ellis & Everh.) Höhn. ex Petr., asexual morphs *Labridella*, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), Wijayawardene et al. (2016; taxonomy, nomenclature), Rossman et al. (2016) proposed to protect *Labridella* over *Griphosphaerioma*, cultures and sequences are unavailable.

Groenewaldozyma Kurtzman 2016, *Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, three species, type: *G. auringiensis* (Santa María) Kurtzman, saprophytic, worldwide, see Kurtzman (2016; taxonomy), cultures and sequences are available.

Groenhiella Jorg., E.B.G. Jones & S.T. Moss 1983, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, one species, type: *G. bivestia* Jørg. Koch, E.B.G. Jones & S.T. Moss, asexual morph unknown, marine, on wood often associated with sand, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline) cultures and sequences are unavailable.

Grosmania Goid. 1936, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, one species, type: *G. penicillata* (Grosmann) Goid., holomorph, asexual morph hyphomycetous, associated with bark beetles, terrestrial, worldwide, see Masuya et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Duong et al. (2012; new species, phylogeny), Linnakoski et al. (2012; new species), Kirk et al. (2013; genus accepted), Andoa et al. (2016; DNA, phylogeny), Linnakoski et al. (2016; DNA, phylogeny), cultures available for the type: CMW43738 (*fide* Linnakoski et al. 2016).

Groveolopsis Boedijn 1951, *Ascomycota* genera *incertae sedis*, six species, type: *G. pandani* (Höhn.) Boedijn, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Grovesia Dennis 1960, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *G. parasiticus* Döbbeler & Hertel, asexual morph unknown, saprobes, terrestrial, Venezuela, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Grovesiella M. Morelet 1969, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *G. abieticola* (Zeller & Goodd.) M. Morelet & Gremmen, asexual morph unknown, saprobes, terrestrial, USA, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available for the type: ZT 91110 (*fide* Sieber and Kowalski 1993).

Grovesinia M.N. Cline, J.L. Crane & S.D. Cline 1983 (= *Hinomyces* Narumi & Y. Harada 2006 *fide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *G. pyramidalis* M.N. Cline, J.L. Crane & S.D. Cline, asexual morph *Hinomyces*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature).

Guanomyces M.C. González, Hanlin & Ulloa 2000, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *G. polythrix* M.C. González, Hanlin & Ulloa, asexual morph unknown, saprobes, terrestrial, Mexico, Trinidad, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept as a valid genus), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available (see Gonzalez et al. 2000).

Gudelia Henssen 1995, *Gloeoheppiaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *G. mexicana* Henssen, lichenized, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Guedea Rambelli & Bartoli 1978, *Ascomycota* genera *incertae sedis*, six species, type: *G. sacra* Rambelli & Bartoli, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Guelichia Speg. 1886, *Ascomycota* genera *incertae sedis*, six species, type: *G. paradoxa* Speg., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline, accepted as a genus in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Boonmee et al. (2014) and Wijayawardene et al. (2014) did not accept as a genus in *Tubeufiaceae*, cultures and sequences are unavailable, needs generic revision.

Guestia G.J.D. Sm. & K.D. Hyde 2001, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *G. gonetropospora* G.J.D. Sm. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Guilliermondia Boud. 1904, *Sordariaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *G. saccoboloides* Boud., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Guttulispora Thambugala, Qing Tian & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *G. crataegi* Qing Tian, Thambugala, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Thambugala et al. (2015b; morphology, phylogeny), holotype of type: MFLU 14–0584, ex-type strains of type: MFLUCC 13–0442.

Gyalecta Ach. 1808, *Gyalectaceae*, *Ostropales*, *Lecanoromycetes*, 50 species, type: *G. cupularis* (Hedw.) Schaer., lichenized, terrestrial (corticolous, saxicolous, terricolous), mainly temperate, see Baloch et al. (2010, 2013; taxonomy), Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; DNA), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; DNA), Aptroot and Moon (2015; new species), Resl et al. (2015; DNA), Lücking et al. (2016; classification), sequences are available but lacks for the type.

Gyalectaria Lumbsch, Kalb & Schmitt 2010, *Coccotremataceae*, *Pertusariales*, *Lecanoromycetes*, three species, type: *G. jamesii* (Kantvilas) I. Schmitt, Kalb & Lumbsch, lichenized, terrestrial (corticolous), Chile, New Guinea, North America, Tasmania, from lowland to subalpine, see Schmitt et al. (2010; taxonomy), Resl et al. (2015; DNA), Lücking et al. (2016; classification), sequences are available.

Gyalectidium Müll. Arg. 1881, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, 52 species, type: *G. filicinum* Müll. Arg., lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Gyalidea Lettau ex Vězda [nom. cons.] 1966, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, 50 species, type: *G. lecideopsis* (A. Massal.) Lettau ex Vězda, lichenized, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Gyalideopsis Vězda [nom. cons.] 1972, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, 95 species, type: *G. peruviana* G. Merr. ex Vězda, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Gyalolechia A. Massal. 1852, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 30 species, type: *G. aurea* (Schaer.) A. Massal., lichenized, see Arup et al. (2013; taxonomy), Kondratyuk et al. (2014a; taxonomy), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification), sequences are available.

Gymnascella Peck 1884, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, 14 species, type: *G. aurantiaca* Peck, asexual morphs unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Gymnoascoideus G.F. Orr, K. Roy & G.R. Ghosh 1977, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *G. petalosporus* G.F. Orr, K. Roy & G.R. Ghosh, asexual morphs unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Gymnoascus Baran. 1872, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, eight species, type: *G. reessii* Baran., asexual morphs unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Gymnoderma Nyl. 1860, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *G. coccoarpum* Nyl., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Gymnographopsis C.W. Dodge 1967, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, two species; type: *G. chilena* C.W. Dodge, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. 2013 (genus accepted), Rivas Plata et al. (2012a; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Gymnohydnotrya B.C. Zhang & Minter 1989, *Discinaceae*, *Pezizales*, *Pezizomycetes*, three species, type: *G. australiana* B.C. Zhang & Minter, asexual morphs unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Gymnostellatospora Udagawa, Uchiy. & Kamiya 1993, *Myxotrichaceae*, *Leotiomycetes*, families *incertae sedis*, two species, type: *G. japonica* Udagawa, Uchiy. & Kamiya, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: BF 24290, cultures available for type: UAMH 9239 (*fide* Rice and Currah 2006).

Gymnoxyphium Cif., Bat. & I.J. Araújo 1963, *Ascomycota* genera *incertae sedis*, six species, type: *G. malum* Bat., Nascim. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gynonectria Döbbeler 2012, *Hypocreales* genera *incertae sedis*, six species, type: *G. intraspora* Döbbeler, asexual morph unknown, saprobes, terrestrial, South America, see Döbbeler (2012; outline), cultures and sequences are unavailable, needs generic revision.

Gyoerffyella Kol 1928 *Helotiales* genera *incertae sedis*, nine species, type: *G. tatraca* Kol, hyphomycetous, sexual morph unknown, saprobes, pathogens, saprobes, aquatic, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Baschien et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures unavailable for the type:, ex-type strains available for *G. entomobryoides* (CBS268.63 *fide* Baschien et al. 2013), *G. tricapillata* (CBS 451.64 *fide* Baschien et al. 2013).

Gypsoplaca Timdal 1990, *Gypsoplacaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *G. macrophylla* (Zahlbr.) Timdal, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Gyrocollema Vain. 1929, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, two species, type: *G. scyphuliferum* Vain., with ascomata, lichenized (Nostoc), terrestrial (saxicolous), North and Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016, classification), cultures and sequences are unavailable.

Gyrographa Ertz & Tehler 2015, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *G. gyrocarpa* (Flot.) Ertz & Tehler, sexual morph with knot-like or clustered-gyrose to lirelliform ascomata, asexual morph coelomycetous, lichenized, terrestrial, worldwide, see Ertz et al. (2015; taxonomy, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Gyromitra Fr. 1849, *Discinaceae*, *Pezizales*, *Pezizomycetes*, 20 species, type: *G. esculenta* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Methven et al. (2013; DNA, phylogeny), cultures available for the type: AFTOL-ID 5017.

Gyronactis Ertz & Tehler 2015, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *G. asiatica* Ertz & Tehler, sexual morph with apothecioid ascomata, asexual morph coelomycetous, lichenized, terrestrial, tropical, see Ertz et al. (2015; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.

Gyrophthorus Hafellner & Sancho 1990, *Ascomycota* genera *incertae sedis*, two species, type: *G. perforans* Hafellner & Sancho, asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gyrostroma Naumov 1914, *Diaporthales* genera *incertae sedis*, one species, type: *Gy. sinuosum* Naumov, sexual morph unknown, saprobes, terrestrial, Europe, see Hirooka et al. (2012; morphology, accepted as a genus in *Diaporthales*, genera *incertae sedis*), Wijayawardene et al. (2012; accepted as a genus in *Hypocreales*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Diaporthales*, genera *incertae sedis*), cultures and sequences are unavailable for the type: thus *Gyrostroma* s. str. uncertain, needs generic revision.

Gyothrix Corda 1842, *Ascomycota* genera *incertae sedis*, c. 22 species, type: *G. podosperma* (Corda) Rabenh, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Rambelli et al. (2011; morphology), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gyrotrema A. Frisch 2006, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *G. sinuosum* (Sipman) Frisch, with ascomata, lichenized (green algae), terrestrial (corticolous), Central and South America see Rivas Plata (2008; outline), Kalb (2009; outline), Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; outline); Cáceres et al. (2014; DNA), Kraichak et al. (2014; DNA), Lücking et al. (2016, classification), sequences are available but lacks for type.

Hadronema Syd. & P. Syd. 1909, *Ascomycota* genera *incertae sedis*, four species, type: *H. orbiculare* Syd. & P. Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, China, UK see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hadrospora Boise 1989, *Trematosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *H. fallax* (Mouton) Boise, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; accepted as a genus in *Trematosphaeriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Hadrosporium Syd. 1938, *Ascomycota* genera *incertae sedis*, two species, type: *H. fraserianum* Syd., hyphomycetous, saprobes, terrestrial, Australia, New Zealand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hadrotrichum Fuckel 1865, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *H. phragmitis* Fuckel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for *H. pyrenaicum* (YMJ 320 *vide* Hsieh et al. 2005).

Haematomma A. Massal. 1852, *Haematommaceae*, *Lecanorales*, *Lecanoromycetes*, c. 40 species, type: *H. vulgare* A. Massal., with ascomata, lichenized (*Pseudotreobuxia*), terrestrial (corticolous, lignicolous or saxicolous), cosmopolitan, but most diverse in the tropics, see Brodo et al. (2008; outline and chemistry), Ekman et al. (2008; DNA), Kalb et al. (2008; DNA), Lumbsch et al. (2008; DNA), Stocker-Wörgötter et al. (2010; chemistry, mycobionts), Lumbsch and Huhndorf (2010; outline), Miądlikowska et al. (2014; DNA), Lücking et al. (2016; classification), sequences are available but lacks for the type:.

Haematomyxa Sacc. 1884, *Ascomycota* genera *incertae sedis*, two species, type: *H. vinosa* (Cooke & Ellis) Sacc., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hagleromyces Sousa, Morais, Lachance & Rosa 2014, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *H. auroranensis* Sousa, asexual reproduction by multilateral budding, saprophytic, from water tanks (phytotelmata) of *Bromelia karatas* in the cerrado ecosystem of Aurora do Tocantins, Brazil, see Sousa et al. (2014; taxonomy), cultures and sequences are available.

Haglundia Nannf. 1932, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *H. perelegans* Haglund ex Nannf., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Haiyanga K.L. Pang & E. B. G. Jones 2008, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *H. salina* (Meyers) K.L. Pang & E.B.G. Jones, asexual

morph unknown, saprobes, marine, worldwide, see Pang et al. (2008; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Halazon Abdel-Aziz, Abdel-Wahab & Nagah. 2010, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, two species, type: *H. melhae* Abdel-Aziz, Abdel-Wahab & Nagah., coelomycetous, sexual morph unknown, saprobes, marine, worldwide, see Abdel-Wahab et al. (2010; morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type strain of the type: IMI 397964, MF819.

Halbania Racib. 1889, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, three species, type: *H. cyathearum* Racib., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, keys), Wijayawardene et al. (2014; outline), placement in *Asterinaceae* supported by morphology, holotype of type: ZT Myc 1488, cultures and sequences are unavailable.

Halecania M. Mayrhofer 1987, *Catillariaceae*, *Lecanorales*, *Lecanoromycetes*, 22 species, type: *H. alpivaga* (Th. Fr.) M. Mayrhofer, with ascomata, lichenized (green algae), terrestrial (saxicolous, corticolous, lichenicolous or growing on mosses and plant debris), cosmopolitan, see Ekman et al. (2008; DNA), van den Boom (2009; new species), Andreev (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lendemer and Hodkinson (2013; taxonomy), Aptroot and Moon (2015; new species), Kondratyuk (2015; new species), Lücking et al. (2016; classification), sequences are available for type: AY756368 (LSU) (*fide* Ekman et al. 2008).

Halegrapha Rivas Plata & Lücking 2011, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, eight species, type: *Ha. chimaera* Rivas Plata & Lücking, asexual morph unknown, lichenized, terrestrial, tropical, Lücking et al. (2011a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Halenospora E.B.G. Jones, 2009, *Leotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *H. varia* (Anastasiou) E.B.G. Jones, hyphomycetous, sexual morph unknown, saprobe, marine, worldwide, see Jones et al. (2009, 2015; outline, phylogeny), Abdel-Wahab et al. (2010; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available.

Haleomyces D. Hawksw. & Essl. 1993, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *H. oropogonicola* D. Hawksw. & Essl., lichenicolous, terrestrial, Mexico, asexual morph unknown, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; outline), holotype of type: K(M)-IMI 3551875.

Haligena Kohlm. 1961, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *H. elaterophora* Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of type: IMI 297765.

Halodiatrype Dayarathne & K.D. Hyde 2016, *Diatrypaceae*, *Xylariales* *Sordariomycetes*, three species, type: *H. salinicola* Dayarathne & K.D. Hyde, saprobes, found on decaying wood at mangrove stands, Thailand, see Dayarathne et al. (2016b; taxonomy, phylogeny), holotype of type: MFLU 15-0179.

Halographis Kohlm. & Volkm. Kohlm. 1988, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *H. runica* Kohlm. & Volkm.-Kohlm., endolithic lichenoid from corals and snails, marine, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Lücking et al. (2016; classification), sequences unavailable.

Haloguignardia Cribb & J. W. Cribb 1956, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, five species, type: *H. decidua* Cribb & J.W. Cribb, asexual morph unknown, endophytes or parasites, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Halojulella Suetrong, K.D. Hyde & E.B.G. Jones 2013, *Halojulellaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *H. avicenniae* (Borse) Suetrong, K.D. Hyde & E.B.G. Jones, asexual morph coelomycetous, saprobes, on woody substrates in mangrove habitats, worldwide, sequence data available, see Ariyawansa et al. (2013, 2014a, 2014c, 2015; phylogeny, morphology), Hyde et al. (2013; phylogeny, morphology, outline), Abdel-Wahab et al. (2014; diversity), Gnavi et al. (2014, phylogeny), Wijayawardene et al. (2014; outline), Jones et al. (2015; classification, marine), Liu et al. (2015; phylogeny), holotype of type: IMI 304217, cultures and sequences are available.

Halokirschsteiniothelia Boonmee & K.D. Hyde 2012, *Dothideomycetes* genera *incertae sedis*, type: *H. maritima* (Linder) Boonmee & K.D. Hyde, asexual morph unknown, saprobes, marine, USA, see Boonmee et al. (2012; taxonomy, phylogeny; treated as a genus in *Mytiliniaceae*), Hyde et al. (2013; did not accept a genus in *Mytiliniaceae*), Wijayawardene et al. (2014; listed as *Dothideomycetes* genera *incertae sedis*), cultures available for the type: CBS 221.60.

Halomassarina (Kohlm. & Volkm.-Kohlm.) Suetrong, Sakay., E.B.G. Jones, Kohlm., Volkm.-Kohlm. & C.L. Schoch 2009, *Trematosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *H. thalassiae* (Kohlm. & Volkm.-Kohlm.) Suetrong, Sakay., E.B.G. Jones, Kohlm., Volkm.-Kohlm. & C.L. Schoch, asexual morph unknown, saprobes, marine, worldwide, see Suetrong et al. (2009; phylogeny, morphology), Schoch et al. (2009; phylogeny), Alias et al. (2010; diversity), Lumbsch and Huhndorf (2010; outline), Zainuddin et al. (2010; antimicrobial activities), Sakayaroj et al. (2011b; diversity), Boonmee et al. (2012; phylogeny), Dai et al. (2012; phylogeny), Lee et al. (2012; checklist), Jones et al. (2012; phylogeny), Zhang et al. (2012; morphology, phylogeny), Borse et al. (2013; checklist), Hyde et al. (2013; morphology, phylogeny), Ahmed et al. (2014; phylogeny), Gnavi et al. (2014; phylogeny), Shearer et al. (2014; phylogeny), Wijayawardene et al. (2014b; nomenclature), Singtripop et al. (2015; phylogeny), Sarma (2015; key), Sharma et al. (2015; phylogeny), holotype and ex-isotype strain of type: J.K. 4804a, J.K.4804b.

Halonectria E.B.G. Jones 1965, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *H. milfordensis* E.B.G. Jones, asexual morph unknown, marine, on wood, mostly temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Haloplaca Arup, Søchting & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *H. britannica* (R. Sant.) Arup, Frödén & Søchting, lichenized (with green algae), saxicolous, corticolous, lignicolous, lichenicolous, terrestrial, United Kingdom, Greece, Morocco, Turkey, see Vondrák et al. (2012; DNA as *Caloplaca suaesae* s. l.), Arup et al. (2013, DNA), Lücking et al. (2016; classification), sequences are available for all species KC179292 (ITS) (*vide* Arup et al. 2013).

Halorosellinia Whalley, E.B.G. Jones, K.D. Hyde & Læssøe 2000, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *H. oceanica* (S. Schatz) Whalley et al., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Li et al. (2016; new species), holotype of the type: FLA-16 (as *Hypoxylon oceanicum* S. Schatz), available cultures for the type: SGLAf82 (unpublished).

Halorosellinia Whalley, E.B.G. Jones, K.D. Hyde & Laessoe, 2000, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *H. oceanica* (S. Schatz) Whalley, E.B.G. Jones, K.D. Hyde & Læssøe, asexual morph unknown, tropical, on wood especially mangrove substrates, sequence data for both species, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; morphology, phylogeny), Jones et al. (2015; outline), cultures and sequences are available.

Halosarpheia Kohlm. & E. Kohlm. 1977, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, polyphyletic, four species, type: *H. fibrosa* Kohlm. & E. Kohlm., asexual morph unknown, marine, freshwater, saprobes on herbaceous material, wood, widespread, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2010), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Jones et al. (2015; outline), holotype of the type: NY J.K. 3726a, cultures available for type: AFTOL-ID 409, CBS 197.60.

Halosphaeriopsis T.W. Johnson 1958, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *H. mediosetigera* (Cribb & J.W. Cribb) T.W. Johnson, asexual morph: *Trichocladium achrasporum*, saprobes, marine, temperates, subtropics, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2010), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), sequence are available.

Halothia Kohlm. 1963, *Halothiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *H. posidoniae* (Durieu & Mont.) Kohlm., asexual morph coelomycetous, saprobes, marine habitats, mediterranean, see Suetrong et al. (2009; phylogeny, morphology), Jones et al. (2009; classification), Zhang et al. (2012, 2013; morphology, phylogeny), Hyde et al. (2013; morphology, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Jones et al. (2015; classification).

Halysiumyces E.G. Simmons 1981, *Ascomycota* genera *incertae sedis*, one species, type: *H. saxatilis* E.G. Simmons, hyphomycetous, epiphyte, free living, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hamatocanthoscypha Svrček 1977, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *H. laricionis* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures available for the type: TNS-F13530.

Hanliniomyces Raja & Shearer 2008, *Sordariomycetes* genera *incertae sedis*, one species, type: *H. hyaloapicalis* Raja & Shearer, asexual morph unknown, freshwater, northern and southern Florida, see Raja and Shearer (2008; taxonomy), Raja et al. (2009b; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype: R037-3, ILL 40116, cultures and sequences are unavailable.

Hanseniaspora Zikes 1912 (= *Kloeckera* Janke 1928), *Saccharomycodaceae*, *Saccharomycetales*, *Saccharomycetes*, 15 species, type: *H. valbyensis* Klöcker, asexual reproduction is by bipolar budding on a broad base (bud-fission), saprophytic, in soil, fresh water, sea water, rotting plants, fruit, fruit juices, fruit flies, grape must, beer, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Hansfordia Hughes 1951, *Ascomycota* genera *incertae sedis*, seven species, type: *H. ovalispora* S. Hughes, hyphomycetous, saprobes, terrestrial, marine, China, UK, Spain, and India, see Seifert et al. (2011; morphology), Cheng et al. (2011), Wijayawardene et al. (2012; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hansfordiella Hughes 1951, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, eight species, type: *H. asterinearum* S. Hughes, hyphomycetous, saprobes, on fungi, terrestrial, wide spread, see see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017;

outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hansfordiellopsis Deighton 1960, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. aburiensis* Deighton, hyphomycetous, sexual morph unknown, saprobes, lichenicolous, terrestrial, Africa, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: IMI 4778, cultures and sequences are unavailable.

Hansfordiopeltis Bat. & C.A.A. Costa (1956), *Ascomycota* genera, *incertae sedis*, *incertae sedis*, five species, type: *H. congoensis* Bat. & C.A.A. Costa, coelomycetous, saprobes, terrestrial, Congo and Brazil, see Wijayawardene et al. (2012, 2017), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hansfordiopeltopsis M.L. Farr 1986, *Ascomycota* genera *incertae sedis*, one species, type: *H. amazonensis* M.L. Farr, coelomycetous, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hansfordiopsis Bat. 1959, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. phaeospora* (Hansf.) Bat., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013; did not accept as a genus *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, *Dothideomycetes* genera *incertae sedis*), holotype of the type: PDD 6788 (as *Microthyriella phaeospora* Hansf.), cultures and sequences are unavailable.

Hapalocystis Auersw. ex Fuckel 1863, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *H. berkeleyi* Auersw. ex Fuckel, asexual morphs coelomycetous (phoma-like), saprobes, terrestrial, Europe, North America, see de Silva et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Liu et al. (2016; DNA, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), cultures available for the type: AR 3851 (*vide* de Silva et al. 2009).

Hapalosphaeria Syd. 1908, *Ascomycota* genera *incertae sedis*, one species, type: *H. deformans* (Syd.) Syd., coelomycetous, pathogens, terrestrial, Germany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision

Haplariopsis Oudem. 1903, *Ascomycota* genera *incertae sedis*, two species, type: *H. fagicola* Oudem., hyphomycetous, saprobes, terrestrial, India, Holland, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Haplobasidium Erikss. 1889, *Ascomycota* genera *incertae sedis*, three species, type: *H. thalictri* Erikss., hyphomycetous, saprobes, pathogens, terrestrial, Sweden, Asia, Malaysia, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Haplodina Zahlbr. 1930, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, three species, need typification, lichenized, terrestrial (corticolous, saxicolous), China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

Haplographium Berk. & Broome 1859, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, 15 species, type: *H. delicatum* Berk. & Broome, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; outline), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for type species FMR 11585, TNS-F17834.

Haplolepis Syd. 1925, *Ascomycota* genera *incertae sedis*, three species, type: *H. polyadelpha* Syd., coelomycetous, saprobes, terrestrial, Sri Lanka, Africa, see Wijayawardene et al. (2012,

2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Haploloma Trevis. 1857, *Lecanoromycetes* genera *incertae sedis*, one species, type: *H. fraudulentum* Trevis., lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Haplomyces Thaxt. 1893, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *H. californicus* Thaxt., asexual morph unknown, biotrophic, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species, Ecuador), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Haplopetheca Bat., J.L. Bezerra & Cavalc. 1963, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *H. hyleensis* Bat., J.L. Bezerra & Cavalc., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Haplophyse Theiss. 1916, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, ten species, type: *H. oahuensis* Theiss., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Hapsidascus Kohlm. & Volkm.-Kohlm. 1991, *Sordariomycetes* genera *incertae sedis*, one species, type: *H. hadrus* Kohlm. & Volkm.-Kohlm., asexual morph unknown, marine, on mangrove wood and salt marsh sedge, tropical, see Jones et al. (2009, 2015; marine, outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Hapsidomyces J.C. Krug & Jeng 1984, *Pezizaceae*, *Pezizales*, one species, type: *H. venezuelensis* J.C. Krug & Jeng, asexual morph unknown, coprophilous, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: VE-4890z, cultures available for the type: VE-4890z (*fide* Hansen et al. 2005).

Hapsidospora Malloch & Cain 1970, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *H. irregularis* Malloch & Cain, asexual morph hyphomycetous (acromonium-like), saprobes, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: ATCC 22087 (*fide* Suh and Blackwell 1999).

Haptocara Drechsler 1975, *Ascomycota* genera *incertae sedis*, one species, type: *H. latirostrum* Drechsler, hyphomycetous, saprobes, insect-trapping, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Haptospora G.L. Barron 1991, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *H. appendiculata* G.L. Barron, hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, New Zealand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Haradamycetes Masuya, Kusunoki, Kosaka & Aikawa 2009, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, one species, type: *H. foliicola* Masuya, Kusunoki, Kosaka & Aikawa, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: TFM FPH7930, cultures available for the type: MAFF 411026.

Haraea Sacc. & P. Syd. 1913, *Ascomycota* genera *incertae sedis*, one species, type: *E. dingleyae* S. Hughes & Piroz., asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type culture of the type: DAOM 167533, MAFF 411026.

Harknessia Cooke 1881, *Harknessiaceae*, *Diaporthales*, *Sordariomycetes*, c. 50 species, holomorph with wuestneia-like sexual morphs, pathogens, saprobes, terrestrial, worldwide, have sequence data, see Crous et al. (2012; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Wijayawardene et al. (2012, 2016, 2017; morphology, phylogeny), cultures and sequences are available.

Harknessiella Sacc. 1889, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. purpurea* (W. Phillips & Harkn.) Sacc., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Harmoniella V.N. Boriss. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *H. chrysocephalus* V.N. Boriss, hyphomycetous, saprobes, terrestrial, Ukraine, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Harpidium Körb. 1855, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, three species, type: *H. rutilans* Körb., with ascomata and conidia, lichenized (with green algae), terrestrial (saxicolous), Eurasian mountains, North America, South Africa, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Harpographium Sacc. 1880, *Ascomycota* genera *incertae sedis*, five species, type: *H. fasciculatum* Sacc., hyphomycetous, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Harposporium Lohde 1874 (= *Podocrella* Seaver 1928; *Atricordyceps* Samuels 1983; *Polyrhina* Sorokīn 1876 *fide* Quandt et al. 2014; Maharachchikumbura et al. 2015), *Ophiocordycipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *H. anguillulae* Lohde, hyphomycetous, sexual morph unknown, parasitic on nematodes, terrestrial, temperate, see Kuo et al. (2008; taxonomy, DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline, phylogeny), Spatafora et al. (2015; new species), cultures available for the type: ARSEF 5593 (*fide* Chaverri et al. 2005).

Harzia Costantin 1888, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, four species, type: *H. acremonioides* (Harz) Costantin, hyphomycetous, sexual morph unknown, saprobes, foliicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2013; new species, DNA), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline, phylogeny), ex-type cultures available for *H. cameroonensis* Crous & Jol. Roux (CPC 22065, 22066 = CBS 136420 *fide* Crous et al. 2013).

Hassea Zahlbr. 1902, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. bacillosa* (Nyl.) Zahlbr., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Havispora K. L. Pang & Vrijmoed 2008, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *H. longyearbyenensis* K.L. Pang & Vrijmoed, asexual morph unknown, saprobes, marine, Arctic, see Pang et al. (2008, 2011), Lumbsch and Huhndorf (2010;

outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: BBH 18329, cultures and sequences are available.

Hawksworthiana U. Braun 1988, *Ascomycota* genera *incertae sedis*, one species, type: *H. peltigericola* (D. Hawksw.) U. Braun, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, UK, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hegermila Raitv. 1995, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, four species, type: *H. andina* (Pat.) Raitv., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Heimiodora Nicot 1960, *Ascomycota* genera *incertae sedis*, one species, type: *H. verticillata* Nicot, hyphomycetous, saprobes, terrestrial, Thailand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Heiomasia Nelsen, Lücking & Rivas Plata 2010, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *H. sipmanii* (Aptroot, Lücking & Rivas Plata) Nelsen, Lücking & Rivas Plata, lichenized, see Nelsen et al. (2010; taxonomy), Lücking et al. (2016; classification), sequences are available.

Heleiosa Kohlm., Volkm.-Kohlm. & O.E. Erikss. 1996, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *H. barbatula* Kohlm., Volkm.-Kohlm. & O.E. Erikss., asexual morph unknown, tropical, marine on maritime sedge, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Jones et al. (2015; outline), cultures and sequences are unavailable, needs generic revision.

Helensiella (R.F. Castañeda, Heredia & R.M. Arias) Minter, R.F. Castañeda & Heredia 2015, *Ascomycota* genera *incertae sedis*, one species, type: *H. rigidophora* (R.F. Castañeda, Heredia & R.M. Arias) Minter, R.F. Castañeda & Heredia, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Mexico, see Castañeda-Ruiz et al., (2013; morphology), holotype of the type: XAL CB1692, cultures and sequences are unavailable, compare with *Ceratosporella* and *Dendryphon*.

Heleococcum C.A. Jørg. 1922, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *H. aurantiacum* C.A. Jørg., isolated from soil, marine or freshwater, Asia and Europe see Lumbsch and Huhndorf (2010; outline), Grum-Grzhimaylo et al. (2013), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), ex-type of the type: CBS 201.35, slides of holotype of the type: C, NY (few remaining ascomata were broken).

Helhonia B. Sutton 1980, *Ascomycota* genera *incertae sedis*, one species, type: *H. rhamnigena* (Fautrey) B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence are unavailable.

Heliastrum Petr. 1931, *Sordariomycetes* genera *incertae sedis*, one species, type: *H. concinnum* Petr., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Helicangiospora Boonmee, Bhat & K.D. Hyde 2014, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, type: *H. lignicola* Boonmee, Bhat & K.D. Hyde, asexual morph hyphomycetous, saprobes, terrestrial, temperate, see Boonmee et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), holotype and ex-type cultures of the type: MFLU11-0137, MFLUCC 11-0378 = BCC 52029 = ICMP 20069.

Helicascus Kohlm. 1969, *Morosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, six species, type: *H. kanaloanus* Kohlm., asexual morph unknown, saprobes, terrestrial, aquatic,

worldwide, see Amnuaykanjanasin et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Zhang et al. (2013a, b, 2014; new species, phylogeny), Wijayawardene et al. (2014; outline), cultures available for the type: F1R2B2 (*fide* Amnuaykanjanasin et al. 2009).

Helicobolomyces Matzer 1995, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *H. lichenicola* Matzer, with conidiomata, lichenized (with green algae) or lichenicolous, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Helicocentralis Sri-indr., Chuaseehar., Boonyuen, K. Yamag., Suetrong & C.K.M. Tsui 2015, *Leotiomyces* genera *incertae sedis*, one species, type: *H. hyalina* Sri-indr., Chuaseehar., Boonyuen, K. Yamag., Suetrong & C.K.M. Tsui, sexual morph unknown, saprobes, freshwater, Thailand, see Sri-indrasutdhi (2015; morphology, phylogeny), Cultures and sequences are available, holotype of type: BBH27889.

Helicodendron Peyronel 1918, *Helotiaceae*, *Helotiales*, *Leotiomyces*, three species, type: *H. paradoxum* Peyr., hyphomycetous, sexual morph unknown, saprobes, aero-aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Chuaseeharonnachai et al. (2013; diversity, Thailand), Kirk et al. (2013; genus accepted), Panzer et al. (2015; DNA, phylogeny), Sri-indrasutdhi et al. (2015; DNA, phylogeny), cultures available for the type: KF767.

Helicodochium S. Monteiro, R.F. Castañeda, A.C. Cruz & Gusmão 2014, *Ascomycota* genera *incertae sedis*, one species, type: *H. amazonicum* J.S. Monteiro, R.F. Castañeda, A.C. Cruz & Gusmão, hyphomycetous, sexual morph unknown, lignicolous, terrestrial, Brazil, see Monteiro et al. (2014; taxonomy), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable.

Helicofilia Matsush. 1983, *Ascomycota* genera *incertae sedis*, one species, type: *H. madrasensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, UK, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: MFC-11630, cultures and sequences are unavailable, needs generic revision.

Helicogermis Lodha & D. Hawksw. 1983, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *H. celastri* (S.-V. Kale & S.V.S. Kale) Lodha & D. Hawksw., asexual morphs unknown, on twigs, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al (2013; genus accepted), Jaklitsch et al. (2016; position), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: HCIO 29374.

Helicogonium W.L. White 1942, ?*Saccharomycetales* genera *incertae sedis*, *Saccharomycetes*, 19 species, type: *H. jacksonii* W.L. White, asexual reproduction is present or absent, and when present, produce phialides directly on the hyphae, or form small phialide-bearing penicilli, mycoparasitic, Europe, North America, see Baral and Kutorga (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Helicogoosia Hol.-Jech. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *H. paradoxa* Hol.-Jech., hyphomycetous, saprobes, terrestrial, Czechoslovakia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Helicoma Corda 1837, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, type: *H. muelleri* Corda, hyphomycetous, saprobes, terrestrial, worldwide, see Boonmee et al. (2011, 2014; taxonomy, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), available cultures for the type: CBS 964.69 (*fide* Tsui et al. 2006).

Helicomycetes Link 1809, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, c. 15, type: *H. roseus* Link, hyphomycetous, saprobes, aero-aquatic, worldwide, see Boonmee et al. (2011, 2014; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), Wijayawardene et al. (2014; outline), available cultures for the type: AFTOL-ID 1613, CBS 283.51 (*fide* Scoch et al. 2006; Tsui and Berbee 2006).

Helicoön Morgan 1892, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. sessile* Morgan, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013; did not accept as a genus *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, *Dothideomycetes* genera *incertae sedis*), holotype of the type: PDD 6788 (as *Microthyriella phaeospora* Hansf.), cultures and sequences are unavailable.

Helicorhoidion S. Hughes 1958, *Ascomycota* genera *incertae sedis*, six species, type: *H. botryoideum* (Cooke) S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Asia, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Helicosingula P.S. van Wyk, Marasas, Baard & Knox-Dav. 1985, *Ascomycota* genera *incertae sedis*, one species, type: *H. leucadendri* P.S. van Wyk, Marasas, Baard & Knox-Dav., hyphomycetous, pathogen, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Helicosporium Nees 1816, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, c. 15, type: *H. vegetum* Nees, hyphomycetous, saprobes, terrestrial, worldwide, see Zhao et al. (2007; new species), Cruz et al. (2009; new species, Brazil), Dharkar et al. (2010; new species, India), Boonmee et al. (2011, 2014; taxonomy, phylogeny), Seifert et al. (2011; morphology), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), available cultures for the type: BCC 3332 (*fide* Tsui and Berbee 2006).

Helicothyrium I. Hino & Katum. 1961, *Ascomycota* genera *incertae sedis*, one species, type: *H. ryukyuense* I. Hino & Katum., coelomycetous, pathogen, Japan, see Wijayawardene et al. (2012; 2017, outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Helicoubisia Lunghini & Rambelli 1979, *Ascomycota* genera *incertae sedis*, one species, type: *H. coronata* Lunghini & Rambelli, hyphomycetous, saprobe, terrestrial, Ivory Coast, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Heliocephala V. Rao, K.A. Reddy & de Hoog 1984, *Ascomycota* genera *incertae sedis*, type: *H. proliferans* V. Rao, K.A. Reddy & de Hoog, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision, compare with *Holubovaniella*, *Gonatobotrys* and *Uncispora*.

Heliscella Marvanová (1980), *Ascomycota* genera *incertae sedis*, two species, type: *H. stellata* (Ingold & V.J. Cox) Marvanová, hyphomycetous, saprobe, terrestrial, former Czechoslovakia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Heliscina Marvanová 1980, *Ascomycota* genera, *incertae sedis*, two species, type: *H. campanulata* Marvanová, hyphomycetous, saprobes, aquatic, former Czechoslovakia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Helminthascus Tranzschel 1898, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *H. arachnophthorus* Tranzschel, asexual morphs unknown, on insects, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Helminthocarpon Fée 1837, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *H. leprevostii* Fée, lichenized, terrestrial (corticolous, saxicolous), tropical, see Kirk et al. (2013; genus accepted), Bungartz et al. (2013; outline), Lücking et al. (2016; classification), sequences are available.

Helminthopeltis Sousa da Câmara 1950, *Dothideomycetes*, genera *incertae sedis*, one species, type: *H. almeidaeana* Sousa da Câmara, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, *Microthyriaceae*), Hyde et al. (2013) did not accept as a genus in *Microthyriaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable.

Helminthosphaeria Fuckel 1870, *Helminthosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, c. 20 species, type: *H. clavariarum* (Desm.) Fuckel, asexual morph diplococcium-like, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miller et al. (2014; new species, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Bell and Mahoney (2016; new species), culture available for the type: SMH4609 (*fide* Huhndorf et al. 2004).

Helminthosporiella Hern.-Restr., G.A. Sarria & Crous 2016, *Massarinaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *H. stilbacea* (Moreau) Hern.-Restr., G.A. Sarria & Crous, hyphomycetous, saprobes, terrestrial, Colombia, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Helminthosporiomyces G.F. Sepúlveda, Pereira-Carv. & Dianese 2009, *Ascomycota* genera *incertae sedis*, one species, type: *H. cerradensis* G.F. Sepúlveda, Pereira-Carv. & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Pereira-Carvalho et al. (2009; taxonomy), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Helminthosporium Link 1809, *Dothideomycetes*, genera *incertae sedis*, c. 40 species, type: *H. velutinum* Link, hyphomycetous, sexual morph unknown, saprobes, lignicolous, terrestrial, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline, listed under *Massarinaceae*), Hyde et al. (2013) did not accept as a genus in *Massarinaceae*, Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*, genera *incertae sedis*), Zhu et al. (2016; DNA, new species), cultures and reference specimen available for the type: MFLUCC 15-0243, HKAS 84015 (*fide* Zhu et al. 2016).

Helocarpon Fr. 1860, *Helocarpaceae*, *Lecanoromycetes* family *incertae sedis*, three species; type: *H. crassipes* Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline), Miądlkowska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Helochora Sherwood 1979, *Ascomycota* genera *incertae sedis*, one species, type: *H. hypertropha* Sherwood, asexual morph unknown, saprobes, terrestrial, India, UK, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Mesnieraceae*), Kirk et al. (2013; genus accepted), Hyde et al. (2013) Wijayawardene et al. (2014) did not regard as a *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.

Helodiomyces F. Picard 1913, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *H. elegans* F. Picard, asexual morph unknown, biotrophic, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Helvella L. 1753, *Helvellaceae*, *Pezizales*, *Pezizomycetes*, c. 60 species, type: *H. mitra* L., asexual morph unknown, saprobes, ?from soil, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hwang et al. (2015; DNA, phylogeny), Landerosa et al. (2015; phylogeny), Zhao et al. (2015; DNA, phylogeny), cultures and sequences are available but lacks for the type.

Hemibeltrania Piroz. 1963, *Ascomycota genera incertae sedis*, eleven species, type: *H. cinnamomi* (Deighton) Piroz., hyphomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision as have different opinions.

Hemicorynespora M.B. Ellis 1972, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, twelve species, type: *H. deightonii* M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Whiton et al. (2012; new species), Jian et al. (2012; new species), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Hemicorynesporella Subram. 1992, *Ascomycota genera incertae sedis*, one species, type: *H. guadalcanalensis* (Matsush.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Guadalcanal, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hemidothis Syd. & P. Syd. 1916, *Ascomycota genera incertae sedis*, one species, type: *H. miconiae* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hemiglossum Pat. 1890, *Leotiomycetes*, genera *incertae sedis*, two species, type: *H. yunnanense* Pat., asexual morph unknown, saprobes, terrestrial, China, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hemigrapha (Müll. Arg.) R. Sant. ex D. Hawksw. 1975, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, eight species, type: *H. asteriscus* (Müll. Arg.) R. Sant. ex D. Hawksw., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), placement in *Parmulariaceae* supported by morphology, cultures and sequences are unavailable, needs generic revision.

Hemileucoglossum S. Arauzo 2014, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, four species, type: *H. littorale* (Rostr.) S. Arauzo, asexual morph unknown, saprobes, terrestrial, China, Japan, see Hustud and Miller (2014; taxonomy, phylogeny), cultures available for the type: C: 35673.

Hemimyriangium J. Reid & Piroz. 1966, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, one species, type: *H. betulae* J. Reid & Piroz., asexual morph unknown, saprobes, terrestrial, Sweden, see Lumbsch and Huhndorf (2010; outline), Dissanayake et al. (2014; morphology), the genus was not accepted in Kirk et al. (2013).

Hemisphaericaspora Hui, Ren, Chen, Li, Zhang & Niu 2014, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, two species, type: *H. nanyangensis* F.L. Hui, Y.C. Ren, L. Chen, Z.H. Li, L. Zhang, Q.H. Niu, asexual reproduction is by multilateral budding, saprophytic, frass of beetle larvae, South Africa, China, see Hui et al. (2014; taxonomy), sequences are unavailable.

Hemisphaeropsis Petr. 1947, *Ascomycota* genera *incertae sedis*, one species, type: *H. magnoliae* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hemisynnema Subram. (1995) [1992], *Ascomycota* genera *incertae sedis*, one species, type: *H. malaysianum* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not genus accepted), cultures and sequences are unavailable, needs generic revision.

Hemithecium Trevis. 1853, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 50 species, type: *H. balbisii* (Fée) Trevis., asexual morph unknown, lichenized, terrestrial, tropical, see Archer 2009 (key, Australia), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rivas Plata et al. (2012a; taxonomy), Lücking et al. (2014, 2016; classification), sequences are available.

Hendersoniella (Sacc.) Tassi 1900, *Ascomycota* genera *incertae sedis*, one species, type: *H. epixyla* Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hendersonina E.J. Butler 1913, *Ascomycota* genera *incertae sedis*, one species, type: *H. sacchari* E.J. Butler, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hendersoniopsis Höhn. 1918, *Ascomycota* genera *incertae sedis*, one species, type: *H. thelebola* (Sacc.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hendersonulina Tassi 1902, *Ascomycota* genera *incertae sedis*, one species, type: need typification, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Henfella Halici, D. Hawksw., Z. Kocak & M. Kocak. 2016, *Ascomycota* genera *incertae sedis*, one species, type: *H. muriformis* Halici, D. Hawksw., Z. Kocak & M. Kocak, sexual morph unknown, lichenicolous, cultures and sequences are unavailable, holotype of the type: ERC-MGH 1.231.

Henicospora P.M. Kirk & B. Sutton 1980, *Ascomycota* genera *incertae sedis*, six species, type: *H. minor* P.M. Kirk & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Monteiro et al. (2014; Brazil), cultures and sequences are unavailable, needs generic revision.

Henningsiella Rehm 1895, *Schizothyriaceae*, *Dothideomycetes*, families *incertae sedis*, two species, type: *H. quitensis* Rehm, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, accepted as *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Henrica B. de Lesd. 1925, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, three species, type: *G. reessii* Baran., asexual morphs unknown, lichenized, terrestrial, Europe, North America, see Savić and Tibell (2008; taxonomy, revision), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Henrica B. de Lesd. 1921, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, four species, type: *H. ramulosa* B. de Lesd., lichenized, Europe, North America, see Lumbsch and Huhndorf

(2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Heppia Nägeli 1854, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, seven species, type: *H. adglutinata* A. Massal., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Heppsoora D.D. Awasthi & K.Singh 1977, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *H. indica* D.D. Awasthi & Kr.P. Singh, lichenized, India, Middle East, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Heptameria Rehm & Thüm. 1879, *Dothideomycetes*, genera *incertae sedis*, two species, type: *H. elegans* Rehm & Thüm., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Heracleicola Tibpromma, Camporesi & K.D. Hyde 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *H. premilcurensis* Tibpromma, Camporesi & K.D. Hyde, saprobes, Italy, see Ariyawansa et al. (2015; morphology, phylogeny), cultures available for type: MFLUCC 14-0518.

Herbampulla Scheuer & Nogrsek 1993, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *H. crassirostris* Scheuer & Nogrsek, asexual morph unknown, saprobes, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Hercospora Fr. 1825, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *H. tiliae* (Pers.) Tul. & C. Tul., asexual morph unknown, saprobes, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), holotype and ex-type of the type: BPI 748440, AR3526 (Castlebury et al. 2002).

Hermatomyces Speg. 1911, *Lophiotremataceae*, *Pleosporales*, *Dothideomycetes*, eleven species, type: *H. tucumanensis* Speg., saprobes, terrestrial, Africa, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Doilom et al. (2016; new species, phylogeny), Hyde et al. (2016; new species), Tibpromma et al. (2016; new species), cultures and sequences are available.

Herpomyces Thaxt. 1902, *Herpomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 25 species (est. spp. 25+), type: *H. chaetophilus* Thaxt., asexual morph unknown, biotrophic, dioecious, hosts are Blattodea, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015a; DNA), sequences are available for type: (SSU, ITS, LSU), GenBank accession number for ITS of *Herpomyces chaetophilus*: KT800039

Herposira Syd. 1938, *Ascomycota* genera *incertae sedis*, one species, type: *H. velutina* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Herpothallon Tobler 1937, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, 46 species, type: *H. sanguineum* (Vain.) Tobler, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Herpotrichia Fuckel 1868, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, 101 species, type: *H. herpotrichoides* (Fuckel) P.F.Cannon, asexual morph ceolomycetous, parasitic or

saprobies, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012; 2014; 2016; outline; phylogeny, coelomycetous taxa), Kirk et al. (2013; genus accepted), Tian et al. (2015; morphology, nomenclature, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Herreromyces R.F. Castañeda & W.B. Kendr. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *H. catenosporus* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobies, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C91/47, cultures and sequences are unavailable, compare with *Exochalara*, *Chloridium* and *Monilochaetes*, cultures and sequences are unavailable, needs generic revision.

Herteliana P. James 1980, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *H. taylorii* (Salwey) P. James, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Hertelidea Printzen & Kantvilas 2004, *Stereocaulaceae*, *Lecanorales*, *Lecanoromycetes*, six species, type: *H. botryosa* (Fr.) Printzen & Kantvilas, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Hertella Henssen 1985, *Placynthiaceae*, *Peltigerales*, *Lecanoromycetes*, *Ascomycota*; three species; type: *H. subantarctica* Henssen, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Hesperomyces Thaxt. 1891, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, eleven species (est. spp. 11+), type: *H. virescens* Thaxt., no asexual state, biotrophic, hosts are *Biphylidae*, *Coccinellidae*, *Mycetophagidae* (*Coleoptera*), and *Anthocoridae* (*Hemiptera: Heteroptera*), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015a, 2016; DNA), sequences are available for the type: (SSU, ITS, LSU), GenBank accession numbers for ITS of *Hesperomyces virescens*: JN127409, KF192910–KF192920, KT800043–KT800048, KU574864

Heterocarpon Müll. Arg. 1885, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *H. ochroleucum* (Tuck.) Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Heterocephalum Thaxt. 1903, *Ascomycota* genera *incertae sedis*, two species, type: *H. aurantiacum* Thaxt., hyphomycetous, sexual morph unknown, coprophilous, saprobies, terrestrial, worldwide, see Matei and Fendrihan (2008; Antarctica), Puangsombat et al. (2010; Thailand), Seifert et al. (2011; morphology), Silva et al. (2011; Amazon forest), Cort (2012; distribution), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and Sequences are unavailable, neotype of type: CBS H-15402.

Heteroconium Petr. 1949, *Dothideomycetes* genera *incerte sedis*, 20 species, type: *H. citharexyli* Petr., hyphomycetous, sexual morph unknown, saprobies, endophytes, terrestrial, worldwide, see Ruíz et al. (2008; new species), Zhang et al. (2010; new species), Seifert et al. (2011; morphology), Ma et al. (2012a, b; new species), Ren et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lahlali et al. (2014; resistance to clubroot), sequences are available for most of the species.

Heterocyphelium Vain. 1927, *Lecanographaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *H. leucampyx* (Tuck.) Vain., lichenized, see Lumbsch and Huhndorf (2010; outline), Tibell and Frisch (2010; Africa), Kirk et al. (2013; genus accepted), Pandit (2015; India), Lücking et al. (2016; classification), sequences are available.

Heterodermia Trevis. 1868, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, 90 species, type: *H. speciosa* (Wulfen) Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al.

(2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Heteroepichloë E. Tanaka, C. Tanaka, Gafur & Tsuda 2002, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, type: *H. bambusae* (Pat.) E. Tanaka, C. Tanaka, Gafur & Tsuda, asexual morphs unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), cultures and sequences are available

Heteromyces Müll. Arg. 1889, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *H. rubescens* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Heterophoma Q. Chen & L. Cai 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *H. sylvatica* (Sacc.) Q. Chen & L. Cai, coelomycetous, saprobes, ?pathogens, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), neotype and ex-neotype culture of the type: HMAS 246700, CBS 874.97.

Heteroplacidium Breuss 1996, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, twelve species, type: *H. imbricatum* (Nyl.) Breuss, lichenized; see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Heteroseptata E.F. Morris 1972, *Ascomycota* genera *incertae sedis*, one species, type: *H. bacillospora* E.F. Morris, sexual morph unknown, saprobes, terrestrial, Costa Rica, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Heterosphaeria Grev. 1824 (= *Heteropatella* Fuckel *vide* Johnston et al. 2014), *Helotiaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *H. patella* (Tode) Grev., asexual morph hyphomycetous, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature; new combination), cultures and sequences are unavailable, needs generic revision.

Heterosphaeriopsis Hafellner 1979, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. fulvodisca* (Pat.) Hafellner, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Holotype of type: (FH, Sweden).cultures and sequences are unavailable, needs generic revision.

Heterospora (Boerema, Gruyter & Noordel.) Gruyter, Verkley & Crous 2012, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, two species, saprobes, worldwide, have sequence data, see de Gruyter et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), ex-epitype strains of type: CBS 448.68; epitype CBS H-16386.

Heuflera Bail 1860, *Ascomycota* genera *incertae sedis*, type: *Heuflera betulae* Bail, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Heufleridium Müll. Arg. 1883, *Pyrenulales* genera *incertae sedis*, *Eurotiomycetes*, two species, type: *H. pentagasticum* (Müll. Arg.) Müll. Arg., asexual morphs unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Hexacladium D.L. Olivier 1983, *Ascomycota* genera *incertae sedis*, one species, type: *H. corynephorum* D.L. Olivier, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hexagonella F. Stevens & Guba ex F. Stevens 1925, *Schizothyriaceae*, *Dothideomycetes*, families *incertae sedis*, two species, type: *H. peleae* F. Stevens & Guba ex F. Stevens, asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, accepted as *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Heydenia Fresen. 1852, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, four species, type: *H. alpina* Fresen., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North temperate, see Seifert et al. (2011; morphology), Leuchtman and Clemencon (2012; DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), cultures available for the type: 0732 (*vide* Leuchtman and Clemencon 2012).

Heyderia Link 1833, *Cenangiaceae*, *Helotiales*, *Leotiomyces*, six species, type: *H. abietis* (Fr.) Link, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Hemiphacidiaceae*), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny, accepted as a genus in *Cenangiaceae*), cultures available for the type: KL20 (*vide* Pärtel et al. 2016).

Hidakaea I. Hino & Katum. 1955, *Dothideomycetes* genera *incertae sedis*, two species, type: *H. peleae* F. Stevens & Guba ex F. Stevens, asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Wu et al. (2010; placed in *Hypocreales* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes* genera *incertae sedis*), cultures and sequences are unavailable, generic revision is essential as it has different opinions.

Hiemsia Svrček 1969, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *H. pseudoampezzana* (Svrček) Svrček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Hilberina Huhndorf & A.N. Mill. 2004, *Helminthosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, c. 20 species, type: *H. caudata* (Fuckel) Huhndorf & A.N. Mill., asexual morph diplococcium-like, saprobes, terrestrial, worldwide, see Declercq (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miller et al. (2014; new species, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Bell and Mahoney (2016; new species), culture available for the type: SMH1542 (*vide* Miller et al. 2014).

Himantormia I.M. Lamb 1964, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *H. lugubris* (Hue) I.M. Lamb, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Hinoa Hara & I. Hino 1961, *Ascomycota* genera *incertae sedis*, two species, type: *H. sasae* (Hara & I. Hino) Hara & I. Hino, ?coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hippocrepeidea Sérus. 1997, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *H. nigra* Sérus., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Hirudinaria Ces., 1856, *Ascomycota* genera *incertae sedis*, two species, type: *H. mespili* Ces., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hispidicarpomyces Nakagiri 1993, *Hispidicarpomycetaceae*, *Spathulosporales*, *Sordariomycetes*, one species (probably more than this), type: *H. galaxauricola* Nakagiri,

spermatophores or asexual morph hyphomycetous, biotrophic on marine red alga, Japan, see Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2016; outline, the family accepted as in *Spathulosporales*), cultures and sequences are unavailable, holotype of the type: IFO H-12135 and paratype IFO H-12136, needs generic revision since have different opinions.

Hispidiconidioma Tsuneda & M.L. Davey 2010, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *H. alpinum* Tsuneda & M.L. Davey, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Tsuneda et al. (2010; taxonomy), Wijayawardene et al. (2012, 2014; outline), holotype and ex-type culture of the type: UAMH 11010, L2-2.

Histeridomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, six species, type: *H. ramosus* Thaxt., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Histoplasma Darling 1906, *Ajellomycetaceae*, *Onygenales*, *Eurotiomycetes*, seven species, type: *H. capsulatum* Darling, hyphomycetous, sexual morph unknown, on humans and animals, bat guano, terrestrial, Africa, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Hobsoniopsis D. Hawksw. 2001, *Ascomycota* genera *incertae sedis*, one species, type: *H. santessoniii* (Lowen & D. Hawksw., sexual morphs unknown, lichenicolous, Europe, terrestrial, see Seifert et al. (2011; morphology), cultures and sequences are available, holotype of type: UPS.

Hoehneliella Bres. & Sacc. 1902, *Ascomycota* genera *incertae sedis*, two species, type: *H. perplexa* Bres. & Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Austria, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hoffmannoscypha Stielow, Göker & Klenk 2012 [2013], *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *H. pellita* (Sacc.) Stielow, Göker & Klenk, asexual morph unknown, saprobes, terrestrial, Europe, see Stielow et al. (2013; taxonomy, phylogeny), epitype of the type: M-0156529 (holotype of *Peziza pellita*), cultures and sequences are available.

Holmiella Petrini, Samuels & E. Müll. 1979, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, two species, type: *H. sabina* (De Not.) Petrini, Samuels & E. Müll., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), cultures and sequences are unavailable, needs generic revision.

Holmiodiscus Svrček 1992, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *H. filipendulae* Svrček, asexual morph unknown, saprobes, terrestrial, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures unavailable for the type.

Holocryphia Gryzenh. & M.J. Wingf. 2006, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *H. eucalypti* (M. Venter & M.J. Wingf.) Gryzenh. & M.J. Wingf., asexual morph unknown, pathogens, terrestrial, Australia, New Zealand, South Africa, see Lumbsch and Huhndorf (2010; outline), Chen et al. (2013; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: PREM 56211, cultures and sequences are available.

Holubovaea Mercado 1983, *Ascomycota* genera *incertae sedis*, two species, type: *H. roystoneicola* Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba,

see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Holwaya Sacc. 1889 (= *Crinula* Fr. 1821 *vide* Johnston et al. 2014), *Bulgariaceae*, *Helotiales*, *Leotiomyces*, two species, type: *H. ophiobolus* (Ellis) Sacc., asexual morph *Crinula*, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Johnston et al. (2014; nomenclature), living cultures and sequences are available for sexual morph (*vide* Wang et al. 2006).

Homaromyces R.K. Benj. 1955, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *H. epieri* R.K. Benj., asexual morph unknown, biotrophic, USA, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Homortomyces Crous & M.J. Wingf. 2012, *Homortomycetaceae*, *Dothideomyces* family *incertae sedis*, two species, saprobes, South Africa, Italy, have sequence data, see Crous et al. (2012; morphology, phylogeny), Wijayawardene et al. (2014, 2016; morphology, phylogeny), ex-epitype strains of type: CPC 19800; epitype CBS H-21049.

Homostegia Fuckel 1870 [1869-70], *Dothideomyces*, genera *incertae sedis*, type: *H. adusta* Fuckel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Homothecium A. Massal. 1853, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, five species, type: *H. opulentum* (Mont.) A. Massal., lichenized, see Kirk et al. (2013; genus accepted), Ekman et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Hongkongmyces C.C.C. Tsang, J.F.W. Chan, N.J. Trendell-Smith, A.H.Y. Ngan, I.W.H. Ling, K.Y. Yuen, S.K.P. Lau & P.C.Y. Wood 2014, *Lindgomycetaceae*, *Pleosporales*, *Dothideomyces*, two species, type: *H. pedis* C.C.C. Tsang et al., asexual morph unknown, human pathogen, Hong Kong, see Tsang et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), holotype and ex-type strain of the HKU35.

Hoornsmania Crous 2007, *Cladosporiaceae*, *Capnodiales*, *Dothideomyces*, one species, type: *H. pyrina* Crous, hyphomycetous, sexual morph unknown, hyperparasitic on *Neonectria ditissima*, terrestrial, France, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), holotype of the type: CBS H-19769, cultures and sequences are unavailable.

Hormiactis Preuss 1851, *Ascomycota* genera *incertae sedis*, five species, type: *H. alba* Preuss, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Sri Lanka, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hormiokrypsis Bat. & Nascim. 1957, *Ascomycota* genera *incertae sedis*, one species, type: *H. libocedri* Bat. & Nascim., coelomycetous, sexual morph unknown, sooty mould on plants, terrestrial, Australasia, North America, Oceania, see Seifert et al. (2011; morphology, accepted as a genus in *Metacapnodiaceae*), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in *Metacapnodiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Hormiscioideus M. Blackw. & Kimbr. 1979, *Ascomycota* genera *incertae sedis*, one species, type: *H. filamentosus* M. Blackw. & Kimbr., hyphomycetous, sexual morph unknown, on insects, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hormisciomyces Bat. & Nascim. 1957, *Euantennariaceae*, *Dothideomycetes* families *incertae sedis*, eight species, type: *H. prepusus* Bat. & Nascim., sooty mould, terrestrial, Australasia, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Hormocephalum Syd. 1939, *Ascomycota* genera *incertae sedis*, five species, type: *H. ecuadorensis* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Sri Lanka, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hormocladium Höhn. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *H. ecuadorensis* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hormoconis Arx & G.A. de Vries 1973, *Amorphothecaceae*, *Leotiomyces*, families *incertae sedis*, two species, type: *H. resinae* (Lindau) Arx & G.A. de Vries, hyphomycetous, sexual morph unknown, saprobes on resins, hydrocarbons, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available, needs generic revision.

Hormographis Guarro, Punsola & Arx 1986, *Ascomycota* genera *incertae sedis*, one species, type: *H. ramirezii* Guarro, Punsola & Arx, hyphomycetous, sexual morph unknown, from soil, terrestrial, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hormonema Lagerb. & Melin 1927, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, six species, type: *Hormonema dematioides* Lagerb. & Melin, saprobes, human pathogen, terrestrial, Spain, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), Crous et al. (2015; new species, DNA), ?polyphyletic, needs generic revision and epitypification.

Hormosphaeria Lév. 1863, *Arthoniales* genera *incertae sedis*, *Arthoniomyces*, one species, type: *H. tessellata* Lév., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Hortaea Nishim. & Miyaji 1984, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *H. werneckii* (Horta) Nishim. & Miyaji, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014; outline, phylogeny), Hyde et al. (2013; accepted as a genus in *Teratosphaeriaceae*), Egidi et al. (2014; phylogeny), Quaedvlieg et al. (2014; phylogeny), cultures available for the type: CBS 117931= TRN122 (*vide* Egidi et al. 2014).

Hosseusia Gyeln. 1940, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, one species, type: *H. gertrudiana* Gyeln., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.

Houjia G.Y. Sun & Crous 2010, *Dothideomycetes* genera *incertae sedis*, two species, hyphomycetous, sexual morph unknown, saprobes, ?pathogens, terrestrial, USA, China, see Yang et al. (2010; morphology, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), holotype and ex-type strains of the type: CBS H-20325, CPC 16114.

Huangshania O.E. Erikss. 1992, *Triblidiaceae*, *Triblidiiales*, *Ascomycota* orders *incertae sedis*, two species, type: *H. verrucosa* O.E. Erikss., asexual morph unknown, saprobes,

terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Huea C.W. Dodge & G.E. Baker 1938, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, 20 species, type: *H. flava* C.W. Dodge & G.E. Baker, lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Teloschistaceae*), Fryday (2011; taxonomy), Lücking et al. (2016; classification), sequences are available.

Hueidea Kantvilas & P.M. McCarthy 2003, *Fuscideaceae*, *Umbilicariales*, *Lecanoromycetes*, one species, type: *H. australiensis* Kantvilas & P.M. McCarthy, lichenized, see Lücking et al. (2016; classification), sequences are unavailable.

Hughesinia J.C. Lindq. & Gamundí 1970, *Ascomycota* genera *incertae sedis*, one species, type: *H. chusqueae* J.C. Lindq. & Gamundí, hyphomycetous, sexual morph unknown, from soil, terrestrial, Chile, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Humaria Fuckel 1870, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, c. 16 species, type: *H. hemisphaerica* (F.H. Wigg.) Fuckel, asexual morph unknown, saprobes, terrestrial, North temperate, see Palmer et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Gaitnieks et al. (2016; DNA), Klavina et al. (2016; DNA, mycorrhization), cultures and sequences are available.

Humicola Traaen 1914, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *H. fuscoatra* Traaen, hyphomycetous, sexual morph unknown, saprobes, from soil, terrestrial, worldwide, see Jiang and Zhang (2010; new species, China), Ko et al. (2011; new species), Wu and Zhang (2012; new species), Kirk et al. (2013; genus accepted), Geng and Zhang (2014; new species), Zhang and Zhang (2014; new species, China), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: NRRL 22980 (*vide* Wicklow et al. 1998), DAOM 35882 (*vide* Hambleton et al. 2005).

Humicolopsis Cabral & S. Marchand 1976, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *H. cephalosporioides* Cabral & Marchand, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Huneckia S.Y. Kondr., Elix, Kärnefelt, A. Thell & Hur 2014, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *H. pollinii* (A. Massal.) S.Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A.S. Kondr. & Hur, lichenized, see Kondratyuk et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Huntiella Z.W. de Beer, T.A. Duong & M.J. Wingf. 2014, *Ceratocystidaceae*, *Microascales*, *Sordariomycetes*, 17 species, type: *H. moniliformis* (Hedgc.) Z.W. de Beer, T.A. Duong & M.J. Wingf., asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see De Beer et al. (2014; phylogeny), Maharachchikumbura et al. (2015; phylogeny, outline), sequences are available.

Hyalacrotus (Korf & L.M. Kohn) Raitv. 1991, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *H. laricionis* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Hyalobelemnospora Matsush. 1993, *Ascomycota* genera *incertae sedis*, one species, type: *H. amazonica* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Peru, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hyalocamposporium Révay & J. Gönczöl 2007, *Ascomycota* genera *incertae sedis*, four species, type: *H. longiflagellatum* Révay & J. Gönczöl, hyphomycetous, sexual morph

unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BP 98968, cultures and sequences are unavailable, needs generic revision.

Hyalcephalotrichum Nagaraju, Kunwar, Sureshk. & Manohar. 2011, *Ascomycota* genera *incertae sedis*, one species, type: *Hyalcephalotrichum indicum* Nagaraju, Kunwar, Sureshk. & Manohar., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see holotype of the type: HCIO 50144, cultures and sequences are unavailable, needs generic revision.

Hyalocladium Moustafa 1977 [1976], *Ascomycota* genera *incertae sedis*, one species, type: *H. moubasheri* Moustafa, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Kuwait, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hyalocrea Syd. & P. Syd. 1917, *Dothideomycetes*, genera *incertae sedis*, four species, type: *H. epimyces* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Hyalodendriella Crous 2007, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *H. betulae* Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Netherlands, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type strains of the type: CBS-H 19895, CBS 261.82.

Hyaloderma Speg. 1884, *Sordariomyces*, genera *incertae sedis*, one species, type: *H. imperspicuum* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Hyalodermella Speg. 1918, *Ascomycota* genera *incertae sedis*, one species, type: *H. gardeniae* (Keissl.) Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hyalodictyum Woron. 1916, *Ascomycota* genera *incertae sedis*, one species, type: *H. colchicum* Woron., coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hyalohelicomina T. Yokoy. 1974, *Ascomycota* genera *incertae sedis*, one species, type: *H. deutziae* (T. Yokoy.) T. Yokoy., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hyalomeliolina F. Stevens 1924, *Perisporiopsidaceae*, *Dothideomycetes*, families *incertae sedis*, two species, type: *H. guianensis* F. Stevens, asexual morph unknown, saprobes, terrestrial, central and south America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Parodiopsidaceae*), Hyde et al. (2013; accepted as a genus in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Perisporiopsidaceae*), cultures and sequences are unavailable.

Hyalopeziza Fuckel 1870, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, two species, type: *H. patula* (Pers.) Fuckel, asexual morph phialophora-like, saprobes, ?lichenicolous, terrestrial, worldwide, see Huhtinen et al. (2008; new species, Alaska), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are available but lacks for the type.

Hyalopleiochaeta R.F. Castañeda, Guarro & Cano 1996, *Ascomycota* genera *incertae sedis*, one species, type: *H. delicata* R.F. Castañeda, Guarro & Cano, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: INIFAT C94/140, cultures and sequences are unavailable, compare with *Camposporium*.

Hyalorbilia Baral & G. Marson 2001, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, 13 species, type: *H. berberidis* (Velen.) Baral, asexual morph ?hyphomycetous, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Guo et al. (2014; new species), cultures and sequences are available but lacks for type species, needs generic revision.

Hyalorhinoclaadiella H.P. Upadhyay & W.B. Kendr. 1975, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, one species, type: *H. minuta-bicolor* (R.W. Davidson) H.P. Upadhyay & W.B. Kendr., hyphomycetous, saprobes, worldwide, see Lu et al. (2009; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type:.

Hyalorostratum Raja & Shearer 2010, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *H. brunneisporum* Raja & Shearer, freshwater, Alaska and New Hampshire see Raja et al. (2010a; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype: A573-1 ILL 40792.

Hyaloscolecostroma Bat. & J. Oliveira 1967, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. rondoniense* Bat. & J. Oliveira, asexual morph unknown, lichenicolous, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline), culture and sequence are unavailable, needs generic revision.

Hyaloscypha Boud. 1885, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, c. 45 species, type: *H. vitreola* (P. Karst.) Boud., asexual morph hyphomycetous in *H. albohyalina* var. *spiralis* and *H. albohyalina* var. *monodictys*, saprobes, terrestrial, worldwide, see Baral et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are available for the type: M220 (fide Baral et al. 2009).

Hyaloseta A.W. Ramaley 2001, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *H. nolinae* A.W. Ramaley, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Lombard et al. (2015; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), ex-type culture for the type: CBS 109837 (fide Lombard et al. 2015).

Hyalosphaera F. Stevens 1917, *Dothideomycetes* genera *incertae sedis*, four species, type: *H. miconiae* F. Stevens, asexual morph unknown, saprobes, terrestrial, North and Central America, see Alves et al. (2010; new species, Costa Rica), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data available for unidentified *Hyalosphaera* species, needs generic revision.

Hyalosynnema Matsush. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *H. multiseptatum* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, Taiwan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hyalotheles Speg. 1908, *Dothideomycetes*, genera *incertae sedis*, one species, type: *H. dimerosperma* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Alves et al. (2010; new species, Costa Rica), Lumbsch and Huhndorf (2010; outline, accepted

as a genus in *Elsinoaceae*), Li et al. (2011; excluded from *Elsinoaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data available for unidentified *Hyalosphaera* species, needs generic revision.

Hyalothyridium Tassi 1900, *Ascomycota* genera *incertae sedis*, one species, type: *H. viburnicola* Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hyalotiella Papendorf 1967, *Bartaliniaceae*, *Amphisphaeriales*, *Sordariomycetes*, four species, type: *H. transvalensis* Papendorf, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), Li et al. (2015; new species); Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; outline), sequence data and cultures available but lacks for the type:, needs generic revision.

Hyalotiopsis Punith. 1970, *Ascomycota* genera *incertae sedis*, one species, type: *H. subramanianii* (Agnihotr. & Luke) Punith., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hydea K.L. Pang & E.B.G. Jones 2010, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, one species, type: *H. pygmaea* (Kohlm.) K.L. Pang & E.B.G. Jones, hyphomycetous, sexual morph unknown, saprobes, marine, pantropical, see Abdel-Wahab et al. (2010; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Hydnobolites Tul. & C. Tul. 1843, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *H. cerebriiformis* Tul. & C. Tul., asexual morph unknown, hypogeous, terrestrial, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Healy et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Kalvina et al. (2016; DNA, phylogeny), cultures available for type: PA9 (*fide* Kalvina et al. 2016).

Hydnocystis Tul. & C. Tul. 1845, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *H. arenaria* Tul. & C. Tul., asexual morph unknown, hypogeous, terrestrial, Japan, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished) but lacks for the type.

Hydnotrya Berk. & Broome 1846, *Discinaceae*, *Pezizales*, *Pezizomycetes*, c. 15 species, type: *H. tulasnei* (Berk.) Berk. & Broome, asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Stielow et al. (2010; DNA), Kirk et al. (2013; genus accepted), Li et al. (2013; DNA, phylogeny, new species), Methven et al. (2013; DNA, phylogeny), cultures available for the type: BB70 (766) (*fide* Stielow et al. 2010).

Hydnotryopsis Gilkey 1916, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *H. setchellii* Gilkey, asexual morph unknown, hypogeous, terrestrial, North America, see Smith et al. (2007; DNA, phylogeny), Brock et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Stielow et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures available for the type: RBG Kew K(M)99871 (*fide* Brock et al. 2009), src870 (*fide* Smith et al. 2007).

Hydraeomyces Thaxt. 1896, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *H. halipli* (Thaxt.) Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Hydrocina Scheuer 1991, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *H. chaetoclada* Scheuer, asexual morph unknown, saprobes, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Baschien et al. (2013; DNA, phylogeny), Kirk et al. (2013;

genus accepted), cultures and sequences are available for the type: HME4375 (fide Wang et al. 2005), CCM F-10890 (fide Baschien et al. 2013).

Hydromelitis A. Ferrer, A.N. Mill., C. Sarmiento & Shearer 2012, *Sordariomycetidae* genera *incertae sedis*, one species, *H. pulchella* A. Ferrer, A.N. Mill., Sarmiento & Shearer, freshwater, submerged substrates, Costa Rica, see Ferrer et al. (2012; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), holotype: AF284-2, ILL 40117.

Hydrometrospora J. Gönczöl & Révay 1985, *Ascomycota* genera *incertae sedis*, one species, type: *H. symmetrica* J. Gönczöl & Révay, hyphomycetous, sexual morph unknown, saprobes, aquatic, Hungary, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, Holotype and cultures of type species unavailable, needs generic revision.

Hydronectria Kirschst. 1925, *Nitschkiaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *H. kriegneriana* Kirschst., asexual morph unknown, algicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are unavailable, cultures and sequences of type species are unavailable, needs generic revision.

Hydrophilomyces Thaxt. 1908, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, twelve species, type: *H. rhynchophorus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Hydropisphaera Dumort. 1822, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, 25 species, type: *H. peziza* (Tode) Dumort., asexual morph unknown, terrestrial, aquatic, worldwide, Farr and Platas (2008; new species), Lechat and Baral (2008; notes), Lechat et al. (2010; asexual morph), Luo and Zhuang (2010; new species), Zeng and Zhuang (2016; new species), Cultures and sequences are available.

Hydropunctaria C. Keller, Gueidan & Thüs 2009, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, eight species, type: *H. maura* (Wahlenb.) C. Keller, Gueidan & Thüs, marine, lichenized, Asia, Europe, Australia, South America, see Gueidan et al. (2009; description, phylogeny), Roux et al. (2011; new species), Orange (2012; new species), Lücking et al. (2016; classification), Cultures and sequences are available, but not from type material, Holotype and ex-type of type species UPS?, unknown.

Hymenelia Kremp. 1852, *Hymeneliaceae*, *Hymeneliales*, *Lecanoromycetes*, 25 species, type: *H. prevostii* (Duby) Kremp., lichenized, worldwide, see Pykälä (2011; Finland), Weber and Büdel (2011; Endolith list), Weber et al. (2011; weathering patterns), Wirth et al. (2011; Germany), Himelbrant et al. (2013; Russia), Aptroot and Moon (2014; Korea), Kantvilas (2014; new species), Hansen (2015; Greenland), Lücking et al. 2016 (classification), Cultures and sequences are available but lacks for type species.

Hymenella Fr. 1822, *Ascomycota* genera *incertae sedis*, eleven species, type: *H. arundinis* Fr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, Holotype or ex-type of type species unavailable, needs generic revision.

Hymeniopeltis Bat. 1959, *Ascomycota* genera *incertae sedis*, three species, type: *H. erythroxyli* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, Holotype and ex-type of type species unavailable, needs generic revision.

Hymenobia Nyl. 1854, *Ascomycota* genera *incertae sedis*, one species, type: *H. insidiosa* Nyl., asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf

(2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, Holotype or ex-type of type species unavailable, needs generic revision.

Hymenobolus Durieu & Mont. 1845, *Helotiales* genera *incertae sedis*, *Leotiomyces*, three species, type: *H. agaves* Durieu & Mont., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hymenopsis Sacc. 1886, *Ascomycota* genera *incertae sedis*, 13 species, type: *H. trochiloides* (Sacc.) Sacc., sexual morph unknown, saprobes, fungicolous, terrestrial, worldwide, see Schmidt et al. (2010; extrolites), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are available, holotype and ex-type of type species unavailable, needs generic revision.

Hymenoscyphus Gray 1821, *Helotiaceae*, *Helotiales*, *Leotiomyces*, c. 170 species, type: *H. fructigenus* (Bull.) Gray, asexual morph ?hyphomycetous, pathogens, saprobes, terrestrial, North and South America, see Lumbsch and Huhndorf (2010; outline), Queloz et al. (2011; cryptic species), Kirk et al. (2013; genus accepted), Baral et al. (2014; nomenclature), Gross et al. (2014; pathogens), Zheng and Zhuang (2014; new species, China), cultures and sequences are available.

Hymenotorrendiella P.R. Johnst., Baral & R. Galán 2014, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, nine species, type: *H. eucalypti* (Berk.) P.R. Johnst., Baral & R. Galán, asexual morph unknown, saprobes, terrestrial, Europe, see Johnston et al. (2014; taxonomy, DNA, phylogeny), cultures and sequences are available.

Hyperdermium J.F. White, R.F. Sullivan, Bills & Hywel-Jones 2000, *Cordycipitaceae*, *Hypocreales*, *Sordariomyces*, three species, type: *H. caulium* (Berk. & M.A. Curtis) Chaverri & K.T. Hodge, asexual morph unknown, pathogens or saprobes, terrestrial, Central and South America, see Chaverri et al. (2008; recombined), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are available, holotype of type: K(M) 120327 (as *Corticium caulium* Berk. & M.A. Curtis).

Hyperphyscia Müll. Arg. 1894, *Physciaceae*, *Caliciales*, *Lecanoromyces*, nine species, type: *H. synthalea* (C. Knight) Müll. Arg., lichenized, worldwide, see Charak et al. (2009; effect of coal mines), Kinalioglu (2010; Turkey), Esslinger et al. (2012; new species), Young (2013; Russia), Estrabou et al. (2014; Argentina), Lücking et al. (2016; classification), Cultures and sequences are available.

Hyphochlaena Cif. 1962, *Ascomycota* genera *incertae sedis*, one species, type: *H. caespitosa* Cif., sterile mycelium, sexual morph unknown, saprobes, terrestrial, Dominican Republic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

Hyphoconis Egidi & Quaedvlieg 2014, *Dothideomyces* genera *incertae saedis*, one species, type: *H. sterilis* Egidi & Quaedvlieg, hyphomycetous, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 118321 = TRN278.

Hyphodiscosia Lodha & K.R.C. Reddy 1974, *Ascomycota* genera *incertae sedis*, five species, type: *H. jaipurensis* Lodha & K.R.C. Reddy, hyphomycetous, saprobes, pathogen, terrestrial, Argentina, Australia, Brazil, Cuba, Czechoslovakia, India, Japan, Mexico, Nigeria, Poland, Russia, Taiwan, Thailand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are available but lacks for the type species, Holotype and ex-type of type species RUBL 730, needs generic revision.

Hyphodiscosioides Matsush. 1993, *Ascomycota* genera *incertae sedis*, one species, type: *H. tambopataensis* Matsush., hyphomycetous, saprobes, terrestrial, Peru, see Seifert et al. (2011;

morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, Holotype and ex-type of type species MFC 1P-449,?, needs generic revision.

Hyphodiscus Kirschst. 1907 (= *Catenulifera* Hosoya 2002 *vide* Johnston et al. 2014), *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, seven species, type: *H. gregarius* Kirschst., asexual morph *Catenulifera* (hyphomycetous), saprobes, North temperate, see Huhtinen et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Hosoya et al. (2011; DNA, phylogeny, new species), Pärtel and Pöldmaa (2011; new species), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature; new combinations), Cultures and sequences are available but lacks for the type species, Holotype and ex-type of type species unavailable.

Hyphopeziza J.G. Han, Hosoya & H.D. Shin 2014, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *H. pygmaea* (Mouton) J.G. Han, Hosoya & H.D. Shin, asexual morph unknown, saprobes, terrestrial, worldwide, see Han et al. (2014; taxonomy), Cultures and sequences are unavailable, Holotype and available cultures of the type species Mouton 473 (BR), KUS F51564.

Hyhopichia von Arx & van der Walt 1976, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomyces*, nine species, type: *H. burtonii* (Boidin, Pignal, Lehodey, Vey & Abadie) von Arx & van der Walt, asexual reproduction is by multilateral budding, saprophytic, on pollen, alfalfa silage, grain, various fruits, human skin, sputum, decaying insect infested wood, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Hyhopolynema Nag Raj 1977, *Ascomycota* genera *incertae sedis*, six species, type: *H. tropicale* Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Brazil, Colombia, India, USA, UK, see Pinho et al. (2011; morphology, new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Cultures and sequences are unavailable.

Hyphoscypha Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *H. loricata* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

Hyphostereum Pat. 1892, *Ascomycota* genera *incertae sedis*, one species, type: *H. pendulum* Pat., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hyphothyrium B. Sutton & Pascoe 1989, *Ascomycota* genera *incertae sedis*, one species, type: *H. pallidum* B. Sutton & Pascoe, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable.

Hyphobryon Döbbeler 1983, *Dothideomyces*, genera *incertae sedis*, seven species, type: *H. poeltii* (Döbbeler) Döbbeler, asexual morph unknown, on hepatics, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, needs generic revision.

Hypocenyce M.Choisy 1951, *Ophioparmaceae*, *Umbilicariales*, *Lecanoromyces*, four species, type: *H. scalaris* (Ach. ex Lilj.) M. Choisy, lichenized, worldwide, see Romanova (2009; Novosibirsk), Björk (2010; USA), Bendiksby and Timdal (2013, phylogeny, taxonomy), Stepanchikova et al. (2013; Russia), Miądlkowska et al. (2014; Poland), Lücking et al. (2016; classification), Cultures and sequences are available, holotype and ex-type of type species unavailable.

Hypocline Syd. 1939, *Ascomycota* genera *incertae sedis*, one species, type: *H. penniseti* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Dominican Republic, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

Hypocopra (Fr.) J. Kickx f. 1867, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, c. 35 species, type: *H. merdaria* (Fr.) J.J. Kickx, asexual morph unknown, terrestrial, saprobes, mainly coprophilous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jayanetti et al. (2014; applications), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species.

Hypocrella Sacc. 1878 (= *Aschersonia* Mont. *fide* Maharachchikumbura et al. 2015, 2016; Rossman et al. 2016), *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, 43 species, type: *H. discoidea* (Berk. & Broome) Sacc., asexual morph *Aschersonia*, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), Rossman et al. (2016; nomenclature), Cultures and sequences are available.

Hypocreodendron Henn. 1897 (= *Discoxylaria* J.C. Lindq. & J.E. Wright 1964 *fide* Réblová et al. 2016), *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *H. sanguineum* Henn., hyphomycetous, sexual morph of *Discoxylaria*, saprobes, Argentina, Mexico, see Lumbsch and Huhndorf (2010; outline), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Réblová et al. (2016; nomenclature), Daranagama et al. (2017; morphology, taxonomy, key, sexual-asexual link), sequence data available for one species *D. myrmecophila*.

Hypocreopsis P. Karst. 1873, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *H. lichenoides*, asexual morph hyphomycetous, saprobes and/or pathogens, terrestrial, Atlantic coast of Europe, Eastern USA, South-Eastern Australia, New Zealand, see Lumbsch and Huhndorf (2010; outline) Stasiska (2011; Poland), Grundy et al. (2012; molecular analysis),), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

Hypoderma De Not. 1847, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *H. rubi* (Pers.) DC., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lantieri et al. (2011; phylogeny, new species), Lantz et al. (2011; DNA, phylogeny), Wang et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Cultures and sequences are available, lectotype 'Hb. Pers. mis Chaill.

Hypodermella Tubeuf 1895, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, three species, type: *H. laricis* Tubeuf, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

Hypodermellina Höhn. 1917, *Rhytismatales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *H. ruborum* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

Hypodermina Höhn. 1916, *Ascomycota* genera *incertae sedis*, one species, type: *H. nervisequa* (Link) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hypoflavia Marbach 2000, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, three species, type: *H. velloziae* (Kalb) Marbach, lichenized, Brazil, Thailand, Chile, see Lumbsch and Huhndorf (2010; outline), Giralt and Clerc (2011; identification), Lücking et al. (2016; classification), Cultures and sequences are unavailable.

Hypogloeum Petr. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *H. euonymi* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hypogymnia (Nyl.) Nyl. 1896, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 90 species, type: *H. physodes* (L.) Nyl., lichenized, worldwide, see Hauck (2008; metal homeostatis), McCune (2008; new species), Ranković et al. (2008; antimicrobial activity), McCune and Schoch (2009; new species), Solhaug et al. (2009; morphology), Lumbsch and Huhndorf (2010; outline), Wei et al. (2010; new species), McCune (2011; new species), Miądlikowska et al. (2011, phylogeny), Balabanova et al. (2012; biomonitoring), Goward et al. (2012; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available. Holotype and ex-type of type species unavailable.

Hypohelion P.R. Johnst. 1990 (= *Leptostroma* Fr. 1815 *vide* Johnston et al. 2014), *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, three species, type: *H. scirpinum* (DC.) P.R. Johnst., asexual morph *Leptostroma*, saprobes, north temperate, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Wang et al. (2014; DNA, phylogeny), Cultures and sequences are available, cultures available for type: Lantz 394 (UPS) (*vide* Lantz et al. 2011), Holotype and ex-type of type species unknown.

Hypomyces (Fr.) Tul. 1870, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, more than 150 species, type: *H. lactifluorum*, asexual morph hyphomycetous, fungicolous, worldwide, see Jaklitsch et al (2008; new species), Lumbsch and Huhndorf (2010; outline), Pöldmaa (2011; new species, red pigment), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequence data available, holotype of type: CBS H-19806 (as *Sphaeria lactifluorum* Schw., Syn. Fung. 1190-44 Herb.), ex-type strains are unavailable for type species.

Hyponectria Sacc. 1878, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, 17 species, type: *H. buxi* (DC.) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhao and Zhao (2012; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), DNA sequences and cultures available (*vide* Winka and Eriksson 2000), type specimen of type: CBS H-4954.

Hypophloeda K.D. Hyde & E.B.G. Jones 1989, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *H. rhizospora* K.D. Hyde & E.B.G. Jones, asexual morph unknown, marine, mangrove roots, Brunei, Seychelles, see Jones et al. (2009; key, description), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are unavailable.

Hypospilina (Sacc.) Traverso 1913, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *H. bifrons* (DC.) Traverso, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are unavailable, needs generic revision.

Hypotarzetta Donadini 1985, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *H. insignis* (Berthet & Rioussset) Donadini, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are available, holotype and ex-type of type species unavailable.

Hypotrachyna (Vain.) Hale 1974, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 260 species, type: *H. brasiliiana* (Nyl.) Hale, lichenized, worldwide, see Sipman et al. (2009; review), Yáñez-Ayabaca and Eliasaro (2009; new species), Lumbsch and Huhndorf (2010; outline), Flakus et al. (2012; new species), Divakar et al. (2013, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available.

Hypotrachynicola Etayo 2002, *Ascomycota* genera *incertae sedis*, one species, type: *H. rubra* Etayo, asexual morph unknown, lichenicolous, terrestrial, South America, see Lumbsch and

Huhndorf (2010; outline), Cultures and sequences are unavailable, holotype of the type: COL Etayo 16515.

Hypoxylon Bull. 1791 (= *Nodulisporium* Preuss 1849 *vide* Réblová et al. 2016), *Xylariaceae*, *Xylariales*, *Sordariomycetes*, c. 140 species, type: *H. fragiforme* (Pers.) J. Kickx f., asexual morph unknown, terrestrial, saprobes, mainly coprophilous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; nomenclature), cultures and sequences are available, needs generic revision as the genus comprises more than 1000 species epithets (Index Fungorum 2017).

Hypsostroma Huhndorf 1992, *Hypsostromataceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *H. saxicola* Huhndorf, asexual morph unknown, saprobes, terrestrial, worldwide, see Mugambi and Huhndorf (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Hypsostromataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are available, cultures available for the type: SMH 5005 (*vide* Mugambi and Huhndorf 2009), holotype of type species NY, Harris 26462, needs generic revision.

Hysteridium P. Karst. 1905, *Ascomycota* genera *incertae sedis*, one species, type: *H. phragmitis* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hysterium Tode 1791, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, 14 species, type: *H. pulicare* (Lightf.: Fr.) Pers., asexual morph unknown, saprobes, terrestrial, worldwide, see Boehm et al. (2009, overview of genus), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are available, cultures available for type species CBS 123377, holotype of type: CBS H-5484.

Hysterobrevium E. Boehm & C.L. Schoch 2010, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, four species, type: *H. mori* (Schwein.) E.W.A. Boehm & C.L. Schoch, asexual morph coelomycetous (apospheeria-like), saprobes, terrestrial, worldwide, see Boehm et al. (2009; overview), Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), Cultures and sequences are available, holotype and ex-type of type: BPI878733, CBS 123336.

Hysterocarina H. Zogg 1949, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, one species, type: *H. paulistae* H. Zogg, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, needs generic revision.

Hysterodifractum D.A.C. Almeida, Gusmão & A.N. Mill. 2014, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, one species, type: *H. partisporum* D.A.C. Almeida, Gusmão & A.N. Mill, asexual morph unknown, saprobes, terrestrial, Brazil, see: Almeida et al. (2014; taxonomy), Cultures and sequences are available, holotype of type: HUEFS:42865

Hysterodiscula Petr. 1942, *Ascomycota* genera *incertae sedis*, one species, type: *H. kalmiae* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hysteroglonium Rehm ex Lindau 1896, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, two species, type: *H. ovatum* (Cooke) Lindau, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, needs generic revision.

Hysterographium Corda 1842, *Dothideomycetes* genera *incertae sedis*, two species, type: *H. elongatum* (Wahlenb.) Corda, asexual morph unknown, saprobes, terrestrial, worldwide, see Boehm et al. (2009a, b; taxonomy, DNA, phylogeny), Mugambi and Huhndorf (2009; DNA,

phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; key to distinguish from other hysteriaceous genera), Kirk et al. (2013; genus accepted), Logesh et al. (2013; new species, India), Wijayawardene et al. (2014; outline), Cultures and sequences are available, needs generic revision.

Hysteronaevia Nannf. 1984, *Dermateaceae*, *Helotiales*, *Leotiomyces*, twelve species, type: *H. holoschoeni* (De Not.) Nannf., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Hysteropatella Rehm 1890, *Patellariaceae*, *Patellariales*, *Dothideomyces*, three species, type: *H. prostii* (Duby) Rehm, asexual morph unknown, saprobes, terrestrial, Switzerland, see Boehm et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as genus in *Hysteriaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (2013) did not accept as a genus in *Hysteriaceae*, Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), Cultures and sequences are available, cultures available for the type species H.B. 9934b

Hysteropeltella Petr. 1923, *Schizothyriaceae*, *Dothideomyces* family *incertae sedis*, one species, type: *H. moravica* Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as *Dothideomyces*, genera *incertae sedis*), Ariyawansa et al. (2013; transferred to *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Hysteropezizella Höhn. 1917, *Dermateaceae*, *Helotiales*, *Leotiomyces*, 19 species, type: *H. subvelata* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Hysteropsis Rehm 1887, *Dothideomyces* genera *incertae sedis*, four species, type: *H. culmigena* Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Hysteropycnis Hilitzer 1929, *Ascomycota* genera *incertae sedis*, one species, type: need typification, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hysterostegiella Höhn. 1917, *Dermateaceae*, *Helotiales*, *Leotiomyces*, ten species, type: *H. fenestrata* (Roberge ex Desm.) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, holotype and ex-type of type species unavailable, needs generic revision.

Hysterostomella Speg. 1885, *Parmulariaceae*, *Dothideomyces* families *incertae sedis*, 40 species, type: *H. guaranitica* Speg., asexual morph unknown. Epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable.

Hyweljonesia R.G. Shivas, Y.P. Tan, Marney & Abell 2016, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomyces*, one species, type: *H. queenslandica* R.G. Shivas, Y.P. Tan, Marney & Abell, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: BRIP 61322b.

Ialomitzia Gruia 1964, *Ascomycota* genera *incertae sedis*, one species, type: *I. cavernicola* Gruia, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Icmadophila Trevis. [nom.cons.] 1852, *Icmadophilaceae*, *Pertusariales*, *Lecanoromycetes*, eight species, type: *I. aeruginosa* (Scop.) Trevis., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available.

Idiocercus B. Sutton 1967, *Ascomycota* genera *incertae sedis*, two species, type: *I. pirozynskii* B. Sutton, coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, Australia, Tanzania, Sierra Leone, see Wijayawardene et al. (2012, 2017; outline), Cultures and sequences are unavailable, holotype of the type species IMI 107154a.

Idiomyces Thaxt. 1893, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *I. peyritschii* Thaxt., asexual morph unknown, biotrophic, terrestrial, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Idriella P.E. Nelson & S. Wilh. 1956, *Microdochiaceae*, *Xylariales*, *Sordariomycetes*, c. 30 species, type: *I. lunata* P.E. Nelson & S. Wilh., hyphomycetous, sexual morphs unknown, in soil, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hernández-Restrepo et al. (2016; DNA, phylogeny), cultures and sequences are available, needs generic revision.

Igneocumulus A.W. Ramaley 2003, *Ascomycota* genera *incertae sedis*, ten species, type: *I. yuccae* A.W. Ramaley, asexual morph hyphomycetous (lecythophora-like), saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, holotype of type species UC 1713843, needs generic revision.

Ijuhya Starbäck 1899, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, 14 species, type: *I. vitrea* Starbäck, asexual morph acremonium-like, saprobes, terrestrial, worldwide, see Lechat and Courtecuisse (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Lechat and Fournier (2017; new species), cultures and sequences are available, needs generic revision.

Illosporopsis D. Hawksw. 2001, *Incertae sedis*, *Hypocreales*, *Sordariomycetes*, one species, type: *I. christiansenii* (B.L. Brady & D. Hawksw.) D. Hawksw., lichenicolous, Europe, terrestrial, see Seifert et al. (2011; genus accepted), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of type: K(M)-IMI 226836.

Illosporium Mart. 1817, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, 18 species, type: *I. carneum* Fr., asexual morph hyphomycetous, lichenicolous, USA and Europe, see Pindi (2012; marine), Kossowska and Szczepańska (2013; Poland), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are available.

Ilyomyces F. Picard 1917, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, two species, type: *I. mairei* F. Picard, asexual morph unknown, biotrophic, terrestrial, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Ilyonectria P. Chaverri & C. Salgado 2011, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, 22 species, type: *I. destructans* (Zinssm.) Rossman, L. Lombard & Crous, root pathogenic or saprobes, cosmopolitan, see Chaverri et al. (2011; phylogeny), Cabral et al. (2012; new species), Lombard et al. (2015; phylogeny), Cultures and sequences are available, Ex-type of type species CBS 264.65.

Ilytheomyces Thaxt. 1917, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, 15 species, type: *I. elegans* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide,

see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Imaia Trappe & Kovács 2008, *Morchellaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *I. gigantea* (S. Imai) Trappe & Kovács, asexual morph unknown, ectomycorrhizal, saprobes, terrestrial, North American, East Asia, see Kovacs et al. (2008; DNA, taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Cultures and sequences are available, Holotype and ex-type of type species unavailable.

Imazekia Tak. Kobay. & Y. Kawabe 1992, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *I. ryukyensis* Tak. Kobay. & Y. Kawabe, asexual morph unknown, from living leaves, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are unavailable Holotype of type species TFM, FPH-7163.

Imicles Shoemaker & Hambl. 2001, *Ascomycota* genera *incertae sedis*, six species, type: *I. leptospora* (Sacc. & Roum.) Shoemaker & Hambl., hyphomycetous, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, compare with *Sporidesmium*, needs generic revision.

Immersaria Rambold & Pietschm. 1989, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, eight species; type: *I. athroocarpa* (Ach.) Rambold & Pietschm., lichenized, Asia, Africa, Europe, Australia, see Lumbsch and Huhndorf (2010; outline), Valadbeigi et al. (2011; new species), Kirk et al. (2013; genus accepted), Pandit (2014; India), Zhang et al. (2015; China), Gasparyan et al. (2016; Armenia), Lücking et al. (2016; classification), Cultures and sequences are available.

Immersidiscosia Kaz. Tanaka, Okane & Hosoya 2011, *Sporocadaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *I. eucalypti* (Pat.) Kaz. Tanaka, Okane & Hosoya, sexual morph unknown, saprobes, terrestrial, France, Japan, Tunisia, see Tanaka et al. (2011; morphology, phylogeny), Jaklitsch et al. (2016; phylogeny), Cultures and sequences are available, holotype of the type species in FH, ex-type strain unavailable.

Immersiella A.N. Mill. & Huhndorf 2004, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, two species, type: *I. immersa* (P. Karst.) A.N. Mill. & Huhndorf, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type species SMH2589, SMH4104, holotype and ex-type of type species unavailable.

Immersiporthe S.F. Chen, M.J. Wingf. & Jol. Roux [2012] 2013, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *I. knoxdaviesiana* S.F. Chen, M.J. Wingf. & Jol. Roux, coelomycetous, sexual morph unknown, pathogens, terrestrial, South Africa, see Chen et al. (2013a, b; taxonomy, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype and the ex-type of type: PREM 60738, CMW37314 = CBS132862.

Immersisphaeria Jaklitsch 2007, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *I. eichleriana* (Bres.) Jaklitsch, asexual morph unknown, pathogens, terrestrial, South Africa, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Daranagama et al. (2016; accepted in *Xylariales*), cultures and sequences are unavailable.

Immotthia M.E. Barr 1987, *Dothideomycetes* genera *incertae sedis*, one species, type: *I. hypoxylon* (Ellis & Everh.) M.E. Barr, asexual morph coniothyrium-like, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Imshaugia F.C. Mey. 1985, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, seven species, type: *I. aleurites* (Ach.) S.L.F. Mey., lichenized, boreal and temperate regions of the Northern Hemisphere and from cool-montane regions in the Southern Hemisphere, see Hauck et al.

(2009; acid tolerance), Lumbsch and Huhndorf (2010; outline), Benatti (2012; Key), Thell et al. (2012; description, phylogeny), Kirk et al. (2013; genus accepted), Kharpukhayeva and Mukhortova (2016; Baikal), Lücking et al. (2016; classification), sequences are available.

Inaequalispora L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *I. prestonii* (M.C. Tulloch) L. Lombard & Crous, hyphomycetous, sexual morph unknown, from forest soil, terrestrial, Malaysia, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-isotype culture of the type: CBS H-7392, CBS 175.73.

Incertomyces Egidi & Zucconi 2014, *Dothideomycetes* genera *incertae sedis*, two species, type: *I. perditus* Egidi & Zucconi, hyphomycetous, sexual morph unknown rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 136105 = CCFEE 5385.

Incrucipulum Baral 1985, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, six species, type: *I. ciliare* (Schrad.) Baral, asexual morph unknown, saprobes, terrestrial, temperate, see Hosoya et al. (2010; new species, Japan, DNA), Lumbsch and Huhndorf (2010; outline), Cultures and sequences are available.

Incrupila Raitv. 1970, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, ten species, type: *I. aspidii* (Lib.) Raitv., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Cultures and sequences are unavailable, needs generic revision.

Induratia Samuels, E. Müll. & Petrini 1987, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *I. apiospora* Samuels, E. Müll. & Petrini, asexual morph unknown, saprobes, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable, needs generic revision.

Inesiosporium R.F. Castañeda & W. Gams 1997, *Ascomycota* genera *incertae sedis*, two species, type: *I. longispirale* (R.F. Castañeda) R.F. Castañeda & W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; valid genus), Argôlo Magalhães et al. (2014; Bahia), Castañeda-Ruiz et al. (2016; distribution), compare with *Ceratophorum* and *Zalerion*, Cultures and sequences are unavailable, holotype of the type species INIFAT C84/107.

Inflatispora Yin. Zhang, J. Fourn. & K.D. Hyde 2011, *Massarineae*, *Pleosporales*, *Dothideomycetes*, two species, type: *I. pseudostromatica* Ying Zhang, J. Fourn. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, France and Thailand, see Zhang et al. (2011; taxonomy, phylogeny), Tibpromma et al. (2017; taxonomy, phylogeny), cultures and sequences are available, holotype and ex-type of type: IFRD 8989, CBS 123110.

Infundibulomyces Plaingam, Somrith. & E.B.G. Jones 2003, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, two species, type: *I. cupulata* Plaingam, Somrith. & E.B.G. Jones, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2016; outline), cultures and sequences are available, epitype and ex-epitype of the type: SFC 1615, BCC 13400.

Infundichalara Réblová & W. Gams 2011, *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, type: *I. microchona* (W. Gams) Réblová & W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Netherlands, Czech Republic, see Réblová and Gams (2011; morphology, phylogeny), Koukol (2012; morphology, new species), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type strains of the type: CBS-H 19895, CBS 261.82.

Ingaderia Darb. 1897, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *I. pulcherrima* Darb., lichenized, Chile, Europe, see Lumbsch and Huhndorf (2010; outline),

Ertz and Tehler (2011; phylogeny), Notov (2014; outline), Lücking et al. (2016; classification), sequences are available.

Ingvariella Guderley & Lumbsch 1997, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *I. bispora* (Bagl.) Guderley & Lumbsch, lichenized, arid and semi-arid area, see Lumbsch and Huhndorf (2010; outline), Fernández-Brime et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Inifatiella R.F. Castañeda, *Ascomycota* genera *incertae sedis*, one species, type: *I. nectandrae* R.F. Castañeda, coelomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Inocyclus Theiss. & Syd. 1915, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, eight species, type: *I. psychotriae* (Syd. & P. Syd.) Theiss. & Syd, asexual morph unknown, epiphytes, pathogens, biotrophic, terrestrial, worldwide, see Hofmann (2009; review, placed in *Parmulariaceae*), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), Guatimosim et al. (2015; phylogeny), Cultures and sequences are available.

Inoderma (Ach.) Gray 1821, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *I. byssaceum* (Weigel) Gray, lichenized, temperate Europe, North America, Eastern Siberia, Japan, and eastern Africa (Uganda), see Frisch et al. (2015; phylogeny, key, description), Lücking et al. 2016 (classification), sequences are available.

Intercalarispora J.L. Crane & Schokn. 1983, *Ascomycota* genera *incertae sedis*, one species (probably more described as synasexual morphs of *Helicoma*, *Monodictys* or *Xenosporium*), type: *I. nigra* J.L. Crane & Schokn., hyphomycetous, sexual morph unknown (probably *Tubeufia*), saprobes, on rotten submerged wood, America and Africa, see Hyde et al. (2011; checklist), Kirk et al. (2013; valid genus), cultures and sequences are unavailable, holotype of type: ILLS 43047.

Intralichen D. Hawksw. & M.S. Cole 2002, *Ascomycota* genera *incertae sedis*, four species, type: *I. christiansenii* (D. Hawksw.) D. Hawksw. & M.S. Cole, sexual morph unknown, lichenicolous, North Temperate, see Seifert et al. (2011; genus accepted), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Involucropyrenium Breuss 1996, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, nine species, type: *I. waltheri* (Kremp.) Breuss, lichenized, Europe, North America, Asia, see Sun et al. (2008; China), Prieto et al. (2010; key, description), Prieto et al. (2012; phylogeny), Breuss (2016; nomenclature), Lücking et al. (2016; classification), sequences are available, holotype of type species unavailable.

Involucroscypha Raitv. 2002, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, ten species, type: *I. involucrata* (B. Erikss.) Raitv., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, holotype of the type species TAA165831, needs generic revision.

Iodophanus Korf 1967, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, 16 species, type: *I. carneus* (Pers.) Korf, asexual morph unknown, coprophilous, terrestrial, worldwide, see Schmitt et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, type material of type species CBS H-6320.

Iodosphaeria Samuels, E. Müll. & Petrini 1987, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *I. phyllophila* (Mouton) Samuels, E. Müll. & Petrini, asexual morph hyphomycetous (selenosporella-like and ceratosporium-like), saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus

accepted), Maharachchikumbura et al. (2015, 2016; outline), Li et al. (2015; new species, DNA, phylogeny), cultures and sequences are available, holotype of the type: PDD 47872.

Iodowynnea Medel, Guzmán & S. Chacón 1996, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *I. auriformis* (Pat. ex Le Gal) Medel, Guzmán & S. Chacón, asexual morph unknown, coprophilous, terrestrial, worldwide, see Schmitt et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Ionaspis Th.Fr. 1871, *Hymeneliaceae*, *Hymeneliales*, *Lecanoromycetes*, seven species, type: *I. chrysophana* (Körb.) Th. Fr., lichenized, worldwide, see Thüs and Schultz (2009; key), Kınalıoğlu (2010; Turkey), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Ionopragmium Peres 1961, *Ascomycota* genera *incertae sedis*, one species, type: *I. notatum* Peres & L. Xavier, coelomycetous, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, compare with *Asterostomella*, holotype of type: IMUR 20676, needs generic revision.

Ioplaca Poelt 1977, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *I. sphalera* Poelt, lichenized, Himalayas, see Lumbsch and Huhndorf (2010; outline), Arup et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); cultures and sequences are available, holotype of type species (see MBT#158202).

Iraniella Petr. 1949, *Sordariomycetes* genera *incertae sedis*, one species, type: *I. rechingeri* Petr., asexual morph unknown, saprobes, terrestrial, Iran, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are unavailable, needs generic revision.

Irenopsis F. Stevens 1927, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, 75 species, type: *I. tortuosa* (G. Winter) F. Stevens, asexual morph produced from the hyphae, saprobes, pathogens, terrestrial, worldwide, see Hosagoudar and Archana (2010; new species, India), Hosagoudar and Sabeena (2010; new species, India), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pinho et al. (2013, 2014; new species, Brazil, DNA, phylogeny), Hosagoudar et al. (2014; new species, Andaman Islands), Hongsanan et al. (2015; new species, taxonomy), Maharachchikumbura et al. (2015, 2016; outline), Rodríguez et al. (2015; new species), Cultures and sequences are available, holotype and ex-type of type species unavailable.

Iridinea Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, type: need typification, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, data inadequate, needs generic revision.

Irpicomycetes Deighton 1969, *Ascomycota* genera *incertae sedis*, three species, type: *I. schiffnerulae* Deighton, hyphomycetous, sexual morph unknown, on leaves or twigs, Malaysia and Japan, see Watanabe (2010; illustrations), Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, holotype of type species IMI 54929b.

Irydyonia Racib. 1900, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, one species, type: *I. filicis* Racib., asexual morph unknown, saprobes, Java, see Lumbsch and Huhndorf (2010; outline), holotype and ex-type of type species unavailable, needs generic revision.

Isalonactis Ertz, Tehler, Eb. Fisch., Killmann, Razafin. & Sérus. 2014, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *I. madagascariensis* Ertz, Tehler, Eb. Fisch., Killmann, Razafin. & Sérus., sexual morph with apothecoid ascomata, lichenized, terrestrial, Madagascar, see Ertz et al. (2014; morphology, phylogeny), Lücking et al. (2016;

classification), sequences are available, lectotype and ex-type strain of type: Ertz 13024.

Isaria Pers. 1794, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, c. 13 species, type: *I. farinosa* (Holmsk.) Fr., hyphomycetous, entomogenous, worldwide, see Jiang et al. (2008; metabolite properties), Meyer et al. (2008; Florida), Zimmermann (2008; biology, ecology), Avery et al. (2009; *in vitro* infection), Zhang et al. (2009; extrolites), Ali et al. (2010; enzyme evaluation), Kim et al. (2010; thermotolerance), Ma et al. (2010; extrolites), Hoy et al. (2010; *Diaphorina citri* control), Asai et al. (2011; Tenuipyrone), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, epitype and ex-type of type: CBS-H6586, CBS 111113.

Isariella Henn. 1909, *Ascomycota* genera *incertae sedis*, two species, type: *I. auerswaldiae* Henn., hyphomycetous, saprobes, terrestrial, Brazil, Dominican Republic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), compare with *Atractilina*, sequences are unavailable, holotype of type species S-F40445, needs generic revision.

Ischnostroma Syd. & P. Syd. 1914, *Ascomycota* genera *incertae sedis*, one species, type: *I. merrillii* Syd. & P. Syd., coelomycetous, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), compare with *Trachythriolum*, sequences are unavailable, needs generic revision.

Isia D. Hawksw. & Manohar. 1978, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *I. neocaledoniensis* (C. Moreau) D. Hawksw. & Manohar, on plant material, Asia and Pacific, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are unavailable, needs generic revision.

Isomunkia Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, one species, type: *I. pulvinula* (Pat.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, Ecuador, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Isothea Fr. 1849, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *I. rhytismoides* (Bab.) Fr., asexual morph unknown, from living leaves, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), DNA sequences are unavailable.

Isthmoconidium Etayo & Berger 2013, *Ascomycota* genera *incertae sedis*, one species, type: *I. bacidiicola* Etayo & F. Berger, coelomycetous, sexual morph unknown, parasymbiont on *Bacidia*, terrestrial, Caribbean, see Etayo and Berger (2013; morphology, distinction of similar lichenicolous genera), sequences are unavailable, holotype of the type species LI, F. Berger 22323 & S. La Greca.

Isthmolongispora Matsush. 1971, *Ascomycota* genera *incertae sedis*, eleven species, type: *I. intermedia* Matsush., hyphomycetous, saprobes, aquatic and terrestrial, Argentina, Australia, Brazil, China, Cuba, Hungary, Japan, Malaysia, Papua New Guinea, Peru, Portugal, Scotland, Taiwan, United Kingdom, Venezuela and West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with *Isthmophragmospora* and *Wiesneriomyces*, cultures and sequences are available, holotype of type: MFC-3052, needs generic revision.

Isthmophragmospora Kuthub. & Nawawi 1992, *Ascomycota* genera *incertae sedis*, two species, type: *I. verruculosa* Kuthub. & Nawawi, hyphomycetous, sexual morph unknown, saprobes, on submerged rotten angiosperms twigs, on submerged decaying leaves in a black water stream, Malaysia and Brazil, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Monteiro et al. (2014; new species), sequences are unavailable, holotype of type: IMI 344358.

Isthmospora F. Stevens 1918, *Ascomycota* genera *incertae sedis*, three species, type: *I. spinosa* F. Stevens, hyphomycetous, sexual morph unknown, saprobes, terrestrial,

Pantropical, see Seifert et al. (2011; morphology, accepted as a genus in *Microthyriaceae*), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Isthmosporella Shearer & J.L. Crane 1999, *Dothideomycetes* genera *incertae sedis*, one species, type: *I. pulchra* Shearer & J.L. Crane, asexual morph unknown, saprobes, fresh water, USA, see Lumbsch and Huhndorf (2010; outline, placed in *Phaeosphaeriaceae*), Zhang et al. (2012; placed in *Pleosporales*), Hyde et al. (2013; accepted in *Phaeosphaeriaceae*), Phookamsak et al. (2014; excluded from *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*), sequences are unavailable, holotype of type: ILLS 53086, needs generic revision.

Isthmotricladia Matsush. 1971, *Ascomycota* genera *incertae sedis*, three species, type: *I. laeensis* Matsush., hyphomycetous, saprobes, aquatic and terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with *Articulospora*, holotype of type: MFC-2803, cultures are available, needs generic revision.

Ityorhoptrum P.M. Kirk 1986, *Ascomycota* genera *incertae sedis*, four species, type: *I. verruculosum* (M.B. Ellis) P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Whitton et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Mel'nik et al. (2014; key species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ivanpisutia S.Y. Kondr., L. Lokös & Hur 2015, *Lecanorales* genera *incertae sedis*, *Lecanoromycetes*, one species, type: *I. oxneri* S.Y. Kondr., Lökös & Hur, lichenized, Russia, see Kondratyuk et al. (2015; outline), Lücking et al. (2016; classification), Cultures and sequences are unavailable, holotype of type: KoLRI 020233.

Iwilsoniella E.B.G. Jones 1991, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *I. rotunda* E.B.G. Jones, asexual morph unknown, marine on wood, Great Britain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are unavailable, holotype of type species IMI 271838.

Iyengarina Subram. 1958, *Ascomycota* genera *incertae sedis*, three species, type: *I. elegans* Subram., hyphomycetous, sexual morph unknown, saprobes, lignicolous, India, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type: MUBL 2015 (Madras, India) (?IMI 113126)

Jacobsonia Boedijn 1935, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *J. glauca* Boedijn, asexual morph unknown, saprobes, terrestrial, Sumatra, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type species (see MBT#191503).

Jaffuela Speg. 1921, *Pseudoperisporiaceae*, *Dothideomycetes*, families *incertae sedis*, one species, type: *J. chilensis* Speg., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothioraceae*), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; transferred to *Pseudoperisporiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Jafnea Korf 1960, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, four species, type: *J. fusicarpa* (W.R. Gerard) Korf, saprobes, terrestrial, north temperate, Australia, Tasmania, see Antonín and Moravec (2010; Czech Republic), Lumbsch and Huhndorf (2010; outline), Gates and Van Vooren (2016; new species), cultures and sequences are available.

Jahniella Petr. 1921, *Ascomycota genera incertae sedis*, three species, type: *J. bohémica* Petr., coelomycetous, saprobe, pathogen, terrestrial, Czechoslovakia, France, Germany, Russia, Ukraine, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with *Septoria*, sequences are unavailable, holotype of type: IMI 204129, needs generic revision.

Jahnula Kirschst. 1936, *Aliquandostipitaceae, Jahnulales, Dothideomycetes*, 16 species, type: *J. aquatica* (Plöttner & Kirschst.) Kirschst., asexual morph unknown, saprobes, aquatic, worldwide, see Raja et al. (2008; new species), Sivichai and Boonyuen (2010; new species), Sivichai et al. (2011; anamorph), Jones et al. (2012; phylogeny), cultures and sequences are available, GenBank Number: NR_120015 (*Jahnula bipileata*), holotype and ex-type of type species unavailable.

Jamesiella Lücking, Sérus. & Vězda 2005, *Gomphillaceae, Ostropales, Lecanoromycetes*, four species, type: *J. anastomosans* (P. James & Vězda) Lücking, Sérus. & Vězda, lichenized, cosmopolitan, see Hauck (2009, Europe), Lumbsch and Huhndorf (2010; outline), Motiejūnaitė (2011; Lithuania), Khodosovtsev et al. (2013; Ukraine), Yatsyna and Motiejūnaitė (2015; Belarus), Lücking et al. (2016; classification), sequences are unavailable, holotype of type species unavailable.

Janannfeldtia Subram. & Sekar 1993, *Nitschkiaceae, Coronophorales, Sordariomycetes*, one species, type: *J. karwarensis* Subram. & Sekar, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), sequences are unavailable, isotype of the type: IMI 324682.

Janetia M.B. Ellis 1976, *Ascomycota genera incertae sedis*, 22 species, type: *J. euphorbiae* M.B. Ellis, hyphomycetous, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Silva et al. (2016; morphology and phylogeny), compare with *Sporidesmium* and *Stanjehughesia*, cultures and sequences are available but lacks for the type species, holotype of type: IMI 163941, needs generic revision.

Japewia Tønsberg 1990, *Ramalinaceae, Lecanorales, Lecanoromycetes*, three species, type: *J. tornoënsis* (Nyl.) Tønsberg, lichenized, cool temperate Northern Hemisphere, see Czarnota (2009; Carpathians), Lumbsch and Huhndorf (2010; outline), Kantvilas (2011; Australia), Coppins (2013; Slovenia), Kirk et al. (2013; genus accepted), Allen and Lendemer (2015; key), Lücking et al. (2016; classification), cultures and sequences are available.

Japewiella Printzen 1999, *Lecanoraceae, Lecanorales, Lecanoromycetes*, six species, type: *J. carrollii* (Coppins & P. James) Printzen, lichenized, humid temperate and subtropical regions, see Giordani and Incerti (2008; climate effects), Lumbsch and Huhndorf (2010; outline), Kantvilas (2011; Australia), Kirk et al. (2013; genus accepted), Allen and Lendemer (2015; new species, key), Lücking et al. (2016; classification), sequences are unavailable.

Jarmania Kantvilas 1996, *Ramalinaceae, Lecanorales, Lecanoromycetes*, two species, type: *J. tristis* Kantvilas, lichenized, Australia, New Zealand, Kerguelen Islands, see Kantvilas (2008; Australia), Øvstedal and Gremmen (2009; Kerguelen Islands), Lumbsch and Huhndorf (2010; outline), Ludwig and Kantvilas (2015; New Zealand), Lücking et al. (2016; classification), sequences are unavailable.

Jarxia D. Hawksw. 1989, *Naetrocymbaceae, Pleosporales, Dothideomycetes*, two species, type: *J. thelenula* (Müll. Arg.) D. Hawksw., on twigs, terrestrial, Caribbean, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Naetrocymbaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Jaklitsch et al. (2016; position), sequences are unavailable, holotype of type species G.

Jasonhuria S.Y. Kondr., L. Lökös & S.O. Oh 2015, *Teloschistaceae, Teloschistales, Lecanoromycetes*, one species, type: *J. bogilana* (Y. Joshi & Hur) S.Y. Kondr., L. Lökös, J. Kim, A.S. Kondr. & S.O. Oh, lichenized, South Korea, see Kondratyuk et al. (2015; genera

proposed), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type species KoLRI, Hur 041679.

Jattaea Berl. 1900, *Calosphaeriaceae*, *Calosphaeriales*, *Sordariomycetes*, twelve species, type: *J. algeriensis* Berl., asexual morph hyphomycetous (phialophora-like *fide* Damm et al. 2008), from living leaves, terrestrial, worldwide, see Marincowitz et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Réblová et al. (2011; taxonomy, revision, new species), Kirk et al. (2013; genus accepted), Réblová et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available; GenBank Number: NR_135946, verified culture for type species STE-U 6201 (*fide* Damm et al. 2008).

Javaria Boise 1984, *Astrosphaeriellaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *J. samuelsii* Boise, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; morphology, phylogeny), Kirk et al. (2013; genus accepted), Tian et al. (2015; morphology, nomenclature, phylogeny), sequences are unavailable, needs generic revision.

Javonarxia Subram. ex Subram. 1995, *Ascomycota* genera *incertae sedis*, two species, type: *J. triseptata* Subram. ex Subram., hyphomycetous, sexual morph unknown, saprobes, on twigs, Malaysia, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type: MUBL 3124.

Jayarambhatia J. Pratibha 2013, *Ascomycota* genera *incertae sedis*, one species, type: *J. mangrovei* J. Pratibha, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Pratibha (2013; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, holotype of the type: HClO 51502.

Jenmania W. Wächt. 1897, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, two species, type: *J. goebelii* W. Wächt., lichenized, British Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unknown.

Jerainum Nawawi & Kuthub. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *J. triquetrum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, on submerged rotten twigs, Malaysia, see Hyde et al. (2011; checklist), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type species KLU 300009.

Jobellisia M.E. Barr 1993, *Jobellisiaceae*, *Jobellisiales*, *Sordariomycetes*, five species, type: *J. luteola* (Ellis & Everh.) M.E. Barr, asexual morph unknown, saprobes, terrestrial, fresh water, worldwide, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2012; new species, DNA, phylogeny), Kirk et al. (2013; genus accepted), Untereiner et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, GenBank Number: NR_138381 (*Jobellisia guangdongensis*), holotype of the type: J.P. Morgan 1109.

Joergensenia Passo, Stenroos & Calvelo 2008, *Lecanorales* genera *incertae sedis*, *Lecanoromycetes*, one species, type: *J. cephalodina* (Zahlbr.) Passo, S. Stenroos & Calvelo, lichenized, Chile, see Passo et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type: UPS L-78746.

Johansonia Sacc. 1889, *Saccardiaceae*, *Ascomycota* families *incertae sedis*, c.12 species, type: *J. setosa* (G. Winter) Sacc., asexual morph unknown, saprobes, terrestrial, widespread (tropical), see Crous et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type species, needs generic revision.

Johnalcornia Y.P. Tan & R.G. Shivas 2014, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *J. aberrans* (Alcorn) Y.P. Tan & R.G. Shivas, asexual morph hyphomycetous, associated with leaf spots, terrestrial, Australia, see Tan et al. (2014; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of the type: BRIP 16281, isotype: IMI 335210, ex-isotype: CBS 510.91.

Josefpoeltia S.Y.Kondr. & Kärnefelt 1997, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *J. boliviensis* S.Y. Kondr. & Kärnefelt, lichenized, Peru, Chile, see Gaya et al. (2008; phylogeny), Arup et al. (2013, taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species MIN (2732).

Jubispora B. Sutton & H.J. Swart 1986, *Ascomycota* genera *incertae sedis*, one species, type: *J. acaciae* B. Sutton & H.J. Swart, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Wijayawardene et al. (2012, 2016, 2017; morphology, outline), sequences are unavailable, holotype of the type: IMI 167364.

Jugulospora N. Lundq. 1972, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, two species, type: *J. rotula* (Cooke) N. Lundq., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, cultures available for the type species ATCC 38359, type material of type species CBS H-13717.

Julella Fabre 1879, *Thelenellaceae*, *Ostropales*, *Lecanoromycetes*, c. 20 species, type: *J. buxi* Fabre, asexual morph unknown, saprobes, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014b; phylogeny), cultures and sequences are available, holotype of type: S F599, needs generic revision.

Jumillera J.D. Rogers, Y.M. Ju & F. San Martín 1997, *Lopadostomataceae*, *Xylariales*, *Sordariomycetes*, eight species, type: *J. mexicana* J.D. Rogers, Y.M. Ju & F. San Martín, asexual morph libertella-like, with geniculosporium-like synanamorph, saprobes, Rio Grande do Sul, Hawaiian Island, Mexico, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable, placement in *Lopadostomataceae* needs to be confirmed by molecular data.

Juncaceicola Tennakoon, Camporesi, Phookamsak & K.D. Hyde 2016, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, eight species, type: *J. luzulae* Tennakoon, Camporesi, Phookamsak & K.D. Hyde, asexual morph unknown, saprobes, Italy, see Tennakoon et al. (2016; taxonomy, phylogeny), Hyde et al. (2016; new species, phylogeny), holotype of the type: HKAS 93700, cultures and sequences are available.

Juncigena Kohlm., Volkm.-Kohlm. & O.E. Erikss. 1997 (= *Moheitospora* Abdel-Wahab et al. 2010 *vide* Réblová et al. 2016), *Juncigenaceae*, *Torpedosporales*, *Sordariomycetes*, two species, type: *J. adarca* Kohlm., Volkm.-Kohlm. & O.E. Erikss., asexual morph *Moheitospora*, saprobes, marine, widespread, see Abdel-Wahab et al. (2010, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Junctospora Minter & Hol.-Jech. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *J. pulchra* Minter & Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species IMI 243573, needs generic revision.

Junewangia W.A. Baker & Morgan-Jones 2002, *Ascomycota* genera *incertae sedis*, four species, type: *J. sphaerospora* W.A. Baker & Morgan-Jones, sexual morph unknown,

saprobies, terrestrial, see Zhao et al. (2011; outline), cultures and sequences are available, holotype of type species AUA.

Kabatia Bubák. 1904, *Ascomycota genera incertae sedis*, ten species, type: *K. latemarensis* Bubák, coelomycetous, pathogen, terrestrial, Armenia, Canada, China, Czechoslovakia, Germany, Italy, Japan, Poland, Russia, Spain, Scotland, Switzerland, Turkey, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with *Leptothyrium*, sequences are unavailable, holotype of type: IMI 213594, needs generic revision.

Kabatiella Bubák 1907, *Aureobasidiaceae, Dothideales, Dothideomycetes*, 18 species, type: *K. microsticta* Bubák, hyphomycetous, sexual morph unknown, saprobies, pathogen, terrestrial, worldwide, see Simon et al. (2009; DNA), Seifert et al. (2011; morphology), Bai et al. (2012; pathogens), Bills et al. (2012; new species), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Kabatiella Bubák. 1907, *Dothideales genera incertae sedis, Dothideomycetes*, c. 15 species, type: *K. microsticta* Bubák, hyphomycetous, saprobies, pathogen, endophyte, epiphyte, terrestrial, worldwide, Seifert et al. (2011; morphology), Bills et al. (2012; morphology and phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with *Aureobasidium*, cultures and sequences are available but lacks for the type species, needs generic revision.

Kabatina R. Schneid. & Arx 1966, *Dothideaceae, Dothideales, Dothideomycetes*, five species, type: *K. thujae* R. Schneid. & Arx, hyphomycetous, sexual morph unknown, saprobies, pathogen, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; accepted as a genus in *Dothideaceae*), cultures and sequences are available, needs generic revision.

Kacosphaeria Speg. 1887, *Calosphaeriaceae, Calosphaeriales, Sordariomycetes*, one species, type: *Kacosphaeria antarctica* Speg., asexual morph unknown, from living leaves, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

Kaernefeltia Thell & Goward 1996, *Parmeliaceae, Lecanorales, Lecanoromycetes*, two species, type: *K. californica* (Tuck.) A. Thell & Goward, lichenized, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Herrera-Campos et al. (2016; Mexico), Lücking et al. (2016; classification), cultures and sequences are available.

Kaernefia S.Y.Kondr., Elix, A.Thell & Hur 2013, *Teloschistaceae, Teloschistales, Lecanoromycetes*, three species, type: *K. kaernefeltii* (S.Y. Kondr., Elix & A. Thell) S.Y. Kondr., A.Thell, Elix, J. Kim, A.S. Kondr. & J.-S. Hur, lichenized, Australia, see Kondratyuk et al. (2013; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available.

Kainomyces Thaxt. 1901, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *K. isomali* Thaxt., asexual morph unknown, biotrophic, terrestrial, Western Africa, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Kalaallia Alstrup & D. Hawksw. 1990, *Dacampiaceae, Dothideomycetes families incertae sedis*, one genus, type: *K. reactiva* Alstrup & D. Hawksw., on lichens, Europe, see Etayo and Sancho (2008; synonym of *Opegrapha, Roccellaceae*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), cultures and sequences are unavailable, holotype of type: C.

Kalaharituber Trappe & Kagan-Zur 2005, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *K. pfeilii* (Henn.) Trappe & Kagan-Zur, mycorrhizal, terrestrial, see Adeleke and Dames (2014; interaction with bacteria), Trappe et al. (2008; desert truffles), Chaturvedi et al. (2015; antioxidant property), cultures and sequences are available, holotype and ex-type of type species unavailable.

Kalamarospora G. Delgado 2010 [2011], *Ascomycota* genera *incertae sedis*, one species, type: *K. multiflagellata* G. Delgado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: BPI 879811A.

Kalapuya M.J. Trappe, Trappe & Bonito 2010, *Morchellaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *K. brunnea* M.J. Trappe, Trappe & Bonito, asexual morph unknown, epigeous, saprobes, mycorrhizal, terrestrial, Italy, USA, see Trappe et al. (2010; DNA, phylogeny), Jaklitsch et al. (2016; accepted as a genus in *Morchellaceae*), cultures and sequences are available.

Kalbiana Henssen 1988, *Verrucariales* genera *incertae sedis*, *Eurotiomycetes*, one species, type: *K. brasiliensis* Henssen, lichenized, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Kalbographa Lücking 2007, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *K. caracasana* (Müll. Arg.) Lücking, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Kalb et al. (2009; Thailand), Plata et al. (2012a; placed in family), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are available, holotype of type species unavailable.

Kalchbrenneriella Diederich & M. S. Christ. 2002, *Ascomycota* genera *incertae sedis*, one species, type: *K. cyanescens* (Kalchbr.) Diederich & M.S. Christ., hyphomycetous, sexual morph unknown, lichenicolous, non-lichenized, terrestrial, Europe, North America and Papua New Guinea, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Joshi et al. (2016; India), sequences are unavailable.

Kaleidosporium Van Warmelo & B. Sutton 1981, *Ascomycota* genera *incertae sedis*, one species, type: *K. fenestratum* (Ellis & Everh.) Van Warmelo & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; morphology), cultures and sequences are unavailable.

Kallichroma Kohlm. & Volkm.-Kohlm. 1993, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, type: *K. tethys* (Kohlm. & E. Kohlm.) Kohlm. & Volkm.-Kohlm., two species, asexual morph unknown, saprobes, terrestrial, aquatic, temperate and tropical regions of the Atlantic, Indian and Pacific Oceans and east coast of Australia, see Dethoup et al. (2009; Thailand), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), Abdel-Wahab et al. (2016; new species, phylogeny), cultures and sequences are available.

Kallistoskypha Pfister, Agnello, Lantieri & LoBuglio 2013, *Caloscyphaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *K. incarnata* (Duvernoy & Maire) Pfister, Agnello, Lantieri & LoBuglio, on soil associated with *Eucalyptus*, Mediterranean region, see Pfister et al. (2013; proposed genera), sequences are unavailable.

Kalmusia Niessl 1872 (= *Dendrothyrium* Verkley et al. 2013 *fide* Ariyawansa et al. 2014; Wijayawardene et al. 2014), *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 15 species, type: *K. ebuli* Niessl, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genera in *Didymosphaeriaceae*), Ariyawansa et al. (2014; taxonomy, phylogeny), Wijayawardene et al.

(2014, 2016; phylogeny, taxonomy, outline, nomenclature), Zhang et al. (2014; neotypified *Kalmusia ebuli*), Liu et al. (2015; new species, Italy), Tanaka et al. (2015; phylogeny), cultures and sequences are available, neotype and ex-neotype culture for type: BJFC 200201, CBS 123120 (*vide* Zhang et al. 2014).

Kamatella Anahosur 1969, *Ascomycota* genera *incertae sedis*, one species, type: *K. indica* Anahosur, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, India, see Wijayawardene et al. (2012, 2016, 2017; outline, morphology), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type species unavailable.

Kameshwaromyces Kamal, R.K. Verma & Morgan-Jones 1986, *Ascomycota* genera *incertae sedis*, two species, type: *K. globosus* Kamal, R.K. Verma & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Verma et al. (2008; new species, India), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Kananascus Nag Raj 1984, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, three species, type: *K. verrucisporus* Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Kantvilasia P.M. McCarthy, Elix & Sérus. 2000, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *K. hians* P.M. McCarthy, Elix & Sérus., lichenized, Australia, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable, holotype of type species HO 445410.

Kapooria J. Reid & C. Booth 1989, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *K. musarum* (J.N. Kapoor) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type species unknown, needs generic revision.

Karschia Körb. 1865, *Asterinales* genera *incertae sedis*, *Dothideomycetes*, four species, type: *K. talcophila* (Ach.) Körb., asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Lichenotheliaceae*), Ertz and Diederich (2015; phylogeny), cultures and sequences are available.

Karstenella Harmaja 1969, *Karstenellaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *K. vernalis* Harmaja, saprobes, terrestrial, Europe (Finland) and North America (New Mexico), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pfister et al. (2013; genus accepted), cultures and sequences are available, holotype of type species unavailable.

Karstenia Fr. 1885, *Rhytismatales* genera *incertae sedis*, *Leotiomycetes*, ten species, type: *K. sorbina* (P. Karst.) P. Karst., asexual morph unknown, saprobes, Europe, USA, see Lumbsch and Huhndorf (2010; outline), Baral (2015; new combination), sequences are unavailable, holotype of type species unavailable, needs generic revision.

Karsteniomyces D. Hawksw. 1980, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *K. peltigerae* (P. Karst.) D. Hawksw., asexual macroconidial morphs of *Scutula* Tul. (Wedin et al. 2007), lichenicolous, widespread, see Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of type species H-Karst 2041.

Karstenula Sp. 1879, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 16 species, type: *K. rhodostoma* (Alb. & Schwein.) Sp., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted in

Didymosphaeriaceae), Hyde et al. (2013; accepted in *Didymosphaeriaceae*), Ariyawansa et al. (2014; taxonomy, accepted in *Didymosphaeriaceae*, phylogeny), Wijayawardene et al. (2014; outline), Tanaka et al. (2015; DNA, phylogeny), holotype of the type species PH 01048835 (holotype of *Sphaeria rhodostoma*), cultures available for type species CBS 690.94, CBS 691.94.

Kashiwadia S.Y.Kondr., L.Lökös & Hur 2014, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *K. orientalis* (Kashiw.) SY Kondr., L. Lökös et J.-S. Hur, lichenized, eastern Asia, see Kondratyuk et al. (2014c; taxonomy, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Kastanostachys L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *K. aterrima* (Fuckel) L. Lombard & Crous, asexual morph hyphomycetous, from forest soil, terrestrial, Czech Republic, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype and ex-epitype culture of the type: PRM 934970, CBS 101310.

Kathistes Malloch & M. Blackw. 1990, *Kathistaceae*, *Ophiostomatales*, *Sordariomycetes*, type: *K. calyculata* Malloch & M. Blackw., three species, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences and cultures are available (unpublished), holotype of type species TRTC 51145.

Katumotoa Kaz. Tanaka & Y. Harada 2005, *Lentitheciaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *K. bambusicola* Kaz. Tanaka & Y. Harada, asexual morph unknown, saprobes, terrestrial, Japan, see Tanaka et al. (2009, 2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type species HHUF 28661, JCM 13131.

Kazachstania Zubkova 1971, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, 35 species, type: *K. viticola* Zubkova, asexual reproduction is by multilateral budding, saprophytic, but a few species are opportunistic pathogens of mammals, in soil, maize silage, waste water, soft drinks, fermented foods, tree fluxes, feces, infected mammals, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Keinstirschia J. Reid & C. Booth 1989, *Diaporthales incertae sedis*, *Sordariomycetes*, one species, type: *K. megalosperma* (Kirschst.) J. Reid & C. Booth, terrestrial, saprobes, Germany, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type species (see MBT#133497), needs generic revision.

Keissleriella Höhn. 1919, *Lentitheciaceae*, *Pleosporales*, *Dothideomycetes*, c. 34, type: *K. aesculi* (Höhn.) Höhn., asexual morph dendrophoma-like, saprobes, terrestrial, worldwide, Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in *Lentitheciaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (2013; outline, accepted as a genus in *Lentitheciaceae*), Crous et al. (2014; new species, The Netherlands), Ariyawansa et al. (2015; new species), Liu et al. (2015; new species, Italy), Tanaka et al. (2015; new species, phylogeny), Thambugala et al. (2016; new species, Italy), cultures and sequences are available.

Keissleriomyces D. Hawksw. 1981, *Ascomycota genera incertae sedis*, one species, type: *K. sansteadeans* (Keissl.) D. Hawksw., lichenicolous, Europe, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species W 1921/185.

Kellermania Ellis & Everh. 1885 (= *Planistromella* A.W. Ramaley 1993 *vide* Wijayawardene et al. 2014; Rossman et al. 2015), *Planistromellaceae*, *Botryosphaeriales*, *Dothideomycetes*, type: *K. yuccigena* Ellis & Everh., coelomycetous, sexual morph *Planistromella*, saprobes, terrestrial, worldwide, see Minnis et al. (2012; taxonomy, phylogeny), Wijayawardene et al.

(2012, 2014, 2017; outline, nomenclature), Hyde et al. (2013; taxonomy), Monkai et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Rossmann et al. (2015; nomenclature), cultures and sequences are available, needs generic revision.

Kendrickomyces B. Sutton, V.G. Rao & Mhaskar 1976, *Ascomycota* genera *incertae sedis*, two species, type: *K. indicus* B. Sutton, V.G. Rao & Mhaskar, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of the type species IMI 190465.

Kensinjinia J. Reid & C. Booth 1989, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *K. umbrina* (Jenkins) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Kephartia R.C. Harris & Lendemer 2013, *Ascomycota* genera *incertae sedis*, two species, type: *K. crystalligera* R.C. Harris & Lendemer, asexual morph unknown, lichenized, terrestrial, USA, see Lendemer et al. (2013; taxonomy), sequences are unavailable, holotype of type: NY(26883).

Kernia Nieuwl. 1916, *Microascaceae*, *Microascales*, *Sordariomycetes*, five species, type: *K. nitida* (Sacc.) Nieuwl., asexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype material of type: CBS H-13743, needs generic revision.

Kerniomyces Toro 1939, *Schizothyriaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *K. costi* Toro, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Ketubakia Kamat, Varghese & V.G. Rao, 1987, *Ascomycota* genera *incertae sedis*, one species, type: *K. indica* Kamat, Varghese & V.G. Rao, hyphomycetous, sexual morph unknown, saprobes, lignicolous, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Kiehlia Viégas 1944, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *K. obscura* Viégas, asexual morph unknown, epiphytes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, Holotype of type species IACM.

Kiliophora Kuthub. & Nawawi 1993, *Ascomycota* genera *incertae sedis*, three species, type: *K. fusispora* Kuthub. & Nawawi, hyphomycetous, sexual morph unknown, saprobes, foliicolous, Ivory Coast, Malaysia and Vietnam, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hidayat et al. (2014; phylogeny, placed in *Amphisphaeriaceae*), Rajeshkumar et al. (2016; family needs revision), Cultures and sequences are available, holotype of type species IMI 355816.

Kimbropezia Korf & W.Y. Zhuang 1991, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *K. campestris* Korf & W.Y. Zhuang, saprobes, terrestrial, Canary Island, cultures and sequences are available, holotype of type: CUP-MM 2762.

Kionocephala P.M. Kirk 1986, *Ascomycota* genera *incertae sedis*, one species, type: *K. catenulata* (M.B. Ellis) P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, lignicolous, UK, Russia, Cuba, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Kionochaeta P.M. Kirk & B. Sutton 1986, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, seven species, type: *K. ramifera* (Matsush.) P.M. Kirk & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, holotype of the type: IMI188783.

Kirschsteiniothelia D. Hawksw. 1985 (= *Dendryphiopsis* S. Hughes 1953 *vide* Wijayawardene et al. 2014; Rossmann et al. 2015), *Kirschsteiniotheliaceae*, *Dothideomycetes* family *incertae sedis*, 19 species, type: *K. aethiops* (Berk. & Curtis) D. Hawksw., asexual morph *Dendryphiopsis*, on wood, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes* genera *incertae sedis*), Boonmee et al. (2012; phylogeny), Hyde et al. (2013; accepted as a genus in *Kirschsteiniotheliaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Rossmann et al. (2015; nomenclature), Jaklitsch et al. (2016; position), cultures and sequences are available, holotype of type species K(M), genus remains polyphyletic.

Kirstenboschia Quaedvlieg, Verkley & Crous 2013, *Ascomycota* genera *incertae sedis*, one species, type: *K. diospyri* Quaedvl., Verkley & Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Quaedvlieg et al. (2013; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of the type: CBS H-21326, CBS 134911.

Kitesporella Jheng & K. L. Pang 2012, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *K. keelungensis* J.S. Jheng & K.L. Pang, asexual morph unknown, saprobes, marine, Taiwan, see Pang and Jheng (2012a; placement in *Halosphaeriaceae*), Maharachchikumbura et al. (2015, 2016; genus accepted), sequence are unavailable, holotype of type: BBH30190.

Klasterskya Petr. 1940, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, one species, type: *K. acuum* (Mouton) Petr., asexual morph hyalorhinoclaadiella-like, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Kleidiomyces Thaxt. 1908, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *K. furcillatus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic, terrestrial, America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Kluyveromyces van der Walt 1971, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, eight species, type: *K. marxianus* (E.C. Hansen) van der Walt, asexual reproduction is by multilateral budding, saprophytic, sea water, *Drosophila* spp., mushrooms, tree fluxes, cacti, dairy products, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Kmetia Bres. & Sacc. 1902, *Ascomycota* genera *incertae sedis*, one species, type: *K. exigua* Bres. & Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Kmetiopsis Bat. & Peres 1960, *Ascomycota* genera *incertae sedis*, one species, type: *K. hymenaeae* Bat. & Peres, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Knemiothyrium Bat. & J.L. Bezerra 1960, *Ascomycota* genera *incertae sedis*, one species, type: *K. weldenii* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes,

terrestrial, Jamaica, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Knoxdavesia M.J. Wingf., P.S. van Wyk & Marasas 1988, *Microascaceae*, *Microascales*, *Sordariomycetes*, two species, type: *K. proteae* M.J. Wingf., P.S. van Wyk & Marasas, hyphomycetous, sexual morph unknown, coprophilous, terrestrial, South Africa, see Lumbsch and Huhndorf (2010; outline), de Beer et al. (2013; new species), Kirk et al. (2013; genus accepted), Aylward et al. (2014, 2015; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of the type: PREM48928, cultures and sequences are available.

Knufia L.J. Hutchison & Unter. 1996, *Trichomeriaceae*, *Chaetothyriales*, *Eurotiomycetes*, 13 species, type: *K. cryptophialidica* L.J. Hutchinson & Unter., hyphomycetous, mostly terrestrial, associated with soil, bark, rock surfaces and human skin, America, Asia and Europe, see Li et al. (2008; human infection, as “*Coniosporium*”), Tsuneda et al. (2011; outline), Seifert et al. (2011; morphology), Untereiner et al. (2011; phylogeny, sexual morph), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2013b; new species), Réblová et al. (2013; phylogeny, new combination), Isola et al. (2015; new species), holotype and ex-isotype strain of the type: TRTC 51492, DAOM 216555.

Kochiella Sakayaroj, K.L. Pang & E.B.G. Jones 2011, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *K. crispa* (Kohlm.) Sakay., K.L. Pang & E.B.G. Jones, asexual morph unknown, saprobes, marine, Denmark, Hawaii, Japan, Liberia, Martinique, Taiwan, see Sakayaroj et al. (2011; morphology, phylogeny), cultures and sequences are available.

Kockiozyma Jindam., Yukphan, & Y. Yamada 2012, *Lipomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *K. suomiensis* (M.T. Sm., Van der Walt & Y. Yamada) Jindam., Yukphan & Y. Yamada, saprophytic, see Jindamorakot et al. (2012; taxonomy).

Kodamaea Y. Yamada, T. Suzuki, Matsuda & Mikata emend. Rosa, Lachance, Starmer, Barker, Bowles & Schlag-Edler 1999, *Metschnikowiaceae*, *Saccharomycetales*, *Saccharomycetes*, seven species, type: *K. ohmeri* (Etchells & T.A. Bell) Y. Yamada, Suzuki, M. Matsuda & Mikata, saprophytic, on flowers of morning glory, (*Hibiscus* spp.) and other plants including cacti, various beetles, on *Drosophila*, pickle brines, see Lumbsch and Huhndorf (2010; outline), Freitas et al. (2013; DNA), Kirk et al. (2013; genus accepted), sequences are available.

Kodonospora K. Ando 1993, *Ascomycota* genera *incertae sedis*, one species, type: *K. tetracolumnaris* K. Ando, hyphomycetous, sexual morph unknown, saprobes, on leaves, Japan, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), sequences are unavailable, holotype of type: TNS F-176499.

Koerberia A. Massal. 1854, *Koerberiaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *K. biformis* A. Massal., lichenized, Europe, Asia, USA,?, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Placynthiaceae*), Kirk et al. (2013; genus accepted), Spribille and Muggia (2013, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

Koerberiella Stein 1879, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, two species, type: *K. wimmeriana* (Körb.) Stein, lichenized, Europe, North America, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Schmull et al. (2011; phylogeny), Lücking et al. 2016 (classification), cultures and sequences are available, holotype of type species unavailable.

Kohlmeyeriella E. B. G. Jones, R. G. Johnson & S. T. Moss 1983, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, two species, type: *K. tubulata* (Kohlm.) E.B.G. Jones, R.G. Johnson & S.T. Moss, asexual morph unknown, saprobes, marine, worldwide, see Lumbsch

and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; genus accepted), cultures and sequences are available.

Kohlmeyeriopsis S. Klaubauf, M.H. Lebrun & P.W. Crous 2014, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *K. medullaris* (Kohlm., Volkm.-Kohlm. & O.E. Erikss.) Klaubauf, Lebrun & Crous, holomorph, asexual morph hyphomycetous, saprobes, marine, USA, see Abdel-Wahab et al. (2014; phylogeny), Klaubauf et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; genus accepted), cultures and sequences are available, ex-type culture of type species unavailable, holotype of type species J.K. 5528 = 01315596-99 = 01315600-05, NYBG.

Kohninia Holst-Jensen, Vrålstad & T. Schumach. 2004, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *K. linnaeicola* Holst-Jensen, Vrålstad & T. Schumach., asexual morph unknown, saprobes, terrestrial, Norway, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; phylogeny), cultures and sequences are available.

Kolletes Kohlm. & Volkm.-Kohlm. 2005, *Ascomycota* genera *incertae sedis*, one species, type: *K. undulatus* Kohlm. & Volkm.-Kohlm., hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; not accepted as valid genus), cultures and sequences are unavailable, holotype of the type: IMS, Kohlmeyer 5728, needs generic revision.

Komagataella Y. Yamada, Matsuda, Maeda & Mikata 1995, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, six species, type: *K. pastoris* (Guilliermond) Y. Yamada, M. Matsuda, K. Maeda & Mikata, asexual reproduction is by multilateral budding, saprophytic, fluxes from various trees and from rotted wood, worldwide, see Kurtzman (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Komposocypha Pfister 1989, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *K. chudei* (Pat. ex Le Gal) Pfister, saprobes, on leaves, fruits and twigs, tropical and subtropical, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Konenia Hara 1913, *Sordariomycetes* genera *incertae sedis*, two species, type: *K. bambusae* Hara, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Konradia Racib. 1900, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *K. bambusina* Racib., asexual morph unknown, saprobe, terrestrial, Java, Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Kontospora A. Roldán, Honrubia & Marvanová 1990, *Ascomycota* genera *incertae sedis*, one species, type: *K. halophila* A. Roldán, Honrubia & Marvanová, hyphomycetous, sexual morph unknown, saprobes, aquatic, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Koorchaloma Subram. 1953, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, nine species, type: *K. madreeya* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread (pantropical), see Allegrucci et al. (2011; key to species), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable for type species, needs generic revision.

Koorchalomella Chona, Munjal & J.N. Kapoor 1958, *Ascomycota* genera *incertae sedis*, one species, type: *K. oryzae* Chona, Munjal & J.N. Kapoor, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Koordersiella Höhn. 1909 (= *Hansfordiellopsis* Deighton 1960; *Ascohansfordiellopsis* D. Hawksw. 1979 *vide* Rossman et al. 2016), *Dothideomycetes* genera *incertae sedis*, three species, type: *K. javanica* Höhn., asexual morph unknown, lichenicolous, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Koralionastes Kohlm. & Volkm.-Kohlm. 1987, *Koralionastetaceae*, *Koralionastetales*, *Sordariomycetes*, five species, type: *K. ovalis* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Campbell et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; genus accepted), holotype of type species J.K. 4965a, cultures and sequences are available.

Korfia J. Reid & Cain 1963, *Hemiphacidiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *K. tsugae* (E.K. Cash & R.W. Davidson) J. Reid & Cain, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type species unavailable.

Korfiella D.C. Pant & V. P. Tewari 1970, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *K. karnika* D.C. Pant & V.P. Tewari, saprobes, on conifer needles, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Korfomyces Iturr. & D. Hawksw. 2004, *Lecanoromycetes* genera *incertae sedis*, one species, type: *K. gelatinosus* Iturr. & D. Hawksw. (as "gelatinosum"), asexual morph unknown, on resin and wood, Venezuela, see Lumbsch and Huhndorf (2010; outline), Jaklitsch et al. (2016; position), cultures and sequences are unavailable, holotype of type: VEN Iturriaga 615.

Korunomyces Hodges & F.A. Ferreira 1981, *Ascomycota* genera *incertae sedis*, three species, type: *K. terminaliae* Hodges & F.A. Ferreira, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, ex-type of type: CBS 224.80, needs generic revision.

Kostermansinda Rifai 1968, *Ascomycota* genera *incertae sedis*, three species, type: *K. magna* (Boedijn) Rifai, hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Kostermansindiopsis R.F. Castañeda 1986, *Ascomycota* genera *incertae sedis*, one species, type: *K. theobromae* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Kotlabaea Svrcek 1969, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, twelve species, type: *K. deformis* (P. Karst.) Svrcek, saprobes, terrestrial, North temperate, see Benkert (2008; revision), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lindemann et al. (2015; transferred species to *Byssonectria* and *Pseudoboubovia*), cultures and sequences are available.

Kramabeeja G.V. Rao & K.A. Reddy 1981, *Ascomycota* genera *incertae sedis*, one species, type: *K. shrungashakha* G.V. Rao & K.A. Reddy, hyphomycetous, sexual morph unknown, saprobes, on dead rachis of *Areca*, India, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Kramasamuha Subram. & Vittal 1973, *Ascomycota* genera *incertae sedis*, one species, type: *K. sibika* Subram. & Vittal, hyphomycetous, sexual morph unknown, saprobes, on leaves, widespread, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Kraurogymnocarpa Udagawa & Uchiy. 1999, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, two species, type: *K. lenticulispota* Udagawa & Uchiy., asexual morphs unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Sigler et al. (2013; DNA), cultures and sequences are available, needs generic revision.

Kravtzevia Schwarzman 1961, *Sordariomycetes* genera *incertae sedis*, three species, type: *K. halimodendri* Schwarzman, asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Kregervanrija Kurtzman 2006, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, three species, type: *K. fluxuum* (Phaff & E.P. Knapp) Kurtzman, asexual reproduction multilateral budding, saprophytic, on tree fluxes, apples, apple juice, wine and other fermented beverages, pickle brines, Europe and North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Kreiseliella U. Braun 1991, *Ascomycota* genera *incertae sedis*, one species, type: *K. typhae* (Vasyag.) U. Braun, coelomycetous, terrestrial, foliicolous, leaf-spotting, Asia (Kazakhstan), see Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type species AA (Kazakhstan, South Kazakhstan Region, Shymkent, Tokursaj, 28 km away from Makhtaly, on *Typha latifolia*, 30 Jul. 1960, M.P. Vasyagina), cultures and sequences are unavailable, needs generic revision.

Kretzschmaria Fr. 1849, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, more than 50 species, type: *K. clavus* (Fr.) Sacc., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Daranagama et al. (2017 morphology, taxonomy, key), sequences are available but lacks for the type species.

Kretzschmariella Viégas 1944, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *K. culmorum* (Cooke) Y.-M. Ju & J. D. Rogers, asexual morph present, saprobes, Thailand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable.

Kriegeriella Höhn. 1918, *Dothideomycetes* genera *incertae sedis*, four species, type: *K. mirabilis* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline, placed in *Pleosporaceae*), Wu et al. (2011; classification), Zhang et al. (2012; placed in *Microthyriaceae*), Hyde et al. (2013; classification), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014; classification), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, generic revision is essential

Krishnamyces Hosag. 2003, *Ascomycota* genera *incertae sedis*, one species, type: *K. indica* Hosag., ?hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see

Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Krogia Timdal 2002, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *K. coralloides* Timdal, lichenized, Asia, Africa, see Timdal (2009; new species), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type species O L21909.

Kroswia P.M.Jørg. 2002, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, four species, type: *K. crystallifera* P.M. Jørg., lichenized, Asia, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2015; China), Magain and Sérusiaux (2015; nomenclature), Lücking et al. 2016 (classification), Cultures and sequences are available, holotype of type species US Hale 43843.

Kruphaimyces Thaxt. 1931, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *K. trochoidei* Thaxt., asexual morph unknown, biotrophic, terrestrial, Fiji, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Kuehniella G.F. Orr 1976, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, two species, type: *K. racovitzae* (Lagarde) G.F. Orr, asexual morph unknown, saprobes, terrestrial, Northern America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Kullhemia P. Karst. 1878, *Dothideomycetes* genera *incertae sedis*, three species, type: *K. moriformis* (Ach.) P. Karst., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Kumanasamuha P.Rag. Rao & D. Rao 1964, *Ascomycota* genera *incertae sedis*, four species, type: *K. sundara* P.Rag. Rao & D. Rao, hyphomycetous, sexual morph unknown, saprobes, lignicolous, widespread, see Nagao et al. (2009; new species), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Kundalinella Hande & Subhedar 2001, *Ascomycota* genera *incertae sedis*, one species, type: *K. raoella* Hande & Subhedar, asexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Kuraishia Y. Yamada, Maeda & Mikata 1994, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, seven species, type: *K. capsulata* (Wickerham) Y. Yamada, K. Maeda & Mikata, asexual reproduction is by multilateral budding, saprophytic, on insect frass, rotted wood, soil, mushroom, worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Kurssanovia Kravtzev 1955, *Sordariomycetes* genera *incertae sedis*, three species, type: *K. vassiljevskii* Kravtzev, asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Kurtzmaniella Lachance & Starmer 2008, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, twelve species, type: *K. cleridarum* Lachance & Starmer, in asexual reproduction cells produced by asexual reproduction are ovoid to ellipsoid and form by multilateral budding, saprophytic, one species is an opportunistic human pathogen, cactus flowers, mushrooms, tree fluxes, beetles, rotted wood, insect frass, apple cider, rotted fruit, olives, soil, seawater, human feces, sputum, worldwide, see Lumbsch and Huhndorf (2010; outline), Lachance et al. (2013; DNA), sequences are available.

Kusanobotrys Henn. 1904, *Dothideomycetes* genera *incertae sedis*, three species, type: *K. bambusae* Henn., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Kylindria DiCosmo, S.M. Berch & W.B. Kendr. 1983, *Reticulascaceae*, *Glomerellales*, *Sordariomycetes*, nine species, type: *K. triseptata* (Matsush.) DiCosmo, S.M. Berch & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Zhang et al. (2010; new species, China), Réblová et al. (2011; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for type species.

Kyphomyces I.I. Tav. 1985, *Laboulbeniales*, *Laboulbeniomycetes*, 14 species, type: *K. ansatus* (Thaxt.) I.I. Tav., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Kyphophora B. Sutton 1991, *Ascomycota* genera *incertae sedis*, one species, type: *K. avicenniae* B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Laboulbenia Mont. & C.P. Robin 1853, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, c. 625 species, type: *L. rougetii* Mont. & C.P. Robin, asexual morph unknown, biotrophic, hosts are diverse, including *Acari*, *Blattodea*, *Coleoptera* (*Carabidae*, *Chrysomelidae*, *Curculionidae*, *Erotylidae*, *Gyrinidae*, *Staphylinidae*, and others), *Diptera*, *Hemiptera*, *Hymenoptera* (*Formicidae*), and *Orthoptera* (*Gryllotalpidae*), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015a; DNA), Rossi et al. (2016; morphology), Wang et al. (2016; morphology), cultures and sequences are available but lacks for the type species, needs generic revision.

Laboulbeniopsis Thaxt. 1920, *Laboulbeniomycetes* genera *incertae sedis*, one species, type: *L. termitarius* Thaxt., asexual morph unknown, parasitic on termites, terrestrial, North America, Caribbean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Labrocarpon Pérez-Ortega & Etayo 2010, *Asterinales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *L. canariense* (D. Hawksw.) Etayo & Pérez-Ortega, asexual morph unknown, lichenicolous on *Pertusaria* species, parasymbiont, Canary Islands, Madeira, mainland Spain and Portugal, Italy and Greece, see Pérez-Ortega and Etayo (2010; genus proposed), Ertz and Diederich (2015, phylogeny), cultures and sequences are available, holotype of type: IMI 259313.

Laburnicola Wanasinghe, Camporesi, E.B.G. Jones & K.D. Hyde 2016, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *L. muriformis* Wanasinghe, E. Camporesi, E.B.G. Jones & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Europe, Russia, see Wanasinghe et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of type: MFLU 16-0230, MFLUCC 16-0290.

Labyrinthina Malcolm, Elix & OweLarsson 1995, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *L. implexa* Malcolm, Elix & Owe-Larss., lichenized, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type species CHR 470232.

Labyrinthomyces Boedijn 1939, *Tuberaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *L. steenisii* Boedijn, truffles, ectomycorrhizal, terrestrial, Australia, see Trappe et al. (2008;

desert truffles), Vellinga et al. (2009; distribution pattern), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Lacazia Taborda, V.A. Taborda & McGinnis 1999, *Onygenales*, genera *incertae sedis*, *Eurotiomycetes*, two species, type: *L. lobo* Taborda, V.A. Taborda & McGinnis, asexual morph unknown, on humans and animals, terrestrial, neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Lacellina Sacc. 1913, *Ascomycota* genera *incertae sedis*, three species, type: *L. graminicola* (Berk. & Broome) Petch, hyphomycetous, sexual morph unknown, on plants, widespread (pantropical), see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lacellinopsis Subram. 1953, *Ascomycota* genera *incertae sedis*, three species, type: *L. sacchari* Subram., hyphomycetous, sexual morph unknown, saprobes, on leaves (grasses) and litter, widespread (pantropical), see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

Lachancea Kurtzman 2003, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, ten species, type: *L. thermotolerans* (Filippov) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, tree fluxes, rotted wood, alpechin, fruit, fruit flies, spoiled beverages, soil, seawater near mangroves, worldwide, see Lumbsch and Huhndorf (2010; outline), sequences are available.

Lachnellula P. Karst. 1884, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, c. 40 species, type: *L. chrysophthalma* (Pers.) P. Karst., sexual morph unknown, saprobes, pathogen, terrestrial, widespread (temperate), see Lumbsch and Huhndorf (2010; outline), Whitton et al. (2012; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type species, needs generic revision.

Lachnellula P. Karst. 1884, *Lachnaceae*, *Helotiales*, *Leotiomycetes*, 25 species, type: *L. chrysophthalma* (Pers.) P. Karst. L., asexual morph unknown, some species pathogenic (canker), others saprobes on bark, wood or resin of conifers, widespread, temperate and tropical areas, see Hosoya et al. (2010; cultures, phylogeny), Kirk et al. (2013; genus accepted), Shumacher et al. (2015; distribution), cultures and sequences are available, needs generic revision.

Lachnodoichium Marchal 1895, *Ascomycota* genera *incertae sedis*, one species, type: *L. candidum* Marchal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lachnum Retz. 1769, *Lachnaceae*, *Helotiales*, *Leotiomycetes*, c. 50 species, type: *L. agaricinum* Retz., asexual morph unknown, saprobes on ferns, bamboo culms, herbs, herbaceous stems, cones, cupules, wood or leaves of palms, coniferous or broadleaved trees, cosmopolitan, see Nagao (2008; Japan), Hosoya et al. (2010; phylogeny, cultures), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Laciniocladium Petri 1917, *Ascomycota* genera *incertae sedis*, one species, type: *L. candidum* Marchal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Laciniocladium Petri 1917, *Ascomycota* genera *incertae sedis*, one species, type: *L. castaneae* Petri, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see

Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lacrymospora Aptroot 1991, *Requienellaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *L. parasitica* Aptroot, asexual morph unknown, lichenicolous, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: herb. Aptroot, Aptroot and Hensen 12613.

Lacunospora Cailleux 1969, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, two species, type: *L. stercoraria* Cailleux, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Laetinaevia Nannf. 1932, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, c. 15 species, type: *L. lapponica* (Nannf.) Nannf., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Baral and Rama (2015; DNA), cultures and sequences are available but lacks for type species, needs generic revision.

Laeviomyces D. Hawksw. 1981, *Ascomycota genera incertae sedis*, four species, type: *L. pertusariicola* (Nyl.) D. Hawksw., sexual morphs unknown, lichenicolous, terricolous, widespread, see Kirk et al. (2013; genus accepted), Zhurbenko and Otte (2012, 2016; genus accepted, illustrations), cultures and sequences are unavailable, holotype of type species H-Nyl 23576.

Lagenulopsis Fitzp. 1942, *Coryneliaceae*, *Coryneliales*, *Eurotiomycetes*, one species, type: *Lagenulopsis bispora* Fitzp., asexual morph unknown, saprobes, terrestrial, Northern America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wood et al. (2016; phylogeny, taxonomy), cultures and sequences are available.

Lahmia Körb. 1861, *Lahmiaceae*, *Lahmiales*, *Incertae sedis*, one species, type: *Lahmia kunzei* Körb., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable.

Lahmiomyces Cif. & Tomas. 1953, *Helotiales genera incertae sedis*, *Leotiomycetes*, one species, type: *L. piceae* Cif. & Tomas., asexual morph unknown, saprobes, terrestrial, Italy, see Lumbsch and Huhndorf (2010; outline), cultures and sequence are unavailable, needs generic revision.

Lambdasporium Matsush. 1971, *Ascomycota genera incertae sedis*, three species, type: *L. wauense* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lambertella Höhn., 1918, *Rutstroemiaceae*, *Helotiales*, *Leotiomycetes*, c. six species, type: *L. corni-maris* Höhn., asexual morph helicodendron-like, terrestrial, aquatic, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Zhao et al. (2013; Japan), Kirk et al. (2013; genus accepted), Galán et al. (2015; phylogeny), sequence data available for ten species, holotype and exatype of type species unavailable..

Lambertellinia Korf & Lizoň 1994, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *L. scutuloides* Korf & Lizoň., asexual morph unknown, saprobes, terrestrial, Norway, see Lumbsch and Huhndorf (2010; outline, listed as *Lambertellina* Korf & Lizon~), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, holotype of type species CUP (JA 2252), needs generic revision.

Lambiella Hertel 1984, *Xylographaceae*, *Trapeliales*, *Lecanoromycetes*, twelve species, type: *L. psephota* (Tuck.) Hertel, lichenized, see Spribille et al. (2014, phylogeny), Resl et al. (2015, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Lambinonia Sérus. & Diederich 2005, *Ascomycota* genera *incertae sedis*, one species, type: *L. strigulae* (Elenkin & Woron.) Sérus. & Diederich, hyphomycetous, sexual morph unknown, lichenicolous, non-lichenized, on foliicolous lichens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable.

Lambro Racib. 1900, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *L. insignis* Racib., asexual morphs unknown, saprobes, terrestrial, Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequence are unavailable, needs generic revision.

Lamproconium (Grove) Grove 1937, *Lamproconiaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *L. desmazieri* (Berk. & Broome) Grove, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), Norphanphoun et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2016; taxonomy), cultures and sequences are available, holotype of type: CBS H-13785, needs generic revision.

Lamprospora De Not. 1864, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, c. 60 species, type: *L. miniata* (P. Crouan & H. Crouan) De Not., parasitic on mosses, worldwide, see Eckstein and Eckstein (2009; Germany), Mann (2009; laccase production), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pradhan et al. (2013; India), Egertova et al. (2015; Czech), cultures and sequences are available, holotype of the type: CBS H-14139.

Lanatosphaera Matzer 1996, *Dothideomycetes* genera *ncertae sedis*, two species, type: *L. porinicola* Matzer, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of the type species GZU, Matzer 1422 & Pelzmann, needs generic revision.

Lanceispora Nakagiri, Okane, Tad. Ito & Katum. 1997, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *L. amphibia* Nakagiri, Okane, Tad. Ito & Katum., asexual morph unknown, endophytic, saprophytic, subtropics, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Amphisphaeriaceae*), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2016; outline), cultures and sequences are available, holotype and ex-type of the type: IFO H-12218, NBRC 32918.

Lanspora K.D. Hyde & E.B.G. Jones 1986, *Ophiostiomatales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *L. coronata* K.D. Hyde & E.B.G. Jones, asexual morph unknown, saprobes, marine, Seychelles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Lanzia Sacc. 1884, *Rutstroemiaceae*, *Helotiales*, *Leotiomycetes*, 55 species, type: *L. flavorufa* (Sacc.) Sacc., asexual morph unknown, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Johnston and Park (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are available but lacks for the type species, holotype of type species unavailable.

Laocoön J.C. David 1997, *Ascomycota* genera *incertae sedis*, one species, type: *L. paradoxus* (Syd. & P. Syd.) J.C. David, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in *Mycosphaerellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline, transferred to *Ascomycota* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Lapidomyces de Hoog & Stielow 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *L. hispanicus* de Hoog & Stielow, hyphomycetous, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy, phylogeny), Quaedvlieg

et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 118355 = TRN500.

Lappodochium Matsush. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *Lappodochium langeniforme* Matsush., hyphomycetous, sexual morph unknown, on soil, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Laquearia Fr. 1849, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, one species, type: *L. sphaeralis* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lareunionomyces Crous & M.J. Wingf. 2016, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *L. syzygii* Crous & M.J. Wingf., hyphomycetous, saprobes, terrestrial, France, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type species CBS H-22623, CPC 26531.

Laricina Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *L. mollis* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Larissia Raitv. 2008, *Incertae sedis*, *Helotiales*, *Leotiomyces*, one species, type: *L. pyrolae* Raitv., asexual morph unknown, saprobes, terrestrial, Russia, see Raitviir (2008; taxonomy), the genus was not listed in any recent outlines or checklists, cultures and sequences are unavailable, holotype of type species TAA-182408.

Lasallia Mérat 1821, *Umbilicariaceae*, *Umbilicariales*, *Lecanoromyces*, 17 species, type: *L. pustulata* (L.) Mérat, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Lasiobolium Ellis & Everh. 1897, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, c. 20 species, type: *L. subflavidum* Ellis & Everh., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type species, needs generic revision.

Lasiobertia Sivan. 1978, *Xylariales* genera *incertae sedis*, *Sordariomyces*, two species, type: *L. africana* Sivan., asexual morph unknown, saprobes, terrestrial, Ghana, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lack for the type species, holotype of the type: IMI 38816.

Lasiobolidium Malloch & Cain 1971, *Pyronemataceae*, *Pezizales*, *Pezizomyces*, seven species, type: *L. spirale* Malloch & Cain, asexual morph unknown, saprobes, on dung, North America, see Doveri et al. (2013; key, Italy), Hansen et al. (2013; polyphyletic genus), cultures and sequences are available.

Lasiobolus Sacc. 1884, *Ascodesmidaceae*, *Pezizales*, *Pezizomyces*, eleven species, type: *L. pilosus* (Fr.) Sacc., coprophilous, sexual morph unknown, saprobes, on herbivore dung, worldwide, see Güngör et al. (2008; proposed family), Chang and Wang (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type: CBS H-13792.

Lasiobotrys Kunze 1823, *Venturiales* genera *incertae sedis*, one species, type: *Lasiobotrys lonicerae* (Fr.) Kunze, asexual morph unknown, saprobes, terrestrial, ulocladium-like, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Hyde et al. (2013) did not accept as a genus in *Venturiaceae*, Zhang et al. (2012; accepted as a genus in

Venturiales genera *incertae sedis*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Lasiodiplodia Ellis & Everh. 1896, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, at least 31 species, type: *L. theobromae* (Pat.) Griffon & Maubl., asexual morph coelomycetous, saprobes, pathogens, terrestrial, worldwide, see Pavlic et al. (2008; new species), Phillips et al. (2008, 2013; taxonomy, phylogeny), Abdollahzadeh et al. (2010; new species), Liu et al. (2012; taxonomy, phylogeny), Úrbez-Torres et al. (2012; new species), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny), Dissanayake et al. (2016; taxonomy), neotype and ex-neotype of the type: CBS H-21411, CBS 164.96 (fide Phillips et al. 2013).

Lasiodiplodiella Zambett 1955, *Ascomycota* genera *incertae sedis*, three species, type: *L. triflorae* (B.B. Higgins) Zambett., coelomycetes, sexual morph unknown, widespread, see Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable.

Lasioloma R.Sant. 1952, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, nine species, type: *L. arachnoideum* (Kremp.) R. Sant., lichenized, Asia, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Lasiomollisia Raitv. & Vesterh. 2006, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *L. phalaridis* Raitv. & Vesterh., asexual morph unknown, saprobes, terrestrial, Sweden, cultures and sequences are unavailable, holotype of the type: TAA (M), Hanson 2003-147.

Lasionectria (Sacc.) Cooke 1884, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, twelve species, type: *L. mantuana* (Sacc.) Cooke, asexual morph acremonium-like, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lechat and Fournier (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Lasiosphaeria Ces. & De Not. 1863, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, 72 species, type: *L. ovina* (Pers.) Ces. & De Not., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Raja et al. (2011; DNA), Kirk et al. (2013; genus accepted), Miller et al. (2014; phylogeny), Kruys et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Bell and Mahoney (2016; new species, phylogeny), cultures available for the type species ANM 1295 (Raja et al. 2011), holotype of type: CBS H-13806.

Lasiosphaeriella Sivan. 1975, *Chaetosphaeriales* genera *incertae sedis*, *Sordariomycetes*, twelve species, type: *L. dennisii* Sivan., asexual morph acremonium-like, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), accepted as *Sordariomycetidae*, genera *incertae sedis*, Huhndorf and Miller (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Lasiosphaeriopsis D. Hawksw. & Sivan. 1980, *Nitschkeaceae*, *Coronophorales*, *Sordariomycetes*, seven species, type: *L. salisburyi* D. Hawksw. & Sivan, asexual morph unknown, lichenicolous, widespread, terrestrial, see Lumbsch & Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: K(M)-IMI 80468.

Lasiosphaeris Clem. 1909 (= *Lasiadelphia* Réblová & W. Gams 2011 fide Maharachchikumbura et al. 2015, 2016; Réblová et al. 2015), *Sordariales* genera *incertae sedis*, , *Sordariomycetes*, three species, type: *L. hispida* (Tode) Clem., asexual morph hyphomycetous, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline),

Kirk et al. (2013; genus accepted), Miller et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2015; nomenclature), cultures available for the type: TL6019, SMH 3336 (Miller and Huhndorf 2004).

Lasiostemma Theiss., Syd. & P. Syd. 1917, *Pseudoperisporiaceae*, *Dothideomycetes*, families *incertae sedis*, five species, type: *L. meliolooides* (Berk. & Ravenel) Theiss., Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Mapook et al. (2016; transferred to *Pseudoperisporiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Lasiostrictella Sherwood 1986, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, one species, type: *L. bambusae* Sherwood, asexual morph unknown, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lasiothyrium Syd. & P. Syd. 1913, *Ascomycota* genera *incertae sedis*, one species, type: *L. cycloschizon* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lasmenia Speg. 1886, *Diaporthales* genera *incertae sedis*, *Sordariomyces*, five species, type: *L. balansae* Speg., coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, South America, Australia, Hong Kong, Philippines, see Serrato-Diaz et al. (2011; DNA), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Lasmeniella Petr. & Syd. 1927, *Ascomycota* genera *incertae sedis*, 13 species, type: *L. guaranitica* (Speg.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lasseria Dennis 1960, *Incertae sedis*, *Helotiales*, *Leotiomyces*, one species, type: *L. chrysophthalma* Dennis, asexual morph unknown, saprobes, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), living cultures and sequences are unavailable, needs generic revision.

Latericonis G.V. Rao, K.A. Reddy & de Hoog 1984, *Ascomycota* genera *incertae sedis*, one species, type: *L. obscura* V. Rao, K.A. Reddy & de Hoog, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lateriramulosa Matsush. 1971, *Ascomycota* genera *incertae sedis*, five species, type: *L. uninflata* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Laterispora Uecker, W.A. Ayers & P.B. Adams 1982, *Ascomycota* genera *incertae sedis*, one species, type: *L. brevirama* Uecker, W.A. Ayers & P.B. Adams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lathagrium (Ach.) Gray 1821, *Collemataceae*, *Peltigerales*, *Lecanoromycetes*, ten species, type: ?*L. nigrescens* (Huds.) Gray, lichenized, North America, Europe, Russia,?, see Otálora et al. (2013a, 2014; phylogeny, review), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type species ?.

Lathraeodiscus Dissing & Sivertsen 1989, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *L. arcticus* Dissing & Sivertsen, on soil with mosses with *Octospora*, *Lamprospora*, *Geopora*, high arctic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species C, isotype TRH.

Latorua Crous 2015, *Latoruaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *L. caligans* (Bat. & H.P. Upadhyay) Crous, hyphomycetous, saprobes, Brazil, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22267, CBS 576.65.

Lauderlindsaya J.C. David & D. Hawksw. 1989, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, three species, type: *L. borreeri* (Tul.) J.C. David & D. Hawksw., some species lichenicolous, some species lichenized, Europe, Japan, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Muggia et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; genus accepted), cultures and sequences are unavailable, lectotype of type species K-Borrer.

Lauriomyces R.F. Castañeda 1990, *Leotiomycetes*, genera *incertae sedis*, five species, type: *L. pulcher* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Crous et al. (2009; DNA, phylogeny), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species, Thailand, accepted as *Ascomycota incertae sedis*), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Lautitia S. Schatz 1984, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *Lautitia danica* (Berl.) S. Schatz, asexual morph unknown, parasites, marine, Denmark, France, UK, USA, see Jones et al. (2009; review), cultures and sequences are unavailable, holotype and ex-type unavailable.

Lautospora K.D. Hyde & E.B.G. Jones 1989, *Lautosporaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *L. gigantea* K.D. Hyde & E.B.G. Jones, asexual morph unknown, saprobes, marine, Australia, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Jones et al. (2015; outline, phylogeny), cultures and sequences are unavailable, holotype of the type species IMI 327273.

Lawalreea Diederich 1990, *Ascomycota genera incertae sedis*, one species, type: *L. lecanorae* Diederich, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: LG (66/14656), needs generic revision.

Lazarenkoa Zerova 1938, *Incertae sedis*, *Incertae sedis*, *Dothideomycetes*, three species, type: *L. selaginellae* Zerova, asexual morph unknown, saprobes, terrestrial, Siberia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Lazarenkoella S.Y. Kondr., Kärnefelt, A.Thell, Elix & Hur 2015, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *L. zoroasteriorum* S.Y. Kondr. & M. Haji Moniri ex S.Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A.S. Kondr. & Hur, lichenized, Iran, Uzbekistan, see Kondratyuk et al. (2015b; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species KW-L.

Lazuardia Rifai 1988, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *L. lobata* (Berk. & M.A. Curtis) Rifai, asexual morph unknown, hypogeous, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for type: AAU 43756 (Perry et al. 2007), holotype of type species unavailable.

Lecanactis Körb. [nom. cons.] 1855, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, 25 species, type: *L. abietina* (Ehrh. ex Ach.) Körb., lichenized, worldwide, see Ertz et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available, holotype of type species unavailable.

Lecania A.Massal. 1853, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, 50 species, type: *Lecania fuscella* (Schaer.) A. Massal., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Lecanicillium W. Gams & Zare 2001, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, 26 species, type: *L. lecanii* (Zimm.) Zare & W. Gams, hyphomycetous, entomogenous, fungicolous and in soil, see Goettal et al. (2008; disease management), Zare and Gams (2008; phylogeny), Vandermeer et al. (2009; hyperparasitism), Kouvelis et al. (2008; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, neotype and ex-neotype of type: IMI 331550, CBS 102067.

Lecanidiella Sherwood 1986, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *L. contortae* Sherwood, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), holotype of the type: CBS, Aptroot 38022, cultures and sequences are unavailable, needs generic revision.

Lecaniocola Brain 1923, *Ascomycota* genera *incertae sedis*, one species, type: *L. parasitica* (Linder) Brain, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

Lecanographa Egea & Torrente 1994, *Lecanographaceae*, *Arthoniales*, *Arthoniomycetes*, 37 species, type: *L. lyncea* (Sm.) Egea & Torrente, sexual morph with rounded to lirelliform ascomata, lichenized, rarely lichenicolous, terrestrial, rather world-wide with a preference for coastal habitats with a Mediterranean or Desert type climate, see Ertz and Tehler (2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Lecanora Ach. 1809, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, 550 species, type: *L. allophana* Nyl., lichenized, worldwide, see Brand (2008; new species), Laundon (2010; new species), Lumbsch and Huhndorf (2010; outline), Pérez-Ortega et al. (2010; phylogeny), Ranković et al. (2011; Antioxidant, antimicrobial and anticancer activity), Kirk et al. (2013; genus accepted), Zhao et al. (2015; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Lecanosticta Syd. 1922 (= *Eruptio* M.E. Barr 1996 *fide* Wijayawardene et al. 2014; Rossman et al. 2015), *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, seven species, type: *L. pini* Syd., hyphomycetous, sexual morph formerly named in *Eruptio*, pathogens, see Quaedvlieg et al. (2012; morphology, phylogeny), Wijayawardene et al. (2014, 2016; taxonomy, phylogeny), cultures and sequences are available, epitype and ex-epitype of type: CBS H-21113, CBS 133791.

Lecanostictopsis B. Sutton & Crous 1997, *Ascomycota* genera *incertae sedis*, four species, type: *L. kamatii* (Ullasa) B. Sutton & Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, France, India, South Africa, see Wijayawardene et al. (2012, 2016; outline, morphology), cultures and sequences are unavailable, holotype of the type: IMI 147817.

Lecidea Ach. 1803, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, 100 species, type: *L. fuscoatra* (L.) Ach., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline),

Schmull et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Lecidella Körb. 1855, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, 80 species, type: *Lecidella viridans* (Flot.) Körb., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; new species), Kantvilas and Elix (2013; review), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

Lecideopsella Höhn. 1909, *Schizothyriaceae*, *Dothideomycetes*, families *incertae sedis*, c. eleven species, type: *L. gelatinosa* Höhn., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak et al. (2016; new species, taxonomy), cultures and sequences are unavailable.

Lecidoma Gotth. Schneid. & Hertel 1981, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *L. demissum* (Rutstr.) Gotth. Schneid. & Hertel, lichenized, clearings of alpine grasslands and in places with prolonged snow cover, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Lecidopyrenopsis Vain. 1907, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *L. corticola* Vain., lichenized, Thailand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Leciophysma Th. Fr. 1865, *Collemataceae*, *Peltigerales*, *Lecanoromycetes*, three species, type: *L. finmarkicum* Th. Fr., asexual morph unknown, lichenized, terrestrial, Siberia, see Wedin et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Øvstedal and Smith (2011; new species, Antarctica), Kirk et al. (2013; genus accepted), Ekman et al. (2014; new species), cultures and sequences are available.

Lectera P.F. Cannon 2012, *Plectosphaerellaceae*, *Glomerellales*, *Sordariomycetes*, two species, type: *L. colletotrichoides* (J.E. Chilton) P.F. Cannon, coelomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Cannon et al. (2012; taxonomy, phylogeny), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, lectotype and cultures of the type species ISC 217496, CBS 109728

Lecythiomyces Doweld 2013, *Sordariomycetes* genera *incertae sedis*, three species, type: *L. aeruginea* (Zukal) Doweld, asexual morph unknown, saprobes, terrestrial, Austria, see Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Lecythothecium Réblová & Winka 2001, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, four species, type: *L. duriligni* Réblová & Winka, asexual morph hyphomycetous (sporidesmium-like), terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type of the type: PRM 842977, CBS 101317.

Leeina Petr. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *L. philippinensis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leifidium Wedin 1993, *Sphaerophoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *L. tenerum* (Laurer) Wedin, asexual morph unknown, lichenized, terrestrial, Australia, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus

accepted), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

Leightoniella Henssen 1965, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, one species, type: *L. zeylanensis* (Leight.) Henssen, lichenized, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Weerakoon et al. (2016, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

Leightonimyces D. Hawksw. & B. Sutton 1977, *Ascomycota* genera *incertae sedis*, two species, type: *L. phillipsii* (Berk. & Leight.) D. Hawksw. & B. Sutton, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Europe, North America, see Seifert et al. (2011; genus accepted), Wijayawardene et al. (2012, 2017; outline), Pérez-Vargas et al. (2013; morphology, new species), cultures and sequences are unavailable, holotype of the type: TFC Lich 12742.

Leimonis R.C. Harris 2009, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *L. erratica* (Körb.) R.C. Harris & Lendemer, asexual morph unknown, lichenized, terrestrial, North America, see Harris (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

Leioderma Nyl. 1888, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, one species, type: *L. pycnophorum* Nyl., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ekman et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences and cultures are available.

Leiorreuma Eschw. 1824, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 15 species, type: *L. hepaticum* Eschw., asexual morph unknown, lichenized, terrestrial, North America, see Lendemer and Knudsen (2008; new species), Moon et al. (2008; new species), Dubey et al. (2010; new species), Joshi et al. (2013; Taiwan), Kirk et al. (2013; genus accepted), McDonald et al. (2013; DNA), Lücking et al. (2014, 2016; taxonomy), Poengsungnoen et al. (2014; new species), Wang et al. (2015; China), sequences and cultures are available.

Leiosphaerella Höhn. 1919, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, nine species, type: *L. praeclara* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Jaklitsch and Voglmayr (2012; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, isotype of the type: W11860, epitype and ex-epitype of the type species WU 31314, CBS 125586 (Jaklitsch and Voglmayr 2012).

Leiothecium Samson & Mouch. 1975, *Aspergillaceae*, *Eurotiales*, *Eurotiomycetes*, two species, type: *Leiothecium ellipsoideum* Samson & Mouch., saprobes, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Houbraeken and Samson (2011; DNA), Kirk et al. (2013; genus accepted), Marin-Felix et al. (2014; new species, phylogeny), cultures and sequences are available.

Lemalis Fr. 1825, *Helotiales* genera *incertae sedis*, *Leotimycetes*, three species, type: *L. alismatis* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), living cultures or cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

Lembosia Lév. 1845, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, 257 species, type: *L. tenella* Lév., asexual morph unknown, epiphytes, biotrophic, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, DNA, keys), Wijayawardene et al. (2014; outline), Guatimosim et al. (2015; phylogeny, DNA), most species do not have molecular data, needs generic revision.

Lembosiella Sacc. 1891, *Aulographaceae*, *Dothideomycetes*, families *incertae sedis*, one species, type: *L. polyspora* (Pat.) Sacc., asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Aulographaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Lembosina Theiss. 1913, *Aulographaceae*, *Dothideomycetes*, families *incertae sedis*, 21 species, type: *L. aulographoides* (E. Bommer, M. Rousseau & Sacc.) Theiss., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Aulographaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Lembosiopsis Theiss. 1918, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *L. andromedae* (Tracy & Earle) Theiss., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; transferred to *Mycosphaerellaceae* from *Asterinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Lembuncula Cif. 1954, *Ascomycota* genera *incertae sedis*, one species, type: *L. pothoidei* Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, Santo Domingo, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lemkea Morgan-Jones & R.C. Sinclair 1983, *Ascomycota* genera *incertae sedis*, one species, type: *L. sphaerospora* Morgan-Jones & R.C. Sinclair, hyphomycetous, sexual morph unknown, saprobes, lignicolous, North America, South Africa, Spain, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lemmopsis (Vain.) Zahlbr. 1906, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, three species, type: *L. arnoldiana* (Hepp) Zahlbr., asexual morph unknown, lichenized, terrestrial, Europe, see van den Boom and Brand (2008; Netherlands), Lumbsch and Huhndorf (2010; outline), Motiejūnaitė (2012; Lithuania), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Lemonniera De Wild. 1894, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, seven species, type: *L. aquatica* De Wild., hyphomycetous, sexual morph unknown, saprobes, aquatic, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Lempholemma Körb. 1855, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, 35 species, type: *L. compactum* (Wallr.) Körb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; DNA, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available but lack for the type species.

Lentithecium K.D. Hyde, J. Fourn. & Ying Zhang 2009, *Lentitheciaceae*, *Pleosporales*, *Dothideomycetes*, ten species, type: *L. fluviatile* (Aptroot & Van Ryck.) K.D. Hyde, asexual morph coelomycetous, saprobes, aquatic (freshwater or marine), Europe, Japan, Africa, See, Zhang et al (2009; taxonomy, phylogeny), Hyde et al. (2013, 2016; taxonomy, phylogeny), Wijayawardene et al. (2014, 2017; outline), Tibpromma et al. (2017; taxonomy, phylogeny), cultures and sequence are available, holotype of type species GENT (509).

Lentomitella Höhn. 1906, *Sordariomycetidae*, genera *incertae sedis*, seven species, type: *L. vestita* (Sacc.) Höhn., saprobes, terrestrial, temperate, see Huhndorf et al. (2008; new species, DNA, phylogeny), Marincowitz et al. (2008; new species, South Africa), Raja and Shearer (2009; compare with *Hanliniomyces*), Réblová and Stepanek (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Réblová et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), sequence data and cultures available but lacks for the type species.

Leohumicola N.L. Nick. 2005, *Leotiomyces* genera *incertae sedis*, seven species, type: *L. verrucosa* N.L. Nick., Hambl. & Seifert, saprobes, from soil, terrestrial, worldwide, see Nguyen and Seifert (2008; new species, phylogeny), Chen et al. (2009; new records to China), Wijayawardene et al. (2012, 2017; outline), Zhang et al. (2012; new species), Takashima et al. (2014; symbiotic associations with *Lycopodiaceae* roots), holotype and ex-type culture of the type: DAOM 226889, DAOM226889.

Leotia Pers. 1797, *Leotiaceae*, *Helotiales*, *Leotiomyces*, four species, type: *L. lubrica* (Scop.) Pers., asexual morph unknown, lichenized, terrestrial, worldwide, see Palmer et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, type specimen of type species CBS H-13841.

Lepidocollema Vain. 1890, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *L. carassense* Vain., lichenized, Brazil, Solomon Islands, see Lumbsch and Huhndorf (2010; outline), Elvebakk (2016; new species), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

Lepidopterella Shearer & J.L. Crane 1980, *Incertae sedis*, *Argynnaceae*, *Dothideomycetes*, two species, type: *L. palustris* Shearer & J.L. Crane, asexual morph unknown, saprobes, aquatic, USA, see Shearer et al. (2009; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Argynnaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Peter et al. (2016; DNA, comparison), cultures available for the type species CBS 459.81 (*vide* Peter et al. 2016).

Lepidosphaeria Parg.-Leduc 1970, *Testudinaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *L. nicotiae* Parg.-Leduc, asexual morph unknown, saprobes, aquatic, USA, see Kruys and Wedin (2009; DNA), Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Testudinaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, type specimen and cultures available for type species CBS H-7282, CBS 559.71 (*vide* Kruys and Wedin 2009).

Lepisticola W. Gams 2009, *Ascomycota* genera *incertae sedis*, one species, type: *L. capitata* (Costantin & Matr.) W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, Europe, see Gams et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

Leprantha Dufour ex Körb. 1855, *Arthoniaceae*, *Arthoniales*, *Arthoniomyces*, one species, type: need typification, lichenized, see Lücking et al. (2016; classification), sequences are unavailable.

Lepraria Ach. 1803, *Stereocaulaceae*, *Lecanorales*, *Lecanoromycetes*, 74 species, type: *L. incana* (L.) Ach., sterile, terrestrial (various substrata), cosmopolitan, see Lendemer (2010a, b; new species; 2011; DNA, new species; 2012; DNA; 2013; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Flakus and Kukwa (2011; new species), Flakus et al. (2011; new species), Bungartz et al. (2013; new species), Elix (2013; new species), Lendemer and Hodkinson (2013; DNA, phylogeny), Miadlikowska et al. (2014, DNA), sequences are available.

Leprieuria Læssøe, J.D. Rogers & Whalley 1989, *Xylariaceae*, *Xylariales*, *Sordariomyces*, one species, type: *L. bacillum* (Mont.) Læssøe, J.D. Rogers & Whalley, asexual morph

geniculosporium-like, saprobes, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable.

Leprieurinella Bat. & H. Maia 1961, *Ascomycota* genera *incertae sedis*, one species, type: *L. ingae* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leprocaulon Nyl. 1879, *Leprocaulaceae*, *Leprocaulales*, *Lecanoromycetes*, 17 species, type: *L. nanum* Nyl., coelomycetous, lichenized, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lendemmer and Hodkinson (2013; new species), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Leptocollema Vain. 1890, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, three species, type: *L. americanum* Vain., lichenized, Europe, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. 2016 (classification), cultures and sequences are unavailable.

Leptoplaca (Nyl.) Nyl. 1888, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, six species, type: *L. xantholyta* (Nyl.) Nyl., lichenized, Europe, see Arup et al. (2013; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Leptascospora Spig. 1918, *Ascomycota* genera *incertae sedis*, one species, type: *L. uredinis* (Racib.) Spig., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded the genus from *Meliolaceae*), cultures and sequences are unavailable, holotype of type species unavailable.

Leptochidium M. Choisy 1952, *Massalongiaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *Leptochidium albociliatum* (Desm.) M. Choisy, lichenized, Europe, North America, see Lücking et al. (2016; classification), cultures and sequences are available.

Leptochlamys Died. 1921, *Ascomycota* genera *incertae sedis*, one species, type: *L. scapicola* (P. Karst.) Died., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leptocucurthis Aptroot 1998, *Dacampiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *L. quadrata* Aptroot, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in *Dacampiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of the type species CBS, Aptroot 37234.

Leptodermella Höhn. 1915, *Ascomycota* genera *incertae sedis*, one species, type: *L. incarnata* (Bres.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leptodiscella Papendorf 1969, *Ascomycota* genera *incertae sedis*, three species, type: *L. africana* (Papendorf) Papendorf, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, Spain, South Africa, see Seifert et al. (2011; morphology), Madrid et al. (2012; new species, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures for the type: CBS 400.65, type specimen of type species CBS H-720.

Leptodontidium de Hoog 1979, *Helotiales* genera *incertae sedis*, *Leotiomyces*, eleven species, type: *L. elatius* (F. Manganot) de Hoog, sexual morph unknown, saprobes, terrestrial, Europe, North America, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are

available, holotype and cultures for the type species CBS H-7283, CBS 329.53 (Sogonov et al. 2005).

Leptogidium Nyl. 1873, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, three species, type: *L. dendriscum* (Nyl.) Nyl., lichenized, Europe, North America, see Muggia et al. (2011b; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Leptogium (Ach.) Gray 1821, *Collemataceae*, *Peltigerales*, *Lecanoromycetes*, 70 species, type: *L. lacerum* (Sw.) Gray, lichenized, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Schultz et al. (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type species unavailable.

Leptographium Lagerb. & Melin 1927, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, 68 species, type: *L. lundbergii* Lagerb. & Melin, asexual morph unknown, hyphomycetous, saprobes, worldwide, see Zhou et al. (2008; new species), Seifert et al. (2011; morphology), Duong et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Paciura et al. (2010; new species), Beer et al. (2013; new species), Kirk et al. (2013; genus accepted), Huang and Chen (2014; new species), Romón et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), Yin et al. (2014; new species), cultures and sequences are available.

Leptoguignardia E. Müll. 1955, *Phyllostictaceae*, *Botryosphaeriales*, *Dothideomycetes*, three species, type: *L. onobrychidis* E. Müll., asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Botryosphaeriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014, 2017; outline, accepted as a genus in *Phyllostictaceae*), cultures and sequences are unavailable, type specimen of type species CBS H-13858, needs generic revision.

Leptokalpion Brumm. 1977, *Thelebolaceae*, *Thelebolales*, *Leotiomyces*, two species, type: *L. albicans* Brumm., asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leptomassaria Petr. 1914, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *L. simplex* (Nitschke ex G.H. Otth) Petr., asexual morph unknown, saprobes, Europe and Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable, placement in *Xylariaceae* needs to be confirmed by molecular data.

Leptomelanconium Petr. 1923, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *L. asperulum* (Moesz) Petr., coelomycetous, sexual morph teratosphaeria-like, saprobes, terrestrial, North temperate, see Crous et al. (2009; transferred *L. australiense* to *Teratosphaeria*), Zhao and Zhao (2012; new species), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; outline, taxonomy, accepted as a genus in *Teratosphaeriaceae*), cultures and sequences are unavailable, needs generic revision.

Leptomeliola Höhn. 1919, *Perisporiopsidaceae*, *Dothideomycetes* family *incertae sedis*, nine species, type: *L. hyalospora* (Lév.) Höhn., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; symbiosis with bryophytes, DNA), Silvério et al. (2011; taxonomy, South America), Hyde et al. (2013; accepted in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species.

Leptopeltis Höhn. 1917, *Leptopeltidaceae*, *Dothideomycetes* genera *incertae sedis*, one species, type: *L. filicina* (Lib.) Höhn., asexual morph leptothyrium-like, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene

et al. (2014; outline), cultures and sequences are unavailable, available specimen of type: CBS H-13860, needs generic revision.

Leptoperidia Rappaz 1987, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *L. macropunctata* (Rehm) Rappaz, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, available specimen of type: CBS H-6460, needs generic revision.

Leptophyllosticta I.E. Brezhnev 1939, *Ascomycota* genera *incertae sedis*, two species, type: *L. lychnitis* I.E. Brezhnev, coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leptorhaphis Körb. 1855, *Naetrocymbaceae*, *Dothideomycetes* genera *incertae sedis*, 15 species, type: *L. oxyspora* (Nyl.) Körb., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted in *Naetrocymbaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Leptosacca Syd. 1928, *Sordariomycetes* genera *incertae sedis*, two species, type: *L. lumae* Syd., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type species (see MBT# 199061), needs generic revision.

Leptosillia Höhn. 1928, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *L. notha* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Leptosphaerella Speg. 1909, *Sordariomycetes* genera *incertae sedis*, seven species, type: *L. fagaricola* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Leptosphaeria Ces. & De Not. 1863, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 148 species, type: *L. doliolum* (Pers.) Ces. & De Not., asexual morph coelomycetous, saprobes or parasitic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al (2012; taxonomy, phylogeny), Hyde et al. (2013, 2016; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014, 2017; outline), Ariyawansa et al. (2015; taxonomy, phylogeny), cultures and sequence are available, available specimen for type: CBS H-13880.

Leptosphaerulina McAlpine 1902, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, 30 species, type: *L. australis* McAlpine, asexual morph hyphomycetous (pithomyces-like), saprobes, terrestrial, worldwide, see de Gruyter et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Crous et al. (2011; DNA, phylogeny, on *Proteaceae*), Zhang et al. (2012; DNA, phylogeny), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2013; new species with asexual morphs), Wijayawardene et al. (2014; outline), Chen et al. (2015; phylogeny), cultures and sequences are available, available specimen and cultures for type species CBS H-13980, CBS 311.51 (*vide* Zhang et al. 2012).

Leptospora Rabenh. 1857, *Dothideomycetes* genera *incertae sedis*, 15 species, type: *L. porphyrogona* (Tode) Rabenh., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted in *Naetrocymbaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline),

Hyde et al. (2016; new species), cultures and sequences are available, holotype of type species unavailable, needs generic revision.

Leptosporella Penz. & Sacc. 1897, *Chaetosphaeriales* genera *incertae sedis*, *Sordariomycetes*, twelve species, type: *L. gregaria* Penz. & Sacc., asexual morph unknown, saprobes, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Huhndorf and Miller (2011; morphology, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Dai et al. (2016; morphology, phylogeny, new species), cultures and sequences are available but lacks for type material, needs generic revision.

Leptostromella (Sacc.) Sacc. 1884, *Ascomycota* genera *incertae sedis*, two species, type: *L. septorioides* Sacc. & Roum., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leptothyrella Sacc. 1885, *Ascomycota* genera *incertae sedis*, ten species, type: *L. mougeotiana* Sacc. & Roum., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

Leptothyrina Höhn. 1915, *Ascomycota* genera *incertae sedis*, one species, type: *L. rubi* (Duby) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Switzerland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

Leptothyrium Kunze 1823, *Ascomycota* genera *incertae sedis*, two species, type: *L. lunariae* Kunze, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leptotrochila P. Karst. 1871 (= *Sporonema* Desm. 1874 *fide* Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomycetes*, 15 species, type: *L. radians* (Desm.) P. Karst., asexual morphs formerly named in *Sporonema*, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequence are unavailable, needs generic revision.

Leptoxyphium Speg. 1918, *Capnodiaceae*, *Capnodiales*, *Dothideomycetes*, five species, type: *L. graminum* (Pat.) Speg., asexual morph unknown, sooty moulds, terrestrial, cosmopolitan, see Cheewangkoon et al. (2009; DNA, phylogeny), Chomnunti et al. (2011; taxonomy, new species), Crous et al. (2011; new species), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Yang et al. (2014; DNA, new species), Kajale et al. (2015; associated with insects), Park et al. (2015; pathogens), cultures and sequences are available, needs generic revision.

Letendraea Sacc. 1880, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *L. eurotioides* Sacc. asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2013, 2014; taxonomy, DNA, phylogeny), Hyde et al. (2013; accepted in *Didymosphaeriaceae*), Wijayawardene et al. (2014; outline), Bolanos et al. (2015; phylogeny), cultures available for the type species CBS 212.31 (*fide* Kodsueb et al. 2016).

Letendraeopsis K.F. Rodrigues & Samuels 1994, *Dothideomycetes* genera *incertae sedis*, , one species, type: *L. palmarum* K.F. Rodrigues & Samuels, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tubeufiaceae*), Hyde et al. (2013; not accepted in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; not accepted in *Tubeufiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Letharia (Th. Fr.) Zahlbr. 1892, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *L. vulpina* (L.) Hue, asexual morph unknown, lichenized, terrestrial, worldwide, see McCune and Altermann (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type species unavailable.

Lethariella (Motyka) Krog 1976, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, ten species, type: *L. intricata* (Moris) Krog, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Letrouitia Hafellner & Bellem. 1982, *Letrouitiaceae*, *Teloschistales*, *Lecanoromycetes*, 16 species, type: *L. domingensis* (Pers.) Hafellner & Bellem., asexual morph unknown, lichenized, terrestrial, worldwide, see Elix and Kondratyuk (2008; new species), Lumbsch and Huhndorf (2010; outline), Gays et al. (2012; DNA, phylogeny), Joshi et al. (2013; Vietnam), Kirk et al. (2013; genus accepted), Shi et al. (2015; Cambodia), cultures available for type species AFTOL-ID 102 (*vide* Spatafora et al. 2006).

Lettauia D. Hawksw. & R. Sant. 1990, *Fuscideaceae*, *Umbilicariales*, *Lecanoromycetes*, three species, type: *L. cladoniicola* D. Hawksw. & R. Sant., asexual morph unknown, on lichens, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), cultures and sequences not available, holotype of type species B 7700.

Leucangium Qué. 1883, *Morchellaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *L. ophthalmosporum* Qué., asexual morph unknown, saprobes, hypogeous, worldwide, see Trappe (2009; North America), Lumbsch and Huhndorf (2010; outline), Sbissi et al. (2010; phylogeny, comparison), Trappe et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

Leucocarpia Vězda 1969, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *L. biatorella* (Arnold) Vězda, asexual morph unknown, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leucoconiella Bat., H. Maia & Peres 1960, *Ascomycota* genera *incertae sedis*, type species *L. paraguayensis* Bat., H. Maia & Peres, asexual morph unknown, saprobes, terrestrial, Paraguay, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leucoconis Theiss. & Syd. 1918, *Ascomycota* genera *incertae sedis*, one species, type: *L. erysiphina* (Syd. & P. Syd.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leucodecton A. Massal. 1860, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, type: *L. compunctum* (Ach.) A. Massal., asexual morph unknown, lichenized, terrestrial, pantropical, see Mangold et al. (2009; key, Australia), Rivas Plata et al. (2010a; key), Sipman et al. (2012; key, Costa Rica), Joshi et al. (2010, 2013; Korea, India), Lumbsch and Huhndorf (2010; outline), Lücking and Breuss (2012; new combination), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species, needs generic revision.

Leucodermia Kalb 2015, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, ten species, type: *L. leucomelos* (L.) Kalb, lichenized, see Mongkolsuk et al. (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type species GB, Arvidsson & Arvidsson 4158 (as *Heterodermia fertilis* Moberg).

Leucodiaporthe Lar.N. Vassiljeva 2007, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *L. acerina* M.E. Barr & Lar.N. Vassiljeva, asexual morphs unknown,

saprobies, terrestrial, North temperate zone, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: VLA P-2941.

Leucodochium Syd. & P. Syd. 1917, *Ascomycota* genera *incertae sedis*, type: *L. pipturi* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobies, terrestrial, Philippines, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leucoglossum S. Imai 1942, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, two species, type: *L. durandii* (Teng) S. Imai, asexual morph unknown, saprobies, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline, accepted as *Leotiomycetes*), Arauzo and Iglesias (2014; new species), Fedosova and Kovalenko (2015; DNA, phylogeny, Russia), cultures and sequences are available but lacks for the type species, needs generic revision.

Leuconeurospora Malloch & Cain 1970, *Pseudeurotiaceae*, *Leotiomycetes* family *incertae sedis*, three species, type: *L. pulcherrima* (G. Winter) Malloch & Cain, asexual morph unknown, saprobies, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, type specimen and cultures available for type species CBS H-14009, CBS 343.76.

Leucoscypha Boud. 1885, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *L. leucotricha* (Alb. & Schwein.) Boud., asexual morph unknown, hypogeous, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Leucosphaerina Arx 1987, *Hypocreales* genera *incertae sedis*, *Hypocreales*, *Sordariomycetes*, two species, type: *L. indica* (Arx, Mukerji & N. Singh) Arx, asexual morph hyphomycetous, terrestrial, saprobies, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Bionectriaceae*), Giraldo et al. (2012; phylogeny), cultures and sequences are available, cultures available for type: CBS 123.78.

Leucothecium Arx & Samson 1973, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, three species, type: *L. emdenii* Arx & Samson, asexual morph unknown, saprobies, on marine and river sediments, Spain, see Gueidan et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted in *Onygenaceae*), Kirk et al. (2013; genus accepted), Giraldo et al. (2014; DNA, phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-7299 CBS 576.73 (*vide* Gueidan et al. 2008).

Leucovibrisea (A. Sánchez) Korf 1990, *Vibriseaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *L. obconica* (Kanouse) Korf, asexual morph unknown, from fine roots of *Pinus*, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leuliisinea Matsush. 1985, [as '*Leuiisinea*'], *Ascomycota* genera *incertae sedis*, two species, type: *L. bambusicola* Matsush., hyphomycetous, sexual morph unknown, saprobies, lignicolous, Australia, Peru and Taiwan, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Leveillella Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, one species, type: *L. drimydis* (Lév.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, Chile, see Hofmann (2009; review, accepted in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, excluded from *Asterinaceae*), Wijayawardene et al. (2014; outline, accepted in *Dothideomycetes*), Cultures and sequences are unavailable, type specimen of type species PC 0084470.

Leveillina Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, two species, type: *L. arduinae* (Kalchbr. & Cooke) Theiss. & Syd., asexual morph unknown, saprobies, terrestrial, Africa, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus

accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Leveillula G. Arnaud 1921, *Erysiphaceae*, *Erysiphales*, *Leotiomyces*, 40 species, type: *L. taurica* (Lév.) G. Arnaud (\equiv *Erysiphe taurica* Lév.), hyphomycetous asexual morphs, obligate plant pathogens, terrestrial, worldwide, see Khodaparast et al. (2012, 2016; phylogeny), Braun & Cook (2012; taxonomy), cultures and sequences of non-type material of the type species are available, lectotype of type: Tauria, “Balaklava”, ex herb. Lévillé (G 00298357).

Libartania Nag Raj 1979, *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, type: *L. laserpitii* (Bres.) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Liberomyces Pažoutová, M. Kolařík & Kubátová 2012, *Sordariomyces* genera *incertae sedis*, two species, type: *L. saliciphilus* Paoutová, M. Kolarík & Kubátová, coelomycetous, sexual morph unknown, endophytes, terrestrial, Czech Republic, see Pazoutová et al. (2012; morphology, DNA), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type species PRM 921954, CCF 4020.

Libertasomyces Crous & Roets 2016, *Pleosporales* genera *incertae sedis*, *Dothideomyces*, two species, type: *L. myopori* Crous & Roets, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, New Zealand, see Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22617, CPC 27354.

Libertiella Speg. & Roum. 1880, *Ascomycota* genera *incertae sedis*, six species, type: *L. malmedyensis* Speg. & Roum., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Motiejūnaitė et al. (2011; record from Lithuania), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), current generic concept is uncertain, cultures and sequences are unavailable, needs generic revision.

Lichenobactridium Diederich & Etayo 1995, *Ascomycota* genera *incertae sedis*, one species, type: *L. pertusariae* Diederich & Etayo, hyphomycetous, sexual morph unknown, lichenicolous, non-lichenized, terrestrial, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species LG, Diederich 9219.

Lichenochora Hafellner 1989, *Phyllachoraceae*, *Phyllachorales*, *Sordariomyces*, five species, type: *L. thallina* (Cooke) Hafellner, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Etayo and Navarro-Rosines (2008; new species), Zhurbenko (2008; new species, Italy), Halc et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Etayo (2011; new species), Hafellner and Zimmermann (2012; new species), Etayo et al. (2013; new species), Kirk et al. (2013; genus accepted), Zhurbenko (2013; new species), Lender et al. (2016; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: K.

Lichenoconium Petr. & Syd. 1927, *Lichenoconiaceae*, *Lichenoconiales*, *Dothideomyces*, five species, type: *L. lichenicola* (P. Karst.) Petr. & Syd., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, worldwide, see Lawrey et al. (2011; new species), Wijayawardene et al. (2012, 2014, 2016; outline, taxonomy), Hyde et al. (2013; taxonomy), cultures and sequences are available but lacks for the type species, needs generic revision.

Lichenodiplis Dyko & D. Hawksw. 1979, *Chaetothyriales* genera *incertae sedis*, *Eurotiomyces*, 13 species, type: *L. lecanorae* (Vouaux) Dyko & D. Hawksw., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, worldwide, see Atienza et al. (2009; morphology, new species), Knudsen and Kocourkova (2009; morphology, new

species), Kirk et al. (2013; genus accepted), Pérez-Vargas et al. (2013; new species), Muggia et al. (2015; phylogeny), Wijayawardene et al. (2016; outline, morphology, phylogeny), Cultures and sequences are available, lectotype of type species ANGUC.

Lichenohendersonia Calatayud & Etayo 2001, *Ascomycota* genera *incertae sedis*, three species, type: *L. squamarinae* Calat. & Etayo, sexual morph unknown, parasymbiont on different lichens, terrestrial, Northern Hemisphere, see Wijayawardene et al. (2016; morphology), sequence data and cultures unavailable, holotype of the type: IMI 363556.

Lichenopeltella Höhn. 1919, *Trichothyriaceae*, *Dothideomycetes*, families *incertae sedis*, c. 31 species, type: *L. maculans* (Zopf) Höhn., asexual morph unknown, saprobes, lichenicolous, terrestrial, worldwide, see Pérez-Ortega and Sribille (2009; new species), Brackel (2010; new species), Etayo (2010; new species), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Zhurbenko (2010; new species), Flakus and Kukwa (2012; new records in Bolivia), van den Boom and Giralt (2012; records in Portugal), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; transferred to *Mycosphaerellaceae* from *Asterinaceae*), Wijayawardene et al. (2014; outline), Zhurbenko and Pino-Bodas (2015; new species, New Zealand), cultures and sequences are unavailable.

Lichenopeziza Zukul 1884, *Ascomycota* genera *incertae sedis*, one species, type: *L. bryophile* Zukul, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), current generic concept is uncertain, cultures and sequences are unavailable, needs generic revision.

Lichenopuccinia D. Hawksw. & Hafellner 1984, *Ascomycota* genera *incertae sedis*, one species, type: *L. poeltii* D. Hawksw. & Hafellner, sexual morphs unknown, terrestrial, lichenicolous, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of type species K(M)-IMI 281393.

Lichenopyrenis Calat., M.J. Sanz & Aptroot 2001, *Pleomassariaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *L. galligena* Calat., M.J. Sanz & Aptroot, asexual morph unknown, lichenicolous, terrestrial, Spain, Canada, Japan, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in *Pleomassariaceae*), Hyde et al. (2013; accepted as a genus in *Pleomassariaceae*), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, holotype of the type species MA (Lich.) 12715.

Lichenostella Etayo and Calat. 1999, *Ascomycota* genera *incertae sedis*, one species, type: *L. hypotrachynae* Etayo & Calat., hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lichenosticta Zopf 1898, *Ascomycota* genera *incertae sedis*, one species, type: *L. podetiicola* Zopf, coelomycetous, sexual morph unknown, lichenicolous, terrestrial, North temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), current generic concept is uncertain, cultures and sequences are unavailable, needs generic revision.

Lichenostigma Hafellner 1983, *Phaeococcomycetaceae*, *Lichenostigmatales*, *Arthoniomycetes*, type: *L. maureri* Hafellner, asexual morph hyphomycetous, lichenicolous, terrestrial, worldwide, see Pérez-Ortega and Calatayud (2009; new species, Spain), Fernández-Brime et al. (2010; new species), Knudsen and Kocourkova (2010; new species), Lumbsch and Huhndorf (2010; outline), Valadbeigi and Brackel (2011; new species), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2013; new species), Ertz et al. (2014; new species; phylogeny), Cultures and sequences are available, current generic concept is uncertain, cultures available for type species Diederich 1730, Diederich 17337, Diederich 17326, Diederich 17337 (*fide* Ertz et al. 2014).

Lichenothelia D. Hawksw. 1981, *Lichenotheliaceae*, *Lichenotheliales*, *Dothideomycetes*, 29 species, type: *L. scopularia* (Nyl.) D. Hawksw., asexual morphs pycnidial or hyphomycetous, on rock or lichenicolous, terrestrial, widespread, some species may belong in *Lichenostigma* Hafellner, see Lumbsch & Huhndorf (2011; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; genus accepted), Muggia et al. (2015; phylogeny), Jaklitsch et al. (2016; position), cultures and sequences are available, isotypes of type species BM and K(M) [Anzi, Lich. Langob. 35].

Lichenoverruculina Etayo 2011, *Sordariomycetes* genera *incertae sedis*, one species, type: *L. sigmatospora* (Speg.) Etayo & Sharuddin, asexual morph unknown, lichenicolous on *Heterodermia*, terrestrial, South America, see Etayo and Sharuddin (2011; genus proposed), cultures and sequences are unavailable, holotype of the type species J. Puiggari 124 (LPS-1715).

Lichina C. Agardh [nom.cons.] 1817, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, nine species, type: *L. pygmaea* (Lightf.) C. Agardh, lichenized, marine, west-european coast, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Lichinella Nyl. 1873, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, 30 species, type: *L. stipatula* Nyl., lichenized, North America, Europe, Asia, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Lichinodium Nyl. 1875, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, four species, type: *L. sirosiphoideum* Nyl., lichenized, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Licopolia Sacc., Syd. & P. Syd. 1900, *Dothideomycetes* genera *incertae sedis*, two species, type: *L. franciscana* Sacc., Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Brazil, Kenya, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Lignincola Höhnk 1955, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, five species, type: *L. laevis* Höhnk, asexual morph unknown, saprobes, marine, worldwide, see Jones et al. (2009, 2015; classification), Alias et al. (2010; diversity), Jones (2010; diversity), Abdel-Wahab (2011; diversity), Liu et al. (2011a; morphology), Pang et al. (2011; monograph), Sakayaroj et al. (2011a,b; phylogeny, diversity), Lee et al. (2012; checklist), Pang and Jheng (2012; checklist), Pang et al. (2013b; genetic variation), Alsheikh-Hussain et al. (2014, review), Overy et al. (2014; natural product), Réblová et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, neotype of type species J.K. 4459a.

Lignoscripta B.D.Ryan 2004, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, one species, type: *L. atroalba* B.D. Ryan & T.H. Nash, lichenized, Pacific Northwest, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; taxonomy), Lücking et al. 2016 (classification), cultures and sequences are unavailable, holotype of type species ASU (9092).

Lignosphaeria Boonmee, Thambugala & K.D. Hyde 2015, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *L. thailandica* Boonmee, Thambugala & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Thailand, see Thambugala et al. (2015b; morphology, phylogeny), holotype and ex-type of type species MFLU 11–0135, MFLUCC 11–0376.

Lillicoa Sherwood 1977, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *L. palicoureae* (Seaver & Whetzel) Sherwood, saprobes, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Limaciniaseta D.R. Reynolds 1988, *Capnodiaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *L. californica* D.R. Reynolds, asexual morph unknown, saprobes, terrestrial, USA, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Limacinula Höhn. 1907, *Coccodiniaceae*, *Chaetothyriales*, *Eurotiomycetes*, c. 16 species, type: *L. samoënsis* Höhn., aerial surface of living plants, epifoliar fungus, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Limacospora Jørg. Koch & E.B.G. Jones 1995, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *L. sundica* (Jørg. Koch & E.B.G. Jones) Jørg. Koch & E.B.G. Jones, asexual morph unknown, saprobes, marine, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Limnaiomyces Thaxt. 1900, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *L. tropisterni* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Limtongia Jindam., Am-in, Yukphan & Y. Yamada 2011, *Lipomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *L. smithiae* (Van der Walt, M.J. Wingf. & Y. Yamada) Jindam., Am-in, Yukphan & Y. Yamada, saprophytic, see Jindamorakot et al. (2011; taxonomy), cultures and sequences are unavailable.

Lindauella Rehm 1900, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *L. pyrenocarpoidea* Rehm, asexual morph unknown, from living leaves, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Lindgomyces K. Hiray., Kaz. Tanaka & Shearer 2010, *Lindgomycetaceae*, *Pleosporales*, *Dothideomycetes*, eleven species, type species: *L. ingoldianus* (Shearer & K.D. Hyde) K. Hirayama, Kaz. Tanaka & Shearer, asexual morph unknown, saprobes, aquatic, China, Japan, USA, see Hirayama et al. (2010; morphology, phylogeny), Raja et al. (2011, 2013; morphology, phylogeny), Zhang et al. (2014; morphology, phylogeny), Crous et al. (2015a; morphology, phylogeny), Li et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type species ILLS 52289, ATCC 200398.

Lindquistomyces Aramb., E. Müll. & Gamundí 1982, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *L. antarcticus* (Speg.) Aramb., E. Müll. & Gamundí (Art. 33.3; Invalid), asexual morph unknown, saprobes, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lindra I. M. Wilson 1956, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, five species, type: *L. inflate* I.M. Wilson, asexual morph hyphomycetous, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; review), sequences are available, holotype of type: IMI 62909.

Lineolata Kohlm. & Volkm.-Kohlm. 1990, *Dothideomycetes* genera *incertae sedis*, one species, type: *L. rhizophorae* (Kohlm. & E. Kohlm.) Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Suetrong et al. (2009; phylogeny, morphology), Jones et al. (2009, 2015; classification), Alias et al. (2010; diversity), Sakayaroj et al. (2011b; diversity), Zhang et al. 2012; phylogeny, morphology), Abdel-Wahab et al. (2014; diversity), Wijayawardene et al. (2014; outline), holotype of type: J.K. 2390a.

Lineostroma H.J. Swart 1988, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *L. banksiae* (Cooke) H.J. Swart, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Jayasiri et al. (2016a; classification), cultures and sequences are unavailable, available specimen for type: CBS H-5512, needs generic revision.

Linkosia A. Hern.-Gut. & B. Sutton 1997, *Ascomycota* genera *incertae sedis*, ten species, type: *L. coccothrinacis* (A. Hern. Gut. & J. Mena) A. Hern. Gut. & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Ma et al. (2011; morphology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Almeida et al. (2014; morphology, new species), Delgado (2014; morphology), sequence data available, holotype of the type species HAC, HACCM 206.

Linocarpon Syd. & P. Syd. 1917, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, 42 species, type: *L. pandani* Syd. & P. Syd., asexual morph phialophora-like, saprobes, pathogen, endophytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures available for type: HKUM16278, HKUM16279.

Linochora Höhn. 1910, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, five species, type: *L. leptospermi* Höhn., coelomycetous, sexual morph unknown, from living leaves, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type species unknown, needs generic revision.

Linochorella Syd. & P. Syd. 1912, *Ascomycota* genera *incertae sedis*, one species, type: *L. striiformis* Syd. & P. Syd., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, South Africa, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Linodochium Höhn. 1909, *Ascomycota* genera *incertae sedis*, two species, type: *L. hyalinum* (Lib.) Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology, accepted as a genus in *Helotiaceae*), Wijayawardene et al. (2017; outline), Kirk et al. (2013; did not accept), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Linopeltis I. Hino & Katum. 1961, *Schizothyriaceae*, *Dothideomycetes* family *incertae sedis*, two species, type: *L. ryukyuensis* I. Hino & Katum., asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Lipomyces Lodder & Kreger-van Rij 1952 (= *Myxozyma* van der Walt, Weijman & von Arx 1981), *Lipomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, 20 species, type: *L. starkeyi* Lodder & Kreger, asexual reproduction is by multilateral budding, saprophytic, predominantly from soil, but not uncommon in tree frass from bark beetles, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Yamazaki and Kawasaki (2014; new species, DNA), sequences are available.

Lirellodisca Aptroot 1998, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *L. pyrenulispora* Aptroot, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), cultures and sequences are unavailable, holotype of the type species CBS, Aptroot 38022, needs generic revision.

Lirula Darker 1967, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, three species, type: *L. nervisequa* (DC.) Darker, asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Fan et al. (2012; new

species, China, DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

Listeromyces Penz. & Sacc. 1901, *Ascomycota* genera *incertae sedis*, one species, type: *L. insignis* Penz. & Sacc., hyphomycetous, sexual morph unknown, saprobes, lignicolous, Asia, Oceania, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lithoglypha Brusse 1988, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, one species, type: *L. aggregata* Brusse, lichenized, South Africa, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Lithographa Nyl. 1857, *Xylographaceae*, *Trapeliales*, *Lecanoromycetes*, ten species, type: *L. petraea* (Nyl.) Nyl., lichenized, North and South America, Australia, see Resl et al. (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Lithogyalideopsis Lücking, Sérus. & Vězda 2005, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *L. poeltii* (Vězda) Lücking, Sérus. & Vězda, lichenized,?, see Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Lithophila Selbmann & Isola, MB811675. For diagnosis see Fungal Diversity 76: 88 (2016). *Trichomeriaceae*, *Chaetothyriales*, *Eurotiomycetes*, rock-inhabiting fungus, monospecific; sexual morph unknown; type species *Lithophila guttulata* Selbmann & Isola, MB811676. For diagnosis see Fungal Diversity 76: 90 (2016). Holotypus: CBS 139723. From marble stone, Cortile della Pigna (Vatican City State); = CCFEE 5907 (NCBI accession numbers: KP791773 (ITS), KR781061 (LSU)), taxonomic species delimitation supported by molecular data. *Lithophila* Selbmann & Isola (2016), introduced as a genus of *Trichomeriaceae*, is a later homonym of *Lithophila* Sw., Prodr, 14, 1788, a name previously and validly published for a genus of *Amaranthaceae*.

Notes: *Lithophila* Selbmann & Isola is illegitimate and unavailable for use [ICN (Melbourne) Art. 53.1]; it is here renamed ***Lithohypha*** Selbmann & Isola nom. nov., MB819853. For diagnosis see Fungal Diversity 76: 88 (2016). The type species is here renamed ***Lithohypha guttulata*** (Selbmann & Isola) Selbmann & Isola comb. nov., MB819854.

Lithopythium Bornet & Flahault 1891, *Ascomycota* genera *incertae sedis*, three species, type: *L. gangliiforme* Bornet & Flahault, asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lithothelium Müll. Arg. 1885, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, eight species, type: *L. cubanum* Müll. Arg., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Valadbeigi and Sipman (2010; Iran), Weerakoon et al. (2012; DN, phylogeny), Kirk et al. (2013; genus accepted), Gueidan et al. (2016; phylogeny), cultures and sequences are available but lacks for the type species, needs generic revision.

Livia Velen. 1947, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *L. aurea* Velen., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Lizonia (Ces. & De Not.) De Not. 1863, *Pseudoperisporiaceae*, *Dothideomycetes* family *incertae sedis*, one species, type: *L. empirigonia* (Auersw.) De Not., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Stenroos

et al. (2010; DNA), Hyde et al. (2013; accepted in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, type specimen of type species CBS H-14093.

Llimonaea Egea & Torrente 1991, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, four species, type: *L. occulta* Egea & Torrente, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Arthoniales*), Ertz and Tehler (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available, holotype of type: MUB 13619.

Llimoniella Hafellner & Nav.-Ros. 1993, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *L. scabridula* (Müll. Arg.) Nav.-Ros. & Hafellner, asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Suija et al. (2015; phylogeny), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available, needs generic revision.

Lobaria (Schreb.) Hoffm. 1796, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, 60 species, type: *L. pulmonaria* (L.) Hoffm., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Moncada et al. (2013a; classification), Miądlikowska et al. (2014; phylogeny), Cornejo and Scheidegger (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Lobariella Yoshim. 2002, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, 35 species, type: *L. crenulata* (Hook.) Yoshim., lichenized, neo-tropical distribution, see Lumbsch and Huhndorf (2010; outline, accepted as a synonym of *Lobaria*), Moncada et al. (2013a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Lobarina Nyl. ex Cromb. 1894, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, 15 species, type: *L. scrobiculata* (Scop.) Nyl., lichenized, Northern Hemisphere and in oceanic areas of Africa, Australia, New Zealand and South America, see Moncada et al. (2013a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Lobatopedis P.M. Kirk 1979, *Ascomycota* genera *incertae sedis*, five species, type: *L. foliicola* P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, on leaf litter, widespread, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Heredia et al. (2014; new species), cultures and sequences are unavailable, needs generic revision, holotype of type species IMI 222919.

Lobothallia (Clauzade & Cl.Roux) Hafellner 1991, *Megasporaceae*, *Pertusariales*, *Lecanoromycetes*, nine species, type: *L. alphoplaca* (Wahlenb.) Hafellner, lichenized, Asia, Europe, North America, see Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Lockerbia K. D. Hyde 1994, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *L. palmicola* K.D. Hyde, asexual morph unknown, freshwater, Australia, Florida, see Raja and Shearer (2008; new species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: BRIP 21334.

Loculistroma F. Patt. & Charles 1910, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *L. bambusae* F. Patt., Charles & Veihmeyer, asexual morph hyphomycetous, terrestrial, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: BPI 632466.

Loculohypoxylon M.E. Barr 1976, *Teichosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *L. grandineum* (Berk. & Ravenel) M.E. Barr, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013;

accepted as a genus in *Teichosporaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Loculotuber Trappe, Parladé & I.F. Alvarez 1993, *Pezizales genera incertae sedis*, *Pezizomycetes*, two species, type: *L. gennadii* (Chatin) Trappe, Parladé & I.F. Alvarez, asexual morph unknown, saprobes, hypogeous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lodderomyces van der Walt 1971, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, c. 40 species, type: *L. elongisporus* (Recca & Mrak) van der Walt, asexual reproduction is by multilateral budding, saprophytic, but some species are common human and animal pathogens, clinical isolates, soil, plant debris, beetles, water, yeast cake, worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Loekoesia S.Y. Kondr., S.O. Oh & Hur 2015, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *L. austrocoreana* (S.Y. Kondr., L. Lökös & J.S. Hur) S.Y. Kondr., J. Kim, A.S. Kondr., S.O. Oh & J.S. Hur, lichenized, South Korea, see Kondratyuk et al. (2015d; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species KoLRI 015504.

Loflammia Vězda 1986, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *L. flammea* (Müll. Arg.) Vězda, lichenized, Australia, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Loflammiosis Lücking & Kalb 2000, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *L. brasiliensis* Lücking & Kalb, lichenized, Brazil, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type species Kalb, Kalb & Kalb 27140.

Logilvia Vězda 1986, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *L. gilva* (Müll. Arg.) Vězda, lichenized, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Lohwagia Petr. 1942, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, three species, type: *L. intermedia* (Speg.) Petr., asexual morph unknown, from living leaves, terrestrial, central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Lojkania Rehm 1905, *Fenestellaceae*, *Dothideomycetes* family *incertae sedis*, ten species, type: *L. hungarica* Rehm, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Fenestellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak and Hyde (2015; taxonomy), cultures and sequences are available but lacks for the type species, needs generic revision.

Lolia Abdel-Aziz & Abdel-Wahab 2011, *Lindgomycetaceae*, *Pleosporales*, *Dothideomycetes*, two species, type species *Lolia aquatica* Abdel-Aziz & Abdel-Wahab, asexual morph coelomycetous, saprobes, aquatic, Egypt, see Abdel-Aziz and Abdel-Wahab (2011; taxonomy, phylogeny), Hyde et al. (2013; accepted in *Lindgomycetaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2014; outline), Abdel-Aziz (2016; new species, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type species IMI 398675, MF644.

Loliomyces Maire 1937, *Ascomycota* genera *incertae sedis*, one species, type: *L. temulenti* Maire, hyphomycetous, saprobes, Morocco, see Seifert et al. (2011; taxonomy),

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lollipopaia Inderb. 2001, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *L. minuta* Inderb., asexual morph unknown, saprobes, terrestrial, Thailand, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Lomaantha Subram. 1954, *Ascomycota* genera *incertae sedis*, three species, type: *L. pooga* Subram., hyphomycetous, sexual morph unknown, saprobes, dead wood and culms, India and China, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Ma et al. (2011; new species, revision), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lomachashaka Subram. 1956, *Ascomycota* genera *incertae sedis*, one species, type: *L. kera* Subram., hyphomycetous, saprobes, Western Africa, India, see Yadav and Bhat (2009; new species, India), Seifert et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Longicollum Zelski, F.R. Barbosa, Raja, A.N. Mill. & Shearer 2011, *Annulatascales*, *Annulatascales*, *Sordariomycetes*, one species, type: *L. biappendiculatum* Zelski, F.R. Barbosa, Raja, A.N. Mill. & Shearer, asexual morph unknown, saprobes, aquatic, USA, South America, see Zelski et al. (2011; taxonomy), cultures and sequences are unavailable, holotype of the type: ILL 40794, needs generic revision.

Longiostiolum Doilom, Ariyawansa & K.D. Hyde 2016, *Massarinaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *L. tectonae* Doilom, Ariyawansa & K.D. Hyde, saprobes, terrestrial, Thailand, see Li et al. (2016; taxonomy, phylogeny), cultures and sequences are available, ex-type strains of type: MFLUCC 12–0562, MKT 078, ICMP 21259, Holotype of type species MFLU 15–3532.

Lopadium Körb. [nom.cons.] 1855, *Lopadiaceae*, *Lecideales*, *Lecanoromycetes*, five species, type: *L. pezizoideum* (Ach.) Körb., lichenized, worldwide, see Ekman et al. (2008; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Lopadostoma (Nitschke) Traverso 1906, *Lopadostomataceae*, *Xylariales*, *Sordariomycetes*, twelve species, type: *L. turgidum* (Pers.) Traverso, asexual morph libertella-like, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2014), Senanayake et al. (2015), Maharachchikumbura et al. (2015, 2016; outline), Daranagama et al. (2017 morphology, phylogeny), cultures and sequence are available but lacks for the type species.

Lopezaria Kalb & Hafellner 1990, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *L. versicolor* (Fée) Kalb & Hafellner, asexual morph unknown, lichenized, Morocco, see Seifert et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for type species AFTOL-ID 108, needs generic revision.

Lophiella Sacc. 1878, *Dothideomycetes* genera *incertae sedis*, one species, type: *L. cristata* (Pers.) Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lophiostomataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, Index Fungorum (2016) treated type species as a synonym of *Lophiostoma angustilabrum* (Berk. & Broome) Cooke, holotype of type material unavailable, needs generic revision.

Lophiohelichrysum Dayarathne, Camporesi & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *L. helichrysi* Dayarathne, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Ariyawansa et al. (2015;

taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-0175, MFLUCC 15-0701.

Lophionema Sacc. 1883, *Dothideomycetes* genera *incertae sedis*, nine species, type: *L. vermisporum* (Ellis) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lophiostomataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Lophiopoacea Ariyaw., Thambug., Camporesi & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *L. arundinis* Ariyawansa, Thambugala, Camporesi & K.D. Hyde, asexual morph unknown, saprobes on *Poaceae*, terrestrial, Italy, Japan, see Thambugala et al. (2015b; morphology, phylogeny), cultures and sequenced are available, holotype and ex-type of type species MFLU 14-0590, MFLUCC 11-0463.

Lophiosphaerella Hara 1948, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *L. euryae* (Syd.) Hara, asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Li et al. (2014; transferred to *Mycosphaerellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Lophiostoma Ces. & De Not. 1863, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, c. 100 species, type: *L. macrostomum* (Tode) Ces. & De Not., asexual morph coelomycetous, only known for *L. semiliberum*, saprobes, terrestrial, aquatic, worldwide, sequence data available for four species, see Lumbsch and Huhndorf (2010; outline), Hirayama and Tanaka (2011; phylogeny), Hyde et al. (2013; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Thambugala et al. (2015; phylogeny, review), cultures and sequences are available, epitype of the type: IFRD 2005.

Lophiotrema Sacc. 1878, *Lophiotremataceae*, *Pleosporales*, *Dothideomycetes*, 15 species, type: *L. nucula* (Fr.) Sacc., asexual morph coelomycetous, saprobes, terrestrial habitats, worldwide, See Hirayama and Tanaka (2011; taxonomy, phylogeny), Zhang et al. (2012; taxonomy, phylogeny), Hyde et al. (2013, 2016; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type: Scler. suec. n. 230.

Lophium Fr. 1818, *Mytilinidiaceae*, *Mytilinidiales*, *Dothideomycetes*, five species, type: *L. mytilinum* (Pers.) Fr., asexual morph papulaspora-like, saprobes, terrestrial, Europe, America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mytilinidiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hernández-Restrepo et al. (2016; new species), cultures and sequences are available.

Lophodermella Höhn. 1917, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, nine species, type: *L. sulcigena* (Link) Tubeuf, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Lophodermium Chevall. 1826, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, c. 145 species, type: *L. arundinaceum* (Schrad.) Chevall., asexual morph unknown, pathogens, saprobes, endophytes, terrestrial, widespread, see Lumbsch and hunduf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Lophomerum Ouell. & Magasi 1966, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, nine species, type: *L. autumnale* (Darker) Magasi, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available for *Lophomerum ponticum* (Lantz et al. 2011), but lacks for the type species, needs generic revision.

Lophophacidium Lagerb. 1949, *Phacidiaceae*, *Phacidiales*, *Leotiomycetes*, five species, type: *L. hyperboreum* Lagerb., asexual morph unknown, pathogens, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lafalme et al. (2015; pathogens, phylogeny), cultures and sequences are available but lacks for the type species, needs generic revision.

Lophotrichus R.K. Benj. 1949, *Microascaceae*, *Microascales*, *Sordariomycetes*, one species, type: *L. ampullus* R.K. Benj., asexual morph hyphomycetous (humicola-like), saprobes, human pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Eghrari et al. (2015; human pathogens, DNA), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, available specimen and cultures for the type: CBS H-14124, UAMH 11809.

Loramycetes W. Weston 1929, *Loramycetaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *Loramycetes juncicola* W. Weston, asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; phylogeny), Tanney et al. (2016; DNA, phylogeny), cultures and sequences are available.

Loranitschkia Lar.N. Vassiljeva 1990, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, one species, type: *L. viticola* Lar.N. Vassiljeva, asexual morph unknown, saprobes, terrestrial, Asia, see Vasilyeva et al. (2009, 2010, 2013; taxonomy, distribution), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: VLA, Vasil'eva.

Loratospora Kohlm. & Volkm. 1993, *Phaeosporiaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *L. aestuarii* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, terrestrial, USA, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; revision), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; phylogeny), cultures and sequences are available, holotype and cultures available for the type: IMS J.K. 5505, JK 5535B.

Loricella Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *L. juncina* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lotinia Pérez-Butrón, Fern.-Vic. & P. Alvarado 2015, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *L. verna* Pérez-Butrón, Fern.-Vic. & P. Alvarado, asexual morph unknown, saprobes, Spain, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Loxospora A.Massal. 1852, *Sarrameanaceae*, *Sarrameanales*, *Lecanoromycetes*, 13 species, type: *L. elatina* (Ach.) A. Massal., lichenized, Australia, Asia, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Loxosporopsis Henssen 1995, *Pertusariaceae*, *Pertusariales*, *Lecanoromycetes*, one species, type: *L. corallifera* Brodo, Henssen & Imshaug, asexual morph unknown, lichenized, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; DNA, phylogeny), cultures and sequences are available, holotype of type: herb. Henssen, Henssen 13604; isotypes CANL, FH, GZU, UPS, US.

Lucidascoarpha A. Ferrer, Raja & Shearer 2008, *Dothideomycetes* genera *incertae sedis*, one species, type: *L. pulchella* A. Ferrer, Raja & Shearer, asexual morph unknown, submerged wood from freshwater, Panama, Ecuador, see Ferrer et al. (2008; genus proposed), Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: ILL 40558 (AF178-2).

Luciotrichus R. Galán & Raitv. 1995, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *L. lasioboloides* R. Galán & Raitv., asexual morph unknown, saprobes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: RG [sic] 6808.

Ludwigomyces Kirschst. 1939, *Ascomycota* genera *incertae sedis*, one species, type: *L. parasiticus* Kirschst., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lueckingia Aptroot & Umaña 2006, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *L. polyspora* Aptroot & Umaña, asexual morph unknown, lichenized, terrestrial, tropical, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type species INB, Aptroot 60206.

Lulwoana Kohlm., Volkm.-Kohlm., J. Campb., Spatafora & Gräfenhan 2005, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, one species, type: *L. uniseptata* (Nakagiri) Kohlm., Volkm.-Kohlm., J. Campb., Spatafora & Gräfenhan, asexual morph unknown, endophytic, saprobes, marine, Japan, see Lumbsch and Huhndorf (2010; outline), Jones et al. (2015; outline of marine genera), Maharachchikumbura et al. (2015, 2016; outline), Panzer et al. (2015; DNA, distribution), Torta et al. (2015; endophytes, DNA), cultures and sequences are available.

Lulwoidea Kohlm., Volkm.-Kohlm., J. Campbell, Spatafora & Gräfenhan 2005, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, one species, type: *L. lignoarenaria* (Jørg. Koch & E. B. G. Jones) Kohlm., Volkm.-Kohlm., J. Campb., Spatafora & Gräfenhan, asexual morph unknown, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: Herb. J. Koch 398, slides 1-5 (CP).

Lulworthia G. K. Sutherl. 1915, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, eleven species, type: *L. fucicola* G.K. Sutherl., asexual morph hyphomycetous, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline), ex-neotype of type: ATCC 64288.

Lunatiannulus Daranagama, Camporesi & K.D. Hyde 2015, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *L. irregularis* Daranagama, Camporesi & K.D. Hyde, asexual morph libertella-like, saprobes, terrestrial, Italy, Europe, see Daranagama et al. (2015; morphology, phylogeny), Maharachchikumbura et al. (2016; morphology, phylogeny), holotype and ex-type strains of type species MFLU 14-0236, MFLUCC 14-0014.

Lunulospora Ingold 1942, *Sordariales* genera *incertae sedis*, two species, type: *L. curvula* Ingold, hyphomycetous, sexual morph unknown, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available.

Luteocirrhus C.F. Crane, B.L. Shearer & T.I. Burgess 2013, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *L. shearii* C.F. Crane, B.L. Shearer & T.I. Burgess, coelomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Crane and Burgess (2013; taxonomy, phylogeny), Shearer and Crane (2014; pathogens), Norphanphoun et al. (2016; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and the ex-type cultures of the type species PERTH 08439362, CBS 130776 = WAC 13425.

Luttrellia Shearer 1978, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, four species, type: *L. estuarina* Shearer, asexual morph unknown, saprobes, marine, fresh water, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accepted), Jones et al.

(2015; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Luzfridiella R.F. Castañeda & W.B. Kendr. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *L. insignis* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lylea Morgan-Jones 1975, *Ascomycota* genera *incertae sedis*, six species, type: *L. catenulata* Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, Europe, see Karandikar and Singh (2010; new species, India), McKenzie (2009; new species, New Zealand), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Xia et al. (2014; new species, China), cultures and sequences are unavailable, needs generic revision.

Lyromma Bat. & H. Maia 1965, *Lyrommataceae*, *Chaetothyriales*, *Eurotiomycetes*, seven species, type: *L. nectandrae* Bat. & H. Maia, coelomycetous, sexual morph unknown, lichenicolous, lichenized, worldwide, see Lücking (2008; new species, taxonomy), Wijayawardene et al. (2012; outline, accepted as *Pyrenulales*), Kirk et al. (2013; genus accepted), Flakus and Farkas (2013; new species, Bolivia), Farkas and Flakus (2015; South Africa), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Lysotheca Cif. 1962, *Ascomycota* genera *incertae sedis*, six species, type: *L. suprastromatica* Cif., coelomycetous, sexual morph unknown, saprobes, Dominican Republic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Maasoglossum K.S. Thind & R. Sharma 1985, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, one species, type: *M. verrucisporum* K.S. Thind & R. Sharma, asexual morph unknown, saprobes, terrestrial, Asia, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as *Leotiomycetes*), Kirk et al. (2013; genus accepted), Hustad and Miller (2014; revision, phylogeny), Cultures and sequences are available, cultures available for the type: CUP-IN-000606 (Hustad and Miller 2014), needs generic revision.

Macgarvieomyces Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, two species, type: *M. borealis* (de Hoog & Oorschot) Klaubauf, Lebrun & Crous, hyphomycetous, pathogens, terrestrial, UK, Netherlands, see Klaubauf et al. (2014; phylogeny, morphology, asexual morph), Wijayawardene et al. (2017; outline), cultures and sequences available, ex-type strain of type species CBS 461.65, needs generic revision.

Mackenziella Yanna & K.D. Hyde 2009, *Ascomycota* genera *incertae sedis*, one species, type: *M. livistonae* (Yanna & K.D. Hyde) Yanna & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Yanna and Hyde (2009; morphology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: HKU (M) 13304.

Macowaniella Doidge 1921, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. congesta* (G. Winter) Doidge, epiphytes, terrestrial, see Hofmann (2009; review, accepted in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, treated as a doubtful genus in *Asterinales*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Macroconia (Wollenw.) Gräfenhan, Seifert & Schroers 2011, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *Macroconia leptosphaeriae* (Niessl) Gräfenhan & Schroers, hyphomycetous, terrestrial, mostly fungicolous, Northern hemisphere, see

Gräfenhan et al. (2011; phylogeny), Lombard et al. (2015; phylogeny), Cultures and sequences are available, lectotype of type: K(M) 165805.

Macroderma Höhn. 1917, *Cryptomycetaceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *M. curtisii* (Berk. & Ravenel) Höhn., asexual morph unknown, saprobes, terrestrial, North America, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Macrodiaporthe Petr. 1920, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *M. occulta* (Fuckel) Petr., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, Needs generic revision.

Macrodiplodia Sacc. 1884, *Ascomycota* genera *incertae sedis*, two species, type: *M. curreyi* (Sacc. & Roum.) Sacc., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Macrodiplodiopsis Petr. 1922, *Macrodiplodiopsidaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *M. desmazieri* (Mont.) Petr., asexual morph coelomycetous, saprobes, Europe, see Wijayawardene et al. (2012, 2014, 2016; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015; taxonomy, sexual morph, typification), Tanaka et al. (2015; phylogeny), cultures and sequences are available, lectotype of the type: PC 0142158, epitype and ex-epitype of the type: CBS H-22269, CBS 140062 (Crous et al. 2015).

Macrographa Etayo 2008, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *M. antarctica* Etayo, asexual morph unknown, terrestrial, parasymbiont, or parasite on *Nephroma antarcticum*, South America, see Etayo and Sancho (2008; morphology), Hyde et al. (2013; accepted as *Trichothyriaceae*, but without molecular data), cultures and sequences are unavailable, holotype of the type species MAF, Etayo 23269.

Macrohilum H.J. Swart 1988, *Macrohilaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *M. eucalypti* H.J. Swart, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2016; outline, morphology, phylogeny), Crous et al. (2015a; morphology, phylogeny), cultures and sequences are available, epitype and ex-epitype of the type: CBS H-22279, CBS 140063.

Macrophomina Petr. 1923, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, three species, type: *M. phaseolina* (Tassi) Goid., coelomycetous, sexual morph unknown, saprobes, pathogens, in soil, terrestrial, cosmopolitan, see Phillips et al. (2008, 2013; taxonomy, phylogeny), Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny), Dissanayake et al. (2016; taxonomy), cultures and sequences are available.

Macrorhabdus Tomaszewski, Logan, Snowden, Kurtzman & Phalen 2003, *Saccharomycetales* genera *incertae sedis*, *Saccharomycetes*, one species, type: *M. ornithogaster* Tomasz., asexual reproduction is by fission, typically infects the stomach area of budgerigars (*Melopsittacus undulates*) and other birds causing a wasting disease, on Budgerigars and other birds, worldwide, sequences are available.

Macrovalsaria Petr. 1962, *Dothideomycetes* genera *incertae sedis*, *Incertae sedis*, , two species, type: *M. leonensis* (Deighton) Petr., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline, *Dothideomycetes*), Hyde et al. (2013; accepted in *Botryosphaeriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted in *Botryosphaeriaceae*), Doilom et al. (2016; DNA, phylogeny), cultures and sequences are available but lacks for the type species, needs generic revision.

Macroventuria Aa 1971, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *M. anomochaeta* Aa, asexual morph unknown, saprobes, ?pathogens, terrestrial, cosmopolitan, see Aveskamp et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Chen et al. (2015; taxonomy, phylogeny), cultures and sequences are available.

Maculatifrones K.D. Hyde 1996, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *M. aequatoriensis* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: BRIP 23240, needs generic revision.

Maculati Palma J. Fröhl. & K.D. Hyde 1995, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *M. frondicola* J. Fröhl. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: BRIP 21402, needs generic revision.

Madurella Brumpt 1905, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, nine species, type: *M. mycetomatis* (Laveran) Brumpt, hyphomycetous, sexual morph unknown, saprobes, human (causal agent of black-grain mycetoma) and animal pathogens, worldwide, see Fahala et al. (2011; pathogen, treatments), Seifert et al. (2011; morphology), de Hoog et al. (2012, 2013; new species, Sudan, Sumatera), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Irinyi et al. (2015; barcode), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, cultures available for the type species CBS 247.48 (*fide* de Hoog et al. 2013), needs generic revision.

Magmopsis Nyl. 1875, *Arthopyreniaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. pertenella* Nyl., lichenized, see Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Magnaporthiopsis J. Luo & N. Zhang 2013, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, six species, type: *M. poae* (Landsch. & N. Jacks.) J. Luo & N. Zhang, asexual morph hyphomycetous, pathogens, terrestrial, worldwide, see Luo and Zhang (2013; taxonomy, phylogeny), Klaubauf et al. (2014; new species, phylogeny), Luo et al. (2014; new species, phylogeny), Crous et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), Khemmuk et al. (2016; phylogeny), holotype and cultures available for the type species DAR 59044, M47 (*fide* Luo and Zhang 2013).

Magnibotryascoma Thambugala & K.D. Hyde 2015, *Floricolaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. uniseriatum* (Mugambi, A.N. Mill. & Huhndorf) Thambug. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, USA, see Thambugala et al. (2015b; phylogeny), cultures and sequences are available, holotype of type species ANM 909.

Magnicamarosporium Kaz. Tanaka & K. Hiray. 2015, *Sulcatisporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type species: *M. iriomotense* Kaz. Tanaka & K. Hiray., sexual morph unknown, saprobes, terrestrial, Japan, see Tanaka et al. (2015; morphology, phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type cultures of the type: HHUF 30125, CBS 139696.

Magnisphaera J. Campb., J.L. Anderson & Shearer 2003 (= *Matsusphaeria* K.L. Pang & E.B.G. Jone *fide* Maharachchikumbura et al. 2015, 2016), *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *Magnisphaera spartinae* (E.B.G. Jones) J. Campb., J.L. Anderson & Shearer, asexual morph unknown, saprobes, marine, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept as a valid genus), Jones et al.

(2015; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Reblova et al. (2016; DNA, phylogeny), cultures and sequences are available.

Magnohelicospora R.F. Castañeda, Hern.-Restr., Gené & Guarro 2013, *Ascomycota* genera *incertae sedis*, one species, type: *M. iberica* R.F. Castañeda, Hern.-Restr., Gené & Guarro, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Portugal, see Castañeda-Ruiz et al. (2013; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: HAL (Fungi) 2447, cultures and sequences are unavailable, needs generic revision.

Magnusiomyces Zender 1977 (= *Saprochaete* Coker & Shanor ex D.T.S. Wagner & Dawes 1970), *Dipodascaceae*, *Saccharomycetales*, *Saccharomycetes*, eight species, type: *M. ludwigii* Zender, asexual reproduction consists of true hyphae that branch at acute angles with acuminate apices, and that disarticulate into arthroconidia, saprophytic, but clinical isolates are not uncommon, soil, tree fluxes, waste water, insect tunnels in trees, worldwide, cultures and sequences are available.

Mahabalella B. Sutton & S.D. Patil 1966, *Ascomycota* genera *incertae sedis*, two species, type: *M. acutisetosa* B. Sutton & S.D. Patil, hyphomycetous, with acremonium-like synasexual morph, sexual morph unknown, saprobes, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Majewskia Y.B. Lee & K. Sugiy. 1986, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *M. japonica* Y.B. Lee & K. Sugiy., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Malacaria Syd. 1930, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. meliolicola* Syd., asexual morph unknown, saprobes, pantropical, see Lumbsch and Huhndorf (2010; outline, accepted in *Tubeufiaceae*), Hyde et al. (2013; not accepted in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; not accepted in *Tubeufiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Malaysiasca Crous & M.J. Wingf. 2016, *Glomerellales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *M. phaii* Crous & M.J. Wingf., asexual morph coelomycetous, saprobes, terrestrial, Malaysia, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type species CBS H-22616, CPC 27548.

Malbranchea Sacc. 1882, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, 22 species, type: *M. pulchella* Sacc. & Penz., hyphomycetous, sexual morph unknown, in soil, dung, keratin, cellulose, man and other substrata, terrestrial, Northern America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Malcolmiella Vězda 1997, *Teloschistales* genera *incertae sedis*, *Lecanoromycetes*, one species, type: *M. cinereovirens* Vězda, lichenized, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kalb et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, holotype of type: CHR (2757).

Mallochia Arx & Samson 1986, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, four species, type: *M. echinulata* (B.G. Dutta & G.R. Ghosh) Arx & Samson, asexual morph unknown, saprobes, paleotropical, see Lumbsch and Huhndorf (2010; outline, accepted in *Onygenaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen for type: CBS H-6703, needs generic revision.

Malmeomyces Starbäck 1899, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. pulchellus* Starbäck, asexual morph unknown, terrestrial, saprobes, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Malmidea Kalb, Rivas Plata & Lumbsch 2011, *Malmideaceae*, *Lecanorales*, *Lecanoromycetes*, 50 species, type: *M. piperis* (Spreng.) Kalb, Rivas Plata & Lumbsch, ascomata apotheciate, conidiomata pycnidial, lichen-forming, mostly on bark, pantropical, see Kalb et al. (2011; phylogeny), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Malmographina M. Cáceres, Rivas Plata & Lücking 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *M. plicosa* (C.F.W. Meissn.) M. Cáceres, Rivas Plata & Lücking, asexual morph unknown, lichenized, terrestrial, pantropical, see Cáceres et al. (2012; taxonomy), Lumbsch et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Malthomyces K.D. Hyde & P.F. Cannon 1999, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *M. calamigena* (Berk. & Broome) K.D. Hyde & P.F. Cannon, asexual morph unknown, saprobes, terrestrial, India, Sri Lanka, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Mamiania Ces. & De Not. 1863, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, three species, type: *M. fimbriata* (Pers.) Ces. & De Not., asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Mamianiella Höhn. 1917, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, three species, type: *M. coryli* (Batsch) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Sogonov et al. (2008; accepted as *Diaporthales*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Gnomoniaceae*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as *Diaporthales*), cultures and sequences are available, available specimen and cultures for the type: CBS H-14211, BPI 877578.

Mamillisphaeria K.D. Hyde, S.W. Wong & E.B.G. Jones 1996, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. dimorphospora* K.D. Hyde, S.W. Wong & E.B.G. Jones, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Melanommataceae*), Wijayawardene et al. (2014; outline), Tian et al. (2015; accepted as a genus in *Melanommataceae*), holotype of the type: BRIP 22967, cultures and sequences are unavailable.

Mammaria Ces. ex Rabenh. 1854, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, two species, type: *M. echinobotryoides* Ces., sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, available specimen for type: CBS H-14212.

Manglicola Kohlm. & E. Kohlm. 1971, *Manglicolaceae*, *Jahmiales*, *Dothideomycetes*, two species, type: *M. guatemalensis* Kohlm. & E. Kohlm., asexual morph unknown, saprobes, marine, Brunei, Guatemala, Thailand, see Jones et al. (2009, 2015; classification), Suetrong et al. (2010, 2011a; morphology, phylogeny), Jones et al. (2012; morphology, phylogeny), Hyde et al. (2013; morphology, phylogeny), Shearer et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype and ex-isotype strain of type species J.K. Nos. 2700 (NY), J.K. 2700a (IMS).

Mangoldia Lücking, Parmen & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *M. australiana* Lücking, Parmen & Lumbsch, asexual morph unknown, lichenized, terrestrial, Australia, see Lücking et al. (2012, 2014; taxonomy), Lumbsch et al. (2014; phylogeny), sequences are available, holotype of the type: CANB, Mangold 27zB.

Mangrovispora K.D. Hyde & Nakagiri 1991, *Sordariomycetes* genera *incertae sedis*, two species, type: *M. pemphii* K.D. Hyde & Nakagiri, asexual morph unknown, saprobes, marine, Australia, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; accepted as *Phyllachorales*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available (unpublished), holotype of the type: BRIP 17112.

Manoharachariella Bagyan., N.K. Rao & Kunwar 2009, *Tubeufiaceae*, *Tubeufiales*, *Dothidiomycetes*, four species, type: *M. lignicola* Bagyan., N.K. Rao & Kunwar, sexual morph unknown, saprobes, terrestrial, Asia and Turkey, see Bagyanarayana et al. (2009; established genera), Rajeshkumar et al. (2012; new species), Faruk et al. (2014; new species), Doilom et al. (2016; new species), cultures and sequences are available for *M. tectonae*, holotype of type: IMI 296857.

Manokwaria K.D. Hyde 1993, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *Manokwaria notabilis* K.D. Hyde, asexual morph unknown, saprobes, fresh water, Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: BRIP 20854, needs generic revision.

Mapletonia B. Sutton 1991, *Ascomycota* genera *incertae sedis*, one species, type: *M. falcata* B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species IMI 263431a.

Marasasiomyces Crous 2015, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, one species, type: *M. karoo* (B. Sutton & Marasas) Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-isotype culture of the type: PREM 44967, CBS 118718.

Marcelaria Aptroot, Nelsen & Parmen 2013, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, three species, type: *M. purpurina* (Nyl.) Aptroot, Nelsen & Parmen, asexual morph unknown, lichenized, terrestrial, worldwide, see Aptroot et al. (2013; taxonomy), Nelsen et al. (2014; DNA, phylogeny), Luangsaphabool et al. (2016; DNA, phylogeny), cultures and sequences are available, holotype and cultures available for the type species 236 (PC), MPN323A (*fide* Nelsen et al. 2014).

Marcelleina Brumm., Korf & Rifai 1967, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *M. persoonii* (P. Crouan & H. Crouan) Brumm., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lantieri and Pfister (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rubio et al. (2014; new species, Spain), cultures and sequences are available, cultures available for type: TL-5696, needs generic revision.

Marchantiana S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur 2014, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *M. occidentalis* (Elix, S. Y. Kondr. & Kärnefelt) S.Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A.S. Kondr. & Hur, asexual morph unknown, lichenized, terrestrial, Australia, see Kondratyuk et al. (2014, 2015; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, holotype and available cultures of the type: CANB Elix 32479, SK981 and SK982.

Margaritispora Ingold 1942, *Helotiales* genera *incertae sedis*, one species, type: *M. aquatica* Ingold, hyphomycetous, sexual morph unknown, saprobes, aquatic, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Mariannaea G. Arnaud ex Samson 1974, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *Mariannaea elegans* (Corda) Samson, asexual morph hyphomycetous, terrestrial, saprobes and in soil, Asia, see Gräfenhan et al. (2011; phylogeny), Lombard et al. (2015; phylogeny), cultures and sequences are available, holotype of type species in herb. Corda (as *Penicillium elegans*).

Marinokulati E.B.G. Jones & K.L. Pang 2014, *Juncigenaceae*, *Torpedosporales*, *Sordariomycetes*, one species, type: *M. chaetosa* (Kohlm.) E.B.G. Jones & K.L. Pang, saprobes, marine, temperate, asexual morph unknown, see Jones et al. (2014, 2015; morphology, phylogeny; outline), cultures and sequences are available.

Marinosphaera K.D. Hyde 1989, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *M. mangrovei* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Brunei, see Jones et al. (2009, 2015; phylogeny, outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: IMI 325412, needs generic revision.

Marinospora A.R. Caval 1966, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *M. calyptrata* (Kohlm.) A.R. Caval., asexual morph unknown, saprobes, marine, Argentina, Belgium, Denmark, France, Germany, Scotland, Iceland, Spain, USA, Canada, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), cultures and sequences are available, needs generic revision.

Marisolaris Jørgen Koch & E.B.G. Jones 1989, *Sordariomycetes* genera *incertae sedis*, one species, type: *M. ansata* Jørg. Koch & E.B.G. Jones, asexual morph unknown, marine, temperate, on wood associated with sand, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Ascomycota* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), no sequence data, needs generic revision.

Maronea A.Massal. 1856, *Fuscideaceae*, *Umbilicariales*, *Lecanoromycetes*, 13 species, type: *M. berica* A. Massal., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; phylogeny), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Maronella M. Steiger 1959, *Biatorrellaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *M. laricina* M. Steiner, lichenized, temperate northern hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Marthamyces Minter 2003, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, nine species, type: *M. emarginatus* (Cooke & Masee) Minter, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lantz et al. (2011; DNA, phylogeny), cultures and sequences are available.

Martinellisia V.G. Rao & Varghese 1977, *Ascomycota* genera *incertae sedis*, one species, type: *M. indica* V.G. Rao & Varghese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Martininia Dumont & Korf 1970, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, ten species, type: *M. panamaensis* Dumont & Korf, asexual morph unknown, saprobes, terrestrial,

worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Martiniozyma Kurtzman 2015, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, two species, type: *M. abiesophila* (Kurtzman) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, water, soil, fruit, sap of red fir, worldwide, see Kurtzman (2015; taxonomy), cultures and sequences are available.

Martinjahnsia S.Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.S. Hur & A. Thell 2012, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, ten species, type: *M. resendei* (Poelt & C. Tav.) S.Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.S. Hur & A. Thell, asexual morph unknown, lichenized, terrestrial, worldwide, see Fedorenko et al. (2012; taxonomy), cultures and sequences are unavailable.

Masonhalea Kärnefelt 1977, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *M. richardsonii* (Hook.) Kärnefelt, lichenized, Arctic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Massalongia Körb. 1855, *Massalongiaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *M. carnosa* (Dicks.) Körb., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Massalongina Bubák 1916, *Ascomycota* genera *incertae sedis*, one species, type: *M. aquilina* (C. Massal.) Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Massaria De Not. 1844, *Massariaceae*, *Pleosporales*, *Dothideomycetes*, 31 species, type: *M. inquinans* (Tode) De Not., asexual morph coelomycetous, saprobes or weak parasitic, terrestrial, northern temperate climate zone, see Lumbsch and Huhndorf (2010; outline), Voglmayr and Jaklitsch (2011; taxonomy, phylogeny), Hyde et al. (2013, 2016; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data available for 17 species, holotype of type species WU 30526.

Massarina Sacc. 1883, *Massarinaceae*, *Pleosporales*, *Dothideomycetes*, c. 100 species, type: *M. eburnea* (Tul. & C. Tul.) Sacc., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Zhang et al. (2009a, b; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tanaka et al. (2015; taxonomy, phylogeny), cultures and sequences are available.

Massariola Füsting 1868, *Dothideomycetes* genera *incertae sedis*, two species, type: need typification, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Massariosphaeria (E. Müll.) Crivelli 1983, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, 25 species, type: *M. phaeospora* (E. Müll.) Crivelli, asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lophiostomataceae*), Tanaka et al. (2011; new species, Pakistan), Hyde et al. (2013; excluded from *Lophiostomataceae*) Kirk et al. (2013; genus accepted), Thambugala et al. (2014; excluded from *Lophiostomataceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Pleosporales*), cultures available for the type: CBS 611.86 (*vide* Schoch et al. 2009), needs generic revision.

Massariothea Syd. 1939, *Ascomycota* genera *incertae sedis*, eight species, type: *M. themedae* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see

Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Massariovalsia Sacc. 1882 (= *Melanconiopsis* Ellis & Everh. *vide* Rossman et al. 2015), *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *M. sudans* (Berk. & M.A. Curtis) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, available specimen for type: CBS H-14272, needs generic revision.

Masseea Sacc. 1889, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *M. quisquiliarum* (Berk. & M.A. Curtis) Sacc., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Mastigosporella Höhn. 1914 (= *Wuestneiopsis* J. Reid & Dowsett 1990 *vide* Rossman et al. 2015), *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *M. hyalina* (Ellis & Everh.) Höhn., asexual morph coelomycetous, pathogens, saprobes, terrestrial, worldwide, see Crous et al. (2013; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2015; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are available but lack for the type, needs generic revision.

Mastigosporium Riess 1852, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, four species, type: *M. album* Riess, coelomycetous, sexual morph unknown, pathogens, terrestrial, temperate, see Kirk et al. (2013; genus accepted), Crous et al. (2014; taxonomy, epitypification, phylogeny), cultures and sequences are available but lacks for the type species, needs generic revision.

Mastodia Hook.f. & Harv. 1847, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, five species, type: *M. tessellata* (Hook. f. & Harv.) Hook. f. & Harv., lichenized, Southern hemisphere, especially Antarctica, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Mastodiaceae*), Pérez-Ortega et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Matsushimaea Subram. 1978, *Ascomycota* genera *incertae sedis*, three species, type: *M. fasciculata* (Matsush.) Subram., sexual morph unknown, saprobes, terrestrial, Asia, North America, Africa, see Hyde et al. (2011; checklist), Rambelli (2011; Mediterranean), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Matsushimiella R.F. Castañeda & Heredia 2001, *Ascomycota* genera *incertae sedis*, two species, type: *M. queenslandica* (Matsush.) R.F. Castañeda & Heredia, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Monteiro et al. (2015; new species, Brazil), holotype of type: MFC-8A063, cultures and sequences are unavailable, compare with *Minimelanolocus*, *Nigrolentilocus*, *Pseudospiropes* and *Spiropes*.

Matsushimomyces V.G. Rao & Varghese 1979, *Ascomycota* genera *incertae sedis*, two species, type: *M. indicus* V.G. Rao & Varghese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Matsusporium E.B.G. Jones & K.L. Pang 2010, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, one species, type: *M. tropicale* (Kohlm.) E.B.G. Jones & K.L. Pang, hyphomycetous, sexual morph unknown, saprobes, marine, pantropical, see Abdel-Wahab et al. (2010; phylogeny), cultures and sequences are available, holotype of type: IMI 325412.

Mattirolella S. Colla 1929, *Kathistaceae*, *Ophiostomatales*, *Sordariomycetes*, one species, type: *M. silvestrii* S. Colla, saprobes, Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Mattirolia Berl. & Bres. 1889, *Thyridiaceae*, *Sordariomycetes* family *incertae sedis*, one species, type: *M. roseovirens* Berl. & Bres., saprobes, Africa, see Lumbsch and Huhndorf (2010; outline), Checa et al. (2013; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences and cultures are unavailable, epitype of type: WU 32154.

Mattiolomyces E. Fisch. 1938, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *M. terfezioides* (Mattir.) E. Fisch., asexual morph unknown, hypogeous, terrestrial, worldwide, see Trappe et al. (2010; DNA), Kovács et al. (2011; DNA, new combination), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Maublancia G. Arnaud 1918, *Dothideomycetes* genera *incertae sedis*, one species, type: *M. myrtacearum* G. Arnaud, asexual morph unknown, saprobes, terrestrial, South America, South Africa, see Lumbsch and Huhndorf (2010; outline, accepted in *Microthyriaceae*), Wu et al. (2011; excluded from *Microthyriaceae*), Hyde et al. (2013; excluded from *Microthyriaceae*), Wijayawardene et al. (2014, accepted in *Dothideomycetes*), cultures and sequences are unavailable, available specimen of type: CBS H-14276.

Mauginiella Cavara 1925, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. scaettae* Cavara, asexual morph unknown, saprobes, pathogens, terrestrial, South America, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Mauritiana Poonyth, K.D. Hyde, Aptroot & Peerally 2000, *Halotthiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. rhizophorae* Poonyth, K.D. Hyde, Aptroot & Peerally, asexual morph unknown, saprobes, marine, see Alias and Jones (2009; monograph), Suetrong et al. (2009; phylogeny, morphology), Jones et al. (2009, 2015; outline, marine), Zainuddin et al. (2010; antimicrobial activities), Lee et al. (2012; checklist, Malaysia), Zhang et al. (2012; phylogeny, morphology), Hyde et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype of type: HKU(M) 10219.

Mawsonia C.W. Dodge 1948, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *M. harrissonii* C.W. Dodge, lichenized, Brazil, Antarctica, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Mazaediothecium Aptroot 1991, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, three species, type: *M. rubiginosum* Aptroot, asexual morph unknown, lichenized, terrestrial, Papua New Guinea, Costa Rica, Malaysia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type: Aptroot (17464).

Mazosia A. Massal. 1854, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, 27 species, type: *M. rotula* (Mont.) A. Massal., sexual morph with apothecioid ascomata, asexual morph coelomycetous, lichenized, rarely lichenicolous, terrestrial, tropical to subtropical regions, see Lücking (2008, morphology), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; phylogeny), Frisch et al. (2014; phylogeny), Lücking et al. (2016; classification), sequence data available for a few species, holotype of species unavailable.

Mazzantia Mont. 1855, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *M. galii* (Fr.) Mont., asexual morph coelomycetous, saprobes, terrestrial, Europe, America, see Sogonov et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for the type: AR4658 (*vide* Udayanga et al. 2014).

Mebarria J. Reid & C. Booth 1989, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *M. thujina* (Nag Raj & DiCosmo) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Medeolaria Thaxt. 1922, *Medeolariaceae*, *Medeolariales*, *Pezizomycotina* order *incertae sedis*, one species, type: *M. farlowii* Thaxt., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Medusamyces G.L. Barron & Szijarto 1990, *Ascomycota* genera *incertae sedis*, two species, type: *M. lunulosporus* G.L. Barron & Szijarto, hyphomycetous, sexual morph unknown, on rotifers, aquatic, Canada, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: OAC 10845.

Megacapitula J.L. Chen & Tzean 1993, *Ascomycota* genera *incertae sedis*, two species, type: *M. villosa* J.L. Chen & Tzean, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Prabhugaonkar and Bhat (2011; record in India, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype and cultures available for the type: PPH17, GUFCC 15515 (*vide* Prabhugaonkar and Bhat 2011).

Megalaria Hafellner 1984, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, 29 species, type: *M. grossa* (Pers. ex Nyl.) Hafellner, lichenized, worldwide, see Ekman et al. (2008; Ancestral state reconstructions), Schmull et al. (2011; phylogeny), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Megaloblastenia Sipman 1983, *Megalosporaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *M. flavidoatra* (Nyl.) Sipman, lichenized, Australia, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Megalodochium Deighton 1960, *Ascomycota* genera *incertae sedis*, four species, type: *M. palmicola* Deighton, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, China, India, Sierra Leone (tropical Africa), see Tiwari and Rai (2009; morphology), Wijayawardene et al. (2012, 2017; outline), Zhao and Zhao (2012; morphology), Crous et al. (2015; compare with *Melanconium*), cultures and sequences are unavailable, needs generic revision.

Megalohypha A. Ferrer & Shearer 2007, *Aliquandostipitaceae*, *Jahnulales*, *Dothideomycetes*, one species, type: *M. aqua-dulces* A. Ferrer & Shearer, freshwater, Panama, Thailand, see Suetrong et al. (2011; phylogeny), cultures and sequences are available, holotype of type: AF005 ILL.

Megaloseptoria Naumov 1925, *Ascomycota* genera *incertae sedis*, one species, type: *M. mirabilis* Naumov, coelomycetous, sexual morph unknown, saprobes, terrestrial, Russia, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Megalospora Meyen 1843, *Megalosporaceae*, *Teloschistales*, *Lecanoromycetes*, 35 species, type: *M. sulphurata* Meyen, lichenized, tropical and warm temperate zones, see Lumbsch and Huhndorf (2010; outline), Kantvilas and Lumbsch (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Megalotremis Aptroot 1991, *Monoblastiaceae*, *Monoblastiales*, *Dothideomycetes*, twelve species, type: *M. verrucosa* (Makhija & Patw.) Aptroot, asexual morph unknown, lichenized,

terrestrial, tropical, India, Costa Rica, Sri Lanka, see Nelsen et al. (2009, 2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures available for type: MPN104 (*vide* Nelsen et al. 2011), needs generic revision.

Megaspora (Clauzade & Cl. Roux) Hafellner & V. Wirth 1987, *Megasporaceae*, *Pertusariales*, *Lecanoromycetes*, three species, type: *M. verrucosa* (Ach.) Hafellner & V. Wirth, lichenized, Austria, Iran, Armenia, see Lumbsch and Huhndorf (2010; outline), Valadbeigi et al. (2011; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Zakeri et al. (2016; new species), cultures and sequences are available, needs generic revision.

Meionomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, six species, type: *M. asteni* Thaxt., asexual morph unknown, biotrophic, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Melanamphora Lafl. 1976, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *M. spinifera* (Wallr.) Lafl., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Melanconiella Sacc. 1882, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *M. spodiaea* (Tul. & C. Tul.) Sacc., asexual morph *discosporina*-like and *melanconium*-like, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Voglmayr et al. (2012; taxonomy, phylogeny, asexual morph, typification), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, cultures available for type species SPOD1, SPOD, MVS, MSH (*vide* Voglmayr et al. 2012), needs generic revision.

Melanelia Essl. 1978, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, six species, type: *Melanelia stygia* (L.) Essl., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Melanelixia O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 2004, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, eight species, type: *M. glabra* (Schaer.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch (syn. *Parmelia olivacea* f. *glabra* Schaer.), lichenized, widespread, terrestrial, see Lumbsch and Huhndorf (2010; outline), Jaklitsch et al. (2016; position), Lücking et al. (2016; classification), cultures and sequences are available, lectotype of type species G.

Melanocamarosporium Wijayaw., Camporesi, D.J. Bhat & K.D. Hyde 2016, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. galicola* Wijayaw., Camporesi, D.J. Bhat & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2016, 2017; taxonomy, phylogeny, outline), holotype and ex-type culture of the type: MFLU 15–3451, MFLUCC 13–0545.

Melanocarpus Arx 1975, *Lasiochaeriacae*, *Sordariales*, *Sordariomycetes*, three species, type: *M. albomyces* (Cooney & R. Emers.) Arx, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Sordariales*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), van den Brink et al. (2015; thermophilic nature), cultures and sequences are available.

Melanocephala S. Hughes 1979, *Ascomycota* genera *incertae sedis*, five species, type: *M. cupulifera* S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017;

outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Melanodothis R.H. Arnold 1972, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *Melanodothis caricis* R.H. Arnold, asexual morph ramularia-like, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Mycosphaerellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Melanographium Sacc. 1913, *Sordariomycetes* genera *incertae sedis*, nine species, type: *M. spleniosporum* Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Melanohalea O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 2004, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 19 species, type: *M. exasperata* (De Not.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch (syn. *Parmelia exasperata* De Not.), lichenized, widespread, terrestrial, see Jaklitsch et al. (2016; position), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species RO.

Melanolecia Hertel 1981, *Hymeneliaceae*, *Hymeneliales*, *Lecanoromycetes*, eight species, type: *M. transitoria* (Arnold) Hertel, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, cultures available for the type: Meltra167, needs generic revision.

Melanomma Nitschke ex Fuckel 1870, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, c. 30 species, type: *M. pulvis-pyrius* (Pers.) Fuckel, asexual morph unknown, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Melanommataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures available for type: CBS 371.75, CBS 109.77, CBS 124080, CBS 371.75.

Melanopeziza Velen. 1939, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *M. artemisiae* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Melanophloea P. James & Vězda 1971, *Ascomycota* genera *incertae sedis*, one species, type: *M. pacifica* P. James & Vězda, lichenized, Mid-Atlantic region of eastern North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Thelocarpaceae*), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Melanophoma Papendorf & J.W. du Toit 1967, *Ascomycota* genera *incertae sedis*, one species, type: *M. karroo* Papendorf & G.W. du Toit, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Melanops Nitschke ex Fuckel 1870, *Melanopsaceae*, *Botryosphaeriales*, *Dothideomycetes*, one species, type: *M. tulasnei* Fuckel, asexual morph coelomycetous, saprobes, terrestrial, cosmopolitan, see Phillips and Alves (2009; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Slippers et al. (2014; phylogeny, introduced of a new family *Melanopsaceae*), Wijayawardene et al. (2014; outline, phylogeny), epitype and ex-epitype of the type: LISE 95179, CBS 116805.

Melanopsamma Niessl 1876, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, c. 40 species, type: *M. pomiformis* (Pers.) Sacc., asexual morph custingophora-like, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Niessliaceae*), Kirk et al. (2013; genus accepted), Wang et al. (2015; phylogeny), Maharachchikumbura et al.

(2015, 2016; outline), Lombard et al. (2016; phylogeny), cultures available for type: CBS 114119, CBS 325.50, CBS 114119, CBS 101322.

Melanormia Körb. 1865, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *M. velutina* Körb., asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Melanospora Corda 1836 (= *Gonatobotrys* Corda 1839 *fide* Réblová et al. 2016), *Ceratostomataceae*, *Melanosporales*, *Sordariomyces*, 35 species, type: *Melanospora zamiae* Corda, asexual morphs formerly named in *Gonatobotrys*, saprobes, from soil, fungicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; nomenclature), cultures and sequences are available.

Melanotopelia Lumbsch & Mangold 2008, *Graphidaceae*, *Ostropales*, *Lecanoromyces*, four species, type: *M. toensbergii* (Vězda & Kantvilas) Lumbsch & Mangold, asexual morph unknown, lichenized, terrestrial, worldwide, see Mangold et al. (2008; taxonomy), Serusiaux et al. (2009; new species, Rwanda), Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2010, 2015; new species, Falkland Island, accepted in *Graphidaceae*), Plata et al. (2012; accepted in *Graphidaceae*), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species, holotype of the type species BG, Tønsberg 25545 (holotype of *Topeliopsis toensbergii* Kantvilas & Vězda).

Melanotrema Frisch 2006, *Graphidaceae*, *Ostropales*, *Lecanoromyces*, eleven species, type: *M. platystomum* (Mont.) Frisch, asexual morph unknown, lichenized, terrestrial, worldwide, see Mangold et al. (2009; new species, Australia), Lumbsch and Huhndorf (2010; outline), Paping et al. (2010; new species), Plata et al. (2013; DNA, phylogeny), Kraichak et al. (2014; new species), Sipman (2014; new species), Lumbsch et al. (2015; accepted in *Graphidaceae*), Lücking et al. (2016; classification), cultures and sequences are available, cultures available for the type: DNA3492 (*fide* Plata et al. 2013), needs generic revision.

Melarthonis Frisch & G. Thor 2014, *Chrysotrichaceae*, *Arthoniales*, *Arthoniomyces*, one species, type: *Melarthonis piceae* Frisch & G. Thor, asexual morph unknown, saprobes, terrestrial, see Frisch et al. (2014a; taxonomy), Lücking et al. (2016; classification), holotype of the type: UPS, Thor 25995, sequences are available.

Melaspilea Nyl. 1857, *Melaspileaceae*, *Eremithallales*, *Dothideomyces*, 163 species, type: *M. arthonioides* (A. Massal.) Nyl., asexual morph unknown, saprobes, marine and terrestrial, worldwide, see Jones et al. (2009, 2015; classification), Pérez-Ortega and Etayo (2010; morphology), Zainuddin et al. (2010; antimicrobial activities), Zhurbenko and Zhdanov (2013; morphology), Flakus et al. (2014; morphology), Ertz and Diederich (2015; phylogeny), Perlmutter et al. (2015; morphology), Lücking et al. (2016; classification), sequences are available but lacks for the type, needs generic revision.

Melaspileopsis (Müll. Arg.) Ertz & Diederich 2015, *Melaspileaceae*, *Eremithallales*, *Dothideomyces*, one species, type: *M. diplasiospora* (Nyl.) Ertz & Diederich, sexual morph with lirelliform ascomata, saprobes, terrestrial, tropical and subtropical, see Ertz and Diederich (2015; morphology, phylogeny), Ertz et al. (2016, phylogeny), sequences are available, lectotype of the type: Lindig 846 (PC0146198).

Melastiza Boud. 1885, *Pyronemataceae*, *Pezizales*, *Pezizomyces*, 14 species, type: *M. miniata* (Fuckel) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Melchioria Penz. & Sacc 1897, *Niessliaceae*, *Hypocreales*, *Sordariomyces*, six species, type: *M. leucomelaena* Penz. & Sacc., asexual morph unknown, terrestrial, saprobes,

Indonesia and South America, cultures and sequences are unavailable, Holotype and ex-type strain unavailable.

Meliniomyces Hambl. & Sigler 2005, *Helotiales* genera *incertae sedis*, *Leotiomyces*, three species, type: *M. variabilis* Hambl. & Sigler, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available.

Meliola Fr. 1825, *Meliolaceae*, *Meliolales*, *Sordariomyces*, c. 1300, type: *M. nidulans* (Schwein.) Cooke, asexual morph produced from the hyphae, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Meliolaster Höhn. 1918, *Asterinaceae*, *Asterinales*, *Dothideomyces*, three species, type: *M. clavisporus* (Pat.) Höhn., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; outline), Hongsanan et al. (2014; taxonomy, keys), cultures and sequences unavailable, holotype of type: FH 258798.

Meliolina Syd. & P. Syd. 1914, *Meliolinaceae*, *Dothideomyces*, families *incertae sedis*, c. 40 species, type: *M. cladotricha* (Lév.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; listed the family under excluded, doubtful and poorly known families), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Melioliphila Speg. 1921, *Dothideomyces* genera *incertae sedis*, *Incertae sedis*, , seven species, type: *M. graminicola* (F. Stevens) Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Tubeufiaceae*), Hyde et al. (2013; excluded from *Tubeufiaceae*), Boonmee et al. (2014; excluded from *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Mellitiosporiella Höhn. 1919, *Marthamycetaceae*, *Helotiales*, *Leotiomyces*, two species, type: *M. pulchella* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Kirk et al. (2013; genus accepted), Index Fungorum (2015), cultures and sequences are available, needs generic revision.

Mellitiosporium Corda 1838, *Marthamycetaceae*, *Helotiales*, *Leotiomyces*, one species, type: *M. versicolor* Corda, asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline, accepted as *Rhytismatales*, genera *incertae sedis*), Lantz et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Melnikia Wijayaw., Goonas., D.J. Bhat & K.D. Hyde, 2016, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomyces*, one species, type: *M. anthoxanthii* Wijayaw., Goonas., Camporesi, D.J. Bhat & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2016, 2017; taxonomy, phylogeny, outline), holotype and ex-type culture of the type: MFLU 15–2657, MFLUCC 14–1010.

Meloderma Darker 1967, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, nine species, type: *M. desmazieri* (Duby) Darker, asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lantz et al. (2011; DNA, phylogeny), cultures and sequences are available.

Melogramma Fr. 1849, *Melogrammataceae*, *Xylariales*, *Sordariomyces*, three species, type: *M. campylosporium* Fr., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline, accepted in *Melanconidaceae*), Jaklitsch and Voglmayr. (2012; phylogeny, accepted in *Melogrammataceae*), Kirk et al. (2013; genus accepted), Senanayake

et al. (2015; outline, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available, needs generic revision.

Melomastia Nitschke ex Sacc. 1875, *Sordariomycetes* genera *incertae sedis*, four species, type: *M. friesii* Nitschke, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Melophia Sacc. 1884, *Ascomycota* genera *incertae sedis*, four species, type: *M. ophiospora* (Lév.) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Memnoniella Höhn. 1923, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, twelve species, type: *M. echinata* (Riv.) Galloway (\equiv *Penicillium echinatum* Riv.), hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; synonym of *Stachybotrys*), Wang et al. (2015; synonym of *Stachybotrys*), Lombard et al. (2016; reinstated the genus, phylogeny), Wijayawardene et al. (2017; outline), Cultures and sequences are available, epitype and ex-epitype culture of type species CBS H-22447, CBS 216.32.

Mendogia Racib., *Schizothyriaceae*, *Dothideomycetes* family *incertae sedis*, four species, type: *M. bambusina* Racib. 1900, asexual morph unknown, epiphytic, terrestrial, Indonesia, Philippine, Thailand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Mendoziopeltis Bat. 1959, *Dothideomycetes* genera *incertae sedis*, four species, type: *M. byrsonimae* Bat. & Nascim. ex Bat., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as *Micropeltidaceae*), Hyde et al. (2013; excluded from *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.

Menegazzia A. Massal. 1854, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 70 species, type: *M. terebrata* (Hoffm.) A. Massal., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Menidochium R.F. Castañeda & W.B. Kendr. 1990, *Ascomycota* genera *incertae sedis*, one species, type: *M. formosum* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Menispora Pers. 1822 (= *Zignoëlla* sacc. 1878 *fide* Réblová et al. 2016), *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, 14 species, type: *Melomastia friesii* Nitschke, hyphomycetous, sexual morph formerly named in *Zignoëlla*, saprobes, terrestrial, temperate, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Menisporopsis S. Hughes 1952 (= *Menisporopascus* Matsush. 2003 *fide* Réblová et al. 2016), *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, nine species, type: *Menisporopsis theobromae* S. Hughes, hyphomycetous, sexual morph formerly named in *Menisporopascus*, saprobes, terrestrial, temperate, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015,

2016; outline), Réblová et al. (2016; nomenclature), cultures and sequences are available, available specimen of type: CBS H-19592.

Mercadomyces J. Mena 1988, *Ascomycota* genera *incertae sedis*, one species, type: *M. camagueyensis* J. Mena, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Meridianelia Kantvilas & Lumbsch 2009, *Elixiaaceae*, *Umbilicariales*, *Lecanoromycetes*, one species, type: *M. macCarthyana* Kantvilas & Lumbsch, lichenized, corticolous, Tasmania, see Kantvilas and Lumbsch (2010; outline), Bendiksby and Timdal (2013; phylogeny), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Merismatium Zopf 1898, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, eleven species, type: *M. lopadii* (Anzi) Zopf, asexual morph unknown, lichenicolous, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Brackel (2011; Iceland), Kirk et al. (2013; genus accepted), Yazici and Aslan (2016; Asia, Turkey), cultures and sequences are unavailable.

Merismella Syd. 1927, *Ascomycota* genera *incertae sedis*, six species, type: *M. concinna* Syd., sexual morph *Chaetothyrium* Speg., epiphytic, terrestrial, Brazil, Greece, India, Panama, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Meristemomyces Isola & Onofri 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. frigidus* Isola & Onofri, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), Crous et al. (2016; new species), cultures available for the type: CBS 136109 = CCFEE 5508.

Merodontis Clem. 1909, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *M. tenella* (Penz. & Sacc.) Clem., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Merugia Rogerson & Samuels 1990, *Sordariomycetidae* genera *incertae sedis*, seven species, type: *M. palicoureae* Rogerson & Samuels, saprobes, terrestrial, Guyana, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: NY, Samuels 6552, needs generic revision.

Mesniera Sacc. & P. Syd. 1902, *Mesnieraceae*, *Dothideomycetes* family *incertae sedis*, one species, type: *M. rottlerae* (Racib.) Sacc. & P. Syd., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, available specimen of type: CBS H-4212, needs generic revision.

Metacapnodium Speg. 1918 (= *Antennularia* Rchb. 1828; = *Capnocybe* S. Hughes 1966; *Capnophialophora* S. Hughes 1966; = *Capnobotrys* S. Hughes 1970; *Capnosporium* S. Hughes 1976 *vide* Rossman et al. 2016), *Metacapnodiaceae*, *Capnodiales*, *Dothideomycetes*, 13 species, type: *M. juniperi* (W. Phillips & Plowr.) Speg., asexual morph unknown, sooty mould on living plants, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hughes et al. (2012; morphology), Hyde et al. (2013; accepted as a genus in *Metacapnodiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Metacordyceps G.H. Sung, J.M. Sung, Hywel-Jones & Spatafora 2007, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, 16 species, type: *Metacordyceps taii* (Z.Q. Liang & A.Y. Liu)

G.H. Sung, J.M. Sung, Hywel-Jones & Spatafora, asexual morph hyphomycetous, terrestrial, entomogenous and in soil and dung, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kepler et al. (2012), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Metadiplodia Syd. 1937, *Ascomycota* genera *incertae sedis*, c. 40 species, type: *M. eucalypti* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Metadothella Henn. 1904, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *M. stellata* Henn., asexual morph hyphomycetous, terrestrial, Peru, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; phylogeny), cultures and sequences are unavailable, holotype and ex-type strain not available.

Metahyphopichia Sipiczki & Pfliegler 2016, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *M. laotica* Sipiczki, Pfliegler, Safar, Morais, & Rosa, dimorphic, asexual morph unknown, on plants, terrestrial, Southeast Asia, South America, see Sipiczki et al. (2016; taxonomy), cultures and sequences are available.

Metamelanea Henssen 1989, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, three species, type: *M. umbonata* Henssen, lichenized, asexual morph unknown, terrestrial, Europe, North America, see Kirk et al. (2013; genus accepted), Prieto et al. (2015; records in Sweden), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Metameris Theiss. & Syd. 1915, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, three species, type: *M. japonica* (Syd. & P. Syd.) Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (accepted as a genus in *Phaeosphaeriaceae*), Phookamsak et al. (2014; placed in *Botryosphaeriaceae*), Wijayawardene et al. (2014; outline, accepted in *Botryosphaeriaceae*), cultures and sequences are unavailable, needs generic revision.

Metapezizella Petr. 1968, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *M. phyllachorivora* Petr., asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Metapochonia Kepler, S.A. Rehner & Humber 2014, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *M. suchlasporia* (W. Gams & Dackman) Kepler, Rehner & Humber, asexual morph hyphomycetous, terrestrial, nematogenous and in soil, rotifers and plant roots, cosmopolitan, see Kepler et al. (2014; taxonomy), cultures and sequences are available, Holotype and ex-type of type species in Suecia, C. Dackman No. 10 (1983); CBS 251.83.

Metarhizopsis D.W. Li, R.S. Cowles, Vossbrinck 2008, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. microspora* D.W. Li, R.S. Cowles & Vossbrinck, hyphomycetous, sexual morph unknown, terrestrial, entomogenous, USA, see Li et al. (2008; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type of type: BPI 878276 = UAMH 10901.

Metarhizium Sorokin 1879, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, 24 species, type: *M. anisopliae* (Metschn.) Sorokīn, hyphomycetous, sexual morph unknown, terrestrial, entomogenous and in soil, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kepler et al. (2014; phylogeny), cultures and sequences are available.

Metathyriella Syd. 1927, *Schizothyriaceae*, *Dothideomycetes* family *incertae sedis*, three species, type: *M. roupalae* Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak et al. (2016; taxonomy), cultures and sequences are unavailable, needs generic revision.

Metazythia Petr. 1950, *Ascomycota* genera *incertae sedis*, one species, type: *M. caespitosa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Metazythiopsis M. Morelet 1988, *Ascomycota* genera *incertae sedis*, one species, type: *M. halepensis* M. Morelet, coelomycetous, sexual morph unknown, saprobes, terrestrial, France, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Metschnikowia Kamienski 1899, *Metschnikowiaceae*, *Saccharomycetales*, *Saccharomycetes*, c. 100 species (including c. 50 *Candida* species in the *Metschnikowia* clade), type: *M. bicuspidata* (Metschnikoff) T. Kamienski, asexual reproduction is by multilateral budding, saprophytic, on beetles, fruit flies, rotted plants, berries, water, seawater, flowers of various plant species, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015; new species, phylogeny), asexual species in this clade are classified in the genus *Candida*, but will be transferred to *Metschnikowia* as new combinations, sequences are available.

Metulocladosporiella Crous, Schroers, J.Z. Groenew., U. Braun & K. Schub. 2006, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, two species, type: *M. musae* (E.W. Mason) Crous, Schroers, J.Z. Groenew., U. Braun & K. Schub., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Neotropics, see Seifert et al. (2011; morphology), Xu et al. (2011; phylogeny), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, needs generic revision.

Metus D.J. Galloway & P. James 1987, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *M. conglomeratus* (F. Wilson) D.J. Galloway & P. James, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; DNA, phylogeny), Lücking et al. (2016, classification), cultures and sequences are available, cultures available for the type: AFTOL-ID 4945 (Miadlikowska et al. 2014), needs generic revision.

Meyerozyma Kurtzman & M. Suzuki 2010, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, five species, type: *M. guilliermondii* (Wickerham) Kurtzman & M. Suzuki, asexual reproduction is by multilateral budding, saprophytic, but *M. guilliermondii* is a common clinical species, atmosphere, soil, water, sugar cane and other plants, plant debris, fruit, mammals, worldwide, see Kurtzman and Suzuki (2010; taxonomy), Bautista-Rosales et al. (2013; bio control agent of *Colletotrichum* sp.), Coda et al. (2013; antifungal properties), sequences are available.

Micarea Fr. [nom.cons.] 1825, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, 100 species, type: *M. prasina* Fr., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Micareopsis R.C. Harris & Lendemer 2013, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *M. irriguata* R.C. Harris & Lendemer, asexual morph unknown, lichenized, terrestrial, USA, see Lendemer et al. (2013; taxonomy), cultures and sequences are unavailable, holotype of the type species NY, Buck 49935.

Microascus Zukal 1886, *Microascaceae*, *Microascales*, *Sordariomycetes*, 51 species, type: *M. longirostris* Zukal, asexual morph hyphomycetous, coprophilous, on human, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Sandoval-Denis et al. (2015; new species, phylogeny), Crous et al. (2016; new species), Jagielski et al. (2016; new species, phylogeny), neotype and ex-neotype of type: CBS H-14440, MUCL 9058 (Sandoval-Denis et al. 2015).

Microblastosporon Cif., 1930, *Ascomycota* genera *incertae sedis*, one species, type: *M. botryoideum* (Chaborski) Cif., hyphomycetous, saprobes or plant pathogenic, Europe, See Wijayawardene et al. (2012, 2017; outline), Kirk (2013; accepted as valid genus), cultures and sequences are unavailable, needs generic revision.

Microcalicium Vain. 1927, *Microcaliciaceae*, *Ascomycota* family *Incertae sedis*, four species, type: *M. disseminatum* (Ach.) Vain., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), culture for the type species (sequence data also deposited under this number) Wedin 6353 (Prieto et al. 2012), needs generic revision.

Microcallis Syd. 1926, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, ten species, type: *M. phoebes* Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Microcera Desm. 1848, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, nine species, type: *M. coccophila* Desm., asexual morph hyphomycetous, terrestrial, entomogenous, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Gräfenhan et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, lectotype of type: K(M) 165807.

Microclava F. Stevens 1917, *Ascomycota* genera *incertae sedis*, six species, type: *M. miconiae* F. Stevens, hyphomycetous, saprobes or plant pathogenic, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Microcyclella Theiss. 1914, *Dothideomycetes* genera *incertae sedis*, one species, type: *M. nervisequia* (Höhn.) Theiss., asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Microcyclophaeria Bat. 1958, *Hypocreales*, genera *incertae sedis*, one species, type: *M. palmicola* (Syd.) Bat. & H. Maia ex Bat., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariomycetes* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Microcyclospora J. Frank, Schroers & Crous 2010, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, seven species, type: *M. pomicola* J. Frank, B. Oertel, Schroers & Crous, sexual morph unknown, saprobes, terrestrial, Europe, Canada, Iran, see Frank et al. (2010; taxonomy, phylogeny), Arzanlou and Bakhshi (2011; new species), Seifert et al. (2011; morphology), Crous et al. (2012; new species, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Microcyclosporella J. Frank, Schroers & Crous 2010, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. mali* J. Frank, Schroers & Crous, hyphomycetous, sexual morph unknown, plant pathogenic, epiphytic, Slovenia, see Frank et al. (2010; morphology, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type of type: CBS H-20413; CBS 126136.

Microcyclus Sacc., Syd. & P. Syd. 1904, *Dothideomycetes* genera *incertae sedis*, c. 15 species, type: *M. angolensis* Sacc., Syd. & P. Syd., asexual morph unknown, pathogen, saprobes, endophytes, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable for type species, needs generic revision.

Microdiplozia Allesch. 1901, *Ascomycota* genera *incertae sedis*, 30 species, type: *M. conigena* Allesch., sexual morph unknown, saprobes, terrestrial, Europe, Canada, Iran, see Wijayawardene et al. (2016; outline, taxonomic notes and treated as doubtful), cultures and sequences are available, need generic revision and epitypification.

Microdiscula Höhn. 1915, *Ascomycota* genera *incertae sedis*, two species, type: *M. rubicola* (Bres.) Höhn., coelomycetous, sexual morph unknown, saprobes or plant pathogenic, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted); cultures and sequences are unavailable, needs generic revision.

Microdiscus Sacc. 1916, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *M. americanus* (Sacc.) Trotter, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Microdochium Syd. & P. Syd. 1924 (= *Monographella* Petr. 1924 *vide* Réblová et al. 2016), *Microdochiaceae*, *Xylariales*, *Sordariomyces*, 25 species, type: *M. phragmitis* Syd., hyphomycetous, sexual morph formerly named in *Monographella*, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Hernández-Restrepo et al. (2016; phylogeny, introduced *Microdochiaceae*), Réblová et al. (2016; nomenclature), holotype and epitype of the type: K-IMI 193888, CBS H-22135, ex-epitype culture CBS 285.71.

Microdothella Syd. & P. Syd. 1914, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. culmicola* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, North America, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Microdothiorella C.A.A. Costa & Sousa da Câmara 1955, *Ascomycota* genera *incertae sedis*, one species, type: *M. sphaeralceae* M.E.A. Costa & Sousa da Câmara, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Portugal, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Microeurotium Ghatak 1936, *Pezizales* genera *incertae sedis*, *Pezizomyces*, two species, type: *M. albidum* Ghatak, asexual morph unknown, saprobes or coprophilous, terrestrial, UK, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Microglossum Gillet 1879, *Leotiaceae*, *Helotiales*, *Leotiomyces*, ten species, type: *M. olivaceum* (Pers.) Gillet, asexual morph unknown, saprobes, on soil, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kucera et al. (2014; new species, phylogeny), Pärtel et al. (2016; phylogeny), cultures and sequences are available for the type species SAV 9902 (Kucera et al. 2014) and KL220 (*vide* Pärtel et al. 2016), needs generic revision.

Microhendersonula Dias & Sousa da Câmara 1952, *Ascomycota* genera *incertae sedis*, one species, type: *M. cestri* Dias & Sousa da Câmara, coelomycetous, saprobes or plant pathogenic, Portugal, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Microhilum H.Y. Yip & A.C. Rath 1989, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. oncoperae* H.Y. Yip & A.C. Rath, hyphomycetous, terrestrial, entomogenous, Australia, see Hyde et al. (2011; checklist), Wijayawardene et al. (2011; checklist), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; *Sordariomycetes*), cultures and sequences are available, holotype of type species DATH 64D6.

Microidium (To-anun & S. Takam.) To-anun & S. Takam. 2012, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, four species, type: *M. phyllanthi* (J.M. Yen) To-anun & S. Takam. (\equiv *Oidium phyllanthi* J.M. Yen), hyphomycetous, sexual morphs unknown, biotrophic, obligate plant pathogens, terrestrial, Asia, South America, see Braun and Cook (2012; taxonomy), Tam et al. (2015; Vietnam), sequences of non-type material available, needs generic revision.

Micromastia Speg. 1909, *Ascomycota* genera *incertae sedis*, two species, type: *M. trigonospora* Speg., asexual morph unknown, saprobes, on soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Micronematobotrys Xiang Sun & L.D. Guo 2010, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 14 species, type: *M. verrucosus* Xiang Sun & L.D. Guo, hyphomycetous, sexual morph unknown, saprobes, terrestrial, China, see Sun and Guo (2010; taxonomy, phylogeny), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are available, holotype and cultures available for type species HMAS 186049; E13-2151 (*vide* Sun and Guo 2010).

Micropeltis Mont. 1842, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, c. 110 species, type: *M. applanata* Mont., asexual morph unknown, epiphytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; new species), cultures and sequences are unavailable.

Microperella Höhn. 1909, *Ascomycota* genera *incertae sedis*, one species, type: *M. quercus* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Micropheziza Fuckel 1870, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, twelve species, type: *M. cornea* (Berk. & Broome) Nannf., asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Micropodia Boud. 1885, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *M. pteridina* (Nyl.) Boud., asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Micropustulomyces R.W. Barreto 1995, *Ascomycota* genera *incertae sedis*, one species, type: *M. mucilaginosus* R.W. Barreto, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Microscypha Syd. & P. Syd. 1919, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, six species, type: *M. grisella* (Rehm) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Europe, China, see Huhtinen et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Microsomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *M. psammoechi* Thaxt., asexual morph unknown, biotrophic, terrestrial,

tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Microsphaeropsis Höhn. 1917, *Microsphaeropsidaceae*, *Pleosporales*, *Dothideomycetes*, 37 species, type: *M. olivacea* (Bonord.) Höhn., coelomycetous, sexual morph unknown, saprobes, pathogens of both plants and animals, lichenicolous, terrestrial, worldwide, see Marincowitz et al. (2008; new species), Pethybridge et al. (2008; new species, Australia), de Gruyter et al. (2009; DNA, phylogeny), Etayo and Sancho (2009; new species), Etayo and Yazici (2009; new species, lichenicolous), Alves et al. (2010; new species, Costa Rica), Crous et al. (2011; new species, pathogens, *Proteaceae*), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Brackel (2014; new species), Chen et al. (2015; taxonomy, phylogeny), cultures available for the type: CBS 116669, CBS 442.83 (*fide* de Gruyter et al. 2009).

Microsporium Gruby 1843, *Arthrodermataceae*, *Onygenales*, *Eurotiomycetes*, c. 17 species, type: *M. audouinii* Gruby, hyphomycetous, sexual morph unknown, on humans and other mammals, causing microsporoses, terrestrial, worldwide, see Seifert et al. (2011; taxonomy), Choi et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Hubka et al. (2014; new species), Mirhendi et al. (2014; DNA, phylogeny), cultures and sequences are available, culture available for the type: CBS 280.63 (*fide* Mirhendi et al. 2014), needs generic revision.

Microstoma Bernstein 1852, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *M. hiemale* Bernstein, asexual morph unknown, saprobe, terrestrial, Costa Rica, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Microtheliopsis Müll. Arg. 1890, *Microtheliopsidaceae*, *Dothideomycetes* family *incertae sedis*, four species, type: *M. uleana* Müll. Arg., asexual morph unknown, saprobe, terrestrial, Central and South America, Australasia, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Microthia Gryzenh. & M.J. Wingf. 2006, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *M. havanensis* (Bruner) Gryzenh. & M.J. Wingf., asexual morph unknown, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and cultures available for the type: BPI 614275; CMW 10879 = CBS 115758, PREM 57522.

Microthyrium Desm. 1841, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, c. 60 species, type: *M. microscopicum* Desm., asexual morph unknown, epiphytes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Microthyriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Microtyle Speg. 1919, *Ascomycota* genera *incertae sedis*, one species, type: *M. bergii* Speg., asexual morph coelomycetous, saprobes or plant pathogenic, South America, See Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Microxyphiella Speg. 1918, *Ascomycota* genera *incertae sedis*, 15 species, type: *M. fuligo* (Berk. & Desm.) Speg., coelomycetous, saprobes or plant pathogenic, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Microxyphiopsis Bat. 1963, *Ascomycota* genera *incertae sedis*, two species, type: *M. byrsonimae* Bat., coelomycetous, saprobes or plant pathogenic, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Micularia Boedijn 1961, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, one species, type: *M. merremiae* Boedijn, asexual morph unknown, saprobes, parasitic, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline, accepted genus as in *Elsinoaceae*), Hyde et al. (2013; accepted in *Myriangiaceae*), Dissanayake et al. (2014; accepted in *Myriangiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Middelhovenomyces Kurtzman & Robnett 2014, ?*Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, two species, type: *M. tepae* (J. Grinbergs) C.P. Kurtzman & C.J. Robnett, asexual reproduction is by multilateral budding and from formation of pseudohyphae, saprophytes, rotted wood, Chile, see Kurtzman and Robnett (2014; taxonomy), sequences are available.

Midotiopsis Henn. 1902, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *M. bambusicola* Henn., asexual morph unknown, saprobes, terrestrial, America (tropical), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Miladina Svrček 1972 (= *Actinosporella* Descals et al. 1999 *vide* Healy et al. 2016), *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *M. lecithina* (Cooke) Svrček, asexual morph formerly named in *Actinosporella*, saprobes, hypogeous, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available for the type species from voucher KH.04.22 (Hansen et al. 2013), needs generic revision.

Millerburtonia Cif. 1951, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *M. oyedaeae* Cif., coelomycetes, sexual morph unknown, saprobes, terrestrial, Venezuela, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Millerozyma Kurtzman & M. Suzuki 2010, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, five species, type: *Millerozyma farinosa* (Lindner) Kurtzman & M. Suzuki, asexual reproduction is by multilateral budding, saprophytic, on beetle larvae, food contaminants, dung, worldwide, see Kurtzman and Suzuki (2010; taxonomy), sequences are available.

Milospium D. Hawksw. 1975, *Ascomycota* genera *incertae sedis*, three species, type: *M. graphideorum* (Nyl.) D. Hawksw., lichenicolous, terrestrial, sexual morph unknown, Europe, see Seifert et al. (2011; genus accepted), Kirk et al. (2013; genus accepted), Crous et al. (2015; phylogeny), cultures and sequences are available, conserved type and epitype of type species BM (Herb. Lich. Paris 72), CBS H-22271.

Miltidea Stirt. 1898, *Miltideaceae*, *Pertusariales*, *Lecanoromycetes*, one species, type: *L. rubricatula* Stirt., lichenized, Southern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Widhelm and Lumbsch (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Mindoa Petr. 1949, *Ascomycota* genera *incertae sedis*, two species, type: *M. ingae* Petr., coelomycetous, saprobes or plant pathogenic, South America, See Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures or cultures and sequences are unavailable, needs generic revision.

Miniancora Marvanová & Bärl. 1989, *Leotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *M. allisoniensis* Marvanová and Bärl., hyphomycetous, sexual morph unknown, saprobes, freshwater, Canada, see Wijayawardene et al. (2012, 2017; outline), Barchien et al. (2013; phylogeny), sequence is available, ex-type strain CCM F-30487, needs generic revision.

Minimelanocus R.F. Castañeda & Heredia 2001, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomyces*, 26 species, type: *M. navicularis* (R.F. Castañeda) R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, China, Portugal, Mexico, Cuba, see Zhang et al. (2009, 2010; new species), Ma et al. (2011a, b; China; new species), Hernández-Restrepo et al. (2013; Portugal), Heredia et al. (2014; Mexico), Xia et al. (2014; China), Liu et al. (2015; phylogeny), Hyde et al. (2016; new species), sequence available but lacks for the type species, holotype of the type: INIFAT C86/157, compare with *Pseudospiropes*, *Spiropes* and *Sympodioplanus*.

Minimidochium B. Sutton 1970, *Ascomycota* genera *incertae sedis*, eight species, type: *M. setosum* B. Sutton, hyphomycetous, saprobes or plant pathogenic, widespread (tropical), see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 103360c, needs generic revision.

Minksia Müll. Arg. 1882, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, six species, type: *M. caesiella* Müll. Arg., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

Mintera Inácio & P.F. Cannon 2003, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *M. reticulata* (Starbäck) Inácio & P.F. Cannon, asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, Isotype of type species S F20503.

Minteriella Heredia, R.F. Castañeda & R.M. Arias 2013, *Dothideomycetes* genera *incertae sedis*, one species, type: *M. cenotigena* Heredia, R.F. Castañeda & R.M. Arias, hyphomycetous, sexual morph unknown, saprobes, aquatic, Mexico, see Heredia et al. (2013; morphology), cultures and sequences are unavailable, holotype of the type: XAL CB897, compare with *Cylindrosympodium*, *Polyscytalum* and *Sympodioplanus*.

Minutiella Crous 2015, *Phaeomoniellaceae*, *Phaeomoniellales*, *Eurotiomyces*, one species, type: *M. tardicola* (Damm & Crous), coelomycetous, sexual morph unknown, on living leaves, pathogens, terrestrial, South Africa, see Damm et al. (2010; as *Phaeomoniella tardicola*, morphology), Crous et al. (2015; phylogeny), cultures and sequences are available, holotype and ex-type culture of type: CBS H-20000, CBS 121757.

Minutisphaera Shearer, A.N. Mill. & A. Ferrer 2011, *Minutisphaeraceae*, *Minutisphaerales*, *Dothidiomycetes*, four species, type: *M. fimbriatispora* Shearer, A.N. Mill. & A. Ferrer, freshwater, USA, Japan, see Ferrer et al. (2011; taxonomy), Raja et al. (2013, 2015; phylogeny, new species), cultures and sequences are available, holotype of type: A242-8 (ILL).

Minutoexcipula V. Atienza & D. Hawksw. 1994, *Ascomycota* genera *incertae sedis*, seven species, type: *M. tuckerae* V. Atienza & D. Hawksw., coelomycetous, sexual morph unknown, terrestrial, lichenicolous, Europe, North America, see Atienza et al. (2009; generic concept), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; illustration), cultures and sequences are unavailable, holotype of type: K(M)-IMI 352335.

Minutophoma D. Hawksw. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *M. chrysophthalmae* D. Hawksw., sexual morph unknown, lichenicolous, Europe, terrestrial, see

Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Mirandina G.Arnaud ex Matsush. 1975 (= *Chaetonectrioides* Matsush. 1996 *vide* Rossman et al. 2016), *Ascomycota* genera *incertae sedis*, eleven species, type: *M. corticola* G. Arnaud ex Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial and aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Ma et al. (2015: morphology), Fiuza et al. (2016: morphology), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable.

Mirannulata Huhndorf, F.A. Fernández, A.N. Mill. & Lodge 2003, *Sordariomycetidae* genera *incertae sedis*, four species, type: *M. samuelsii* Huhndorf, F.A. Fernández, A.N. Mill. & Lodge, asexual morph unknown, saprobes, terrestrial, neotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and cultures for the type species F (Huhndorf 1880); SMH 1880.

Miricatena Punith. & Spooner 2011, *Ascomycota* genera *incertae sedis*, two species, type: *M. prunicola* Punith. & Spooner, hyphomycetous, sexual morph unknown, pathogens, terrestrial, UK, see Punithalingam and Spooner (2011; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Mirimyces Nag Raj 1993, *Ascomycota* genera *incertae sedis*, one species, type: *M. pulcher* Nag Raj, coelomycetous, saprobes or plant pathogenic, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, holotype of type: DAOM 215253.

Miriquidica Hertel & Rambold 1987, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, 30 species, type: *M. complanata* (Körb.) Hertel & Rambold (*Lecanora complanata* Körb.), lichenized fungi, saxicolous, lichenicolous, worldwide temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogenetic placement), Lücking et al. (2016; classification), sequence are available, needs generic revision.

Misgomyces Thaxt. 1900, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, four species, type: *M. dyschirii* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Mitopeltis Speg. 1921, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. chilensis* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted in *Micropeltidaceae*), Hyde et al. (2013; excluded from *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Mitrula Fr. 1821, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, eight species, type: *M. paludosa* Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Mitrolinia Spooner 1987, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, one species, type: *M. ushuaiae* (Rehm) Spooner, asexual morph unknown, saprobes, terrestrial, southern hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures or sequence are unavailable, needs generic revision, needs generic revision.

Miuraea Hara 1948, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *M. degenerans* (Syd. & P. Syd.) Hara, hyphomycetous, sexual morph mycosphaerella-like, plant pathogenic, see Crous et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type: M. Miura 572 (S-F1753).

Mixtoconidium Etayo 1995, *Ascomycota* genera *incertae sedis*, one species, type: *M. canariense* Etayo, coelomycetous, sexual morph unknown, parasymbiont on *Ramalina*, terrestrial, Canary Islands, see Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: IMI Etayo 3470.

Mixtura O.E. Erikss. & J.Z. Yue 1990, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. saginata* (Syd.) O.E. Erikss. & J.Z. Yue, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; placed in *Didymellaceae*), Wijayawardene et al. (2014; outline), cultures and sequence are unavailable, needs generic revision.

Miyakeomyces Hara 1913, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. bambusae* Hara, asexual morph hyphomycetous, terrestrial, saprobes, Japan, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, needs generic revision.

Miyoshiella Kawam. 1929, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *M. fusispora* Kawam., asexual morph unknown, terrestrial, saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; not accepted as valid genus), Index Funorum (2016; synonym of *Chaetosphaeria*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequence are unavailable, needs generic revision.

Moana Kohlm. & Volkman-Kohlm. 1989, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *M. turbinulata* Kohlm. & Volkm.-Kohlm., asexual morph unknown, marine, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Mobergia H. Mayrhofer & Sheard 1992, *Physciaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *M. calculiformis* (W.A. Weber) H. Mayrhofer & Sheard, asexual morph unknown, terrestrial, saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Moelleriella Bres. 1896, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, 25 species, type: *M. sulphurea* Bres., asexual morph hyphomycetous or coelomycetous, terrestrial, entomogenous, tropical South America and French Guiana, see Chaverri et al. (2008; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Li et al. (2016; new species, coelomycetous), cultures and sequences are available, neotype of type: CUP 067787, ex-type strain P.C. 756.

Moleospora Abdel-Wahab, Abdel-Aziz & Nagah. 2010, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, one species, type: *Moleospora maritima* Abdel-Wahab, Abdel-Aziz & Nagah., hyphomycetous, sexual morph unknown, saprobes, marine, Egypt, Saudi Arabia, see Abdel-Wahab et al. (2010, phylogeny), Jones et al. (2015; phylogeny, outline), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), cultures and sequences are available.

Molleriella G. Winter 1886, *Elsinoaceae*, *Myriangiales*, *Dothideomycetes*, four species, type: *M. mirabilis* G. Winter, asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jayawardena et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Mollicamarops Lar.N. Vassiljeva 2007, *Boliniaceae*, *Boliniales*, *Sordariomycetes*, one species, type: *M. stellata* Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, north temperate zone, see Huhndorf and Miller (2008; morphology), Lumbsch and Huhndorf

(2010; outline), Untereiner et al. (2013; accepted in *Boliniaceae*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: VLA P-2942.

Mollisia (Fr.) P. Karst. 1871, *Dermateaceae*, *Helotiales*, *Leotiomyces*, c. 130 species, type: *M. cinerea* (Batsch) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tanney et al. (2016; DNA), cultures and sequences are available, available specimen and cultures for the type: CBS H-14530, AFTOL-ID 76.

Mollisia P. Karst. 1871, *Dermateaceae*, *Helotiales*, *Leotiomyces*, c. 130 species, type: need typification, asexual morph phialophora-like, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type species, needs generic revision.

Mollisina Höhn. ex Weese 1926, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, eleven species, type: *M. rubi* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are available.

Mollisinopsis Arendh. & R. Sharma 1984, *Helotiaceae*, *Helotiales*, *Leotiomyces*, three species, type: *Mollisinopsis filicis* Arendh. & R. Sharma, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are unavailable.

Mollisiopsis Rehm 1908, ?*Helotiales* genera *incertae sedis*, *Leotiomyces*, seven species, type: *M. subcinerea* Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are unavailable.

Monandromyces R.K. Benj. 1999, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, eleven species, type: *M. microveliae* (Thaxt.) R.K. Benj., asexual morph unknown, biotrophic, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Monascella Guarro & Arx 1986, *Onygenaceae*, *Onygenales*, *Eurotiomyces*, one species, type: *M. botryosa* Guarro & Arx, asexual morph unknown, saprobes, Spain, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: CBS 233.85, needs generic revision.

Monascus Tiegh. 1884 (= *Basipetospora* G.T. Cole & W.B. Kendr. 1968; *Backusia* Thirum. et al. 1965 *fide* Rossman et al. 2016), *Monascaceae*, *Eurotiales*, *Eurotiomyces*, 14 species, type: *Monascus ruber* Tiegh., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures and sequences are available, available specimen for type: CBS H-14541.

Monerolechia Trevis. 1857, *Caliciaceae*, *Caliciales*, *Lecanoromyces*, five species, type: *M. bayrholderi* (Schaer.) Trevis., lichenized, Asia, Australia, Europe, see Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Prieto and Wedin (2016; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Monilia Honey 1928 (= *Monilia* Bonord. 1851 *fide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, c. 30 species, type: *M. fruticola* (G. Winter) Honey, asexual morph formerly named in *Monilia*, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Zhu et al. (2016; pathogens, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Monilochaetes Halst. ex Harter 1916 (= *Australiasca* sivan. & Alcorn 2002 *fide* Réblová et al. 2016), *Australiascaceae*, *Glomerellales*, *Sordariomyces*, two species, type: *M. infuscans*

Harter, hyphomycetous, sexual morph formerly named in *Australiasca*, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Réblová et al. (2011, 2016; taxonomy, phylogeny, nomenclature), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-1013, CBS 869.96.

Monoblastia Riddle 1923, *Monoblastiaceae*, *Monoblastiales*, *Dothideomycetes*, eleven species, type: *M. palmicola* Riddle, asexual morph unknown, lichenized, Spain, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Monoblastiopsis R.C. Harris & C.A. Morse 2008, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. konzana* R.C. Harris & C.A. Morse, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: KANU 371963, needs generic revision.

Monochaetia (Sacc.) Allesch. 1902, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, 28 species, type: *M. monochaeta* (Desm.) Allesch., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-14561; CBS 115004, CBS 191.82.

Monochaetiella E. Castell. 1943, *Ascomycota* genera *incertae sedis*, three species, type: *M. hyparrheniae* E. Castell., asexual morph coelomycetous, saprobes or plant pathogenic, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Monochaetiellopsis B. Sutton & DiCosmo 1977 (= *Hypnotheca* Tommerup 1970 *vide* Johnston et al. 2014), *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, type: *M. themedae* (M. Kandasw. & Sundaram) B. Sutton & DiCosmo, coelomycetous, sexual morph *Hypnotheca*, saprobes, terrestrial, India, Australia, Tanzania, see Wijayawardene et al. (2012, 2017; outline), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, holotype of the type species is not designated, other specimens IM I78370a, 151159a, 62200.

Monochaetinula Muthumary, Abbas & B. Sutton 1996, *Ascomycota* genera *incertae sedis*, six species, type: *M. terminaliae* (Bat. & J.L. Bezerra) Muthumary, Abbas & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Monodia Breton & Faurel 1970, *Ascomycota* genera *incertae sedis*, two species, type: *M. elegans* Breton & Faurel, coelomycetous, coprophilous and saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Monodictys S. Hughes 1958, *Dothideomycetes* genera *incertae sedis*, c. 50 species, type: *M. putredinis* (Wallr.) S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology, treated as heterogenous), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

Monodidymaria U. Braun 1994, *Ascomycota* genera *incertae sedis*, five species, type: *M. canadensis* (Ellis & Everh.) U. Braun (≡ *Ramularia canadensis* Ellis & Everh.), asexual morphs hyphomycetous, terrestrial, plant pathogenic, leaf-spotting, Asia, Europe, North and South America, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology),

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, lectotype of type: NY 1293230.

Monodisma Alcorn 1975, *Ascomycota* genera *incertae sedis*, one species, type: *M. fragilis* Alcorn, hyphomycetous, sexual morph unknown, pathogens, terrestrial, widespread, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, cultures available for type: IMI 73184, IMI 41189, needs generic revision.

Monoicomyces Thaxt. 1900, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 49 species, type: *M. homalotae* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species, Ecuador), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015; DNA, phylogeny), cultures and sequences are available only for MT004.

Monorhizina Theiss. & Syd. 1916, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *M. filicina* (Berk. & Broome) Theiss. & Syd., terrestrial, on leaves, Sri Lanka, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Monosporascus Pollack & Uecker 1974, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *M. cannonballus* Pollack & Uecker, asexual morph unknown, thermophilic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Sordariomycetes*), Kirk et al. (2013; genus accepted), Correia et al. (2014; chemical compounds), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, available specimen and cultures for the type: BPI 71820; ATCC 26931 (unpublished), FMR6682 (*fide* Collado et al. 2002), needs generic revision.

Monostichella Höhn. 1916, *Ascomycota* genera *incertae sedis*, 15 species, type: *M. robergei* (Desm.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Montagnella Speg. 1881, *Dothideomycetes* genera *incertae sedis*, nine species, type: *M. curumamuel* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.

Montagnula Berl. 1896, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 30 species, type: *M. infernalis* (Niessl) Berl., asexual morph unknown, saprobes, terrestrial, worldwide, see Zhang et al. (2012; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Hyde et al. (2014; taxonomy, phylogeny), Ariyawansa et al. (2014a; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), Wanasinghe et al. (2016; phylogeny), Tennakoon et al. (2016; taxonomy, phylogeny), cultures and sequences are available, needs generic revision.

Montanelia Divakar, A. Crespo, Wedin & Essl. 2012, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *M. panniformis* (Nyl.) Divakar, A. Crespo, Wedin & Essl., asexual morph unknown, lichenized, terrestrial, worldwide, see Divakar et al. (2012; taxonomy), Leavitt et al. (2015; morphology, phylogeny), Szczepańska et al. (2015; distribution in Poland and Europe), cultures and sequences are available.

Monticola Selbmann & Egidi 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. elongata* Selbmann & Egidi, sexual morph unknown, rock-inhabiting, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 136206 = CCFEE 5394.

Moorella P.Rag. Rao & D. Rao 1964, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, one species, type: *M. speciosa* P.Rag. Rao & D. Rao, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Morakotiella (C.A. Farrant & E.B.G. Jones) Sakay. 2005, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *M. salina* (C.A. Farrant & E.B.G. Jones) Sakay., asexual morph unknown, saprobes, marine, USA, see Lumbsch and Huhndorf (2010; outline), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of the type: IMI 297765.

Moralesia Urries 1956, *Ascomycota* genera *incertae sedis*, one species, type: *M. arundinis* Urries, sexual morph unknown, saprobes, terrestrial, Canary Islands, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Moravecia Benkert, Caillet & Moyne 1987, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *M. calospora* (Quél.) Benkert, Caillet & Moyne, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are lacks for the type species, needs generic revision.

Morchella Dill. ex Pers. 1794 (= *Costantinella* Matr. 1892 *fide* Healy et al. 2016), *Morchellaceae*, *Pezizales*, *Pezizomycetes*, 40 species, type: *Morchella esculenta* (L.) Pers., asexual morph unknown, saprobes, terrestrial, temperate, see Isiloglu et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Clowez (2012; new species, France), Kirk et al. (2013; genus accepted), Elliott et al. (2014; new species, New South Wales), Loizides et al. (2016; new species, Cyprus), cultures and sequences are available, epitype of type: PhC10.

Morenoina Theiss. 1913, *Aulographaceae*, *Asterinales*, *Dothideomycetes*, 25 species, type: *M. antarctica* (Speg.) Theiss., asexual morph coelomycetous (acarella-like), epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, accepted in *Aulographaceae*), Wijayawardene et al. (2014; outline, accepted in *Aulographaceae*), cultures and sequences are unavailable, epitype of type: IMI 349680.

Morinia Berl. & Bres. 1889, *Bartaliniaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *M. pestalozzioides* Berl. & Bres., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; outline), cultures and sequences are available, needs generic revision.

Moriola Norman 1872, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 15 species, type: *M. descensa* Norman, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Moriolomyces Cif. & Tomas. 1953, *Dothideomycetes* genera *incertae sedis*, one species, type: *M. descensae* Cif. & Tomas., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Moromyces Abdel-Wahab, K.L. Pang, Nagah., Abdel-Aziz & E.B.G. Jones 2010, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, one species, type: *M. varius* (Chatmala & Somrith.) Abdel-Wahab, K.L. Pang, Nagah., Abdel-Aziz & E.B.G. Jones, hyphomycetous, sexual morph unknown, saprobes, marine, Egypt, Japan and Thailand, see Abdel-Wahab et al. (2010; phylogeny), Wijayawardene et al. (2012, 2017; outline), Jones et al. (2015; phylogeny, outline), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), cultures and sequences are available, holotype of the type: BBH IT152.

Morosphaeria Suetrong, Sakay., E.B.G. Jones & C.L. Schoch 2009, *Morosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *M. velatispora* (K.D. Hyde & Borse) Suetrong, Sakay., E.B.G. Jones & C.L. Schoch, asexual morph unknown, saprobes, on wood in mangrove habitats, worldwide, see Schoch et al. (2009; phylogeny), Suetrong et al. (2009; phylogeny, morphology), Lumbsch and Huhndorf (2010; outline), Zainuddin et al. (2010;

antimicrobial activity), Suetrong et al. (2011a, 2011b phylogeny), Liu et al. (2011, 2015; phylogeny), Pang et al. (2011; monograph), Sakayaroj et al. (2011; diversity), Boonmee et al. (2012; phylogeny), Zhang et al. (2012; phylogeny, morphology), Hyde et al. (2013; phylogeny, morphology, outline), Sarma and Raghukumar, (2013; diversity), Ariyawansa et al. (2014a, 2014b, 2015; phylogeny), Gnavi et al. (2014; phylogeny), Shearer et al. (2014; phylogeny, freshwater), Wijayawardene et al. (2014; outline), Jones et al. (2015; outline, marine), Tanaka et al. (2015, phylogeny), Singtripop et al. (2015; phylogeny), Zhang et al. (2016; phylogeny), sequence data available for two species, holotype of type species IMI297770.

Morrisographium M. Morelet 1968, *Ascomycota* genera *incertae sedis*, eight species, type: *M. pilosum* M. Morelet, hyphomycetous, sexual morph unknown, saprobes, terrestrial, freshwater, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Moserella Pöder & Scheuer 1994, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, one species, type: *M. radicolica* Pöder & Scheuer, asexual morph unknown, on roots, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Moulinia C.P. Robin 1853, *Ascomycota* genera *incertae sedis*, accepted as a genus in *Pezizomycotina* Kirk et al. (2008) and Kirk et al. (2013) genus accepted. However, previous outlines i.e. Lumbsch and Huhndorf (2010) or Wijayawardene et al. (2012, 2016) did not list as a genus in *Pezizomycotina*.

Moutoniella Penz. & Sacc. 1902, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *M. polita* Penz. & Sacc., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Muciturbo P.H.B. Talbot 1989, *Pezizaceae*, *Pezizales*, *Pezizomyces*, three species, type: *M. reticulatus* P.H.B. Talbot, asexual morph unknown, saprobes, terrestrial, Australia, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; genus not accepted), Wijayawardene et al. (2012, 2016; genus not accepted), Healy et al. (2013; DNA), Kirk et al. (2013; genus not accepted), Index Fungorum (2016; genus accepted), cultures and sequences are available, needs generic revision.

Mucoharknessia Crous, R.M. Sánchez & Bianchin. 2015, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomyces*, two species, type: *M. cortaderiae* Crous, R.M. Sánchez & Bianchin, coelomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, Italy, see Crous et al. (2015; taxonomy, phylogeny), Thynne et al. (2015; new species, pathogens), Li et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), isotype and ex-isotype culture of the type: CBS H-21853, CBS 131032.

Mucomassaria Petr. & Cif. 1932, *Mucomassariaceae*, *Ascomycota* genera *incertae sedis*, one species, type: *M. maxima* Petr. & Cif., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Mucomycosphaerella Quaedvl. & Crous 2014, *Capnodiales* genera *incertae sedis*, *Dothideomyces*, one species, type: *M. eurypotami* (Kohlm., Volkm.-Kohlm. & O.E. Erikss.) Quaedvl. & Crous, asexual morph unknown, terrestrial, USA, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences available, holotype and ex-type of type: JK5586; JK5586J.

Muellerella Hepp ex Müll. Arg. 1862, *Verrucariaceae*, *Verrucariales*, *Eurotiomyces*, 18 species, type: *M. polyspora* Hepp ex Müll. Arg., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Etayo and Sancho (2008; new species, Magallanes) Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Berger and LaGreca (2014; new

species, Bermuda), Muggia et al. (2015; DNA), cultures and sequences are available but lacks for the type species, needs generic revision.

Muellerites L. Holm 1968, *Dothidothiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. juniperi* (E. Müll. & Arx) L. Holm, asexual morph unknown, saprobes, terrestrial, temperate, Switzerland, see Lumbsch and Huhndorf (2010; outline, accepted in *Dothideomycetes*), Hyde et al. (2013; outline, phylogeny), Kirk et al. (2013; genus accepted), Dai et al. (2014; transferred to *Dothidothiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Muelleromyces Kamat & Anahosur 1968, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *M. indicus* Kamat & Anahosur, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Muiaria Thaxt. 1914, *Laboulbeniales* genera *incertae sedis*, one species, type: *M. gracilis* Thaxt., hyphomycetous, sexual morph unknown, on insects, terrestrial, Africa, Borneo, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Muiogone Thaxt. 1914, *Ascomycota* genera *incertae sedis*, two species, type: *M. chromopteri* Thaxt., hyphomycetous, sexual morph unknown, pathogen, terrestrial, West Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Muirella R. Sprague 1959, *Ascomycota* genera *incertae sedis*, one species, type: *M. alascensis* R. Sprague, hyphomycetous, sexual morph unknown, pathogens, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Mulderomyces Crous, Jacq. Edwards & P.W.J. Taylor 2016, *Ostropales* genera *incertae sedis*, *Lecanoromycetes*, one species, type: *M. natalis* Crous, Jacq. Edwards & P.W.J. Taylor, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22609, CPC 25519.

Multiclavula R.H.Petersen 1967, *Clavulinaceae*, *Cantharellales*, *Agaricomycetes*, 16 species, type: *Multiclavula corynoides* (Peck) R.H. Petersen, lichenized, see Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Multilocularia Phook., Ariyawansa & K.D. Hyde 2016, *Parabambusicolaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. bambusae* Phook., Ariyaw. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-isotype culture of the type: MFLU 11–0216, MFLUCC 11-0180.

Multiseptospora Phookamsak & K.D. Hyde 2015, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *Multiseptospora thailandica* Phookamsak & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Liu et al. (2015; taxonomy, phylogeny), Li et al. (2016; new species), holotype and ex-type culture of the type: MFLU 11–0219, MFLUCC 11–0183.

Multisporascus Marinc., M.J. Wingf. & Crous 2008, *Ascomycota* genera *incertae sedis*, one species, type: *M. proteae* Marinc., M.J. Wingf. & Crous, asexual morph unknown, saprobes, terrestrial, South Africa, see Marincowitz et al. (2008; morphology), cultures and sequences are unavailable, holotype of the type: PREM 59465.

Munkia Speg. 1886, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, four species, type: *M. martyr* Speg., asexual morph hyphomycetous, terrestrial, saprobes, South America, see Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; phylogeny), cultures and sequences are unavailable.

Munkiella Speg. 1885, *Polystomellaceae*, *Dothideomycetes* family *incertae sedis*, *Dothideomycetes*, three species, type: *M. caa-guazu* Speg., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Munkovalsaria Aptroot 1995, *Dacampiaceae*, *Dothideomycetes* family *incertae sedis*, three species, type: *M. donacina* (Niessl) Aptroot, asexual morph hyphomycetous (lecythophora-like), saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline), Kirk et al. (2013; genus accepted), Pitt et al. (2014; from grapevine, DNA), Wijayawardene et al. (2014; outline), cultures and sequences are available, type specimen and cultures available for the type: CBS H-14398; HVVV01.

Muraeriata Huhndorf, Greif, Mugambi & A.N. Mill. 2008, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *M. collapsa* Huhndorf, Greif, Mugambi & A.N. Mill., asexual morph unknown, saprobes, terrestrial, Austria, see Huhndorf et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are available, holotype and available cultures for the type: GKM1084, SMH4553.

Murangium Seaver 1951, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *M. sequoiae* (Plowr. ex W. Phillips) Seaver, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted in *Patellariaceae*), cultures and sequences are unavailable, needs generic revision.

Muricopeltis Viégas 1944, *Dothideomycetes* genera *incertae sedis*, one species, type: *M. brasiliensis* Viégas, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013; did not accept in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Muriformistrickeria Q. Tian, Wanasinghe, Camporesi & K.D. Hyde 2015, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. rubi* Q. Tian, Wanasinghe, Camporesi & K.D. Hyde, asexual morph ceolomycetous, saprobes, terrestrial, Italy, see Tian et al. (2015; morphology, nomenclature, phylogeny), cultures and sequences are available for type species, holotype and ex-type strains of type: MFLU 15–1409; MFLUCC 15–0681 = KUMCC15-0079.

Murilentithecium Wanasinghe, Camporesi, E.B.G. Jones & K.D. Hyde 2014, *Lentitheciaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. clematidis* Wanas., Camporesi, E.B.G. Jones & K.D. Hyde, asexual morph camarosporium-like, saprobes, terrestrial, Europe, see Wanasinghe et al. (2014b; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strains of type species MFLU 14–0334; MFLUCC 14-0562 = MUCL 55405.

Murispora Y. Zhang bis, J. Fourn. & K.D. Hyde 2009, *Amniculicolaceae*, *Pleosporales*, *Dothideomycetes*, seven species, type: *M. rubicunda* (Niessl) Y. Zhang ter, J. Fourn. & K.D. Hyde, asexual morph phoma-like, saprobes, terrestrial and aquatic, Europe, significantly substrate stained purple, see Zhang et al. (2008, 2009a, 2009b, 2012; morphology, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Amniculicolaceae*), Wijayawardene et al. (2014; outline), Wanasinghe et al. (2015; morphology, phylogeny), cultures and sequences are available, needs generic revision.

Muroia I. Hino & Katum. 1958, *Dothideomycetes* genera *incertae sedis*, one species, type: *M. nipponica* I. Hino & Katum., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lophiostomataceae*), Hyde et

al. (2013; did not accept in *Lophiostomataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Muscia Gizhitsk. 1929, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *M. catharineae* Gizhitsk., asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Muscicola Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *M. dubia* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Muscodor Worapong, Strobel & W.M. Hess 2001, *Xylariales* genera *incertae sedis*, *Sordariomyces*, 19 species, type: *M. albus* Worapong, Strobel & W.M. Hess, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Daranagama et al. (2017 morphology, taxonomy, phylogeny, key), cultures and sequences are available, needs generic revision.

Musicillium Zare & W. Gams 2007, *Plectosphaerellaceae*, *Glomerellales*, *Sordariomyces*, one species, type: *M. theobromae* (Turconi) Zare & W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, neotype (dry culture) and ex-type culture of the type: Herb. CBS 19864, CBS 968.72.

Muyocopron Speg. 1881, *Muyocopronaceae*, *Muyocopronales*, *Dothideomyces*, one species, type: *M. corrientinum* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Microthyriaceae*), Hyde et al. (2013; introduced *Muyocopronaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Mapook et al. (2016; taxonomy, phylogeny), Tibpromma et al. (2016; morphology, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Mycelephas R.F. Castañeda 2009, *Ascomycota* genera *incertae sedis*, one species, type: *M. robustus* (R.F. Castañeda) R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Myceliophthora Costantin 1892 (= *Corynascus* Arx 1973 *vide* Maharachchikumbura et al. 2015, 2016), *Chaetomiaceae*, *Sordariales*, *Sordariomyces*, one species, type: *M. lutea* Costantin, sexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), van den Brink et al. (2015; DNA, phylogeny), cultures and sequences are available for the type species CBS 146.50, CBS 145.77 (van den Brink et al. 2015), available specimen for type: CBS H-10236.

Mycerema Bat., J.L. Bezerra & Cavalc. 1963, *Schizothyriaceae*, *Dothideomyces* families *incertae sedis*, two species, type: *M. vochysiacearum* Bat., J.L. Bezerra & Cavalc., asexual morph plenotrichaius-like, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak et al. (2016; new species, taxonomy), cultures and sequences are unavailable.

Mycoarachis Malloch & Cain 1970, *Hypocreales* genera *incertae sedis*, *Sordariomyces*, two species, type: *Mycoarachis inversa* Malloch & Cain, asexual morph hyphomycetous, terrestrial, dung, Africa and North America, see Hirooka et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Bionectriaceae*), Maharachchikumbura

et al. (2015, 2016; phylogeny), Cultures and sequences are available, holotype and ex-type of type: TRTC 662166f; CBS 517.70.

Mycoarctium K.P. Jain & Cain 1973, *Thelebolaceae*, *Thelebolales*, *Leotiomyces*, one species, type: *M. ciliatum* K.P. Jain & Cain, asexual morph unknown, coprophilous, terrestrial, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Mycoarthritis Marvanová & P.J. Fisher 2002, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *M. corallina* Marvanová & P.J. Fisher, hyphomycetous, sexual morph unknown, saprobes, aquatic, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Mycobilimbia Rehm 1890, *Lecideaceae*, *Lecideales*, *Lecanoromyces*, five species, type: *M. obscurata* (Sommerf.) Rehm, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Joshi and Hur (2012; Korea), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species, needs generic revision.

Mycoblastus Norman [nom.cons.] 1853, *Tephromelataceae*, *Lecanorales*, *Lecanoromyces*, ten species, type: *M. sanguinarius* (L.) Norman, lichenized, worldwide, see Spribille et al. (2011; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Mycocalicium Vain. 1890, *Mycocaliciaceae*, *Mycocaliciales*, *Eurotiomyces*, twelve species, type: *M. ciliatum* K.P. Jain & Cain, asexual morph phialophora-like, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Mycocentrodochium K. Matsush. & Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *M. curvisporum* K. Matsush. & Matsush., asexual morph hyphomycetous, Japan, saprobes or plant pathogenic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Matsushima Fungus Collection, Kobe, 5M406, needs generic revision.

Mycocentrospora Deighton 1972, *Pleosporales* genera *incertae sedis*, *Dothideomyces*, four species, type: *M. acerina* (R. Hartig) Deighton (\equiv *Cercospora acerina* R. Hartig), hyphomycetous, terrestrial, plant pathogenic (leaves, roots) and saprobes (isolated from soil), Asia, Australia, Europe, North America, New Zealand, see Seifert et al. (2011; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are available, neotype of type: Herb. Mycol. Oecon. 743 (B).

Mycochaetophora Hara & Ogawa 1931, *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, type: *M. japonica* Hara & Ogawa, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Kobayashi et al. (2009; morphology, phylogeny), Seifert et al. (2011; phylogeny), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Mycochlamys S. Marchand & Cabral 1976, *Ascomycota* genera *incertae sedis*, one species, type: *M. macrospora* S. Marchand & Cabral, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, see Wijayawardene et al. (2012, 2017; outline), Siles et al. (unpublished; phylogeny), Dong (unpublished; phylogeny), cultures available for type: CBS 639.76, BAFC 2663, IMI 185605, F277901, needs generic revision.

Mycocitrus A. Møller 1901, *Bionectriaceae*, *Hypocreales*, *Sordariomyces*, three species, type: *M. aurantium* Möller, asexual morph hyphomycetous, terrestrial, plant pathogen, South America, Japan, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; phylogeny), cultures and sequences are unavailable, epitype of type: BPI 631727.

Mycoclelandia Trappe & G.W. Beaton 1984, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *M. arenacea* (Trappe) Trappe & G.W. Beaton, asexual morph unknown, hypogeous, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Trappe et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: OSC:131132, needs generic revision.

Mycocryptospora J. Reid & C. Booth 1987, *Dothideomycetes* genera *incertae sedis*, one species, type: *Mycocryptospora anthostomoides* (Rehm) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Mycodidymella C.Z. Wei, Y. Harada & Katum. 1998, *Dothideomycetes* genera *incertae sedis*, one species, type: *Mycodidymella aesculi* C.Z. Wei, Y. Harada & Katum., asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: HHUF 22892.

Mycodiella Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *M. eucalypti* Crous, asexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22885, CPC 29226.

Mycoënterolobium Goos 1970, *Ascomycota* genera *incertae sedis*, one species, type: *M. platysporum* Goos, asexual morph unknown, saprobes, terrestrial, Hawaii, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Karandikar et al. (2015; morphology), cultures and sequences are unavailable, needs generic revision.

Mycofalcella Marvanová, Om-Kalth. & J. Webster 1993, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *M. calcarata* Marvanová, Om-Kalth. & J. Webster, hyphomycetous, sexual morph unknown, saprobes, freshwater, British Isles (Great Britain), Pakistan, see Baschien et al. (2013; phylogeny), Benucci et al. (2016; phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype and culture available for type species IMI 351879; CCM F-10289.

Mycogalopsis Gjurašin 1925, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *M. retinospora* Gjurašin, asexual morph unknown, saprobes or plant pathogenic, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Mycoglaena Höhn. 1909, *Dothideomycetes* genera *incertae sedis*, 16 species, type: *M. subcoerulescens* (Nyl.) Höhn., asexual morph unknown, saprobes and plant pathogens, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Mycogone Link 1809, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, 29 species, type: *M. rosea* Link, hyphomycetous, widespread, mycoparasites (mushroom), saprobes or plant pathogenic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Rossman et al. (2013; phylogeny), Kirk (2013; genus accepted), cultures and sequences are available, cultures available for the type: CBS 132.97, CBS 260.39, CBS 488.67, CBS 527.80, CBS 563.78A, CBS 563.78B, available specimen of type: CBS H-14849, CBS H-14850.

Mycohypallage B. Sutton 1963, *Ascomycota* genera *incertae sedis*, three species, type: *M. congesta* (Berk. & Broome) B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Africa, South Asia, Russia, see Marinowitz et al. (2010; morphology, new species), Wijayawardene et al. (2016; morphology), cultures and sequences are unavailable, holotype of the type: IM I84983.

Mycomalus Möller 1901, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. bambusinus* Möller, asexual morph unknown, saprobes, terrestrial, Brazil, see Tanaka et al. (2008; compare with *Ustilaginoidea*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Mycomedusiospora G.C. Carroll & Munk 1964, *Ascomycota* genera *incertae sedis*, one species, type: *M. flavida* (Rick) Carroll & Munk, asexual morph unknown, saprobes, terrestrial, Brazil, see Tanaka et al. (2008; compare with *Ustilaginoidea*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Mycomelanea Velen. 1947, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *M. ludmilae* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline, misspelled as *Mycomelaena*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Mycomicrothelia Keissl. 1936, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, three species, type: *M. macularis* (Hampe ex A. Massal.) Keissl., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; DNA, phylogeny), Hyde et al. (2013; accepted as a genus in *Trypetheliaceae*), Wijayawardene et al. (2014; outline), cultures available but lacks for the type species, needs generic revision.

Mycopappus Redhead & G.P. White 1985, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *M. alni* (Dearn. & Barthol.) Redhead & G.P. White, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lee et al. (2013; pathogens, DNA), Phookamsak et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), Tian et al. (2015; accepted as a genus in *Melanommataceae*), cultures and sequences are available.

Mycopara Bat. & J.L. Bezerra 1960, *Ascomycota* genera *incertae sedis*, one species, type: *M. shawii* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, on insects, terrestrial, Africa, Borneo, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Mycopepon Boise 1987, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. anensis* Boise, asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Mycophilomyces Crous & M.J. Wingf. 2016, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. periconiae* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22878, CPC 27558.

Mycoporellum Müll. Arg. 1884, *Dothideomycetes* genera *incertae sedis*, seven species, type: *M. sparsellum* (Nyl.) Müll. Arg., asexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Mycoporis Clem. 1909, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. perexigua* (Müll. Arg.) Clem., asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideaceae*), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; transferred to *Mycosphaerellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Mycoporopsis Müll. Arg. 1885, *Dothideomycetes* genera *incertae sedis*, six species, type: *M. sorenocarpa* (C. Knight) Müll. Arg., asexual morph unknown, saprobes, terrestrial,

worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Mycoporum Flot. ex Nyl. [nom. cons.] 1855, *Mycoporaceae*, *Pleosporales*, *Dothideomycetes*, 25 species, type: *M. elabens* (A. Massal.) Flot. ex Nyl., asexual morph unknown, non-lichenized or facultatively lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Mycorhynchidium Malloch & Cain 1971, *Pyxidiophoraceae*, *Pyxidiophorales*, *Laboulbeniomycetes*, one species, type: *M. saccatum* Malloch & Cain, asexual morph unknown, coprophilous, terrestrial, Kenya, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Mycosphaerangium Verkley 1999, *Helotiales* genera *incertae sedis*, *Leotiomyces*, three species, type: *M. tetrasporum* (Ellis) Verkley, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline, misspelled as *Mycomelaena*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Mycosphaerelloides Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

Mycospraguea U. Braun 1993, *Ascomycota* genera *incertae sedis*, one species, type: *M. campicola* (Rogerson & R. Sprague) U. Braun, coelomycetous (acervular), terrestrial, plant pathogenic, leaf-spotting, North America, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, lectotype and isotypes of type: WSP 42832; NY 256526, 1028516.

Mycosticta Höhn. 1918, *Ascomycota* genera *incertae sedis*, one species, type: *M. ovalis* (Pass.) Höhn., coelomycetous, sexual morph unknown, on insects, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Mycosylva M.C. Tulloch 1973, *Ascomycota* genera *incertae sedis*, three species, type: *M. clarkii* M.C. Tulloch, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Great Britain, Finland, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures for type: CBS 608.73, ATCC 32970, IMI 163345, type specimen of type species CBS H-14862.

Mycosymbiodes J.L. Frank 2014, *Leotiomyces* genera *incertae sedis*, one species, type: *M. mycenophila* J.L. Frank [as 'mycenaphila'], asexual morph unknown, saprobes, terrestrial, USA, see Index Fungorum (2017; taxonomy), holotype of the type: JLF2627 (OSC148294), sequences are available.

Mycothyridium Petr. 1962, *Dothideomycetes* genera *incertae sedis*, 30 species, type: *X. elliptica* G.H. Otth, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Mycotodea Kirschst. 1936, *Ascomycota* genera *incertae sedis*, 14 species, type: *Mycotodea heufleri* (Niessl) Kirschst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Mycousteria M.L. Farr 1986, *Ascomycota* genera *incertae sedis*, two species, type: *M. morulinae* (Bat. & H. Maia) M.L. Farr, coelomycetous, sexual morph unknown, saprobes,

terrestrial, Brazil, see Wijayawardene et al. (2012, 2016), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Mycovellosiella Rangel 1917, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. cajani* Henn., hyphomycetous, sexual morph unknown, plant pathogenic, ?, see Videira et al. (2017; morphology, phylogeny, and designation of neotype), cultures and sequences are available, needs generic revision.

Mycowinteria Sherwood 1986, *Protothelenellaceae*, *Lecanoromycetes* family *incertae sedis*, three species, type: *M. anodonta* (Nyl.) Sherwood & Boise, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Myelochroa (Asahina) Elix & Hale 1987, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 30 species, type: *M. aurulenta* (Tuck.) Elix & Hale, lichenized, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Myeloconis P.M. McCarthy & Elix 1996, *Porinaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *M. fecunda* P.M. McCarthy & Elix, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Nelsen et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, cultures available for the type: MPN3C, MPN759, holotype of type: E, Coppins 5131.

Myelorrhiza Verdon & Elix 1986, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *M. antrea* Verdon & Elix, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures are available but lacks for the type species, needs generic revision.

Myelosperma Syd. & P. Syd. 1915, *Myelospermataceae*, *Xylariales*, *Sordariomycetes*, four species, type: *M. tumidum* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Myiocoprula Petr. 1955, *Ascomycota* genera *incertae sedis*, two species, type: *M. gregaria* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myochroidea Printzen, T. Sprib. & Tønsberg 2008, *Lecanorales* genera *incertae sedis*, *Lecanoromycetes*, four species, type: *M. rufofusca* (Anzi) Printzen, T. Sprib. & Tønsberg, asexual morph unknown, lichenized, terrestrial, worldwide, see Printzen et al. (2008; taxonomy), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Myriangiopsis Henn. 1902, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. sulfurea* (G. Winter) Henn., asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Myriangium Mont. & Berk. 1845, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, one species, type: *M. duriaei* Mont. & Berk., asexual morph unknown, saprobes, terrestrial, Algeria, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Dissanayake et al. (2014; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype of the type species NL 8414.

Myriellina Höhn. 1915, *Ascomycota genera incertae sedis*, two species, type: *M. cydoniae* (Desm.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Papua New Guinea, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Pl. crypt. Fr. nr. 79, needs generic revision.

Myriochapsa M. Cáceres, Lücking & Lumbsch 2013, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *M. psoromica* (M. Cáceres, Santos de Jesus & Santos Vieira) M. Cáceres, Lücking & Lumbsch, asexual morph unknown, lichenized, terrestrial, worldwide, see Parnmen et al. (2013; taxonomy), Lumbsch et al. (2014; accepted in *Graphidaceae*), Lücking et al. (2016; classification), cultures and sequences are available, holotype of the type: ASE, Cáceres 7595 (holotype of *Chapsa psoromica* M. Cáceres, L.S. de Jesus & T.S. Vieira), cultures available for the type: CHAR106 (*vide* Lumbsch et al. 2014).

Myriodiscus Boedijn 1935, *Helotiales genera incertae sedis*, *Leotiomycetes*, one species, type: *M. sparassoides* Boedijn, asexual morph unknown, saprobes on bamboo culms, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myriodontium Samson & Polon. 1978, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *M. keratinophilum* Samson & Polon., sexual morph unknown, human pathogen, saprobes, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Man et al. (2015; DNA), cultures and sequences are available, available specimen and cultures for the type: CBS H-7385; S7-P-3-16 (*vide* Man et al. 2015).

Myriogenospora G.F. Atk. 1894, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. paspali* G.F. Atk., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Myriolecis Clements 1909, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, 31 species, type: *M. sambuci* (Pers.) Clem., lichenized, worldwide, see Śliwa et al. (2012; phylogeny), Zhao et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Myrionora R.C. Harris 1988, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *M. albidula* (Willey) R.C. Harris, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Myriophacidium Sherwood 1974, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, six species, type: *M. aphyophyllicum* Sherwood, asexual morph unknown, saprobes, terrestrial, worldwide, see Hou and Piepenbring (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Myriosclerotinia N.F. Buchw. 1947, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, ten species, type: *M. scirpicola* (Rehm) N.F. Buchw., asexual morph unknown, on roots, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Andrew et al. (2012; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Myriospora Nägeli ex Uloth 1861, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, nine species, type: *M. rufescens* (Ach.) Nägeli, lichenized, Europe, USA, Africa, see Westberg et al. (2011, 2015; phylogeny), Arcadia and Knudsen (2012; phylogeny), Gueidan et al. (2014c; phylogeny), Roux et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Myriostigma Kremp. 1874, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, seven species, type: *M. candidum* Kremp., lichenized,?, see Frisch et al. (2014a; phylogeny), Ertz et al. (2015,

new combination), Jagadeesh Ram and Sinha (2016; phylogeny), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Myriostigmella G. Arnaud 1952, *Dothideomycetes* genera *incertae sedis*, one species, type: *M. guatteriae* (G. Arnaud) G. Arnaud, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Myriotrema Fée 1825, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 54 species, type: *M. olivaceum* Fée, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Mangold et al. (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Sipman et al. (2012; key, Costa Rica), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; accepted as a valid genus), Lücking et al. (2014, 2016; phylogeny, classification), cultures and sequences are available, needs generic revision.

Myrmaeciella Lindau 1897, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. endoleuca* (Sacc.) Lindau, asexual morph unknown, saprobes or fungicolous, terrestrial, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Jaklitsch and Voglmayr (2011; taxonomic notes), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Myrmaecium Nitschke ex Fuckel 1870, *Valsariaceae*, *Valsariales*, *Dothideomycetes*, two species, type: *Myrmaecium rubricosum* (Fr.) Fuckel asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2015; taxonomy, and phylogeny), cultures and sequences are available, lectotype of the type: L9118162, cultures available for the type: CBS 139067.

Myrmecomycetes Jovenaz & Kimbr. 1991, *Ascomycota* genera *incertae sedis*, two species, type: *M. annellisiae* Jovenaz & Kimbr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, Argentina, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of type: FLAS 55591, needs generic revision.

Myrmecridium Arzanlou, W. Gams & Crous 2007, *Myrmecridiaceae*, *Myrmecridiales*, *Sordariomycetes*, eleven species, type: *M. schulzeri* (Sacc.) Arzanlou, W. Gams & Crous, sexual morph unknown, saprobes, terrestrial, worldwide, see Crous et al. (2012, 2015; new species, phylogeny), Jie et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline, accepted in *Hypocreomycetidae*), Crous et al. (2015, 2016; new species, phylogeny), Réblová et al. (2016; new species, phylogeny), cultures and sequences are available for the type: CBS 134.68 = ATCC 16310, needs generic revision.

Myrotheciastrum Abbas & B. Sutton 1988, *Ascomycota* genera *incertae sedis*, one species, type: *M. salvadorae* Abbas & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2016, 2017; morphology, outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: IMI 139985i.

Myrothecium Tode 1790, *Stachybotryaceae*, *Hypocreales*, *Sordariomycetes*, 83 species, type: *M. inundatum* Tode, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; phylogeny), Maharachchikumbura et al. (2015; outline), Chen et al. (2016; review, phylogeny), Dai et al. (2016; morphology, phylogeny, new species), Lombard et al. (2016; phylogeny), cultures and sequences are available but lacks for type, epitype of type: CBS H-14898.

Myrtapendiella Quaedvlieg & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *M. tenuiramis* (Crous & Summerell) Quaedvl. & Crous,

hyphomycetous, sexual morph unknown, pathogens, saprobes, terrestrial, Australia, Thailand, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), Crous et al. (2015, 2016; new species, phylogeny), sequence data available, holotype and ex-type of the type species CBS H-20253; CPC 13692.

Mystrosporiella Munjal & Kulshr. 1969, *Ascomycota* genera *incertae sedis*, two species, type: *M. litseae* Munjal & Kulshr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Mytilinidion Duby 1861, *Mytiliniaceae*, *Mytilinidiales*, *Dothideomycetes*, twelve species, type: *M. aggregatum* (DC.) Duby, asexual morph septonema-like, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mytiliniaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Mytilodiscus Kropp & S.E. Carp. 1984, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *M. alnicola* Kropp & S.E. Carp., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Mytilostoma P. Karst. 1879, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. deflectens* P. Karst., asexual morph unknown, saprobes, terrestrial, Finland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Myxocyclus Riess 1852, *Pleomassariaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. confluens* Riess, coelomycetous, sexual morph *Splanchnonema sensu lato*, saprobes, terrestrial, USA, Canada, Japan, see Pastirčáková and Pastirčák (2010; morphology), Wijayawardene et al. (2016, 2017; morphology, outline), cultures and sequences are unavailable, holotype of the type species IMI 180178.

Myxoparaphysella Caball. 1941, *Ascomycota* genera *incertae sedis*, two species, type: *M. cocoës* Caball., coelomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myxophora Döbbeler & Poelt 1978, *Pseudoperisporiaceae*, *Dothideomycetes* genera *incertae sedis*, seven species, type: *M. amerospora* Döbbeler & Poelt, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Myxospora L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *M. masonii* (M.C. Tulloch) L. Lombard & Crous, hyphomycetous, sexual morph unknown, from forest soil, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), ex-type culture of the type: CBS 174.73.

Myxosporella Sacc. 1881, *Ascomycota* genera *incertae sedis*, one species, type: *M. miniata* Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myxosporidiella Negru 1960, *Ascomycota* genera *incertae sedis*, one species, type: *M. fritillariae* Negru, coelomycetous, sexual morph unknown, saprobes, terrestrial, Roumania,

see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myxostomellina Syd. 1931, *Ascomycota* genera *incertae sedis*, one species, type: *M. apoensis* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myxothyriopsis Bat. & A.F. Vital 1956, *Ascomycota* genera *incertae sedis*, one species, type: *M. astronifolia* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myxothyrium Bubák & Kabát 1915, *Ascomycota* genera *incertae sedis*, one species, type: *M. leptideum* (Fr.) Bubák & Kabát, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myxotrichum Kunze 1823, *Myxotrichaceae*, *Leotiomyces* families *incertae sedis*, twelve species, type: *M. chartarum* Kunze, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Nadsonia Sydow 1912 (= *Schizoblastosporion* Cif. 1930), ?*Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, four species, type: *N. fulvescens* (Nadson & Konokotina) Syd., asexual reproduction is by budding, saprophytic, on exudates of various trees, soil, peat, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kurtzman and Robnett (2014; DNA, taxonomy), sequences are available.

Nadsoniella Issatsch. 1914, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomyces*, one species, type: *N. nigra* Issatsch., hyphomycetous, sexual morph unknown, saprobes, marine, USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, needs generic revision.

Nadvornikia Tibell 1984, *Graphidaceae*, *Ostropales*, *Lecanoromyces*, four species, type: *N. hawaiiensis* (Tuck.) Tibell, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Plata et al. (2012; DNA, phylogeny), Lumbsch et al. (2014; accepted in *Graphidaceae*), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Naemacyclus Fuckel 1874, *Marthamycetaceae*, *Helotiales*, *Leotiomyces*, six species, type: *Naemacyclus pinastri* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Helotiales*), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Naemosphaera P. Karst. 1888, *Ascomycota* genera *incertae sedis*, one species, type: *N. rudis* P. Karst., coelomycetous, sexual morph unknown, saprobes, marine, Finland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Naemosphaerella Höhn. 1923, *Ascomycota* genera *incertae sedis*, two species, type: *N. ceratophora* (Speg.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, marine, Brazil, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Naetrocymbe Körb. 1865, *Naetrocymbaceae*, *Dothideomyces* genera *incertae sedis*, six species, type: *N. fuliginea* Körb., asexual morph unknown, epiphytes, terrestrial, worldwide, see Alstrup et al. (2009; new species, USA), Knudsen and Lendemer (2009; new species),

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Minter et al. (2015; new species), cultures and sequences are unavailable, needs generic revision.

Naevala B. Hein 1976, *Dermateaceae*, *Helotiales*, *Leotiomyces*, six species, type: *Naevala minutissima* (Auersw.) B. Hein, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: CBS 115920, CBS 115003 (Verkley and van Kempen unpub.), available specimen for type: CBS H-15904.

Naeviella Clem. 1909, *Dermateaceae*, *Helotiales*, *Leotiomyces*, three species, type: *N. paradoxa* (Rehm) Clem., asexual morph unknown, saprobes, terrestrial, Europe, see Chlebicki (2009; endophytes, Poland), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Naeviopsis B. Hein 1976, *Dermateaceae*, *Helotiales*, *Leotiomyces*, three species, type: *N. epilobii* (P. Karst.) B. Hein, asexual morph unknown, saprobes, terrestrial, Europe, see Raitviir (2008; Magadan), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nagrajia R.F. Castañeda & W.B. Kendr. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *N. havanensis* R.F. Castañeda, coelomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: INIFAT C91/10-3, needs generic revision.

Nagrajomyces Melnik 1984, *Ascomycota* genera *incertae sedis*, one species, type: *N. dictyosporus* Melnik, coelomycetous, sexual morph unknown, saprobes, terrestrial, Russia, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Naiis Kohlm. 1962, *Halosphaeriaceae*, *Microascales*, *Sordariomyces*, two species, type: *N. inornata* Kohlm., asexual morph unknown, marine, freshwater, on wood, worldwide, see Pang (2011; review), Sakayaroj et al. (2010; phylogeny), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Nakaseomyces Kurtzman 2003, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomyces*, seven species, type: *N. delphensis* (van der Walt & Tscheuschner) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, but several of the species are important human pathogens, on exudate of oaks, figs, human pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline), Limtong et al. (2011; asexual morph as *Candida* sp.), sequences are available.

Nakatopsis Whitton, McKenzie & K.D. Hyde 2001, *Ascomycota* genera *incertae sedis*, two species, type: *N. malaysiana* Whitton, McKenzie & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: HKU (M) 5093.

Nakazawaea Y. Yamada, Maeda & Mikata 1994, *Pichiaceae*, *Saccharomycetales*, *Saccharomyces*, ten species, type: *N. holstii* (Wickerham) Y. Yamada, K. Maeda & Mikata, asexual reproduction is by multilateral budding, saprophytic, on beetle larvae tunnels in spruce and pine trees, alpechin, cider, grapes, sauerkraut, silage, mastitis milk, embalmed human corpse, human feces, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kaewwichian and Limtong (2014; new species, DNA), Kurtzman and Robnett (2014; taxonomy), sequences are available.

Nalanthamala Subram. 1956, *Nectriaceae*, *Hypocreales*, *Sordariomyces*, six species, type: *N. madreya* Subram., sexual morph *Rubrinectria*, saprobes, plant pathogens, terrestrial, worldwide. See Ligoixakis et al. (2013; Greece), Hong et al. (2013; selective medium), Severn-Ellis et al. (2012; South Africa), Li et al. (2013; indoor, phylogeny), Peršoh et al.

(2011; EcoChip), Rossman et al. (2013; acceptance of genus), Su et al. (2013; secondary metabolite), Wilk et al. (2009; secondary metabolite), Summerbell et al. (2011; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, but lacks for type.

Nannfeldtia Petr. 1947, *Leptopeltidaceae*, *Dothideomycetes* family *incertae sedis*, one species, type: *N. atra* Petr., asexual morph unknown, saprobes, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Nannizziopsis Currah 1985, *Nannizziopsidaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *N. vriesii* (Apinis) Currah, asexual morph hyphomycetous, saprobes, animal pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stchigel et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), type specimen and ex-type of the type: CBS H-6714; IMI 149994 (*fide* Stchigel et al. 2016).

Nanomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *N. fijianus* Thaxt., asexual morph unknown, biotrophic, terrestrial, Pacific, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Nanoschema B. Sutton 1980, *Ascomycota* genera *incertae sedis*, one species, type: *N. elaeocarpi* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, British Solomon Islands, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species IMI 187436.

Nanoscypha Denison 1972, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, ten species, type: *N. tetraspora* (Seaver) Denison, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Nanostictis M.S. Christ. 1954, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *N. peltigerae* M.S. Christ., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Etayo and Sancho (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Naothyrsium Bat. 1960, *Ascomycota* genera *incertae sedis*, one species, type: *N. splendidum* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Natantiella Réblová 2009, *Sordariomycetes* genera *incertae sedis*, one species, type: *N. ligneola* (Berk. & Broome) Réblová, asexual morph unknown, saprobes, terrestrial, Europe, see Reblova and Stepanek (2009; morphology), Maharachchikumbura et al. (2016; outline), holotype and culture of the type species K 84426 (holotype of *Sphaeria ligneola*); CBS 123470.

Natantispora J. Campb., J.L. Anderson & Shearer 2003, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, three species, type: *N. retorquens* (Shearer & J.L. Crane) J. Campb., J.L. Anderson & Shearer, marine, freshwater, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, needs generic revision.

Natarajania Pratibha & Bhat 2006, *Stilbosporaceae*, *Diaporthales* *incertae sedis*, *Sordariomycetes*, one species, type: *N. indica* Pratibha & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Shenoy et al. (2010; phylogeny), Seifert et al. (2011; morphology), Crous et al. (2012; phylogeny, familial position unresolved), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Natipusilla A. Ferrer, A.N. Mill. & Shearer 2011, *Natipusillaceae*, *Natipusillales*, *Dothideomycetes*, four species, type: *N. decorospora* A. Ferrer, A.N. Mill. & Shearer, saprobes, on submerged wood, Central and South America, see Raja et al. (2012; placed in *Natipusillaceae*), Hyde et al. (2013; accepted as a genus in *Natipusillaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype of type: AF236-1 (ILL 86249).

Naumovella Kravtzev 1955, *Sordariomycetes* genera *incertae sedis*, two species, type: need typification, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Naumovozyma Kurtzman 2008, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, two species, type: *N. dairenensis* (H. Naganiishi) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, soil, spoiled milk, ensiled maize, fermented vegetables, dried fruit, cecum of baboon, worldwide, see Lumbsch and Huhndorf (2010; outline), sequences are available.

Nautosphaeria E.B.G. Jones 1964, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *N. cristaminuta* E.B.G. Jones, asexual morph unknown, marine, on submerged wood, temperate, tropical, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015; outline), cultures and sequences are available, needs generic revision.

Navicella Fabre 1879, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *N. julii* Fabre, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014d; transferred to *Melanommataceae*), Wijayawardene et al. (2014; outline), Tian et al. (2015; accepted as a genus in *Melanommataceae*), cultures and sequences are unavailable.

Nawawia Marvanová 1980, *Chaetosphaeriales* genera *incertae sedis*, type: *N. filiformis* (Nawawi) Marvanová, hyphomycetous, sexual morph unknown, saprobes, aquatic, worldwide, see Crous et al. (2009; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Goh et al. (2014; new species), cultures and sequences are available but lacks for the type, needs generic revision.

Nebularia P.M. Jørg. 2014, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *N. incrassata* (P.M. Jørg.) P.M. Jørg., lichenized, Ecuador, see Ekman (2014; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Nectria (Fr.) Fr. 1849, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, around 1000 species, type: *N. cinnabarina* (Tode) Fr., saprobes, pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline), Hirooka et al. (2011; monograph), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Lombard et al. (2015; phylogeny), cultures and sequences are available, epitype and ex-epitype of the type: BPI 879981; CBS 125165 = AR 4477 = CLL 7152.

Nectriella Nitschke ex Fuckel 1870, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, 74 species, type: *N. fuckelii* Nitschke ex Fuckel, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Nectriopsis Maire 1911, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, c. 70 species, type: *N. violacea* (J.C. Schmidt ex Fr.) Maire, asexual morph acremonium-like, saprobes, fungicolous, lichenicolous, terrestrial, worldwide, see Etayo (2010; new species), Lumbsch and Huhndorf (2010; outline), Luo and Zhuang (2010; new species), Brackel and Zimmermann (2012; new species), Whitton et al. (2012; new species), Kirk et al. (2013;

genus accepted), Lombard et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Kondratyuk et al. (2016; new species), Zare and Gams (2016; phylogeny), cultures and sequences are available, needs generic revision.

Neelakesa Udaiyan & Hosag. 1992, *Pseudeurotiaceae*, *Leotiomycetes* family *incertae sedis*, three species, type: *N. lignicola* Udaiyan & V.S. Hosag., saprobes, submerged wood, freshwater, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Nemania Gray 1821, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, 68 species, type: *N. serpens* (Pers.) Gray, asexual morph hyphomycetous, saprobes or endophytes, terrestrial or marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Nematococcomyces C.L. Hou, M. Piepenbr. & Oberw. 2004, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, nine species, type: *N. rhododendri* C.L. Hou, M. Piepenbr. & Oberw., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Tian et al. (2013; new species, China, phylogeny), cultures and sequences are available, holotype and culture available for type: HMAS (112); voucher HOU 469A.

Nematogonum Desm. 1834, *Ascomycota* genera *incertae sedis*, one species, type: *N. aurantiacum* Desm., hyphomycetous, sexual morph unknown, mycoparasites, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nematographium Goid. 1935, *Ascomycota* genera *incertae sedis*, one species, type: *Nematographium hippotrichoides* (Lindau) Goid., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type species B herb. Lindau, needs generic revision.

Nematostoma Syd. & P. Syd. 1914, *Pseudoperisporiaceae*, *Dothideomycetes* family *incertae sedis*, 13 species, type: *N. artemisiae* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Nematothecium Syd. & P. Syd. 1912, *Pseudoperisporiaceae*, *Dothideomycetes* family *incertae sedis*, two species, type: *N. vinosum* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Nemozythiella Höhn. 1925, *Ascomycota* genera *incertae sedis*, one species, type: *N. lonicerae* (Died.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neoacanthostigma Boonmee, Bhat & K.D. Hyde 2014, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, three species, type: *N. fusiforme* Boonmee, Bhat & K.D. Hyde, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, Boonmee et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype and available ex-type cultures for the type: MFLU 11-1146; MFLUCC 11-0510 = BCC 52383 = ICMP 20073.

Neopalakesa Punith. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *N. poae* Punith., coelomycetous, sexual morph unknown, saprobes, terrestrial, UK, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: IMI 252188.

Neanthostomella D.Q. Dai & K.D. Hyde 2016, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *N. pseudostromatica* D.Q. Dai & K.D. Hyde, lichenicolous, asexual morph unknown, saprobes, terrestrial, Thailand, see Dai et al. (2016; phylogeny, morphology, sexual morph), sequence data available, holotype and ex-type of type species MFLU 15–1190; MFLUCC 11–0610.

Neoarachnotheca Ulfig, Cano & Guarro 1997, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *N. keratinophila* Ulfig, Cano & Guarro, asexual morph unknown, saprobes, on marine and river sediments, Spain, see Lumbsch and Huhndorf et al. (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: IMI 351982.

Neoarbuscula B. Sutton 1983, *Ascomycota* genera *incertae sedis*, one species, type: *N. eugeniae* (Bat. & Peres) B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, specimens available for the type: IMI 159330, 192110, 198635, 199104, 227705a, 227705b, 296847.

Neascochyta Q. Chen & L. Cai 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, seven species, type: *N. exitialis* (Morini) Q. Chen & L. Cai, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Neobambusicola Crous & M.J. Wingf. 2014, *Sulcatisporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *N. strelitziae* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2014; morphology, DNA), Tanaka et al. (2015; phylogeny), Cultures and sequences are available, holotype and ex-type strain of the type species CBS H-22000; CPC 24182 = CBS 138869.

Neobarclaya Kuntze 1898, *Ascomycota* genera *incertae sedis*, one species, type: *Neobarclaya primaria* (Ellis & Everh.) Kuntze, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neobarya Lowen 1986, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, ten species, type: *N. parasitica* (Fuckel) Lowen, asexual morph acremonium-like, mycoparasites, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lawrey et al. (2015; lichenicolous, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), sequence available for type species; GenBank Number: KP899626, needs generic revision.

Neobroomella Petr. 1947, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *N. ciliata* Petr., asexual morph unknown, saprobes, terrestrial, Syria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015; accepted in *Phlogicylindriaceae*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Neobulgaria Petr. 1921, *Leotiaceae*, *Helotiales*, *Leotiomycetes*, eleven species, type: *N. pura* (Pers.) Petr., asexual morph hyphomycetous (phialophora-like), saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Johnston et al. (2012; new species, New Zealand, asexual morph, DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and cultures for type: CBS H-15111; AFTOL-ID 1259 (Schoch unpub.).

Neocamarosporium Crous & M.J. Wingf. 2014, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *N. goegapense* Crous & M.J. Wingf., coelomycetous, saprobes, terrestrial, worldwide, see Crous et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2016a, b; outline, taxonomy), Ariyawansa et al. (2015; phylogeny, new combination), cultures and sequences are available, holotype and ex-type strains of the type species CBS H-21722; CPC 23676.

Neocarpenteles Udagawa & Uchiy. 2002, *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, one species, type: *N. acanthosporum* (Udagawa & Takada) Udagawa & Uchiy., asexual morph unknown, saprobes, terrestrial, temperate, see Varga et al. (2007; phylogeny), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available, holotype and cultures available for the type: NHL 22462; CBS 447.65, CBS 558.71.

Neocatapyrenium H. Harada 1993, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, four species, type: *N. cladonioideum* (Vain.) H. Harada, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, holotype of type species TUR (142).

Neocatenulostroma Quaedvlieg & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *N. microsporium* (Joanne E. Taylor & Crous) Quaedvl. & Crous, hyphomycetous, pathogens, saprobes, terrestrial, Sweden, Germany, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, nomenclature), holotype and ex-type of the type species PREM 56207a; CPC 1960.

Neoceratosperma Crous & Cheew. 2014, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *N. eucalypti* Crous & Cheew., hyphomycetous, sexual morph mycosphaerella-like, pathogens or associated with leaf spots, Brazil, China, Thailand, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014, 2017; outline), Guatimosim et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of the type species CBS H-21712; CPC 23465.

Neocercospora M. Bakhshi et al. 2015, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *N. ammicola* M. Bakhshi, Arzanlou, Babai-ahari & Crous, hyphomycetous, sexual morph unknown, plant pathogenic, see Bakhshi et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of type: IRAN 16461 F; CCTU 1186 = CBS 136450.

Neochaetosphaerella Lar. N. Vassiljeva, S.L. Stephenson & Chernyshev 2012, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, one species, type: *N. thaxteriospora* Lar. N. Vassiljeva, S.L. Stephenson & Chernyshev, asexual morphs unknown, saprobes, terrestrial, southern USA, see Vasilyeva et al. (2012; morphology), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: VLA P-2489.

Neochaetospora B. Sutton & Sankaran 1991, *Ascomycota* genera *incertae sedis*, one species, type: *N. quezelii* (Faurel & Schotter) B. Sutton & Sankaran, coelomycetous, sexual morph unknown, coprophilous, terrestrial, Sahara, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neocladophialophora Crous & R.K. Schumach. 2014, *Eurotiomycetes* genus *incertae sedis*, one species, type: *N. quercina* Crous & R.K. Schumach., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Germany, see Crous et al. (2014; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of type: CBS H-22003; CPC 24426.

Neoclaviceps J.F. White, Bills, S.C. Alderman & Spatafora 2001, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *N. monostipa* J.F. White, Bills, S.C. Alderman & Spatafora, asexual morph unknown, saprobes, terrestrial, Costa Rica, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, cultures available for the type species INBio 6-141 (Chaverri et al. 2005), holotype of type species RUTPP INBio 6-141.

Neococcomyces Y.R. Lin, C.T. Xiang & Z.Z. Li 1999, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, three species, type: *N. rhododendri* Y.R. Lin, C.T. Xiang & Z.Z. Li, asexual morph unknown, saprobes, terrestrial, China, see Hou and Piepenbring (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: AAU [Anhui] AAUFP 67, needs generic revision.

Neocordana Hern.-Restr. & Crous 2015, *Pyriculariaceae*, *Magnaporthales*, *Sordariomyces*, five species, type: *N. musae* (Zimm.) M. Hern.-Rest. & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Hernández-Restrepo et al. (2015; taxonomy, phylogeny), Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), neotype and ex-neotype culture of the type: CBS H-22054, CPC 18127.

Neocordyceps Kobayasi 1984, *Clavicipitaceae*, *Hypocreales*, *Sordariomyces*, one species, type: *N. kohyasanensis* Kobayasi, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Neocosmospora E.F. Sm. 1899, *Nectriaceae*, *Hypocreales*, *Sordariomyces*, 25 species, type: *N. vasinfecta* E.F. Sm., asexual morph hyphomycetous (acromonium-like), saprobes, pathogens on human, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Nalim et al. (2011; new species), Hirooka et al. (2012; new species), Kirk et al. (2013; genus accepted), Lombard et al. (2015; new species, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Neocrinula Crous 2016, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *N. xanthorrhoeae* Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22859, CPC 29474.

Neocryptospora Petr. 1959, *Sordariomyces* genera *incertae sedis*, one species, type: *N. rickii* Petr., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Neocudoniella S. Imai 1941, *Helotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *N. jezoënsis* (S. Imai) S. Imai, asexual morph unknown, saprobes, terrestrial, Japan, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Neocylindroseptoria K.M. Thambugala & K.D. Hyde 2014, *Dothideaceae*, *Dothideales*, *Dothideomyces*, one species, type: *N. pistaciae* (Quaedvl., Verkley & Crous) Thambug. & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Thambugala et al. (2015c; phylogeny), cultures and sequences are available, holotype and ex-type of type: CBS H-21301; CBS 471.69.

Neodasyscypha Suková & Spooner 2005, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, two species, type: *N. cerina* (Pers.) Spooner, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Whitton et al. (2012; on *Pandunus*), cultures and sequences are available, available specimen of type: CBS H-15118.

Neodeightonia C. Booth 1970, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomyces*, six species, type: *N. subglobosa* Booth, asexual morph coelomycetous, saprobes, pathogens, in soil, terrestrial, cosmopolitan, see Phillips et al. (2008, 2013; taxonomy, phylogeny), Liu et al.

(2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny), Dissanayake et al. (2016; taxonomy), holotype and ex-type culture of the type: IMI 57769(f), CBS 448.91.

Neodeightonella Crous & W.J. Swart 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *N. phragmiticola* Crous & W.J. Swart, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2013; morphology), cultures and sequences are available, holotype and ex-type of type: CBS H-21427; CPC 22059.

Neodevriesia Quaedvl. & Crous 2014, *Neodevriesiaceae*, *Capnodiales*, *Dothideomycetes*, 17 species, type: *N. hilliana* (Crous & U. Braun) Quaedvl. & Crous, hyphomycetous, with teratosphaeria-like sexual morph, saprobes, terrestrial, worldwide, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. 2014 (phylogeny, outline), Crous et al. (2015; morphology, phylogeny, sexual morph), cultures and sequences are available, holotype and ex-type of the type: CBS H-20340; CPC 15382.

Neodidymella Phookamsak, R.H. Perera & K.D. Hyde 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *N. thailandicum* Phookamsak & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU11-0176, MFLUCC 11-0140.

Neodidymelliopsis Q. Chen & L. Cai 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *N. cannabis* (G. Winter) Q. Chen & L. Cai, asexual morph coelomycetous, saprobes, ?pathogens, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), ex-type culture of the type: CBS 121.75.

Neodiplodina Petr. 1954, *Ascomycota* genera *incertae sedis*, one species, type: *N. verruciformis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Neoeriomyopsis Crous & M.J. Wingf. 2015, *Sordariomycetes*, genera *incertae sedis*, one species, type: *N. aristata* (B. Sutton & Hodges) Crous & M.J. Wingf., coelomycetous, saprobes, Brazil, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), epitype and ex-epitype culture of the type: CBS H-22243, CPC 25050.

Neoërysiphe U. Braun 1999, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, c. 15 species, type species: *Neoërysiphe galeopsidis* (DC.) U. Braun, sexual and hyphomycetous asexual morphs, obligate plant pathogens, terrestrial, almost worldwide, asexual morph: *Striatoidium* (R.T.A. Cook, A.J. Inman & C. Billings) R.T.A. Cook & U. Braun, see Takamatsu (2008; phylogeny), Heluta et al. (2010; phylogeny), Braun & Cook (2012; taxonomy), sequences are available of non-type material of the type species, lectotype of type species “*Erysiphe galeopsidis* No. 233” [in herb. de Candolle] (G 00122104).

Notes: *Striatoidium* was originally described as *Oidium* subgen. *Striatoidium* R.T.A. Cook, A.J. Inman & C. Billings, typified by *Oidium leucas-javanicae* Sawada, which is a synonym of *Oidium lamii* Rabenh. according to Braun and Cook (2012). This subgenus was subsequently raised to genus status by Braun and Cook (2012), but no binomial in *Striatoidium* was given to the type species. In addition, four species in *Striatoidium* which lack a *Neoërysiphe* sexual morph are known, i.e. *S. aloysiae* (S. Wolcan, S. Takam. & Havryl.) S. Wolcan, S. Takam. & Havryl., *S. baccharidis* (Havryl. & U. Braun) U. Braun & Havryl., *S. jaborosae* M.G. Cabrera & U. Braun, and *S. maquii* (Havryl. & U. Braun) U. Braun & Havryl. *Oidium lamii* is the asexual morph of *N. galeopsidis* (Braun and Cook 2012) and under unitary nomenclature, the genus *Striatoidium* should be considered a synonym of *Neoërysiphe*. *Oidium leonuri-sibiricae* Sawada is also a synonym of *O. lamii* (Braun & Cook 2012), therefore these names and *O. leucas-javanicae* need to be synonymized with *N.*

galeopsidis. In addition, molecular phylogenetic studies have revealed the placement of *S. aloysiae*, *S. baccharidis*, and *S. maquii* in *Neoërysiphe*, indicating that these names need to be reallocated accordingly. The phylogenetic placement of *S. jaborosae* is unknown and therefore no new combination can be proposed for this taxon in the current state.

***Neoërysiphe galeopsidis* (DC.) U. Braun, *Schlechtendalia* 3:50. 1999**

= *Oidium lamii* Rabenh., *Flora* 36:204. 1853.

= *Oidium leucas-javanicae* Sawada, *Bull. Dept. Agric. Gov. Res. Inst. Formosa* 24:22. 1927

= *Oidium leonuri-sibiricae* Sawada, loc. cit.:24

Additional synonyms of *N. galeopsidis* are listed in Braun and Cook (2012)

***Neoërysiphe aloysiae* (S. Wolcan, S. Takam. & Havryl.) S. Takam., comb. nov.**

Mycobank (or IndexFungorum): XXXXX

Basionym: *Oidium aloysiae* S. Wolcan, S. Takam. & Havryl., in Takamatsu *et al.* *Mycol Res.* 112:644, 2008.

≡ *Striatoidium aloysiae* (S. Wolcan, S. Takam. & Havryl.) S. Wolcan, S. Takam. & Havryl., in U. Braun & R.T.A. Cook, *Taxonomic Manual of the Erysiphales (Powdery Mildews)*: 347. 2012.

***Neoërysiphe baccharidis* (Havryl. & U. Braun) S. Takam., comb. nov.**

Mycobank (or IndexFungorum): XXXXX

Basionym: *Oidium baccharidis* Havryl. & U. Braun, *Nova Hedwigia* 66(3–4):515. 1998.

≡ *Striatoidium baccharidis* (Havryl. & U. Braun) U. Braun & Havryl., *Taxonomic Manual of the Erysiphales (Powdery Mildews)*:348. 2012.

***Neoërysiphe maquii* (Havryl. & U. Braun) S. Takam., comb. nov.**

Mycobank (or IndexFungorum): XXXXX

Basionym: *Oidium maquii* Havryl. & U. Braun, *Nova Hedwigia* 66(3–4):518. 1998.

≡ *Striatoidium maquii* (Havryl. & U. Braun) U. Braun & Havryl., *Taxonomic Manual of the Erysiphales (Powdery Mildews)*:349. 2012.

Neofabraea H.S. Jacks. 1913 (= *Allantozythia* Höhn. 1924; = *Phlyctema* Desm. 1847 *vide* Johnston *et al.* 2014), *Dermateaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *N. malicorticis* H.S. Jacks., asexual morph hyphomycetous, saprobes, pathogens, terrestrial, worldwide, see Raitviir (2008; Magadan), Lumbsch and Huhndorf (2010; outline), Kirk *et al.* (2013; genus accepted), Johnston *et al.* (2014; nomenclature, new combination), Chen *et al.* (2015; new species), Crous *et al.* (2015; new species), cultures and sequences are available, cultures available for the type: DAOM 227090, neotype of type: CBS H-22219.

Neoflageoletia J. Reid & C. Booth 1966, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *N. bambusina* (Syd.) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk *et al.* (2013; genus accepted), Maharachchikumbura *et al.* (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Neofuckelia Zeller & Goodd. 1935, *Ascomycota* genera *incertae sedis*, one species, type: *N. pinicola* (Zeller & Goodd.) Zeller & Goodd., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene *et al.* (2012, 2017; outline), Kirk *et al.* (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neofusicoccum Crous, Slippers & A.J.L. Phillips 2006, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, c. 29 species, type: *N. parvum* (Pennycook & Samuels) Crous, Slippers & A.J.L. Phillips, coelomycetous (with dichomera-like synasexual morphs), saprobes, pathogens, terrestrial, cosmopolitan, see Phillips *et al.* (2008, 2013; taxonomy, phylogeny), Pavlic *et al.* (2009; new species), Inderbitzin *et al.* (2010; new species), Liu *et al.*

(2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny), Dissanayake et al. (2016; taxonomy), holotype and ex-type culture of the type: PDD 45438, ATCC 58191.

Neogaemannomyces D.Q. Dai & K.D. Hyde 2015, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *Neogaemannomyces bambusicola* D.Q. Dai & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Liu et al. (2015; phylogeny, taxonomy), Maharachchikumbura et al. (2016; outline), cultures and sequences are available, holotype and ex-type of type: MFLU 14–0822; MFLUCC 11–0390.

Neogymnomyces G.F. Orr 1970, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *N. demonbreunii* (Ajello & S.L. Cheng) G.F. Orr, asexual morph unknown, saprobes, Spain, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and cultures for the type: CBS H-7197; CBS 233.85.

Neohaplomyces R.K. Benj. 1955, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *N. medonalis* R.K. Benj., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Neohendersonia Petr. 1921, *Ascomycota* genera *incertae sedis*, four species, type: *N. piriformis* (G.H. Otth) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neoheppia Zahlbr. 1909, *Peltulaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *N. brasiliensis* Zahlbr., asexual morph unknown, saprobes, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neoheteroceras Nag Raj 1993, *Ascomycota* genera *incertae sedis*, two species, type: *N. flageoletii* (Sacc.) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, France, Japan, see Yonezawa and Tanaka (2008; morphology, new species), Wijayawardene et al. (2012, 2016, 2017; morphology, outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: PAD 940.

Neohortaea Quaedvl. & Crous 2014, *Capnodiales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *N. acidophila* (Hölker, Bend, Pracht, Tetsch, Tob. Müll., M. Höfer & de Hoog) Quaedvl. & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Germany, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences are available, ex-type strain of type: CBS 113389.

Neohypodiscus J.D. Rogers, Y.M. Ju & Læssøe 1994, *Boliniaceae*, *Boliniales*, *Sordariomycetes*, three species, type: *N. rickii* (Lloyd) J.D. Rogers, Y.M. Ju & Læssøe, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015; accepted in *Xylariomycetidae*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Neojohnstonia B. Sutton 1983, *Ascomycota* genera *incertae sedis*, two species, type: *N. colocasiae* (M.B. Ellis) B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type was not designated but several specimens are at IMI and CBS (CBS H-4370).

Neokalmusia Ariyaw. & K.D. Hyde 2014, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *N. brevispora* (Nagas. & Y. Otani) Kaz. Tanaka,

Ariyawansa & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Japan, Thailand, see Ariyawansa et al. (2014a; taxonomy, phylogeny), Dai et al. (2015; taxonomy, phylogeny), Tanaka et al. (2015; taxonomy, phylogeny), cultures and sequences are available. *Neolamyia* Theiss. & Syd. 1918, *Sordariomycetes* genera *incertae sedis*, two species, type: *N. peltigeriae* (Mont.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, Brazil, see Kocourková (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Neolecta Speg. 1881, *Neolectaceae*, *Neolectales*, *Neolectomycetes*, three species, type: *N. flavovirescens* Speg., asexual morph unknown, saprobes, terrestrial, Brazil, north teperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available but lacks for the type species, needs generic revision.

Neoligniella Naumov 1951, *Ascomycota* genera *incertae sedis*, four species, type: *N. immersa* Naumov, coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neolophiostoma S. Boonmee & K.D. Hyde 2015, *Halotthiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *N. pigmentatum* Boonmee & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 10-0062, MFLUCC 10-0129.

Neomassaria Mapook, Camporesi & K.D. Hyde 2016, *Massariaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *N. fabacearum* Mapook, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 16-1875, MFLUCC 14-1117.

Neomassariosphaeria Y. Zhang bis, J. Fourn. & K.D. Hyde 2009, *Lindgomycetaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *N. typhicola* (P. Karst.) Y. Zhang ter, J. Fourn. & K.D. Hyde, asexual morph unknown, saprobes, aquatic, cosmopolitan, see Zhang et al. (2009; taxonomy, accepted as a genus in *Amniculicolaceae*), Hyde et al. (2013; accepted as a genus in *Amniculicolaceae*), Ariyawansa et al. (2015; acceptd as a genus in *Lindgomycetaceae*), Jones et al. (2015; outline, accepted as a genus in *Amniculicolaceae*), cultures and sequences are unavailable, needs generic revision.

Neomelanconium Petr. 1940, *Ascomycota* genera *incertae sedis*, three species, type: *N. gelatosporum* (Zimm.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, new species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neomicrosphaeropsis Thambug., Camporesi & K.D. Hyde 2016, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, seven species, type: *N. italica* Thambug., Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Thambugala et al. (2016; taxonomy, phylogeny), Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 16-0674, MFLUCC 16-0284.

Neomunkia Petr. 1947, *Hypocreales* genera *incertae sedis*, *Leotiomyces*, one species, type: *N. sydowii* Petr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Neomycosphaerella Crous 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *N. pseudopentameridis* Crous, asexual morph unknown, foliicolous, South Africa, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences are available, holotype and ex-type of type: CBS H-21416; CPC 21127.

Neomyrothecium L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *N. humicola* L. Lombard & Crous, hyphomycetous, sexual morph unknown, from soil, terrestrial, Papua New Guinea, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), holotype and ex-type culture of the type: CBS H-22456, CBS 310.96.

Neonectria Wollenw. 1917 (= *Heliscus* Sacc. 1880; *Cylindrocarpon* Wollenw. 1913 *vide* Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, 28 species, type *N. ramulariae* Wollenw., on bark, sometimes causing cankers, cosmopolitan, mostly in temperate regions, see Chaverri et al. (2011; phylogeny), Rossman et al. (2013; *Neonectria* protected against *Cylindrocarpon*), Lombard et al. (2015; synonymised *Heliscus* under *Neonectria*), Maharachchikumbura et al. (2015, 2016; phylogeny), Rossman et al. (2016; nomenclature), cultures and sequences are available, cultures available for type: CBS 151.29 = IMI 113894 = MUCL 28083), holotype of the type species B.

Neooccultibambusa Doilom & K.D. Hyde 2016, *Occultibambusaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *N. Chiangraiensis* Doilom & K.D. Hyde, saprobes, terrestrial, see Dai et al. (2016; phylogeny), Doilom et al. (2016; phylogeny), cultures and sequences are available, holotype and ex-type strains of type: MFLU 15–3531; MFLUCC 12–0559, MKT 075, ICMP 21165.

Neophiosphaerella Kaz. Tanaka & K. Hiray. 2015, *Lentitheciaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *N. sasicola* (Nagas. & Y. Otani) Kaz. Tanaka & K. Hiray., asexual morph unknown, saprobes, terrestrial, Japan, see Tanaka et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype, epitype and ex-epitype strain of the type species TMI 3176, HHUF 29443; CBS 120247.

Neoovularia U. Braun 1992, *Ascomycota genera incertae sedis*, six species, type: *N. nomuriana* (Sacc.) U. Braun (≡ *Tuberculina nomuriana* Sacc.), asexual morphs hyphomycetous, terrestrial, plant pathogenic, leaf-spotting, Asia, Europe, North America, see Wijayawardene et al. (2014; outline), cultures and sequences are unavailable. Holotype of type species Nomura (PAD).

Neoparodia Petr. & Cif. 1932, *Parodiopsidaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *Neoparodia ekmanii* Petr. & Cif., asexual morph chuppia-like or sarcinella-like, saprobes, terrestrial, West Indies, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Neopeckia Sacc. 1883, *Ascomycota genera incertae sedis*, one species, type: *N. coulteri* (Peck) Sacc., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but unavailable for type species, needs generic revision.

Neopeltella Petr. 1950, *Micropeltidaceae*, *Incertae sedis*, *Dothideomycetes*, three species, type: *N. aequatoriensis* Petr., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline, accepted in *Schizothyriaceae*), Hyde et al. (2013, accepted in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Schizothyriaceae*), Phookamsak et al. (2016; placed in *Micropeltidaceae*), cultures and sequences are unavailable, needs generic revision.

Neopeltis Syd. 1937, *Ascomycota genera incertae sedis*, three species, type: *N. brenesii* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, central America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neopenidiella Quaedvl. & Crous 2014, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *N. nectandrae* (Crous, U. Braun & R.F. Castañeda) Quaedvlieg & Crous,

hyphomycetous, sexual morph unknown, foliicolous, terrestrial, Cuba, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences are available, holotype and ex-type culture of type: INIFAT C87/45; CBS 734.87.

Neopericonia Kamal, A.N. Rai & Morgan-Jones 1983, *Ascomycota* genera *incertae sedis*, three species, type: *N. indica* Kamal, A.N. Rai & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neopestalotiopsis Maharachch., K.D. Hyde & Crous 2014, *Pestalotiopsidaceae*, *Xylariales*, *Sordariomycetes*, 27 species, type: *N. protearum* (Crous & L. Swart) Maharachch., K.D. Hyde & Crous, coelomycetous, sexual morph unknown, saprobes, pathogens on plants, worldwide, see Maharachchikumbura et al. (2014; phylogeny, morphology), Wijayawardene et al. (2016; outline, taxonomy), sequence data available for all species, holotype and ex-type strain of the type: PREM 56186; CBS 114178.

Neopetromyces Frisvad & Samson 2000, *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, one species, type: *N. muricatus* (Udagawa, Uchiy. & Kamiya) Frisvad & Samson, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available, holotype and ex-type strain of type species CBM BF-42515; NRRL 35674.

Neophacidium Petr. 1950, *Rhytismatales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *N. macrocarpum* (Pat.) Petr., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neophaeococcomyces Crous & M.J. Wingf. 2015, *Strelitzianaceae*, *Chaetothyriales*, *Eurotiomycetes*, two species, type: *N. aloes* (Crous & M.J. Wingf.) Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, South Africa, Switzerland, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-21441, CPC 21873.

Neophaeocryptopus Wanasinghe, Camporesi, E.B.G. Jones & K.D. Hyde 2016, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, one species, type: *N. cytisi* Wanasinghe, Camporesi, E.B.G. Jones & K.D. Hyde, asexual morph coelomycetous, sexual morph bitunicate ascomycetous, saprobes, terrestrial, Europe, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-type strain of type: MFLU 15-3542; MFLUCC 14-0970.

Neophaeocryptopus Wanasinghe, Camporesi, E.B.G. Jones & K.D. Hyde 2016, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, one species, type: *N. cytisi* Wanasinghe, Camporesi, E.B.G. Jones & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Italy, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-isotype culture of the type: MFLU 15-3542, MFLUCC 14-0970.

Neophaeomoniella Rooney-Latham & Crous 2015, *Phaeomoniellaceae*, *Phaeomoniellales*, *Eurotiomycetes*, three species, type: *N. eucalypti* Rooney-Latham & Crous, coelomycetous, sexual morph unknown, on living leaves, endophytic, terrestrial, USA, South Korea, South Africa, see Crous et al. (2011, 2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type culture of type: CBS H-22249; CPC 25161.

Neophaeosphaeria M.P.S. Câmara, M.E. Palm & A.W. Ramaley 2003, *Neophaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *N. filamentosa* (Ellis & Everh.) M.P.S. Câmara, M.E. Palm & A.W. Ramaley, asexual morph coelomycetous, saprobes or pathogenic, terrestrial, Mexico, USA, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Leptosphaeriaceae*), Crous et al. (2013;

taxonomy), Ariyawansa et al. (2014a; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), sequence data available for all species, needs generic revision.

Neophaeothecoidea Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *N. proteae* (Crous) Quaedvlieg & Crous, hyphomycetous, saprobes, terrestrial, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype and ex-type strain of the type: CBS H-20092; CPC 2828.

Neophoma Petr. & Syd. 1927, *Ascomycota* genera *incertae sedis*, two species, type: *N. graminella* (Sacc.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America., see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neophyllis F. Wilson 1891, *Sphaerophoraceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *Neophyllis melacarpa* F. Wilson, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available for the type species, holotype of type species available.

Neoplaconema B. Sutton 1977, *Ascomycota* genera *incertae sedis*, two species, type: *N. napelli* (Maire & Sacc.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Germany, see Wijayawardene et al. (2012, 2017; outline), sequences are available, holotype of the type species was not designated (IMI 24787).

Neoplatysporoides Crous & M.J. Wingf. 2015, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *N. aloecicola* Crous & M.J. Wingf., asexual morph coelomycetous, saprobes, Tanzania, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22230, CPC 24435.

Neopodoconis Rifai 2008, *Ascomycota* genera *incertae sedis*, three species, type: *N. ampullacea* (Petch) Rifai, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Indonesia, see Rifai (2008; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, holotype of type species available, needs generic revision.

Neopseudocercospora Crous 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *N. terminaliae* Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Zambia, type, see Crous et al. (2013; morphology), Braun et al. (2014; morphology, keys), cultures and sequences are available, holotype and ex-type of the type: CBS H- 21431; CPC 22685.

Neopseudocercosporella Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *N. capsellae* (Ellis & Everh.) Videira & Crous, hyphomycetous, sexual morph mycosphaerella-like, plant pathogenic on *Brassica* species, USA, see Videira et al. (2016; morphology, phylogeny), Cultures and sequences are available, holotype and isotype of type species NY 883641; BPI 399944.

Neopseudolachnella A. Hashim. & Kaz. Tanaka 2015, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, three species, type: *N. acutispora* A. Hashim., Sat. Hatak. & Kaz. Tanaka, coelomycetous, sexual morph unknown, saprobes, Japan, see Hashimoto et al. (2015b; morphology, phylogeny), sequences are available, holotype and ex-type strain of type: HHUF 29727; MAFF 244358.

Neopsoromopsis Gyeln. 1940, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *Neopsoromopsis argentina* Gyeln., asexual morph unknown, lichenized, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Thell et al. (2012; review), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Neopyricularia Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *N. commelinicola* (M.J. Park & H.D. Shin) Klaubauf,

Lebrun & Crous, asexual morph unknown, saprobes, terrestrial, South Korea, see Klaubauf et al. (2014; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and available cultures for the type: KUS (F) 22838; CBS 128308 = KACC 43081

Neoramularia U. Braun 1991, *Ascomycota* genera *incertae sedis*, nine species, type: *N. eurotiae* (Gamalitzk.) U. Braun, hyphomycetous, sexual morph unknown, terrestrial, plant pathogenic, leaf-spotting, Asia, Europe, North America, see Ruszkiewicz-Michalska and Wolczanska (2008; Europe), Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and cultures and sequences are unavailable, holotype of type: LE 41968.

Neosartorya Malloch & Cain 1973, *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, 15 species, type: *N. fischeri* (Wehmer) Malloch & Cain, asexual morph *Aspergillus*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen of type: CBS H-15123.

Neoscoleobasidium Crous 2016, *Microthyriales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *N. agapanthi* Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22870, CPC 28778.

Neoscytalidium Crous & Slippers 2006, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, two species, type: *N. dimidiatum* (Penz.) Crous & Slippers, coelomycetous, sexual morph unknown, saprobes, pathogen, tropical and sub-tropical regions of Europe, Africa, Asia, North and South America, see Liu et al. (2012; phylogeny), Phillips et al. (2013; morphology, phylogeny, new comb. for type species), cultures and sequences are available, isotype and ex-isotype strain of the type species CBS H-7745; CBS 145.78.

Neoseptoria Quaedvlieg, Verkley & Crous 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *N. caricis* W. Quaedvlieg, G.J.M. Verkley & Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, Netherlands, see Quaedvlieg et al. (2013; morphology, phylogeny), sequence data available, holotype and ex-type strain of the type: CBS H-21293; CBS 135097.

Neoseptorioides Crous, J. Edwards & I.G. Pascoe 2015, *Saccharataceae*, *Botryosphaeriales*, *Dothideomycetes*, two species, type: *N. eucalypti* Crous, J. Edwards & I.G. Pascoe, coelomycetous, sexual morph unknown, saprobes, Australia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22395, CPC 25529.

Neosergipea M. Cáceres, Ertz & Aptroot 2016, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *N. aurata* (M. Cáceres, Ertz & Aptroot) Lücking, M. Gut. & Moncada, lichenized, terrestrial, tropical, see Lücking et al. (2016a,b; taxonomy, classification), cultures and sequences are available, holotype of type species ISE, Cáceres & Jesus 12539 (as *Sergipea aurata* M. Cáceres, Ertz & Aptroot).

Neosetophoma Gruyter, Aveskamp & Verkley 2010, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *N. samararum* (Desm.) Gruyter, Aveskamp & Verkley, asexual morph coelomycetous, saprobes and plant endophytes, terrestrial, aquatic, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Li et al. (2015; phylogeny), Phookamsak et al. (2014; phylogeny), cultures and sequences are available, holotype and ex-type strains of type: CBS H-20319; CBS 138.96 = PD 82/653.

Neospegazzinia Petr. & Syd. 1936, *Ascomycota* genera *incertae sedis*, two species, type: *N. pulchra* Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neosphaerellopsis Crous & Trakun. 2014, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *N. thailandica* Crous & Trakun., on uredinio rust sori on leaves of *Bothriochloa bladhii*, terrestrial, Thailand, see Trakunyingcharoen et al. (2014; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type: CBS H-21847; CPC 21659.

Neosporidesmium Mercado & J. Mena 1988, *Ascomycota* genera *incertae sedis*, two species, type: *N. maestrense* Mercado & J. Mena, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neostagonospora Quaedvli., Verkley & Crous 2013, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *N. caricis* Quaedvlieg, Verkley & Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, Netherlands, South Africa, see Quaedvlieg et al. (2013; morphology, phylogeny), Phookamsak et al. (2014; phylogeny), cultures and sequences are available, holotype and ex-type of the type: CBS H-21306; CBS 135092.

Neostrelitziana Crous & M.J. Wingf. 2015, *Chaetothyriales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *N. acaciigena* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, Malaysia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22232, CPC 24873.

Neosulcatispora Crous & M.J. Wingf. 2015, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *N. agave* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, France, see Crous et al. (2015, 2016; new species, phylogeny), Wijayawardene et al. (2016, 2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22404, CPC 26407.

Neotapesia E. Müll. & Hütter 1963, *Dermateaceae*, *Helotiales*, *Leotiomyces*, three species, type: *N. graddonii* E. Müll. & Hütter, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neotestudina Segretain & Destombes 1961, *Testudinaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *N. rosatii* Segretain & Destombes, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Testudinaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and cultures for the type: CBS H-200; CBS 690.82.

Neothyridaria Petr. 1934, *Sordariomycetes* genera *incertae sedis*, one species, type: *N. moravica* Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Kocourková (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Neothyronectria Crous & Thangavel 2016, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *N. sophorae* Crous & Thangavel, coelomycetous, sexual morph unknown, saprobes, terrestrial, New Zealand, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22880, CPC 29690.

Neotrematosphaeria Thambugala, Kaz. Tanaka & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *N. biappendiculata* (Kaz. Tanaka, Y. Harada & M.E. Barr) Thambugala, Kaz. Tanaka & K.D. Hyde, asexual morph pleurophomopsis-like, saprobes, freshwater, Japan, see Thambugala et al. (2015b; morphology, phylogeny), sequence data available, holotype and ex-type of type species HHUF 28026; MAFF 239297.

Neotrimmatostroma Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *N. excentricum* (B. Sutton & Ganapathi) Quaedvl. & Crous, with hyphomycetous asexual morph, foliicolous, terrestrial, Australia, New Zealand, see Quaedvlieg et al. (2014; morphology, phylogeny), Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of sexual morph of the type: CBS H-19829, ex-type strain of the type: CPC 13092.

Neotruncatella Hyang B. Lee & T.T.T. Nguyen 2016, *Bartaliniaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *N. endophytica* Hyang B. Lee, P.M. Kirk, K.D. Hyde, S.S.N. Maharachch., & T.T.T. Nguyen, coelomycetous, sexual morph unknown, endophytes, terrestrial, Korea, see Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-0399, EMLAS5-1.

Neottiella Cooke Sacc. 1889, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 13 species, type: *N. albocincta* (Berk. & M.A. Curtis) Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Neottiospora Desm. 1843, *Ascomycota* genera *incertae sedis*, two species, type: *N. caricum* Desm., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neottiosporina Subram. 1961, *Ascomycota* genera *incertae sedis*, eleven species, type: *N. apoda* (Speg.) Subram., sexual morph unknown, saprobes, terrestrial, Asia, Australia, South America, see De Gruyter et al. (2009; phylogeny), Wijayawardene et al. (2012, 2016; outline), Trakunyingcharoen et al. (2014; phylogeny), cultures and sequences are available for one species (*N. paspali*).

Neotyphodium Glenn, C.W. Bacon & Hanlin 1996, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *N. coenophialum* (Morgan-Jones & W. Gams) Glenn, C.W. Bacon & Hanlin, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, available specimen and culture for type: CBS H-3511; CBS 494.82.

Neournula Paden & Tylutki 1969, *Chorioactidaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *N. nordmanensis* Paden & Tylutki, asexual morph unknown, saprobes, terrestrial, USA, Europe, North Africa, see Pfister et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available but lacks for the type species, holotype of type: WSP 56281.

Neoventuria Syd. & P. Syd. 1919, *Dothideomycetes* genera *incertae sedis*, two species, type: *N. argentinensis* (Speg.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Neozythia Petr. 1958, *Ascomycota* genera *incertae sedis*, one species, type: *N. nectrioidea* (Petr.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Iran, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Nephroma Ach. 1809, *Nephromataceae*, *Peltigerales*, *Lecanoromycetes*, 36 species, type: *N. polaris* (Ach.) Ach., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Nephromopsis Müll. Arg. 1891, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 24 species, type: *N. stracheyi* (C. Bab.) Müll. Arg., asexual morph unknown, lichenized, terrestrial,

Argentina, see Thell et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Randlane et al. (2013; new species), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Neptunella K.L. Pang & E.B.G. Jones 2003, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *N. longirostris* (Cribb & J.W. Cribb) K.L. Pang & E.B.G. Jones, asexual morph unknown, saprobes, marine, Australia, see Lumbsch and Huhndorf (2010; outline), Jones et al. (2015; review), Maharachchikumbura et al. (2015, 2016; outline), sequences are available, needs generic revision.

Nereiospora E.B.G. Jones, R.G. Johnson & S.T. Moss 1983, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *N. comata* (Kohlm.) E.B.G. Jones, R.G. Johnson & S.T. Moss, asexual morph hyphomycetous, on wood, marine, worldwide, see Sakayaroj et al. (2010; sequence data for type species), Jones et al. (2015; outline), Maharachchikumbura et al. (2015; outline), Cultures and sequences are available, needs generic revision.

Neta Shearer & J.L. Crane 1971, *Ascomycota genera incertae sedis*, two species, type: *N. patuxentica* Shearer & J.L. Crane, hyphomycetous, sexual morph unknown, saprobes, terrestrial and aquatic, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: ILLS 34520, needs generic revision.

Neurospora Shear & B.O. Dodge 1927 (= *Chrysonilia* Arx 1981 *vide* Réblová et al. 2016), *Sordariaceae*, *Sordariales*, *Sordariomycetes*, 52 species, type: *N. sitophila* Shear & B.O. Dodge, asexual morph formerly named in *Chrysonilia*, saprobes, terrestrial, worldwide, see Villalta et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Nygren et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available for type species, needs generic revision.

Nevesia P.M. Jørg, L. Lindblom, Wedin & S. Ekman 2014, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, one species, type: *N. sampaiana* (Tavares) P.M. Jørg., L. Lindblom, Wedin & S. Ekman, lichenized, terrestrial, worldwide, see Ekman et al. (2014; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Nidulispora Nawawi & Kuthub. 1990, *Ascomycota genera incertae sedis*, one species, type: *N. quadrifida* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Malaysia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nidulispora Nawawi & Kuthub. 1990, *Ascomycota genera incertae sedis*, one species, type: *N. quadrifida* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Niebla Rundel & Bowler 1978, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, 22 species, type: *Niebla homalea* (Ach.) Rundel & Bowler, lichenized, New World, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Niesslia Auersw. 1869, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, 42 species, type: *N. chaetomium* (Corda) Auersw., asexual morph unknown, lichenicolous, parasitizing members of *Peltigerales*, terrestrial, Australia, Asia and Europe, see Etayo and Sancho (2008; three new species), Motiejūnaitė et al. (2008; Poland), Zhurbenko and Dillman (2010; Alaska), Etayo et al. (2013; new species), Himelbrant et al. (2014; Russia), Judith et al. (2015; phylogeny), Zhurbenko and Pino-Bodas (2015; New Zealand), sequence data available for *Niesslia exilis*.

Nigrocornus Ryley & Langdon 2003, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *N. scleroticus* (Pat.) Ryley, asexual morph contains simple conidiophores, endophytes, terrestrial, Africa, SE Asia, Australia, see Cheplick & Faeth (2009; ecology), Wijayawardene et al. (2012, 2017; outline), Panka et al. (2013; Poland), Maharachchikumbura et al. (2015, 2016; outline), DNA sequence data available (as *Balansia sclerotica*), culture data unavailable, neotype of the type species FH (Farlow Herbarium).

Nigrolentilocus R.F. Castañeda & Heredia 2001, *Ascomycota* genera *incertae sedis*, five species, type: *N. africanus* (B. Sutton) R.F. Castañeda & Heredia, hyphomycetous, sexual morph unknown, saprobes, terrestrial & aquatic, Malawi, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Monteiro et al. (2014; Brazil), cultures and sequences are unavailable, holotype of type: IMI 347112a, compare with *Matsushimiella*, *Minimelanolocus*, *Pseudospiropes*, *Spiropes* and *Sympodioplanus*.

Nigromacula Etayo 2002, *Ascomycota* genera *incertae sedis*, one species, type: *N. hypotrachynae* Etayo, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, South America, Europe, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: COL Etayo 16185.

Nigromammilla K.D. Hyde & J. Fröhl. 2003, *Sordariomycetes* genera *incertae sedis*, one species, type: *N. calami* K.D. Hyde & J. Fröhl. [as '*Nigramammilla calami*'], asexual morph unknown, saprobes, terrestrial, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: HKU (M) JF212.

Nigropuncta D. Hawksw. 1981, *Ascomycota* genera *incertae sedis*, two species, type: *N. rugulosa* D. Hawksw., coelomycetous, lichenized, lichenicolous, Europe, terrestrial, sexual morph unknown, see Wijayawardene et al. (2012, 2016, 2017; morphology, outline), Kirk et al. (2013; genus accepted), cultures and sequences unavailable, holotype of type: K(M)-IMI 241409.

Nigrosabulum Malloch & Cain 1970, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, twelve species, type: *N. globosum* Malloch & Cain, asexual morph acromonium-like, saprobes, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Bionectriaceae*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; accepted in *Hypocreales*), cultures and sequences are available, holotype of type species TRTC 43288.

Nigrospora Zimm. 1902, *Sordariomycetes*, genera *incertae sedis*, four species, type: *N. panici* Zimm., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Nigrothelium Lücking, M.P.Nelsen & Aptroot 2016, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, two species, type: *N. tropicum* (Ach.) Lücking, M.P. Nelsen & Aptroot, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Aptroot and Lücking (2016; monograph), Lücking et al. (2016c; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, lectotype and iso-lectotype of type: H-ACH 707A; BM-ACH.

Nimbospora Jørg. Koch 1982, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *N. effusa* Jørg. Koch, asexual morph unknown, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; phylogeny), Chu et al. (2015; phylogeny), sequences are available, holotype of type species J. Koch 387, Herbarium CP, Denmark.

Nimisiostella Calat., Barreno & O.E. Erikss. 1997, *Incertae sedis*, *Incertae sedis*, *Lecanoromycetes*, one species, type: *N. lichenicola* Calat., Barreno & O.E. Erikss.,

lichenized, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species VAB (Lich.) 7546.

Nipholepis Syd. 1935, *Arthoniales genera incertae sedis*, *Arthoniomycetes*, one species, type: *N. filicina* Syd., lichenized, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nipicola K.D. Hyde 1992, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, four species, type: *N. carbospora* K.D. Hyde, asexual morph unknown, saprobes, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Daranagama et al. (2017 morphology, taxonomy, phylogeny, key), cultures and sequences are unavailable, needs generic revision.

Nipponoparmelia (Kurok.) K.H. Moon, Y. Ohmura & Kashiw. 2010, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *N. laevior* (Nyl.) K.H. Moon, Y. Ohmura & Kashiw., asexual morph unknown, lichenized, terrestrial, Argentina, see Crespo et al. (2010; taxonomy, phylogeny), Kondratyuk et al. (2013; new species), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Niptera Fr. 1849, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, c. ten species, type: *N. lacustris* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Whitton et al. (2012; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type species, needs generic revision.

Nipterella Starbäck ex Dennis 1962, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *N. duplex* (Starbäck) Starbäck & Dennis, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nitidochapsa Parmen, Lücking & Lumbsch 2013, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *N. leprieurii* (Mont.) Parmen, Lücking & Lumbsch, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Parmen et al. (2013; genus proposed), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Nitschkia G.H. Oth ex P. Karst. 1873, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, 27 species, type: *N. cupularis* (Pers.) P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, available specimen of type: CBS H-4803.

Nodobryoria Common & Brodo 1995, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *N. abbreviata* (Müll. Arg.) Common & Brodo, asexual morph unknown, lichenized, terrestrial, North America, Greenland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Divakar et al. (2015; DNA, phylogeny), cultures and sequences are available, voucher specimen of type: St. Clair 52291 (BRY-C).

Nodulosphaeria Rabenh. 1858, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, c. 52 species, type: *N. hirta* Rabenh., asexual morph coelomycetous, saprobes, terrestrial, aquatic, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zang et al. (2012; taxonomy), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline, phylogeny), Ariyawansa et al. (2015; new species, Italy), Li et al. (2015; new species, phylogeny, asexual morph), Hyde et al. (2016; new species, Italy), Mapook et al. (2016; new species, revision), cultures and sequences are available.

Nohea Kohlm. & Volkm.-Kohlm. 1991, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, three species, type: *N. umiimi* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Abdel-Wahab (2011; phylogeny), Maharachchikumbura et al. (2015, 2016; phylogeny), cultures and sequences are available, holotype of type: J.K. 4847 = 01348233, NYBG.

Nomuraea Maubl. 1903, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *N. prasina* Maubl., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Noosia Crous, R.G. Shivas & McTaggart 2011, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *N. banksiae* Crous, R.G. Shivas & McTaggart, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2011; morphology, DNA), Wijayawardene et al. (2012, 2014; outline), holotype and ex-type: of the type CBS H-20587; CPC 17282 = CBS 129526.

Normandina Nyl. 1855, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, three species, type: *N. jungermanniae* (Nyl.) Nyl., asexual morph unknown, lichenized, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Ascomycota*), Kirk et al. (2013; genus accepted), Muggia et al. (2010; phylogeny), Frisch and Ohmura (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Norrlinia Theiss. & Syd. 1918, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *N. peltigericola* (Nyl.) Theiss. & Syd., asexual morph unknown, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for the type species, needs generic revision.

Nosophloea Fr. 1849, *Ascomycota* genera *incertae sedis*, three species, type: need typification, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nothomitra Maas Geest. 1964, *Leotiomyces* genera *incertae sedis*, three species, type: *N. cinnamomea* Maas Geest., asexual morph unknown, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hustad et al. (2016; taxonomy, phylogeny), cultures and sequences are available, needs generic revision.

Nothopacidium J. Reid & Cain 1962, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *N. abietinellum* (Dearn.) J. Reid & Cain, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: DAOM herb. J. Dearness 5748, needs generic revision.

Nothophoma Q. Chen & L. Cai 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, six species, type: *N. infossa* (Ellis & Everh.) Q. Chen & L. Cai, coelomycetous, saprobes, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), neotype and ex-neotype culture of the type: CBS H-20145, CBS 123395.

Nothorhytisma Minter, P.F. Cannon, A.I. Romero & Peredo 1998, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, three species, type: *N. nahuelitae* Minter, P.F. Cannon, A.I. Romero & Peredo, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: BAFC, needs generic revision.

Nothospora Peyronel 1913, *Ascomycota* genera *incertae sedis*, one species, type: *N. ambigua* Peyronel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Seifert et

al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Notocladonia S. Hammer 2003, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *N. cochleata* (Müll. Arg.) S. Hammer, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Notolecidea Hertel 1984, *Lecanoromycetes* genera *incertae sedis*, one species, type: *N. subcontinua* (Nyl.) Hertel, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Notoparmelia A.Crespo, Ferencova & Divakar 2014, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 16 species, type: *N. signifera* (Nyl.) A. Crespo, Ferencova & Divakar, lichenized, Australasia, see Ferencova et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Novomicrothelia Aptroot, M.P. Nelsen & Lücking 2016, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, one species, type: *N. oleosa* (Aptroot) Aptroot, M.P. Nelsen & Lücking, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Aptroot and Lücking (2016; monograph), Lücking et al. (2016; phylogeny), cultures and sequences are available, holotype of type: F, ISE.

Novozymia W.P. Wu 2005, *Ascomycota* genera *incertae sedis*, one species, type: *N. elegans* W.P. Wu, hyphomycetous, sexual morph unknown, saprobes, terrestrial, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nummospora E. Müll. & Shoemaker 1964, *Ascomycota* genera *incertae sedis*, one species, type: *N. hexamera* E. Müll. & Shoemaker, coelomycetous, sexual morph unknown, saprobes, terrestrial, Switzerland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nusia Subram. 1995, *Ascomycota* genera *incertae sedis*, two species, type: *N. scheeleae* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nyctalospora E.F. Morris 1972, *Ascomycota* genera *incertae sedis*, one species, type: *N. compacta* E.F. Morris, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Costa Rica, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nycteromyces Thaxt. 1917, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *N. streblidinus* Thaxt., asexual morph unknown, biotrophic, only known from *Strebla wiedemanni*, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Nymanomyces Henn. 1899, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *N. aceris-laurini* Henn., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nypaella K.D. Hyde & B. Sutton 1992, *Ascomycota* genera *incertae sedis*, two species, type: *N. frondicola* K.D. Hyde & B. Sutton, coelomycetous, sexual morph unknown, saprobes, marine, on intertidal fronds of *Nypa fruticans*, Brunei, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: IMI 348629.

Nyungwea Sérus., Eb. Fisch. & Killmann 2006, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *N. pallida* Sérus., Eb. Fischer & Killmann, lichenized,

terrestrial, see Lumbsch and Huhndorf (2010; outline), Frisch et al. (2014; phylogeny), sequences are available.

Obeliospora Nawawi & Kuthub. 1990, *Ascomycota* genera *incertae sedis*, three species, type: *O. basispira* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Obolarina Pouzar 1986, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *O. dryophila* (Tul. & C. Tul.) Pouzar, asexual morph hyphomycetous (rhinocladiella-like), saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Pazoutova et al. (2010; DNA, phylogeny), Mirabolfathy et al. (2013; new species, Iran), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: H76, needs generic revision.

Obryzum Wallr. 1825, *Obryzaceae*, *Ascomycota* family *incertae sedis*, two species, type: *O. corniculatum* (Hoffm.) Wallr., asexual morph unidentified, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Obstipipilus B. Sutton 1968, *Ascomycota* genera *incertae sedis*, one species, type: *O. malabaricus* (T.S. Ramakr. & K. Ramakr.) B. Sutton, coelomycetous, sexual morph unknown, pathogens, terrestrial, India, see Wijayawardene et al. (2012, 2016; outline, morphology), cultures and sequences are unavailable, holotype of the type: IMI 110502.

Obstipispora R.C. Sinclair & Morgan-Jones., 1979, *Ascomycota* genera *incertae sedis*, one species, type: *O. chewaclensis* R.C. Sinclair & Morgan-Jones, sexual morph unknown, submerged decaying leaves, Alabama, see Wijayawardene et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: BPI.

Obtectodiscus E. Müll., Petrini & Samuels 1980, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *O. aquaticus* E. Müll., Petrini & Samuels, asexual morph unknown, saprobes, terrestrial, Switzerland, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ocala Raja & Shearer 2009, *Natipusillales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *O. scalariformis* Raja & Shearer, submerged wood, Florida, see Raja et al. (2009; genus proposed), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriaceae*), Shearer et al. (2009; phylogeny), Wijayawardene et al. (2014; accepted as a genus in *Dothideomycetes*), Raja et al. (2015; phylogeny), cultures and sequences are available, holotype of type: F121-1, ILL

Occultibambusa D.Q. Dai & K.D. Hyde 2016, *Occultibambusaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *O. bambusae* D.Q. Dai & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Thailand, see Dai et al. (2016; phylogeny, morphology, sexual and asexual morphs), cultures and sequences are available, holotype and ex-type cultures of type: MFLU 15-1212; MFLUCC 13-0855 = CBS 139960 = MUCL 55882.

Occultithecra J.D. Rogers & Y.M. Ju 2003, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *O. costaricensis* J.D. Rogers & Y.M. Ju, asexual morph unknown, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: INB Rogers, needs generic revision.

Occultocarpon L.C. Mejía & Zhu L. Yang 2012, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *O. ailaoshanense* L.C. Mejía & Zhu L. Yang, asexual morph unknown, saprobes, terrestrial, China, see Mejía et al. (2012; taxonomy),

Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type cultures of the type: BPI 879253, LCM524.01.

Oceanitis Kohlm. 1977, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, four species, type: *O. scuticella* Kohlm., asexual morph unknown, saprobes, freshwater or marine, worldwide, see Dupont et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequence data available for all species, holotype of type: J.K. 2971a, not found in NYBG.

Ocellomma Ertz & Tehler 2015, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *O. picconianum* (Bagl.) Ertz & Tehler, sexual morph with apothecioid ascomata, lichenized, terrestrial, Mediterranean, see Ertz et al. (2014; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available, lectotype and ex-type strain of type: Ertz 17143; 17132.

Ocellularia G. Mey. 1825, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 400 species, type: *O. obturata* (Ach.) Spreng., asexual morph unknown, lichenized fungi, terrestrial, tropical, see Mangold et al. (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Sipman et al. (2012; key, Costa Rica), Kirk et al. (2013; genus accepted), Lücking (2014; key), Lücking et al. (2014, 2016; classification, phylogeny), cultures and sequences are available, needs generic revision.

Ochotrichobolus Kimbr. & Korf 1983, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, one species, type: *O. polysporus* Kimbr. & Korf, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: CUP 59844.

Ochrocladosporium Crous & U. Braun 2007, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, three species, type: *O. elatum* (Harz) Crous & U. Braun, hyphomycetous, terrestrial, Africa, Europe, see Hyde et al. (2011; outline), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Ochroconis de Hoog & Arx 1974, *Symptoventuriaceae*, *Venturiales*, *Dothideomycetes*, 25 species, type: *O. constricta* (E.V. Abbott) de Hoog & Arx, asexual morph hyphomycetous, saprobes, opportunistic pathogens on human and animals, terrestrial, worldwide, see Giraldo et al. (2014; new species), Machouart et al. (2014; phylogeny), Samerpitak et al. (2014, 2015; human and animal pathogens, phylogeny), Wijayawardene et al. (2014, 2017; outline), Crous et al. (2015, 2016; new species, phylogeny), cultures and sequences are available, available specimen and cultures for type: CBS H-15203; CBS 211.53, CBS 202.27 (Samerpitak et al. 2014).

Ochrolechia A. Massal. 1852, *Ochrolechiaceae*, *Pertusariales*, *Lecanoromycetes*, 60 species, type: *O. tartarea* (L.) A. Massal., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2015; new species), sequence are available for the type, needs generic revision.

Ochronectria Rossman & Samuels 1999, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *O. calami* (Henn. & E. Nyman) Rossman & Samuels, asexual morph unknown, saprobes, terrestrial, Asia, South America, see Guu et al. (2010; Taiwan), Pinruan et al. (2010; Thailand), Luo and Zhuang (2010; China), Li et al. (2016; new species), cultures and sequences are available, holotype and culture data unavailable.

Ocostaspora E.B.G. Jones, R.G. Johnson & S.T. Moss 1983, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *O. apilongissima* E.B.G. Jones, R.G. Johnson & S.T. Moss, asexual morph unknown, saprobes, marine, Wales, Denmark, temperate, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Ocotomyces H.C. Evans & Minter 1985 (= *Uyucamyces* H.C. Evans & Minter *vide* Johnston et al. 2014), *Rhytismatales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *O. parasiticus* H.C. Evans & Minter, asexual morph formerly named in *Uyucamyces*, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, holotype of type: IMI 286340, needs generic revision.

Octopodotus Kohlm. & Volkm.-Kohlm. 2003, *Ascomycota* genera *incertae sedis*, one species, type: *O. stupendous* Kohlm. & Volkm.-Kohlm, coelomycetous, sexual morph unknown, saprobes, marine, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Octospora Hedw. 1789, *Pyronemataceae*, *Pezizales*, *Pezizales*, c. 60 species, type: *O. leucoloma* Hedw., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Octosporella Döbbeler 1980, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, nine species, type: *O. jungermanniarum* (P. Crouan & H. Crouan) Döbbeler, asexual morph unknown, on mosses and liverworts, terrestrial, Europe, Venezuela, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; DNA), Döbbeler (2011; new species, Costa Rica and French Guiana), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2015; new species), cultures and sequences are available, needs generic revision.

Octosporopsis U. Lindem. & M. Vega 2014, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, nine species, type: *O. nicolai* U. Lindemann, M. Vega & T. Richter, asexual morph unknown, saprobes, terrestrial, Europe, see Lindemann et al. (2014; taxonomy, phylogeny), sequences are available, voucher specimen for type: MV20130205-1.

Oculimacula Crous & W. Gams 2003 (= *Helgardia* Crous & W. Gams 2003 *vide* Johnston et al. 2014), *Ploettnerulaceae*, *Helotiales*, *Leotiomycetes*, six species, type: *O. yallundae* (Wallwork & Spooner) Crous & W. Gams, asexual morph formerly named in *Helgardia*, saprobes, pathogens, terrestrial, Germany, Australia, France, see Wijayawardene et al. (2012, 2017; outline), Cultures and sequences are available, holotype of the type species unavailable.

Odontodictyospora Mercado 1984, *Ascomycota* genera *incertae sedis*, one species, type: *O. comasii* Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Odontotrema Nyl. 1858, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, c. seven species, type: *O. phacididioides* Nyl., asexual morph unknown, lichenized, temperate, see Baloch et al. (2010; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Zhurbenko (2010; new species), sequences are available.

Oedocephalum Preuss 1851, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, ten species, type: *O. elegans* Preuss, hyphomycetous, sexual morph unknown, saprobes, hypogeous, terrestrial, worldwide, see Davison et al. (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are available for the type species, needs generic revision.

Oedohysterium E.W.A. Boehm & C.L. Schoch 2009, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, three species, type: *O. insidens* (Schwein.) E. Boehm & C.L. Schoch, saprobes, terrestrial, North and South America, Europe, South Africa, China, see Boehm et al. (2009; generic review), Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Oedothea Syd. 1930, *Ascomycota* genera *incertae sedis*, one species, type: *O. vismiae* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et

al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Oevstedalia Ertz & Diederich 2004, *Ascomycota* genera *incertae sedis*, one species, type: *O. antarctica* (C.W. Dodge) Ertz & Diederich, sexual morph perithecioid, asexual morph represented by true ascoconidia, lichenized, on wood, rock, detritus and whale bones, Antarctica, probably endemic, first lichenized ascomycete known to produce true ascoconidia, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of the type: Follmann 14173 (FH-Dodge).

Ogataea Y. Yamada, K. Maeda & Mikata 1994, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, 40 species, type: *O. minuta* (Wickerham) Y. Yamada, K. Maeda & Mikata, asexual reproduction is by multilateral budding, saprophytic, soil, flowers, tree leaves, tree sap, rotted wood, insect frass in trees and other plants, animal feces, fruit of osage orange, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Ohleria Fuckel 1868, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, 13 species, type: *O. modesta* Fuckel, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tian et al. (2015; morphology, nomenclature, phylogeny), cultures and sequences are unavailable, holotype of type species Rhenani exsicc. 2173 present in G, needs generic revision.

Ohleriella Earle 1902, *Delitschiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *O. neomexicana* Earle, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Delitschiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Oidiodendron Robak 1932, *Myxotrichaceae*, *Leotiomyces* families *incertae sedis*, two species, type: *O. fuscum* Robak, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for type: CBS 238.31, MUCL 1057, needs generic revision.

Oidium Link 1824, *Erysiphaceae*, *Erysiphales*, *Leotiomyces*, c. 300 species, type: *Oidium monilioides* (Nees) Link, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Ojibwaya B. Sutton 1973, *Ascomycota* genera *incertae sedis*, one species, type: *O. perpulchra* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Belarus, Canada, Malawi, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: IMI 132708.

Okeanomyces K. L. Pang & E. B. G. Jones 2004, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *O. cucullatus* (Kohlm.) K.L. Pang & E.B.G. Jones, asexual morph hyphomycetous, saprobes, marine, worldwide, Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), sequence data available, holotype of type: J.K. 1686 = 00966750, NYBG.

Olegblumia S.Y.Kondr., L.Lökös & Hur 2015, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *O. demissa* Flot. ex S.Y. Kondr., L. Lökös, J. Kim, A.S. Kondr., S.O. Oh & J.S. Hur, lichenized, Europe and North America, see Kondratyuk et al. (2015d; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Oleoguttula Selbmann & de Hoog 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *O. mirabilis* Selbmann & de Hoog, sexual morph unknown, rock-

inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 136102 = CCFEE 5523.

Oletheriostrigula Huhndorf & R.C. Harris 1996, *Strigulaceae*, *Strigulales*, *Dothideomycetes*, one species, type: *O. papulosa* (Durieu & Mont.) Huhndorf & R.C. Harris, asexual morph unknown, lichenized, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; phylogeny), Lücking et al. (2016; classification), cultures and sequence are unavailable, needs generic revision.

Olla Velen. 1934, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, twelve species, type: *O. ulmariae* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Olpitrichum G.F. Atk. 1894, *Ascomycota* genera *incertae sedis*, three species, type: *O. carpophilum* G.F. Atk., hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Ombrophila Fr. 1849, *Helotiaceae*, *Helotiales*, *Leotiomyces*, eleven species, type: *O. violacea* (Hedw.) Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Osmundson et al. (2013; DNA), cultures and sequences are available.

Omega B. Sutton & Minter 1988, *Ascomycota* genera *incertae sedis*, one species, type: *O. coenobiticum* B. Sutton & Minter, coelomycetous, sexual morph unknown, saprobes, terrestrial, Greece, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species IMI 326014.

Ommatomyces Kohlm., Volkm.-Kohlm. & O.E. Erikss. 1995, *Xylariales* genera *incertae sedis*, *Sordariomyces*, three species, type: *O. coronatus* Kohlm., Volkm.-Kohlm. & O.E. Erikss., asexual morph unknown, saprobes, marine or terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMS JK5509, needs generic revision.

Omnidemptus P.F. Cannon & Alcorn 1994, *Magnaporthaceae*, *Magnaporthales*, *Sordariomyces*, one species, type: *O. affinis* P.F. Cannon & Alcorn, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: BRIP 17195.

Omphalodium Meyen & Flot. 1843, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *O. pisacomense* Meyen & Flot., asexual morph unknown, lichenized, terrestrial, North and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Omphalora T.H. Nash & Hafellner 1990, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *O. arizonica* (Tuck. ex Willey) T.H. Nash & Hafellner, asexual morph unknown, lichenized, terrestrial, North America, see Crespo et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Omphalospora Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, two species, type: *O. stellariae* (Lib.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Oncocladium Wallr. 1833, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *O. flavum* Wallr., hyphomycetous, sexual morph unknown, soilborne, Europe, Canada, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and cultures are unavailable, needs generic revision.

Oncopodiella G. Arnaud ex Rifai 1965, *Ascomycota* genera *incertae sedis*, 14 species, type: *O. trigonella* (Sacc.) Rifai, hyphomycetous, soilborne, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; accepted as valid genus), cultures and sequences are unavailable, cultures available for the type: CBS 126413, MUCL 52643, needs generic revision.

Oncopodium Sacc. 1904, *Ascomycota* genera *incertae sedis*, twelve species, type: *O. antoniae* Sacc. & D. Sacc., hyphomycetous, soilborne, Europe and North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; accepted as valid genus); cultures or cultures and sequences are unavailable, needs generic revision, needs generic revision.

Oncospora Kalchbr. 1880, *Ascomycota* genera *incertae sedis*, eight species, type: *O. bullata* Kalchbr. & Cooke, coelomycetous, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Oncosporella P. Karst. 1887, *Ascomycota* genera *incertae sedis*, one species, type: *O. punctiformis* P. Karst. 1887, coelomycetous, Finland, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Oncostroma Bat. & Marasas 1966, *Ascomycota* genera *incertae sedis*, one species, type: *O. toddaliae* Bat. & Marasas, hyphomycetous, South Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Ondiniella E.B.G. Jones, R.G. Johnson & S.T. Moss 1984, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *O. torquata* (Kohlm.) E.B.G. Jones, R.G. Johnson & S.T. Moss, asexual morph unknown, saprobes on wood, marine, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Onychocola Sigler 1990, *Arachnomycetaceae*, *Arachnomycetales*, *Eurotiomycetes*, five species, type: *O. canadensis* Sigler, human pathogens, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are available, UTMB 3250, needs generic revision.

Onychophora W. Gams, P.J. Fisher & J. Webster 1984, *Ascomycota* genera *incertae sedis*, one species, type: *O. coprophila* W. Gams, P.J. Fisher & J. Webster, hyphomycetous, sexual morph unknown, coprophilous (rabbit dung), terrestrial, UK, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: CBS 1740.

Onygena Pers. 1800, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *O. equina* (Willd.) Pers., asexual morph unknown, on feathers, bones, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Huang et al. (2015; DNA, protein degrading taxa), cultures and sequences are available, cultures available for the type species (Huang et al. 2013), type specimen of type species CBS H-15271.

Oomyces Berk. & Broome 1851, *Acrospermaceae*, *Acrospermales*, *Dothideomycetes*, ten species, type: *O. carneopalbus* (Lib.) Berk. & Broome, asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, need generic revision.

Oosporidium Stautz 1931, *Saccharomycetes* genera *incertae sedis*, two species, type: *O. margaritifera* Stautz, saprobes, terrestrial, Europe and North America, Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures available for type species CBS 2531, ATCC 10676, CCRC 21536, DSM 70351, IFO 1208, NRRL Y-1519, VKM Y-816, needs generic revision.

Oothyrium Syd. 1939, *Ascomycota* genera *incertae sedis*, one species, type: *O. butyrospermi* Syd., coelomycetous, sexual morph unknown, Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Opegrapha Ach. 1809, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, but strongly polyphyletic, 300 species, type: *O. vulgata* (Ach.) Ach., asexual morph unknown, lichenized, saprobes, lichenicolous, terrestrial, worldwide, see Ertz et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Ophidiomyces Sigler, Hambl. & Paré 2013, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *O. ophioidicola* (Guarro, Deanna A. Sutton, Wickes & Rajeev) Sigler, Hambleton & Paré, asexual morph unknown, pathogens on snakes, Northern America, see Sigler et al. (2013; taxonomy, phylogeny), Allender et al. (2015; pathogens), Cultures and sequences are available, cultures available for the type species UAMH 10717 (Sigler et al. 2013), needs generic revision.

Ophiobolus Riess 1854, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *O. disseminans* Riess, asexual morph coniothyrium-like; phoma-like, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Zang et al. (2012; taxonomy), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Ophioceras Sacc. 1883, *Ophioceraceae*, *Magnaporthales*, *Sordariomycetes*, 39 species, type: *O. dolichostomum* (Berk. & M.A. Curtis) Sacc., saprobes, aquatic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Klaubauf et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Ophiociliomyces Bat. & I.H. Lima 1955, *Ascomycota* genera *incertae sedis*, one species, type: *O. bauhiniae* Bat. & I.H. Lima, asexual morph unknown, from living leaves, tropical, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded the genus from *Meliolaceae*), cultures and sequences are unavailable, needs generic revision.

Ophiocordyceps Petch 1931, *Ophiocordycipitaceae*, *Hypocreales*, *Sordariomycetes*, c. 200 species, type: *O. blattae* (Petch) Petch, asexual morph acremonium-like, on insects, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Evans et al. (2011; new species), Kirk et al. (2013; genus accepted), Wen et al. (2014; new species), Araújo et al. (2015; new species), Ban et al. (2015; new species), Kobmoo et al. (2015; new species), Lombard et al. (2015; new species, phylogeny), Sanjuan et al. (2015; new species), Spatafora et al. (2015; new species, nomenclature), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species), cultures and sequences are available, needs generic revision.

Ophiodeira Kohlm. & Volkm.-Kohlm. 1988, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, three species, type: *O. monosemeia* Kohlm. & Volkm.-Kohlm., marine, Caribbean, see Lumbsch and Huhndorf (2010; outline), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences available, needs generic revision.

Ophioportha Y.M. Ju, H.M. Hsieh, C.H. Fu, C.Y. Chen & T.T. Chang 2013, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *O. cyatheae* Y.M. Ju, H.-M. Hsieh, C.H. Fu, C.Y. Chen & T.T. Chang, asexual morph coelomycetous, pathogens, terrestrial, Taiwan, see Fu et al. (2013; phylogeny, taxonomy), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype and ex-type strain of type: YMJ1364; CRC 34961.

Ophiodothella (Henn.) Höhn. 1910, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, 31 species, type: *O. atromaculans* (Henn.) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hanlin and González (2013; new species), Fu et al. (2013; DNA), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Ophiognomonia (Sacc.) Speg. 1896, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, 46 species, type: *O. melanostyla* (DC.) Sacc., asexual morph unknown, endophytes, pathogens, saprobes, primarily temperate and rarely subtropics, worldwide, see Lumbsch and Huhndorf (2010; outline), Walker et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), sequences are available, needs generic revision.

Ophioirenina Sawada & W. Yamam. 1959, *Dothideomycetes* genera *incertae sedis*, one species, type: *O. theae* Sawada & W. Yamam., asexual morph unknown, from leaves, terrestrial, India, Taiwan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; outline, excluded the genus from *Meliolaceae* and placed in *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.

Ophiomassaria Jacz. 1894, *Sordariomycetes* genera *incertae sedis*, one species, type: *O. selenospora* (G.H. Otth) Jacz., asexual morph unknown, saprobes or endophytes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck 1899, *Sordariomycetes* genera *incertae sedis*, four species, type: *O. lindmanii* Starbäck, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in *Sordariomycetes*), cultures and sequences are unavailable, needs generic revision.

Ophionectria Sacc. 1878 (= *Antipodium* Piroz. 1974 *vide* Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *O. trichospora* (Berk. & Broome) Sacc., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures and sequences are available, type specimen and cultures available for the type: CBS H-6331; CBS 109876.

Ophioparma Norman 1852, *Ophioparmaceae*, *Umbilicariales*, *Lecanoromycetes*, two species, type: *O. ventosa* (L.) Norman, asexual morph unknown, saprobes, terrestrial, tropical, see Khare et al. (2010; taxonomy, India), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Le Pogam et al. (2016; taxonomy), Lücking et al. (2016; classification), cultures available for the type: AFTOL-ID 1694, needs generic revision.

Ophioparodia Petr. & Cif. 1932, *Parodiopsidaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *O. pulchra* Petr. & Cif., asexual morph unknown, saprobes, terrestrial, West Indies, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in *Parodiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Ophiorosellinia J.D. Rogers, A. Hidalgo, F.A. Fernández & Huhndorf 2004, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *O. costaricensis* J.D. Rogers, A. Hidalgo, F.A. Fernández & Huhndorf, asexual morph unknown, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: USJ72848.

Ophiosira Petr. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *O. austriaca* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ophiosphaerella Speg. 1909, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, ten species, type: *O. graminicola* Speg., asexual morph *wojnowicia*-like, saprobes, terrestrial, aquatic, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zang et al. (2012; taxonomy), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline, phylogeny), Ariyawansa et al. (2015; new species, phylogeny), cultures and sequences are available.

Ophiostoma Syd. & P. Syd. 1919, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, c. 230 species, type: *O. piliferum* (Fr.) Syd. & P. Syd., saprobes, worldwide, see Linnakoski et al. (2008, 2010; new species), Kamgan Nkuekam et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Beer et al. (2013; new species), Kirk et al. (2013; genus accepted), Romón et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Orbicula Cooke 1871, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *O. cyclospora* Cooke, asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Orbilina Fr. 1836, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, c. 75 species, type: *O. leucostigma* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Zhang et al. (2009; new species, China), Lumbsch and Huhndorf (2010; outline), Su et al. (2011; new species, China), Quijada et al. (2013; new species, Spain), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Orbiliopsis (Sacc. & D. Sacc.) Syd. & P. Syd. 1924, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *O. coleosporioides* (Sacc.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available but lacks for the type species, needs generic revision.

Orbimyces Linder 1944, *Ascomycota* genera *incertae sedis*, one species, type: *O. spectabilis* Linder, sexual morph unknown, hyphomycetous, marine, see Jones et al. (2008; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are available, holotype of type: CBS H-15318.

Orbiocrella D. Johnson, G.H. Sung, Hywel-Jones & Spatafora 2009, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *O. petchii* (Hywel-Jones) D. Johnson, G.H. Sung, Hywel-Jones & Spatafora, asexual morphs unknown, on insects, terrestrial, Thailand, see Johnson et al. (2009; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), cultures and sequences are available.

Orcadia G.K. Sutherl. 1914, *Ascomycota* genera *incertae sedis*, one species, type: *O. ascophylli* G.K. Sutherl., asexual morph unknown, marine, on brown algae, terrestrial, UK, Norway, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Pezizales*), Kirk

et al. (2013; genus accepted), Jones et al. (2015; outline, maine), cultures and sequences are unavailable, cultures and sequences are unavailable, needs generic revision.

Orceolina Hertel 1970, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, two species, type: *O. kerguelensis* (Tuck.) Hertel, asexual morph unknown, lichenized, terrestrial, subantarctic islands, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Kantvilas et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Orcularia (Malme) Kalb & Giralt 2011, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, four species, type: *O. insperata* (Nyl.) Kalb & Giralt, asexual morph present (in the original description, authors mentioned that genus has filiform conidia), lichenized, terrestrial, worldwide, see Kalb and Giralt (2011; taxonomy), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Orientophila Arup, Søbchting & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, four species, type: *O. loekoessii* (S.Y. Kondr. & J.S. Hur) Arup, Søbchting & Frödén, asexual morph unknown, lichenized, terrestrial, worldwide, see Arup et al. (2013; taxonomy, phylogeny), Kondratyuk et al. (2014, 2016; new species, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Ormomyces I.I. Tav. 1985, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *O. clivinae* (Thaxt.) I.I. Tav., asexual morph unknown, biotrophic, terrestrial, Africa, Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Oropogon Th. Fr. 1861, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 30 species, type: *Oropogon loxensis* (Fée) Th. Fr., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Leavitt et al. (2012; diversity in Neotropical), Kirk et al. (2013; genus accepted), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, voucher specimen for the type: Nelson 4197A (F).

Orphanocoela Nag Raj 1989, *Ascomycota genera incertae sedis*, three species, type: *O. calamagrostidis* (H.C. Greene) Nag Raj, coelomycetous, sexual morph unknown, pathogens, terrestrial, USA, Africa, Colombia, Mexico, Nicaragua, Mexico, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; morphology), cultures and sequences are unavailable, holotype of the type species unavailable.

Orphniospora Körb. 1874, *Elixaceae*, *Umbilicariales*, *Lecanoromycetes*, three species, type: *O. groenlandica* Körb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Leavitt et al. (2012; diversity in Neotropical), Kirk et al. (2013; genus accepted), Bilovitz and Mayrhofer (2014; new records in Vorarlberg, Australia), cultures and sequences are unavailable, needs generic revision.

Orphnodactylis Malloch & A. Mallik 1998, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, 31 species, type: *O. kalmiae* Malloch & A. Mallik, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Orromyces B. Sur & G.R. Ghosh 1987, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, four species, type: *O. spiralis* B. Sur & G.R. Ghosh, asexual morph chrysosporium-like, saprobes, from soil, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Orthobellus A.A. Silva & Cavalc. 1973, *Dothideomycetes genera incertae sedis*, three species, type: *O. leguminosarum* A.A. Silva & Cavalc., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus

in *Schizothyriaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Schizothyriaceae*), Phookamsak et al. (2015; taxonomy, transferred to *Dothideomycetes* genera *incertae sedis*), cultures and sequences are unavailable.

Oscarbrefeldia Holterm. 1898, *Saccharomycetes* genera *incertae sedis*, one species, type: *O. pellucida* Holterm., information unavailable, see Kirk et al. (2008; genus accepted in *Saccharomycetes*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Osoriomyces Terada 1981, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *O. rhizophorus* Terada, asexual morph unknown, biotrophic, terrestrial, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ostracodermidium Mukerji 1973, *Ascomycota* genera *incertae sedis*, one species, type: *O. serpentinum* (J.N. Rai & J.P. Tewari) Mukerji, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ostreichnion Duby 1861, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, three species, type: *O. americanum* Duby, asexual morph unknown, saprobes, terrestrial, Atlantic, China, see Boehm et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Ostreola Darker 1963, *Mytiliniaceae*, *Mytilinidiales*, *Dothideomycetes*, twelve species, type: *O. consociata* Darker, asexual morph septonema-like, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mytiliniaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Ostropa Fr. 1825, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *O. barbara* (Fr.) Nannf., asexual morph unknown, lichenized, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), available specimen and cultures for the type: CBS H-15322; AFTOL-ID 77.

Oswaldina Rangel 1921, *Ascomycota* genera *incertae sedis*, one species, type: *O. icarahyensis* Rangel, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Phyllachoraceae*), Wijayawardene et al. (2017; not accepted in *Phyllachoraceae*), cultures and sequences are unavailable, needs generic revision.

Otidea (Pers.) Bonord. 1851, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 40 species, type: *O. onotica* (Pers.) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Carbone and Van Vooren (2011; new species), Kirk et al. (2013; genus accepted), Olariaga et al. (2015; taxonomy, monograph), cultures and sequences are available, epitype and cultures are available for the type species KH.10.284 (S - epitype); KH.10.284.

Othia Nitschke ex Fuckel 1870, *Dothideomycetes* genera *incertae sedis*, eleven species, type: *O. spiraeae* (Fuckel) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, cultures available for the type: HKUCC 10896 (unpublished), needs generic revision.

Otwaya G.W. Beaton 1978, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, twelve species, type: *O. verruculospora* G.W. Beaton, asexual morph unknown, saprobes, or endophytes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ovadendron Sigler & J.W. Carmich. 1976, *Ascomycota* genera *incertae sedis*, one species, type: *O. sulphureo-ochraceum* (J.F.H. Beyma) Sigler & J.W. Carmich., hyphomycetous, sexual morph unknown, human pathogen, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ovadendron Sigler & J.W. Carmich. 1976, *Ascomycota* genera *incertae sedis*, one species, type: *O. sulphureo-ochraceum* (J.F.H. Beyma) Sigler & J.W. Carmich., hyphomycetous, sexual morph unknown, from human, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Oviascoma Y.J. Yao & Spooner 1996, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *O. paludosum* (Dennis) Y.J. Yao & Spooner, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ovicuculispora Etayo 2010, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *O. parmeliae* Etayo, asexual morph unknown, lichenicolous, terrestrial, tropical, see Etayo (2010; morphology), cultures and sequences are available, needs generic revision.

Ovulinia F.A. Weiss 1940 (= *Ovulitis* N.F. Buchw 1970 *vide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, nine species, type: *O. azaleae* F.A. Weiss, asexual morph formerly named in *Ovulitis*, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.

Oxnerella S.Y.Kondr., Lökös & Hur 2014, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *O. safavidiorum* S.Y. Kondr., Zarei-Darki, Lökös & Hur, lichenized, see Kondratyuk et al. (2014d; phylogeny), Resl et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type: KW-L 70296.

Oxodeora K.D. Hyde & P.F. Cannon 1999, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *O. petrakii* (Cif.) K.D. Hyde & P.F. Cannon, asexual morph unknown, on living palm leaves, terrestrial, Caribbean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Oxydothis Penz. & Sacc. 1898, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, 31 species, type: *O. grisea* Penz. & Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Paathramaya Subram. 1956, *Ascomycota* genera *incertae sedis*, five species, type: *P. sundara* Subram., hyphomycetous, sexual morph unknown, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-194, need generic revision.

Pachnolepia A. Massal. 1855, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *P. pruinata* (Pers.) Frisch & G. Thor, lichenized, see Frisch et al. (2014a; reinstated), Lücking et al. (2016; classification), sequences are available, need generic revision.

Pachyascus Poelt & Hertel 1968, *Pachyascaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *P. lapponicus* Poelt & Hertel, asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Pachycladina Marvanová 1987, *Ascomycota* genera *incertae sedis*, three species, type: *P. mutabilis* Marvanová, hyphomycetous, sexual morph unknown, Europe, North America, see

Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Pachycudonia S. Imai 1950, *Cudoniaceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *P. constrictospora* (S. Ito & S. Imai) S. Imai, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ge et al. (2014; phylogeny, synonym of *Cudonia*), cultures and sequences are available, needs generic revision.

Pachydisca Boud. 1885, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. guernisacii* (P. Crouan & H. Crouan) Boud., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Pachyella Boud. 1907, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, 19 species, type: *P. barlaeana* (Bres.) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Healy et al. (2009; species in USA and Mexico), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Pachypatella Theiss. & Syd. 1915, *Parmulariaceae*, *Dothideomycetes families incertae sedis*, one species, type: *P. alsophilae* (Racib.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, Brazil, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype and isotype of type species KRAM?; S F9863.

Pachypeltis Søchting, Arup & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, four species, type: *P. castellana* (Räsänen) Søchting, Frödén & Arup, asexual morph unknown, lichenized, terrestrial, Europe, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pachyphloides Zobel 1854, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, 19 species, type: *P. ligericus* Zobel, asexual morph unknown, saprobes, saprobes, terrestrial, worldwide, see Doweld (2013; new combinations), Healy et al. (2015; new species, DNA), cultures and sequences are available, needs generic revision.

Pachyphysis R.C. Harris & Ladd 2007, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *P. ozarkana* R.C. Harris & Ladd, asexual morph unknown, on dolomite, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available, holotype and cultures are available for the type species Pacoza51; NY, Harris 44707.

Pachysacca Syd. 1930, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. eucalypti* Syd., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as genus in *Dothideaceae*), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; excluded from *Dothideaceae* and place in *Teratosphaeriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pachysolen Boidin & Adzet 1957, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *P. tannophilus* Boidin & Adzet, asexual reproduction is by multilateral budding, saprophytic, extracts of chestnut (*Castanea vesca*) and mimosa (*Acacia mollissima*) for use in leather tanning, France, Germany, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Pachythyrium G. Arnaud ex Spooner & P.M. Kirk 1990, *Trichothyriaceae*, *Dothideomycetes*, family *incertae sedis*, one species, type: *P. parasiticum* (Fabre) G. Arnaud ex Spooner & P.M. Kirk, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013;

accepted as a genus in *Trichothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Pachytrype Berl. ex M.E. Barr, J.D. Rogers & Y.M. Ju 1993, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type species: *P. princeps* (Penz. & Sacc.) M.E. Barr, J.D. Rogers & Y.M. Ju, asexual morph cytospora-like, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Paecilomyces Bainier 1907 (= *Byssochlamys* Westling 1909 *fide* Rossman et al. 2016), *Thermoascaceae*, *Eurotiales*, *Eurotiomycetes*, c. 50 species, type: *P. variotii* Bainier, hyphomycetous, sexual morph unknown, widespread, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures available for type species CBS 102.74, CBS 110431.

Palawania Syd. & P. Syd. 1914, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *P. grandis* (Niessl) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Palawaniella Doidge 1921, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, eight species, type: *P. eucleae* Doidge, asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: PREM 12375.

Palicella Rodr. Flakus & Printzen 2014, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *P. glaucopa* (Hook. f. & Taylor) Rodr. Flakus & Printzen, lichenized, Argentina, Canada, Europe, see Rodriguez-Flakus & Printzen (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Paliphora Sivan. & B. Sutton 1985, *Ascomycota* genera *incertae sedis*, six species, type: *P. aurea* Sivan. & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Gusmão et al. (2008; morphology, new species, distribution), Goh et al. (2014; morphology, new species), Wijayawardene et al. (2016; morphology), sequence data available, holotype of the type: IMI 263424g.

Pallidocercospora Crous 2012, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, eight species, type: *P. heimii* (Crous) Crous, hyphomycetous, sexual morph reported, pathogenic, terrestrial, worldwide, see Crous et al. (2012; morphology; phylogeny), cultures and sequences are available, holotype of the type: PREM 51749 (sexual morph), holotype of the type: PREM 51748 (asexual morph), ex-type strain of type: CPC 760.

Pallidogramme Staiger, Kalb & Lücking 2008, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, twelve species, type: *P. chrysenteron* (Mont.) Staiger, Kalb & Lücking, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Archer (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2014, 2016; phylogeny, classification), Cultures and sequences are available, holotype of type species PC (Leprieur 23).

Palmiascoma Phook. & K.D. Hyde 2015, *Bambusicolaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. gregariascomum* Phookamsak & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Thailand, see Liu et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 11–0211, MFLUCC 11–0175.

Palmicola K.D. Hyde 1993, *Xylariales genera incertae sedis, Sordariomycetes*, four species, type: *P. archontophoenicis* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Australia, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, holotype of the type: BRIP 20438.

Pandanicola K.D. Hyde 1994, *Xylariaceae, Xylariales, Sordariomycetes*, two species, type: *P. calocarpa* (Syd. & P. Syd.) K.D. Hyde, asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pannaria Delise ex Bory 1828, *Pannariaceae, Peltigerales, Lecanoromycetes*, 60 species, type: *P. rubiginosa* (Thunb.) Delise, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; new species), Passo and Calvelo (2011; new species), Elvebakk (2012; new species), Jørgensen and Gjerde (2012; new species), Kirk et al. (2013; genus accepted), Magain and Serusiaux (2014; phylogeny), cultures and sequences are available, needs generic revision.

Pannoparmelia (Müll. Arg.) Darb. 1912, *Parmeliaceae, Lecanorales, Lecanoromycetes*, five species, type: *P. angustata* (Pers.) Zahlb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Thell et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Panorbis J. Campb., J.L. Anderson & Shearer 2003, *Halosphaeriaceae, Microascales, Sordariomycetes*, three species, type: *P. viscosus* (I. Schmidt) J. Campb., J.L. Anderson & Shearer, on debris near sea, Germany, USA, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011; phylogeny), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, needs generic revision.

Pantospora Cif. 1938, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, one species, type: *P. guazumae* Cif., hyphomycetous, sexual morph unknown, plant pathogenic, terrestrial, see Minnis et al. (2011; morphology; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), cultures and sequences are available, epitype and ex-type of type: BPI 880778; CBS 130299.

Paoayensis Cabanela, Jeewon & K.D. Hyde 2007, *Sordariomycetes genera incertae sedis*, one species, type: *P. lignicola* Cabanela, Jeewon & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type species HKU(M) 17516, holotype of type: HKUCC 10927.

Papilionospora V.G. Rao & B. Sutton 1976, *Ascomycota genera incertae sedis*, one species, type: *P. aspergilloides* (Speg.) V. Rao & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Myanmar, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Papilionovela Aptroot 1997, *Hyponectriaceae, Xylariales, Sordariomycetes*, 17 species, type: *P. albothallina* Aptroot, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, holotype of type: CBS Aptroot 33014.

Pappimyces B. Sutton & Hodges 1975, *Ascomycota genera incertae sedis*, one species, type: *P. hastatus* B. Sutton & Hodges, hyphomycetous, sexual morph unknown, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Papulaspora Preuss 1851, *Melanosporales* genera *incertae sedis*, *Sordariomycetes*, 24 species, type: *P. sepedonioides* Preuss, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Ahmed et al. (2016; DNA, phylogeny), cultures and sequences are available, type specimen for type species B.

Papulosa Kohlm. & Volkm.-Kohlm. 1993, *Papulosa* family *incertae sedis*, one species, type: *P. amerospora* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and cultures available for the type species IMS J.K. 5491; AFTOL-ID 748.

Paraoria R.K. Verma & Kamal 1987, *Ascomycota* genera *incertae sedis*, one species, type: *P. himalayana* R.K. Verma & Kamal, coelomycetous, sexual morph unknown, Nepal, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 294092, needs generic revision.

Pararthrocladium Matsush. 1993, *Ascomycota* genera *incertae sedis*, one species, type: *P. amazonense* Matsush., hyphomycetous, sexual morph unknown, Peru, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Matsushima Fungus Collection Kobe OP-146, need generic revision.

Parabagliettoa Gueidan & Cl. Roux 2009, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, three species, type: *Parabagliettoa dufourii* (DC.) Gueidan & Cl. Roux, asexual morph unknown, lichenicolous, terrestrial, Europe, Asia, see Diederich et al. (2009), Gueidan et al. (2009; taxonomy), Krzewicka et al. (2012; new species, Poland), Lücking et al. (2016; classification), cultures and sequences are available, available specimen and cultures for the type: G; AFTOL-ID 2254.

Parabambusicola Kaz. Tanaka & K. Hiray. 2015, *Parabambusicolaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. bambusina* (Teng) Kaz. Tanaka & K. Hiray., asexual morph unknown, saprobes, terrestrial, Japan, see Tanaka et al. (2015; morphology, phylogeny), cultures and sequences are available.

Parablastocatena Y.D. Zhang & X.G. Zhang 2012, *Ascomycota* genera *incertae sedis*, one species, type: *P. tetracerae* Y.D. Zhang & X.G. Zhang, hyphomycetous, sexual morph unknown, saprobes, terrestrial, China, see Zhang et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: HSAUP H3357, cultures and sequences are unavailable, needs generic revision.

Paraboeremia Q. Chen & L. Cai 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *P. selaginellae* (Sacc.) Q. Chen & L. Cai, coelomycetous, saprobes, ?pathogens, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), neotype and ex-neotype culture of the type: HMAS 246693, CBS 122.93.

Paracainiella Lar.N. Vassiljeva 1983, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. dryadis* Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, arctic north-eastern Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, holotype of type species VLA P-2943.

Paracamarosporium Wijayaw. & K.D. Hyde 2014, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *P. psoraleae* (Crous & M.J. Wingf.) Wijayaw. & K.D. Hyde, asexual morph coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Africa, USA, see Hyde et al. (2013; accepted in *Didymosphaeriaceae*), Wijayawardene et al. (2014, 2016; outline, phylogeny), Crous et al. (2015; new species, phylogeny), Thambugala

et al. (2016; new species), cultures and sequences are available, holotype and ex-type cultures available for the type: CBS H-21440; CPC 21632 (Crous et al. 2014 as *Camarosporium psoraleae*).

Paracapsulospora Konta. & K. D. Hyde 2016, *Sordariomycetidae*, genera *incertae sedis*, one species, type: *P. metroxyli* Konta. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-0704, MFLUCC 15-0250.

Paraceratocladium R.F. Castañeda 1987, *Ascomycota* genera *incertae sedis*, six species, type: *P. silvestre* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paracercospora Deighton 1979, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *P. egenula* (Syd.) Deighton, hyphomycetous, sexual morph unknown, plant pathogenic, terrestrial, see Braun et al. (2013; morphology), Crous et al. (2013; morphology; phylogeny), Cultures and sequences are available, reference specimen and culture of type: CBS H-20836; CPC 12537, holotype and isotype of type species PRE 25999; IMI 89597, genus requires epitypification.

Parachionomyces Thaug 1979, *Ascomycota* genera *incertae sedis*, one species, type: *P.acroconidiellinae* Thaug, asexual morph hyphomycetous, sexual morph unknown, Myanmar, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Parachnopeziza Korf 1978, *Arachnopezizaceae*, *Helotiales*, *Leotiomycetes*, eight species, type: *P. miniopsis* (Ellis) Korf, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paracladophialophora Crous 2016, *Chaetothyriales* genera *incertae sedis*, *Eurotiomycetes*, one species, type: *P. carceris* Crous & Roets, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22865, CPC 27596.

Paracoccidioides F.P. Almeida 1930, *Ajellomycetaceae*, *Onygenales*, *Eurotiomycetes*, two species, type: *P. brasiliensis* (Splend.) F.P. Almeida, hyphomycetous, sexual morph unknown, human pathogen, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), de Melo Teixeira et al. (2014; clinical control), cultures and sequences are available, needs generic revision.

Paracollema Otálora & Wedin 2014, *Collemataceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *P. italicum* (B. de Lesd.) Otálora, P.M. Jørg. & Wedin, asexual morph coelomycetous, lichenized, terrestrial, Southern Europe, Northern Africa, see Otálora et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Paraconiothyrium Verkley 2004, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *P. estuarinum* Verkley & M. da Silva, asexual morph coelomycetous, saprobes, terrestrial, worldwide, see de Gruyter et al. (2012; new species), Wijayawardene et al. (2012, 2014, 2016; outline, phylogeny, taxonomy), Hyde et al. (2013; accepted in *Didymosphaeriaceae*), Verkley et al. (2014; new species, phylogeny), Ariyawansa et al. (2015; new species, phylogeny), cultures and sequences are available, holotype and cultures available for the type species CBS H-10528, CCT6596 = CBS 109850.

Paracostantinella Subram. & Sudha 1989, *Ascomycota* genera *incertae sedis*, one species, type: *P. pulchra* Subram. & Sudha, hyphomycetous, sexual morph unknown, India, see

Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Paracremonium L. Lombard & Crous 2015, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *P. inflatum* L. Lombard & Crous, asexual morph unknown, pathogens, saprobes, terrestrial, tropical, see Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Lynch et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and cultures of the type: CBS H-21946; CBS 110348.

Paracryptophiale Kuthub. & Nawawi 1994, *Ascomycota* genera *incertae sedis*, two species, type: *P. kamaruddinii* Kuthub. & Nawawi, hyphomycetous, sexual morph unknown, Malaysia, China, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: KLU 300030, needs generic revision.

Paracylindrocarpon Crous, Roets & L. Lombard 2016, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. aloicola* Crous, Roets & L. Lombard., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22613, CPC 27362.

Paracytospora Petr. 1925, *Ascomycota* genera *incertae sedis*, one species, type: *P. salicis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paradendryphiella Woudenberg & Crous 2013, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *Paradendryphiella salina* (G.K. Sutherl.) Woudenberg & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, France, Europe, see Woudenberg et al. (2013; morphology, phylogeny), cultures and sequences are available, holotype of the type species and culture ex-type were not mentioned.

Paradendryphiopsis M.B. Ellis 1976, *Ascomycota* genera *incertae sedis*, five species, type: *P. cambrensis* M.B. Ellis, hyphomycetous, sexual morph unknown, Europe, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species IMI 6151c, need generic revision.

Paradictyoarthrinium Matsush. 1996, *Paradictyoarthriniaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. diffractum* Matsush., hyphomycetous, sexual morph unknown, Transvaal, Thailand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Isaka et al. (2015; DNA, secondary metabolites), Liu et al. (2015; new species, Thailand, phylogeny), cultures and sequences are available, holotype and ex-type available for the type: Matsushima Fungus Collection Kobe 5A135; MFC-5A135.

Paradidymobotryum C.J.K. Wang & B. Sutton 1984, *Ascomycota* genera *incertae sedis*, one species, type: *P. oblongum* C.J.K. Wang & B. Sutton, asexual morph hyphomycetous, sexual morph unknown, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Paradiploдия Sp. ex Trotter 1931, *Ascomycota* genera *incertae sedis*, six species, type: *P. aurantiorum* (Sp.) Clem. & Shear, coelomycetous, sexual morph unknown, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Paradischloridium Bhat & B. Sutton 1985, *Ascomycota* genera *incertae sedis*, one species, type: *P. ychaffrei* Bhat & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, New Zealand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paradiscula Petr. 1941, *Ascomycota* genera *incertae sedis*, one species, type: *P. spuria* (Vestergr.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paradoxa Mattir. 1935, *Tuberaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *P. monospora* Mattir., asexual morph unknown, saprobes, hypogeous, terrestrial, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept genus), cultures and sequences are available, need generic revision.

Paradoxomyces Matzer 1996, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *P. nymanii* Matzer, sexual morph with lirellate ascomata, lichenicolous, terrestrial, Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type: Nyman 87b (UPS).

Paraëpicoccum Matsush. 1993, *Ascomycota* genera *incertae sedis*, one species, type: *P. amazonense* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Peru, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parafulvia Kamal, A.N. Rai & Morgan-Jones 1983, *Ascomycota* genera *incertae sedis*, one species, type: *P. indica* Kamal, A.N. Rai & Morgan-Jones., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parahaplotrichum W.A. Baker & Partr. 2001, *Ascomycota* genera *incertae sedis*, one species, type: *P. idahoense* W.A. Baker & Partr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paraharknessia Matsush. 2003, *Ascomycota* genera *incertae sedis*, one species, type: *P. ellipsoidea* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parahyalotiopsis Nag Raj 1976, *Ascomycota* genera *incertae sedis*, one species, type: *P. borassi* (Thaung) Nag Raj 1976., coelomycetous, sexual morph unknown, saprobes, terrestrial, Myanmar, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paraingaderia Ertz & Tehler 2011, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *P. placodioidea* Ertz & Tehler, sexual morph with punctiform to shortly lirelliform ascomata in groups (synascomata), lichenized, terrestrial, Socotra island, see Ertz and Tehler (2011; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available, holotype of type: Tehler 9344 (S).

Parainoa Resl & T. Sprib. 2014, *Baeomycetaceae*, *Baeomycetales*, *Lecanoromycetes*, one species, type: *P. subconcolor* (Anzi) Resl & T. Sprib., lichenized, see Resl et al. (2015; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Paralecanographa Ertz & Tehler 2011, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *P. grumulosa* (Dufour) Ertz & Tehler, lichenicolous (becoming sometimes

lichenized), terrestrial, mainly (sub-)tropical, Mediterranean, see Ertz and Tehler (2011; morphology, phylogeny), sequences are available, needs generic revision.

Paralecia Brackel, Greiner, Peršoh & Rambold 2015, *Squamarinaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *P. pratorum* Brackel, Greiner, Peršoh & Rambold, asexual morph unknown, lichenized, terrestrial, worldwide, see Liu et al. (2015; taxonomy, phylogeny), Thell et al. (2012; phylogeny), cultures and sequences are available, holotype of the type: M-0045925.

Paraleptosphaeria Gruyter, Verkley & Crous 2012, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *P. nitschkei* (Rehm ex G. Winter) Gruyter, Aveskamp & Verkley, asexual morph coelomycetous, saprobes, terrestrial, worldwide, see de Gruyter et al. (2012; morphology; phylogeny), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; phylogeny), cultures and sequences are available, epitype and ex-epitype of the type: CBS H-20822; CBS 306.51.

Paraletthariicola Calatayud, Etayo & Diederich 2001, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *P. aspicilliae* Calat., Etayo & Diederich, asexual morph unknown, lichenicolous, non-lichenized, Italy and Spain, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, holotype of the type species MA (Fungi) 49914.

Paraliomyces Kohlm. 1959, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. lentifer* Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Suetrong et al. (2009; phylogeny, morphology), Jones et al. (2009, 2015; classification), Pang and Jheng (2012; checklist), Zhang et al. (2012; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are available, type specimen of type: CBS H-5921.

Paramassariothea Subram. & Muthumary 1979, *Ascomycota* genera *incertae sedis*, one species, type: *P. falcata* Subram. & Muthumary., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parameliola Hongsanan, Peršoh & K.D. Hyde 2016, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *P. dimocarpus* Hongsanan & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Saudi Arabia, see Li et al. (2016; taxonomy, phylogeny), holotype of the type: MFLU 15–0045.

Paramenisporopsis Matsush. 2003, *Ascomycota* genera *incertae sedis*, one species, type: *P. undulosepulata* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Paramicrothyrium H.X. Wu & K.D. Hyde 2011, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *Paramicrothyrium chinensis* H.X. Wu & K.D. Hyde, saprobes, terrestrial, Phillipines, see Wu et al. (2011; taxonomy), Hyde et al. (2013; accepted as genus in *Microthyriaceae*), cultures and sequences are available, holotype and ex-type culture of the type: IFRD 8987; IFRDCC2258.

Paramphisphaeria F.A. Fernández, J.D. Rogers, Y.M. Ju, Huhndorf & Umaña 2004, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. costaricensis* F.A. Fernández, J.D. Rogers, Y.M. Ju, Huhndorf & L. Umaña, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; accepted as a genus in *Xylariaceae*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: INB 3466410.

Paramycoleptodiscus Crous & M.J. Wingf. 2016, *Acrospermales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *P. albizziae* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Crous et al. (2016; taxonomy,

phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22615, CPC 27552.

Paramycosphaerella Crous & Jol. Roux 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 15 species, type: *P. brachystegia* Crous & Jol. Roux, asexual morph hyphomycetous (zasmidium-like), foliicolous, terrestrial, worldwide, see Crous et al. (2013; morphology, phylogeny), Quaedvlieg et al. (2014; phylogeny), Guatimosim et al. (2016; phylogeny, new comb.), cultures and sequences are available, holotype and ex-type culture of type: CBS H-21445; CPC 21136.

Paramyrothecium L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, twelve species, type: *P. roridum* (Tode) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, from soil, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), epitype and ex-epitype culture of the type: CBS H-22438, CBS 357.89.

Paranannizziopsis Sigler, Hambl. & Paré 2013, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, four species, type: *P. australasiensis* Sigler, Hambleton & Paré, asexual morph hyphomycetous, animal pathogens, USA, see Sigler et al. (2013; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of the type: UAMH 11645, cultures available for the type: UAMH 10439, UAMH 11719.

Paranectria Sacc. 1878, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *P. affinis* (Grev.) Sacc., asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Paraniesslia K.M. Tsui, K.D. Hyde & Hodgkiss 2001, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. tuberculata* K.M. Tsui, K.D. Hyde & Hodgkiss, asexual morph unknown, saprobes, terrestrial, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: HKU (M) 4647.

Parapendiella Crous & Summerell 2012, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *P. tasmaniensis* (Crous & M.J. Wingf.) Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Crous et al. (2012; morphology; phylogeny), cultures and sequences are available, holotype of the type: PREM 55340.

Parapericonia M.B. Ellis 1976, *Ascomycota* genera *incertae sedis*, one species, type: *P. angusii* M.B. Ellis., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa and Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parapericoniella U. Braun, Heuchert & K. Schub. 2005, *Ascomycota* genera *incertae sedis*, one species, type: *P. asterinae* (Deighton) U. Braun, Heuchert & K. Schub., hyphomycetous, terrestrial, fungicolous, Africa, see Hyde et al. (2011; outline), Seifert et al. (2012; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of type: (K(M) IMI 11851b).

Paraphaeoisaria de Hoog & Morgan-Jones 1978, *Ascomycota* genera *incertae sedis*, one species, type: *P. alabamensis* de Hoog & Morgan-Jones., hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paraphaeomoniella Crous 2015, *Phaeomoniellaceae*, *Phaeomoniellales*, *Eurotiomycetes*, one species, type: *P. capensis* Crous & A.R. Wood, coelomycetous, sexual morph unknown,

on living leaves, endophytic, terrestrial, South Africa, see Crous et al. (2008 as *Phaeomoniella capensis* Crous & A.R. Wood, morphology; 2015, phylogeny), cultures and sequences are available, holotype and ex-type culture of type: CBS H-20159; CPC 15416.

Paraphaeosphaeria O.E. Erikss. 1967, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 33 species, type: *P. michotii* (Westend.) O.E. Erikss., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al (2014a; taxonomy, phylogeny), Verkley et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), Liu et al. (2015; taxonomy, phylogeny), Tanaka et al. (2015; taxonomy, phylogeny), sequence data available for 12 species, holotype for type species.

Parapithomyces Thaug 1976, *Ascomycota* genera *incertae sedis*, one species, type: *P. brideliae* Thaug., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Myanmar and Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parapleurotheciopsis P.M. Kirk 1982, *Beltraniaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. inaequiseptata* (Matsush.) P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, British Isles, Japan, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), DNA sequence available, available specimen and cultures for the type: IMI 234741; MUCL 41089.

Paraporpidia Rambold & Pietschm. 1989, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *P. aboriginum* Rambold, asexual morph unknown, lichenized, on soil and boulders, terrestrial, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parapyrenis Aptroot 1991, *Requienellaceae*, *Pyrenulales*, *Eurotiomycetes*, eight species, type: *P. aurora* (Zahlbr.) Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parapyricularia M.B. Ellis 1972, *Ascomycota* genera *incertae sedis*, one species, type: *P. musae* M.B. Ellis & Peregrine., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pararobillarda Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *P. caffra* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Cape Province, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Parasarcopodium Mel'nik, S.J. Lee & Crous 2004, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. ceratocaryi* Melnik, S.J. Lee & Crous, hyphomycetous, saprobes, terrestrial, South Africa, see Lombard et al. (2015; phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype and ex-type culture of type: PREM 57603; STE-U 5494.

Parascedosporium Gilgado, Gené, Cano & Guarro 2007, *Microascaceae*, *Microascales*, *Sordariomycetes*, two species, type: *P. tectonae* (C. Booth) Gilgado, Gené, Cano & Guarro, asexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, available specimen and ex-type strain of the type species CBS H-7195; CBS 127.84.

Paraschismatomma Ertz & Tehler 2011, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *P. ochroleucum* (Zahlbr.) K. Knudsen, Ertz & Tehler, sexual morph with

apothecioid ascomata, lichenized, terrestrial, Californian coast and Baja California, see Ertz and Tehler (2011; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.

Parascutellinia Svrček 1975, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *P. violacea* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Parasiphula Kantvilas & Grube 2006, *Coccotremataceae*, *Pertusariales*, *Lecanoromycetes*, seven species, type: *Parasiphula fragilis* (Hook. f. & Taylor) Kantvilas & Grube, asexual morph unknown, lichenized, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Parasphaeropsis Petr. 1953, *Ascomycota genera incertae sedis*, one species, type: *P. shearii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Hawaii, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parastagonospora Quaedvl., Verkley & Crous 2013, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *P. nodorum* (Berk.) Quaedvlieg, Verkley & Crous, coelomycetous, pathogenic, saprobes, terrestrial, Germany, Netherlands, Denmark, see Quaedvlieg et al. (2013; taxonomy, phylogeny), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeriaceae*), Wijayawardene et al. (2014, 2017; outline), Crous et al. (2016; new species, phylogeny), Li et al. (2016; new species), culture of type species CBS 110109 (no ex-type cultures), needs generic revision.

Parastenella J.C. David 1991, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *P. magnoliae* (Weedon) J.C. David, coelomycetous, sexual morph unknown, saprobes, associated with leaf spots, USA, Brazil (Rondônia), Taiwan, see Dornelo-Silva et al. (2008; new species), Wijayawardene et al. (2012, 2017; outline), Kirschner and Chen (2010; new species), cultures and sequences are available but lacks for the type species, needs generic revision.

Parasterinopsis Bat. 1960, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, three species, type: *P. sersalisiae* (Hansf.) Bat., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Hongsanan et al. (2014; taxonomy, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, isotype of type: URM 11923, needs generic revision.

Parastigmathea Doidge 1921, *Polystomellaceae*, *Dothideomycetes* family *incertae sedis*, three species, type: *P. nervisita* Doidge, sexual morph unknown, widespread (tropical), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Polystomellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable for type species, needs generic revision.

Parastigmatellina Bat. & C.A.A. Costa 1959, *Ascomycota genera incertae sedis*, one species, type: *P. asiatica* Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines and Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parasympodiella Ponnappa 1975, *Scortechiniaceae*, *Coronophorales*, *Sordariomycetes*, seven species, type: *P. laxa* (Subram. & Vittal) Ponnappa, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Cheewangkoon et al. (2009; new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, specimens available for the type: IMI 50645, IMI 173095h, cultures available for the type: CBS 102698.

Parateratosphaeria Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *P. bellula* (Crous & M.J. Wingf.) Quaedvl. & Crous,

asexual morph unknown, pathogens, terrestrial, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences are available, epitype and ex-epitype strain of the type: CBS H-20094; CPC 1821.

Paratetraploa M.K.M. Wong & K.D. Hyde 2002, *Ascomycota* genera *incertae sedis*, one species, type: *P. exappendiculata* M.K.M. Wong, Goh & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, aquatic, Hong Kong, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type species HKU (M) 12646, needs generic revision.

Paratomenticola M.B. Ellis 1976, *Ascomycota* genera *incertae sedis*, one species, type: *P. lanceolata* (Cooke) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Paratopeliopsis Mercado-Díaz, Lücking & Parnmen 2014, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *P. caraibica* Mercado-Díaz, Lücking & Parnmen, asexual morph unknown, lichenized, terrestrial, worldwide, see Mercado-Díaz et al. (2011; taxonomy), Lumbsch et al. (2014; accepted as a genus in *Thelotremales*), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type: Mercado-Díaz 836.

Paratracharia Lücking 1997, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *P. paradoxa* (Lücking) Lücking, asexual morph unknown, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Plata et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: UPS (114).

Paratracharina Van Vooren, U. Lindemann, M. Vega, Ribes, Illescas & Matočec 2015, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *P. poiraultii* (Boud.) Van Vooren, U. Lindemann, M. Vega, Ribes, Illescas & Matočec, asexual morph unknown, saprobes, terrestrial, Europe, see Van Vooren et al. (2015; taxonomy), sequences are available, voucher specimen of the type: U.L. 178-14.

Paratrichoconis Deighton & Piroz. 1972, *Ascomycota* genera *incertae sedis*, four species, type: *P. chinensis* (Hansf.) Deighton & Piroz., hyphomycetous, sexual morph unknown, saprobes or fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paratrachophaea Trigaux 1985, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, five species, type: *P. macrocystis* Trigaux, asexual morph unknown, from soil, saprobes, terrestrial, Europe, North America, see Benkert et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available but lacks for the type species, needs generic revision.

Paraulocladium R.F. Castañeda 1986, *Ascomycota* genera *incertae sedis*, two species, type: *P. angulosporum* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parauncinula S. Takam. & U. Braun 2005, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, two species, type: *P. septata* (E.S. Salmon) S. Takam. & U. Braun, biotrophic, obligate plant pathogens, terrestrial, Asia (China, Japan), see Lumbsch and Huhndorf (2010; outline), Braun and Cook (2012; taxonomy), sequences of non-type material of the type species are available, lectotype of type: TNS-F-214605.

Paravalsa Ananthap. 1990, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *P. indica* Ananthap., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Parawiesneriomyces Crous & M.J. Wingf. 2016, *Wiesneriomycetaceae*, *Tubeufiales*, *Dothideomycetes*, one species, type: *P. syzygii* Crous & M.J. Wingf., hyphomycetous, saprobes, terrestrial, France, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22630, CPC 26528.

Parberya C.A. Pearce & K.D. Hyde 2001, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *P. kosciuskoa* C.A. Pearce & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: DAR 28023, needs generic revision.

Parencoelia Petr. 1950, *Helotiaceae*, *Helotiales*, *Leotiomyces*, four species, type: *P. andina* Petr., asexual morph unknown, saprobes, terrestrial, Central America, West Indies, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parenglerula Höhn. 1910, *Englerulaceae*, *Dothideomycetes* families *incertae sedis*, nine species, type: *P. macowaniana* (Thüm.) Höhn., asexual morph unknown, epiphytic, terrestrial, tropical region, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014; morphology), cultures and sequences are unavailable, needs generic revision.

Pareutypella Y.M. Ju & J.D. Rogers 1996, *Sordariomycetes* genera *incertae sedis*, one species, type: *P. sulcata* Y.M. Ju & J.D. Rogers, asexual morph unknown, saprobes, terrestrial, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Parmelia Ach. [nom.cons.] 1803, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 50 species, type: *P. saxatilis* (L.) Ach., lichenized, worldwide, see Crespo et al. (2010a; phylogeny), Kirk et al. (2013; genus accepted), Lumbsch and Huhndorf (2010; outline), Divakar (2012, 2013; India, phylogeny), Ferencova et al. (2014; new species), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Parmeliella Müll. Arg. 1862, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, 90 species, type: *P. triptophylla* (Ach.) Müll. Arg., lichenized (with cyanobacteria), terrestrial (saxicolous, corticolous or lignicolous), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ekman et al. (2014; phylogeny), sequences are available, needs generic revision.

Parmelina Hale 1974, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, seven species, type: *P. tiliacea* (Hoffm.) Hale, lichenized (with green algae), terrestrial (saxicolous, corticolous or lignicolous), Northern Hemisphere with a center of distribution in western North America and Europe, see Crespo et al. (2010a, b; phylogeny), Lumbsch and Huhndorf (2010; outline), Núñez-Zapata et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), sequence data available for six species, including the generic type, needs generic revision.

Parmelinella Elix & Hale 1987, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, nine species, type: *P. wallichiana* (Taylor) Elix & Hale, lichenized (with green algae), terrestrial (saxicolous, corticolous or lignicolous), tropical, see Crespo et al. (2010a; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence data available only for the type species, needs generic revision.

Parmeliopsis (Nyl.) Nyl. 1866, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, eight species, type: *P. ambigua* (Wulfen) Nyl., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska

et al. (2014; DNA, phylogeny), Mark et al. (2016; DNA, phylogeny), cultures available for the type: AFTOL-ID 199, needs generic revision.

Parmostictina Nyl. 1875, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, 15 species, type: *Sticta hirsuta* Mont., lichenized,?, rejected against *Pseudocyphellaria* Vain. 1890, see Moncada et al. (2013; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Parmotrema A.Massal. 1860, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 300 species, type: *P. perforatum* (Jacq.) A. Massal., lichenized, terrestrial (corticolous, saxicolous, terricolous or lignicolous), worldwide, but with the center of distribution in tropical regions, see Crespo et al. (2010a; phylogeny), Lumbsch and Huhndorf (2010; outline), Lendemer and Hodkinson (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Parmotremopsis Elix & Hale 1987, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *P. antillensis* (Nyl.) Elix & Hale, asexual morph unknown, lichenized, terrestrial, Central America, West Indies, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parmularia Lév. 1846, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, 31 species, type: *P. styracis* Lév., asexual morph unknown, pathogens, epiphytes, terrestrial, Brazil, Paraguay, Uruguay, see Inácio and Cannon (2008; morphology), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Guatimosim et al. (2015; phylogeny), cultures and sequences are available but lacks for type material, holotype and epitype of type: PC; VIC 42447.

Parmulariella Henn. 1904, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. vernoniae* Henn., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, isotype of type: K, NY, needs generic revision.

Parmulariopsella Sivan. 1970, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. burseracearum* Sivan., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: IMI 34052.

Parmulariopsis Petr. 1954, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. pulchella* Petr., asexual morph unknown., epiphytes, terrestrial, Malaysia, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, isotype of type: IMI 330018.

Parmulina Theiss. & Syd. 1914, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, six species, type: *P. exsculpta* (Berk.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, neotype of type: K Herb. C.E. Broome 593.

Parodiella Speg. 1880, *Parodiellaceae*, *Dothideomycetes* families *incertae sedis*, four species, type: *P. perisporioides* (Berk. & M.A. Curtis) Speg., asexual morph unknown, biotrophic, terrestrial, America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, available specimen of type: CBS H-15496, needs generic revision.

Parodiellina Henn. ex G. Arnaud 1918, *Parodiopsidaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. manaosensis* (Henn.) G. Arnaud, asexual morph

unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiopsisaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Parorbiliopsis Spooner & Dennis 1986, *Helotiaceae*, *Helotiales*, *Leotiomyces*, five species, type: *P. minuta* Spooner & Dennis, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parthenope Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *P. parasitica* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Parvacoccum R.S. Hunt & A. Funk 1988, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *P. pini* R.S. Hunt & A. Funk, asexual morph unknown, saprobes, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: DAVFP 23419, needs generic revision.

Parvomyces Santam. 1995, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *P. merophysiae* Santam., asexual morph unknown, biotrophic, terrestrial, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Parvoplaca Arup, Søchting & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromyces*, five species, type: *P. tirolensis* (Zahlbr.) Arup, Søchting & Frödén, asexual morph unknown, lichenized, terrestrial, worldwide, see Arup et al. (2013, 2015; taxonomy, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, culture available for the type: U1289, U1290, needs generic revision.

Parvothecium L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomyces*, one species, type: *P. terrestre* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, from soil, terrestrial, Brazil, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype and ex-epitype culture of the type: CBS H-4380, CBS 198.89.

Paschelkiella Sherwood 1987, *Odontotremataceae*, *Ostropales*, *Lecanoromyces*, three species, type: *P. pini* (Romell) Sherwood, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Paspalomyces Linder 1933, *Ascomycota* genera *incertae sedis*, one species, type: *P. aureus* Linder, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Passalora Fr. 1849, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomyces*, c. 250 species, type: *P. bacilligera* Fr. & Mont., hyphomycetous, sexual morph unknown, plant pathogens, terrestrial, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Guatimosim et al. (2013; new species), Kirk et al. (2013; genus accepted), Moreno-Rico et al. (2014; new species), Braun et al. 2015; new species), cultures and sequences are available, needs generic revision.

Passeriniella Berl. 1890, *Dothideomyces* genera *incertae sedis*, seven species, type: *P. dichroa* (Pass.) Berl., asexual morph unknown, saprobes, marine habitat, see Suetrong et al. (2009; phylogeny, morphology), Zhang et al. (2009b, 2012; phylogeny), Jones et al. (2009, 2015; outline, marine), Alias et al. (2010; diversity), Besitulo et al. (2010; diversity), Lee et

al. (2012; checklist), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Passerinula Sacc. 1875, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. candida* Sacc., asexual morph unknown, saprobes or fungicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Patellaria Fr. 1822, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, twelve species, type: *P. atrata* (Hedw.) Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Schoch et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in *Patellariaceae*, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; taxonomy), cultures and sequences are available, cultures available for the type: CBS 958.97, BCC 28876, holotype of type: CBS H-17437.

Patellariopsis Dennis 1964, *Dermateaceae*, *Helotiales*, *Leotiomyces*, five species, type: *P. clavispota* (Berk. & Broome) Dennis, asexual morph unknown, saprobes, terrestrial, Europe, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Patescospora Abdel-Wahab & El-Sharouny 2002, *Aliquandostipitaceae*, *Jahnulales*, *Dothideomycetes*, one species, type: *P. separans* Abdel-Wahab & El-Shar., asexual morph unknown, saprobes, freshwater, Egypt, see Suetrong et al. (2010; phylogeny), cultures and sequences are available, holotype of the type: IMI 386405, ?

Patinella Sacc. 1875, *Dermateaceae*, *Helotiales*, *Leotiomyces*, three species, type: *P. hyalophaea* Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures are available for the type (unpublished), needs generic revision.

Patinellaria P. Karst. 1885, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *P. sanguinea* (Pers.) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Patriciomyces D. Hawksw. 2001, *Ascomycota* genera *incertae sedis*, one species, type: *P. valentinianus* D. Hawksw., hyphomycetous, sexual morph unknown, lichenicolous, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences unavailable.

Pauahia F. Stevens 1925, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. sideroxyli* F. Stevens, asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae* and placed in *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.

Paucispora Thambugala, Kaz. Tanaka & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. quadrispora* (K. Hiray. & Kaz. Tanaka) Thambugala, Kaz. Tanaka & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Japan, see Thambugala et al. (2015b; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of type: HHUF 27321; MAFF 239455.

Paucithecium Lloyd 1923, *Xylariaceae*, *Xylariales*, *Sordariomyces*, one species, type: *P. rickii* Lloyd, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Paulia Fée 1836, *Lichinaceae*, *Lichinales*, *Lichinomyces*, ten species, type: *P. pullata* Fée, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available but lack for the type, needs generic revision.

Paulkirkia Wijayaw., Wanasinghe, Tangthirasunun, Camporesi & K.D. Hyde 2016, *Teichosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. arundinis* Wijayaw., Wanasinghe, Tangthirasunun, Camporesi & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2016, 2017; taxonomy, phylogeny, outline), holotype and ex-type culture of the type: MFLU 13–0315, MFLUCC 12–0328.

Paurocotylis Berk. 1855, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *P. pila* Berk., asexual morph unknown, from soil, hypogeous, terrestrial, Europe, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wang et al. (2016; DNA, phylogeny), cultures and sequences are available, voucher specimen of the type: Trappe 12583 (OSC).

Payosphaeria H.Y.M. Leung 1990, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. minuta* H.Y.M. Leung, asexual morph unknown, marine, on wood, mangrove, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: IMI 327472.

Peccania A. Massal. ex Arnold 1858, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, eight species, type: *P. coralloides* (A. Massal.) A. Massal., asexual morph unknown, lichenized, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available, needs generic revision.

Pectenia P.M. Jørg., L. Lindblom, Wedin & S. Ekman 2014, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, four species, type: *P. plumbea* (Lightf.) P.M. Jørg., L. Lindblom, Wedin & S. Ekman, lichenized, terrestrial, Europe, Africa, mostly along the Atlantic coast, see Ekman et al. (2014; taxonomy), cultures and sequences are unavailable, needs generic revision.

Pectinotrichum Varsavsky & G.F. Orr 1971, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *P. llanense* Varsavsky & G.F. Orr, asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence available for the type, available specimen of type: CBS H-7460.

Pedumispora K.D. Hyde & E.B.G. Jones 1992, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *Pedumispora rhizophorae* K.D. Hyde & E.B.G. Jones, asexual morph unknown, saprobes, mangroves, marine, Republic of Seychelles, Guam, Thailand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Klaysuban et al. (2014; DNA, phylogeny), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline), sequence data available, holotype of type: BRIP 19201.

Peethambara Subram. & Bhat 1978, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. sundara* Subram. & Bhat, asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Lombard et al. (2016; phylogeny), cultures and sequences are available, ex-type culture of type: CBS 646.77, needs generic revision.

Peethasthabeja P.Rag. Rao 1981, *Ascomycota* genera *incertae sedis*, one species, type: *P. krishna* P. Rag. Rao, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pellionella (Sacc.) Sacc. 1902, *Ascomycota* genera *incertae sedis*, one species, type: *P. deformans* Penz. & Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Java, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Pellucida Dulym., Sivan., P.F. Cannon & Peerally 2001, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. pendulina* Dulym., Sivan., P.F. Cannon & Peerally, asexual morph unknown, saprobes, terrestrial, Mauritius, see Lumbsch and Huhndorf (2010;

outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: Mauritius (Dulymamode P6), needs generic revision.

Pellucida Dulym., Sivan., P.F. Cannon & Peerally 2001, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, no new species, type: *P. pendulina* Dulym., Sivan., P.F. Cannon & Peerally, sexual morph unknown, see Kirk et al. 2008, Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable for type, needs generic revision.

Peltaster Syd. & P. Syd. 1917, *Dothideomycetes* genera *incertae sedis*, seven species, type: *P. hedyotidis* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes or pathogens, terrestrial, Philippines, South America, Slovenia, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Medjedović et al. (2014; new species, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Peltasterella Bat. & H. Maia 1959, *Ascomycota* genera *incertae sedis*, one species, type: *P. ocoteae* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Peltasterinostroma Punith. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *P. rubi* Punith., coelomycetous, sexual morph unknown, saprobes, terrestrial, British Isles, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Peltasteropsis Bat. & H. Maia 1959, *Ascomycota* genera *incertae sedis*, seven species, type: *P. discreta* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Peltigera Willd. [nom.cons.] 1787, *Peltigeraceae*, *Peltigerales*, *Lecanoromycetes*, 100 species, type: *P. canina* (L.) Willd., lichenized (green algae or, and cyanobacteria), terrestrial (saxicolous, terricolous, corticolous or lignicolous) or aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Peltigeromyces Möller 1901, *Helotiales* genera *incertae sedis*, *Leotiomyces*, three species, type: *P. microsporus* Möller, asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; phylogeny), cultures and sequences are available for unidentified species, needs generic revision, needs generic revision.

Peltistroma Henn. 1904, *Ascomycota* genera *incertae sedis*, one species, type: *P. juruanum* Henn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, lectotype of type: K (Mycotheca Brasiliensis no. 93), needs generic revision.

Peltistromella Höhn. 1907, *Ascomycota* genera *incertae sedis*, one species, type: *P. brasiliensis* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Peltosoma Syd. 1925, *Ascomycota* genera *incertae sedis*, one species, type: *P. freycinetiae* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Peltostromellina Bat. & A.F. Vital 1959, *Ascomycota* genera *incertae sedis*, one species, type: *P. atra* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Sri Lanka, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Peltostromopsis Bat. & A.F. Vital 1959, *Ascomycota* genera *incertae sedis*, one species, type: *P. artocarp* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Sri Lanka, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Peltula Nyl. 1853, *Peltulaceae*, *Lichinales*, *Lichinomycetes*, 32 species, type: *P. radicata* Nyl., asexual morph unknown, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), McDonald et al. (2013; DNA, phylogeny), Marques et al. (2013; new species, Portugal), sequences are available, needs generic revision.

Peltularia R. Sant. 1944, *Coccocarpiaceae*, *Peltigerales*, *Lecanoromycetes*, three species, type: *P. gyrophoroides* (Räsänen) R. Sant., asexual morph unknown, lichenized, terrestrial, South America, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pemphidium Mont. 1840, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, 17 species, type: *P. nitidum* Mont., coelomycetous, common on palms, terrestrial, South America, Australia, Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-6336, needs generic revision.

Pendulispora M.B. Ellis., 1961, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. venezuelanica* M.B. Ellis, sexual morph unknown, hyphomycetous, on dead branches, Venezuela, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Penicillifer Emden 1968 (= *Viridispora* Samuels & Rossman 1999 *fide* Maharachchikumbura et al. 2015, 2016; outline; Lombard et al. 2016; Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, seven species, type: *P. pulcher* Emden, asexual morph hyphomycetous, saprobes, from soil, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), Lombard et al. (2016; phylogeny), Rossman et al. (2016; nomenclature), cultures and sequences are available, type specimen and culture available for type: CBS H-7461; CBS 560.67.

Penicillioopsis Solms 1887, *Aspergillaceae*, *Eurotiales*, *Eurotiomycetes*, three species, type: *P. clavariiformis* Solms, asexual morph unknown, saprobes, terrestrial, worldwide, see Houbraeken and Samson (2011; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Trichocomaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are available, lectotype and culture available for type: Hauman (BR); CBS 761.68.

Penicillium Link 1809, *Aspergillaceae*, *Eurotiales*, *Eurotiomycetes*, c. 300 species, type: *P. crustaceum* Link, hyphomycetous, pathogens, saprobes, widespread (common moulds), see Houbraeken and Samson (2011; morphology, phylogeny), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences available.

Penidiella Crous & U. Braun 2007, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, six species, type: *P. columbiana* Crous & J.K. Stone, hyphomycetous, sexual morph teratosphaeria-like, pathogens, associated with leaf spots, terrestrial, worldwide, see Crous et al. (2007, 2009, 2011; morphology, phylogeny), Crous and Groenewald (2011; morphology,

phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences are available, epitype and ex-epitype strain of the type: CBS H-9937; CBS 486.80.

Penidiellopsis Sandoval-Denis, Gené, Deanna A. Sutton & Guarro 2016, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. syzygii* Crous & M.J. Wingf., hyphomycetous, human pathogen, terrestrial, USA, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22389, CBS 140695.

Pentagenella Darb. 1897, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *P. fragillima* Darb., lichenized, terrestrial, neotropical, see Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; new species, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Penzigomyces Subram. 1992, *Ascomycota genera incertae sedis*, 13 species, type: *P. nodipes* (Penz. & Sacc.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Perelegomyces R.F. Castañeda & W.B. Kendr. 1990, *Ascomycota genera incertae sedis*, one species, type: *P. parviechinulatus* W.B. Kendr. & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Periamphispora J.C. Krug 1989, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *P. phacelodes* J.C. Krug, asexual morph unknown, on dung, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariales*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Periconia Tode 1791, *Periconiaceae*, *Pleosporales*, *Dothideomycetes*, c. 45 species, type: *P. lichenoides* Tode, hyphomycetous, terrestrial, aquatic, worldwide, see Seifert et al. (2011; outline), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Jones et al. (2015; outline, marine), Tanaka et al. (2015; phylogeny), sequence data available, needs generic revision.

Periconiella Sacc. 1885, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 70 species, type: *P. velutina* (G. Winter) Sacc., hyphomycetous, sexual morph unknown, plant pathogens, terrestrial, see cultures and sequences are available, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), epitype and ex-epitype of type: CBS H-15612; CBS 101948.

Peridiothelia D. Hawksw. 1985, *Pleomassariaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *P. fuliguncta* (Norman) D. Hawksw., asexual morph unknown, on bark, Europe, terrestrial, see Lumbsch & Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Peridiothelia*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, lectotype of type: O.

Periglandula U. Steiner, Leistner & Leuchtm. 2011, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *P. ipomoeae* U. Steiner, E. Leistner & Schardl, asexual morph unknown, on living leaves, terrestrial, Ecuador, Panama, see Steiner et al. (2011; taxonomy, outline), Beaulieu et al. (2015; DNA), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Perigrapha Hafellner 1996, *Arthoniales genera incertae sedis*, *Arthoniomycetes*, four species, type: *P. superveniens* (Nyl.) Hafellner, lichenicolous, terrestrial, Asia, Europe and North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),

Etayo and Pérez-Vargas (2013; morphology), Zhurbenko et al. (2015; morphology), sequences are available.

Perischizon Syd. & P. Syd. 1914, *Dothideomycetes* genera *incertae sedis*, three species, type: *P. oleifolium* (Kalchbr. & Cooke) Syd. & P. Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted in *Parmulariaceae*), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; excluded from *Parmulariaceae*), Wijayawardene et al. (2014; outline, accepted in *Dothideomycetes*), cultures and sequences unavailable, Holotype of type: K (P. MacOwan 7).

Perisporiopsis Henn. 1904, *Perisporiopsidaceae*, *Dothideomycetes* families *incertae sedis*, *Dothideomycetes*, 17 species, type: *P. struthanthi* Henn., asexual morph unknown, saprobes, endophytes, terrestrial, tropical, see Chaverri and Gazis (2010, 2011; new species, endophytes), Kawada et al. (2010; antitumour compounds), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Perizomella Syd. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *P. inquinans* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Peroneutypa Berl. 1902, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, 47 species, type: *P. bellula* (Desm.) Berl., asexual morph unknown, saprobes, pathogens, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Dai et al. (2016; morphology, phylogeny), cultures and sequences are available but lacks for type, needs generic revision.

Peroschaeta Bat. & A.F. Vital 1957, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. artocarpi* Bat. & A.F. Vital, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Perrotia Boud. 1901, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, 19 species, type: *P. flammea* (Alb. & Schwein.) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Monaghan et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), sequence available for the type, needs generic revision.

Persiciospora P.F. Cannon & D. Hawksw. 1982, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *P. moreaui* P.F. Cannon & D. Hawksw., fungicolous, widespread, terricolous, see Lumbsch and Huhndorf (2010; outline), Fan et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; position), cultures and sequences are available, holotype of type: K(M)-IMI 238745.

Pertusaria DC. [nom.cons.] 1805, *Pertusariaceae*, *Pertusariales*, *Lecanoromycetes*, 500 species, type: *P. communis* DC., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Perusta Egidi & Sielow 2014, *Dothideomycetes* genera *incertae saedis*, one species, type: *P. inaequalis* Egidi & Sielow, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 118271 = TRN272.

Pesotum J.L. Crane & Schokn. 1973, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, seven species, type: *P. ulmi* (M.B. Schwarz) J.L. Crane & Schokn., hyphomycetous, saprobes, pathogens, worldwide, see Kamgan Nkuekam et al. (2008; new species),

Grobbelaar et al. (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Pestalopezia Seaver 1942, *Helotiaceae*, *Helotiales*, *Leotiomyces*, three species, type: *P. brunneopruinosa* (Zeller) Seaver, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pestalotiopsis Steyaert 1949, *Pestalotiopsidaceae*, *Xylariales*, *Sordariomyces*, c. 300 species, type: *P. maculans* (Corda) Nag Raj, asexual morph coelomycetous, saprobes or pathogens on plants, worldwide, see Maharachchikumbura et al. (2012, 2014; phylogeny, morphology), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), 55 species have ex-type sequences, type specimen of type: CBS H-15678, needs generic revision.

Pestalozziella Sacc. & Ellis ex Sacc. 1882, *Ascomycota* genera *incertae sedis*, four species, type: *P. inquinans* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Petchiomyces E. Fisch. & Mattir. 1938, *Pyronemataceae*, *Pezizales*, *Pezizomyces*, one species, type: *P. thwaitesii* (Berk. & Broome) E. Fisch. & Mattir., asexual morph unknown, saprobes, terrestrial, North America, Sri Lanka, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Peterozyma Kurtzman & Robnett 2010, *Pichiaceae*, *Saccharomycetales*, *Saccharomyces*, two species, type: *P. toletana* (Socias, C. Ramírez & Peláez) Kurtzman & Robnett, asexual reproduction is by multilateral budding, saprophytic, tanning fluid, insect frass from trees and tree bark, Europe, North America, see Kurtzman and Suzuki (2010; taxonomy), sequences are available.

Petractis Fr. 1845, *Stictidaceae*, *Ostropales*, *Lecanoromyces*, six species, type: *P. exanthematica* (Sm.) Fr., asexual morph unknown, lichenized, terrestrial, worldwide, see Orange (2009; new species, DNA), Lumbsch and Huhndorf (2010; outline), Schnull et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Petrakia Syd. & P. Syd. 1913, *Dothideomyces* genera *incertae sedis*, three species, type: *P. echinata* (Peglion) Syd. & P. Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Asia, see Wijayawardene et al. (2012, 2017; outline), Butin et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Li et al. (2016; phylogeny, taxonomy), cultures available for the type: OH 080921.4, needs generic revision.

Petrakiella Syd. 1924, *Phyllachoraceae*, *Phyllachorales*, *Sordariomyces*, two species, type: *P. insignis* Syd., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Petrakina Cif. 1932, *Dothideomyces* genera *incertae sedis*, two species, type: *P. a mirabilis* Cif., asexual morph unknown, epiphytes, terrestrial, see Hofmann (2009; review, accepted as a genus in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, keys, accepted as a genus in *Dothideomyces*), Wijayawardene et al. (2014; outline, accepted in *Dothideomyces*), cultures and sequences unavailable, syntype of type: NY 00936794.

Petrakiopeltis Bat., A.F. Vital & Cif. 1958, *Dothideomyces* genera *incertae sedis*, one species, type: *P. byrsonimae* Bat., A.F. Vital & Cif., asexual morph unknown, epiphytes, terrestrial, Guyana, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Wu et al. (2011; not accepted as *Microthyriaceae*), Kirk et al. (2013; genus

accepted), Hyde et al. (2013; not accepted as a genus in *Microthyriaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.

Petrakiopsis Subram. & K.R.C. Reddy 1968, *Ascomycota* genera *incertae sedis*, one species, type: *P. elegans* Subram. & K.R.C. Reddy, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Petriella Curzi 1930, *Microasceae*, *Microascales*, *Sordariomycetes*, two species, type: *P. asymmetrica* Curzi, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-7548; CBS 238.38.

Petrophila de Hoog & Quaedvlieg 2014, *Extremaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. incerta* de Hoog & Quaedvlieg, hyphomycetous, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 118608 = TRN139b.

Peyritschiella Thaxt. 1890, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 47 species, type: *P. curvata* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Peyronelia Cif. & Gonz. Frag. 1927, *Ascomycota* genera *incertae sedis*, six or seven species (fide Seifert et al. 2011) but Index Fungorum (2017) lists only four epithets, type: *P. sirodesmioides* Cif. & Gonz. Frag., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pezicula Tul. & C. Tul. 1865 (= *Cryptosporiopsis* Bubák & Kabát 1912; = *Lagynodella* Petr. 1922 fide Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomycetes*, c. 50 species, type: *P. carpinea* (Pers.) Tul. ex Fuckel, asexual morph *Cryptosporiopsis*, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Chen et al. (2015; new species), epitype and cultures available for the type: CBS H-17476; CBS 923.96, CBS 921.96, needs generic revision.

Peziza Dill. ex Fr. 1822, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *P. vesiculosa* Bull., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Ashraf et al. (2012; Pakistan, ectomycorrhizae), Barseghyan et al. (2012; Israel). Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and cultures for type: CBS H-15930; AFTOL-ID 507.

Pezolepis Syd. 1925, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *P. denigrata* Syd., asexual morph unknown, saprobes, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pezoloma Clem. 1909, *Leotiaceae*, *Helotiales*, *Leotiomycetes*, 14 species, type: *P. denigrata* Clem., asexual morph unknown, saprobes, terrestrial, temperate, see Huhtinen et al. (2010; new species, Sweden), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bruzone et al. (2016; DNA), cultures and sequences are available but lacks for the type, needs generic revision.

Pezomela Syd. 1928, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *P. saxegothaeae* Syd., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; phylogeny), cultures and sequences are available for unidentified species, needs generic revision.

Phacellium Bonord. 1860, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, 27 species, type: *P. dishonestum* Bonord., hyphomycetous, saprobes, pathogens, terrestrial, Asia, Europe, North America, South America, see Crous et al. (2009; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Phacidiella P. Karst. 1884, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *P. salicina* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species, treated as *Ostropales*), cultures and sequences are available but lacks for the type, needs generic revision since have different opinions.

Phacidina Höhn. 1917, *Leptopeltidaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. gracilis* (Niessl) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phacidiopycnis Potebnia 1912 (= *Potebniomyces* Smerlis 1962, = *Discosporiopsis* Petr. 1921 *fide* Johnston et al. 2014), *Phacidiaceae*, *Phacidiales*, *Leotiomyces*, five species, type: *P. malorum* Potebnia, asexual morph coelomycetous, saprobes, pathogens terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; phylogeny), Johnston et al. (2014; nomenclature), Díaz et al. (2016; pathogens, DNA), cultures and sequences are available but lacks for the type, needs generic revision.

Phacidium Fr. 1815 (= *Ceuthospora* Grev. 1826 *fide* Johnston et al. 2014), *Phacidiaceae*, *Phacidiales*, *Leotiomyces*, 270 species, type: *P. lacerum* Fr., asexual morph formerly named in *Ceuthospora*, saprobes, plant pathogens, terrestrial, worldwide, see Barbeito et al. (2013; pathogenicity), Petäistö et al. (2013; pathogenicity), Crous et al. (2014, 2015a, b; phylogeny, new species), Johnston et al. (2014; nomenclature), Suija et al. (2015; phylogeny), Wiseman et al. (2016; new disease), cultures and sequences are available, epitype and ex-epitype of type: CBS H-10302; CBS 761.73.

Phacographa Hafellner 2009, *Lecanographaceae*, *Arthoniales*, *Arthoniomyces*, three species, type: *P. glaucomaria* (Nyl.) Hafellner, sexual morph with rounded ascomata, lichenicolous, terrestrial, Northern Hemisphere, see Hafellner (2009; morphology), Frisch et al. (2014; phylogeny), sequences are available, lectotype of the type: Nylander (H-Nyl. 11019).

Phacopsis Tul. 1852, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 22 species, type: *P. vulpina* Tul., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhurbenko (2010; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Phacostroma Petr. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *P. hypodermium* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phacostromella Petr. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *P. coronata* (Fuckel) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Gennany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phacothecium Trevis. 1856, *Lecanographaceae*, *Arthoniales*, *Arthoniomyces*, one species, type: *P. varium* (Tul.) Trevis., lichenicolous, terrestrial, Northern Hemisphere, see Hafellner

(2009; morphology), sequences are unavailable, epitype of the type: J. Hafellner 47633 & A. Hafellner.

Phaeangellina Dennis 1955, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. empetri* (W. Phillips) Dennis, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeangium Pat. 1894, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *P. lefebvrei* Pat., asexual morph unknown, saprobes, terrestrial, North Africa, Arabian peninsula, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Zitouni-Haouar et al. (2016; DNA), cultures available for the type: BMBH4 (Zitouni-Haouar et al. 2016), needs generic revision.

Phaeoacremonium W. Gams, Crous & M.J. Wingf. 1996, *Togniniaceae*, *Togniniales*, *Sordariomycete*, 50 species, type: *P. parasiticum* (Ajello, Georg & C.J.K. Wang) W. Gams, Crous & M.J. Wingf., hyphomycetous, with subverticillium-like synasexual morph and sexual morph, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2016; new species, phylogeny), Dai et al. (2016; sexual morph), holotype and ex-type culture of the type: CBS H-22886, CPC 27637.

Phaeoblastophora Partr. & Morgan-Jones 2002, *Ascomycota* genera *incertae sedis*, two species, type: *P. resinae* (Fr.) Partr. & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Phaeobotryon Theiss. & Syd. 1915, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, four species, type: *P. cercidis* (Cooke) Theiss. & Syd., asexual morph coelomycetous, saprobes, pathogens, terrestrial, cosmopolitan, see Phillips et al. (2008, 2013; taxonomy, phylogeny), Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny), Dissanayake et al. (2016; taxonomy), cultures and sequences are available.

Phaeocalicium A.F.W. Schmidt 1970, *Mycocaliciaceae*, *Mycocaliciales*, *Eurotiomycetes*, eleven species, type: *P. praecedens* (Nyl.) A.F.W. Schmidt, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tibell et al. (2014; new species), Tuovila et al. (2014; DNA), Telfer et al. (2015; DNA, phylogeny), sequences are available, voucher specimen of the type: Tuovila 09-240 (TUR).

Phaeocandelabrum R.F. Castañeda, Gusmão, Guarro & Iturr. 2009, *Ascomycota* genera *incertae sedis*, three species, type: *P. elegans* (R.F. Castañeda) R.F. Castañeda, Heredia, Saikawa, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeocercospora Crous 2012, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. colophospermi* Crous, hyphomycetous, pathogens, South Africa, see Crous et al. (2012; morphology; phylogeny), Wijayawardene et al. (2012, 2014, 2017; outline), sequence data available, holotype and ex-type strain of the type: CBS H-20966; CPC 19813.

Phaeochora Höhn. 1909, *Phaeochoraceae*, *Phyllachorales*, *Sordariomycetes*, five species, type: *P. chamaeropsis* (Cooke) Höhn., saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phaeochorella Theiss. & Syd. 1915, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, six species, type: *P. parinari* (Henn.) Theiss. & Syd., from living leaves, South Africa, Phillipines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, available specimen of type: CBS H-15956, needs generic revision.

Phaeochoropsis K.D. Hyde & P.F. Cannon 1999, *Phaeochoraceae*, *Phyllachorales*, *Sordariomycetes*, four species, type: *P. neowashingtoniae* (Shear) K.D. Hyde & P.F. Cannon, saprobes, North and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phaeococcomyces de Hoog 1979, *Phaeococcomycetaceae*, *Lichenostigmatales*, *Arthoniomycetes*, eight species, type: *P. nigricans* (M.A. Rich & A.M. Stern) de Hoog, hyphomycetous, sexual morph unknown, on human, saprobes, Asia, Europe, North America, South America, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Moreno-Rico et al. (2014; new species), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Phaeocryptopus Naumov 1915, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, eight species, type: *P. abietis* Naumov, asexual morph unknown, growing on conifer needles, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Thambugala et al. (2014; review), cultures and sequences are available, holotype of type: F67760.

Phaeocyrtidula Vain. 1921, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. pinea* (Nyl.) Vain., saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phaeocyttostroma Petr. 1921, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *P. istricea* Petr., coelomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; phylogeny, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Phaeodactylium Agnihotr. 1968, *Ascomycota* genera *incertae sedis*, five species, type: *P. venkatesanum* Agnihotr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Castañeda Ruiz et al. (2009, 2013; new species), Seifert et al. (2011; morphology), Zhang et al. (2011; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision, needs generic revision.

Phaeodimeriella Speg. 1908, *Pseudoperisporiaceae*, *Dothideomycetes* family *incertae sedis*, 15 species, type: *P. occulta* (Racib.) Speg, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Mapook et al. (2016; taxonomy, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Phaeodiscula Cub. 1891, *Ascomycota* genera *incertae sedis*, one species, type: *P. celottii* Cub., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeodomus Höhn. 1909, *Ascomycota* genera *incertae sedis*, three species, type: *P. lauracearum* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeodothis Syd. & P. Syd. 1904, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *P. tricuspis* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in *Didymosphaeriaceae*), Ariyawansa et al. (2014; accepted in *Didymosphaeriaceae*), Wijayawardene et al. (2014; outline), Verkley et al. (2014; new species, phylogeny), sequences and cultures available only for *P. winteri* but lacks for the type, available specimen for type: CBS H-4793.

Phaeofabraea Rehm 1909, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. miconiae* Rehm, asexual morph unknown, saprobes, terrestrial, South America, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeographis Müll. Arg. 1882, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 150 species, type: *P. dendritica* (Ach.) Müll. Arg., asexual morph unknown, lichenized, terrestrial, mostly tropical, see Rivas Plata et al. (2012a; phylogeny), Archer (2009; key, Australia), Lücking et al. (2014; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Phaeographopsis Sipman 2007, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *P. indica* (Patw. & Nagarkar) Sipman & Aptroot, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2013; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Phaeohelotium Kanouse 1935, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, 41 species, type: *P. flavum* Kanouse, asexual morph unknown, saprobes, terrestrial, worldwide, see Hengstmengel (2009; outline), Kaya (2009; Turkey), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Phaeohiratsukaea Udagawa & Iwatsu 1990, *Ascomycota* genera *incertae sedis*, one species, type: *P. expansa* Udagawa & Iwatsu, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: National Institute of Hygienic Sciences, Tokyo, NHL2968, needs generic revision.

Phaeoidiomyces Dorn.-Silva & Dianese 2004, *Ascomycota* genera *incertae sedis*, one species, type: *P. qualeae* Dorn.-Silva & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: UB (col. micol.) 9851, needs generic revision.

Phaeoisaria Höhn. 1909, *Pleurotheciaceae*, *Pleurotheciales*, *Sordariomycetes*, 20 species, type: *P. bambusae* Höhn., hyphomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Mel'nik et al. (2012; new species, Vietnam), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cheng et al. (2014; new species, China), Crous et al. (2015; new species), Liu et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Phaeolabrella Speg. 1912, *Ascomycota* genera *incertae sedis*, one species, type: *P. eryngicola* Speg., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeomoniella Crous & W. Gams 2000, *Phaeomoniellaceae*, *Phaeomoniellales*, *Eurotiomycetes*, one species, type: *P. chlamydospora* (W. Gams, Crous, M.J. Wingf. &

Mugnai) Crous & W. Gams, hyphomycetous, sexual morph unknown, with coelomycetous synasexual morph, pathogens, saprobes, endophytic, terrestrial, Italy, see Chen et al. (2015; phylogeny), Crous et al. (2015; phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of type: CBS H-229.95 as *Phaeoacremonium chlamydosporum* W. Gams et al., reference culture of type: CBS 229.95.

Phaeomonilia R.F. Castañeda, Heredia & R.M. Arias 2007, *Ascomycota genera incertae sedis*, four species, type: *P. pleiomorpha* R.F. Castañeda, Heredia & R.M. Arias, hyphomycetous, sexual morph unknown, saprobes, terrestrial and aquatic, Mexico, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Ma et al. (2015; new species), Yang et al. (2016; new species), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, holotype of the type: XAL CB746, compare with *Botryomonilia*, *Pseudaegerita*, *Staheliella* and *Oidiiodendron*.

Phaeomonostichella Keissl. ex Petr. 1941, *Ascomycota genera incertae sedis*, one species, type: *P. symploci* (Keissl.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeonaevia L. Holm & K. Holm 1977, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *P. monilispota* (Starbäck) L. Holm & K. Holm, asexual morph unknown, saprobes, saprobes, terrestrial, northern Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeonectriella R.A. Eaton & E.B.G. Jones 1971, *Halosphaeriaceae*, *Microascales*, *Sordariomyces*, two species, type: *P. lignicola* R.A. Eaton & E.B.G. Jones, asexual morph unknown, saprobes on wood, marine, temperate, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline), sequences are available, needs generic revision.

Phaeopeltosphaeria Berl. & Peglion 1892, *Dothideomyces genera incertae sedis*, two species, type: *P. caudata* Berl. & Peglion, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phaeophacidium Henn. & Lind 1897, *Rhytismatales genera incertae sedis*, *Leotiomyces*, four species, type: *Phaeophacidium escalloniae* Henn. & Lindau, asexual morph unknown, saprobes, causing leaf spots, terrestrial, Asia, Australia, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeophleospora Rangel 1916, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomyces*, eleven species, type: *P. eugeniae* Rangel, coelomycetous, with mycosphaerella-like sexual morphs, plant pathogens, see Wijayawardene et al. (2012, 2017; outline), Quaedvlieg et al. (2014; morphology; phylogeny), Crous et al. (2015, 2016; new species), cultures and sequences are available, neotype of type: IMI 372655.

Phaeophloeosporella Crous & B. Sutton 1997, *Ascomycota genera incertae sedis*, one species, type: *P. ekebergiae* (Syd.) Crous & B. Sutton, coelomycetous, sexual morph unknown, Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeophyscia Moberg 1977, *Physciaceae*, *Teloschistales*, *Lecanoromyces*, 66 species, type: *Phaeophyscia orbicularis* (Neck.) Moberg, foliose lichen, terrestrial, worldwide, see Shukla & Upreti (2009; bioindicator), Lendemer (2009; record), Brackel (2010; Iceland), Arslan et al. (2011; Turkey), Shukla et al. (2012; physiology), Pindaru et al. (2013; chemical composition),

Lücking et al. (2016; classification), cultures and sequences are available for most of the species including type, needs generic revision.

Phaeopyxis Rambold & Triebel 1990, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, five species, type: *P. punctum* (A. Massal.) Rambold, lichenicolous, terrestrial, Europe, Asia, North and South America, Australia, see Diederich et al. (2009; Europe), Motiejūnaitė et al. (2011; Lithuania), Matwiejuk and Bohdan (2011; Poland), Himelbrant et al. (2013; Russia), Suija et al. (2015; phylogeny), sequences are available, needs generic revision.

Phaeoramularia Munt.-Cvetk. 1960, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, more than 100 species names, but genus appears one species, type: *P. gomphrenicola* (Speg.) Munt.-Cvetk., hyphomycetous, plant pathogens, see Videira et al. (2017; morphology, phylogeny), cultures and sequences are available, holotype of type: LPS 914, isotypes of type: BPI 436740, BPI 722393; K(M) IMI 7706 (slide), MICH 15302.

Phaeorrhiza H. Mayrhofer & Poelt 1979, *Physciaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *Phaeorrhiza nimbosa* (Fr.) H. Mayrhofer & Poelt, asexual morph unknown, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Resl et al. (2016; phylogeny), cultures and sequences are available, cultures available for the type: T805, needs generic revision.

Phaeosaccardinula Henn. 1905, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, 16 species, type: *P. diospyricola* Henn., asexual morph unknown, epiphytes, sooty moulds, terrestrial, China, Thailand, see Chomnunti et al. (2012; 2014; morphology; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Yang et al. (2014; morphology; phylogeny), cultures and sequences are available for some species, available specimen of type: CBS H-4260, needs generic revision.

Phaeoschizotrichum C.R. Silva, Gusmão & R.F. Castañeda 2015, *Ascomycota* genera *incertae sedis*, one species, type: *P. ramosum* Silva, Gusmão & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Silva et al. (2015; morphology), cultures and sequences are unavailable, holotype of the type: HUEFS 210423, compare with *Passalora*, *Pseudocercospora* and *Schizotrichum*.

Phaeosclera Sigler, Tsuneda & J.W. Carmich. 1981, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. dematioides* Sigler, Tsuneda & J.W. Carmich., hyphomycetous, sexual morph unknown, terrestrial, saprobes, worldwide, see Schoch et al. (2011; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, isotype and cultures available for the type: CBS H-7557; CBS 157.81.

Phaeosclerotinia Hori 1916, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. nipponica* Hori, asexual morph hyphomycetous, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeoscypha Spooner 1984, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. cladii* (Nag Raj & W.B. Kendr.) Spooner, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeoseptum Ying Zhang, J. Fourn. & K.D. Hyde 2013, *Halotthiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. aquaticum* Ying Zhang, J. Fourn. & K.D. Hyde, asexual morph unknown, saprobes, freshwater, France, see Zhang et al. (2013; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), sequence data available for the type, holotype and ex-type strains of type: IFRD 8986; CBS 123113.

Phaeosperma Nitschke ex Fuckel 1870, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. dryophilum* Nitschke ex G.H. Otth, asexual morph unknown, saprobes, terrestrial,

Switzerland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, epitype and ex-epitype strains of type: WU 32035; CBS 133213, LG21, needs generic revision.

Phaeosphaeria I. Miyake 1909, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 90 species, type: *P. oryzae* I. Miyake, asexual morph coelomycetous, saprobes or pathogens, terrestrial, worldwide, see Zhang et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), sequence data available for more than 10 species, need adequate sequence data, needs generic revision, ex-epitype strains of type: CBS 110110; lectotype of type: S-F9572.

Phaeosphaeriopsis M.P.S. Câmara, M.E. Palm & A.W. Ramaley 2003, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, ten species, type: *Phaeosphaeriopsis glaucopunctata* (Grev.) M.P.S. Câmara, M.E. Palm & A.W. Ramaley, asexual morph unknown coelomycetous, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013 accepted as a genus in *Phaeosphaeriaceae*), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeriaceae*), Wijayawardene et al. (2014, 2017; outline), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

Phaeospora Hepp 1867, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 17 species, type: *P. rimosicola* (Leight. ex Mudd) Hepp, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Etayo (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), van den Boom and Etayo (2014; new species), cultures and sequences are unavailable for the type, needs generic revision.

Phaeosporis Clem. 1909, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *P. melasperma* (Nyl.) Clem., asexual morph unknown, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phaeosporobolus D. Hawksw. & Hafellner 1986, six species, *Ascomycota* genera *incertae sedis*, type: *P. usneae* D.Hawksw. & Hafellner, hyphomycetous, sexual morph unknown, lichenicolous, widespread, see Seifert et al. (2011; morphology), Ertz et al. (2015; phylogeny), cultures and sequences are available, holotype of type: K(M)-IMI 281394.

Phaeostalagmus W. Gams 1976, *Ascomycota* genera *incertae sedis*, seven species, type: *P. cyclosporus* (Grove) W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology, treated as *Chaetosphaeriaceae*), Wijayawardene et al. (2012, 2017; outline, accepted as a genus in *Ascomycota*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, listed in *Chaetosphaeriaceae*), cultures and sequences are unavailable, available specimen of type: CBS H-19245, needs generic revision.

Phaeostilbelloides Armando, Z.M. Chaves & Dianese 2015, *Ascomycota* genera *incertae sedis*, one species, type: *P. velloziae* Armando, Z.M. Chaves & Dianese, hyphomycetous, sexual morph unknown, on living leaves, terrestrial, Brazil, see Armando et al. (2015; morphology), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, holotype of the type: UBMC 18404, compare with *Myrothecium* and *Phaeostilbella*.

Phaeotheca Sigler et al. 1981 *Capnodiales*, genera *incertae sedis*, four species, type: *P. fissurella* Sigler, Tsuneda & J.W. Carmich., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2016; new species, phylogeny), cultures are available.

Phaeothecoidea Crous 2007, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *P. eucalypti* Crous & Summerell, hyphomycetous, sexual morph unknown, pathogens, saprobes, Australia, see Crous et al. (2007, 2009; morphology, phylogeny), Seifert

et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type culture of type: CBS-H 19836, CPC 12918.

Phaeothecoidiella Batzer & Crous 2010, *Capnodiales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *P. missouriensis* Batzer & Crous, hyphomycetous, sexual morph unknown, pathogens, saprobes, USA, see Yang et al. (2010; morphology, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type culture of type: CBS H-20322, CPC 16116.

Phaeothyriolum Syd. 1938, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. eucalyptinum* Syd., asexual morph unknown, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phaeothyrium Petr. 1947, *Ascomycota* genera *incertae sedis*, one species, type: *P. pulchellum* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeotomasellia Katum. 1981, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. ruwenzorensis* Katum., asexual morph unknown, saprobes, terrestrial, Uganda, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phaeotrichoconis Subram. 1956, *Ascomycota* genera *incertae sedis*, two species, type: *P. crotalariae* (M.A. Salam & P.N. Rao) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeotrichosphaeria Sivan. 1983, *Sordariomycetes* genera *incertae sedis*, two species, type: *P. indica* Sivan. & N.D. Sharma, asexual morph unknown, pathogens, terrestrial, India, UK, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phaeotrichum Cain & M.E. Barr 1956, *Phaeotrichaceae*, *Phaeotrichales*, *Dothideomycetes*, two species, type: *P. hystricinum* Cain & M.E. Barr, asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in *Phaeotrichaceae*), Hyde et al. (2013; accepted as a genus in *Phaeotrichaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Phaeoxyphiella Bat. & Cif. 1963, *Ascomycota* genera *incertae sedis*, seven species, type: *P. morototoni* Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Phaffomyces Y. Yamada 1997, *Phaffomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, five species, type: *P. opuntiae* (Starmer, Phaff, M. Miranda, M.W. Miller & J.S.F. Barker) Y. Yamada, asexual reproduction is by multilateral budding, saprophytic, necrotic tissue of the columnar cactus (*Cephalocereus royenii*), the prickly pear cactus (*Opuntia inermis*) and the senita cactus (*Lophocereus schottii*), Australia, USA, islands of the Caribbean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Phalacrichomyces R.K. Benj. 1992, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *P. normalis* R.K. Benj., asexual morph unknown, biotrophic, terrestrial,

Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Phalangispora Nawawi & J. Webster 1982, *Ascomycota* genera *incertae sedis*, three species, type: *P. constricta* Nawawi & J. Webster, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available (unpublished), needs generic revision.

Phanerococculus Cif. 1954, *Ascomycota* genera *incertae sedis*, two species, type: *P. rapanae* Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, Santo Domingo, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaneromyces Speg. & Har. 1889, *Phaneromycetaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *P. macrosporus* (Boud.) Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Phaulomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, 14 species, type: *P. corylophodis* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Phellostroma Syd. & P. Syd. 1914, *Ascomycota* genera *incertae sedis*, one species, type: *P. hypoxyloides* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phialemoniopsis Perdomo, Dania García, Gené, Cano & Guarro 2013, *Sordariomycetes* genera *incertae sedis*, six species, type: *P. ocularis* (Gené & Guarro) Perdomo, Dania García, Gené & Guarro, asexual morph unknown, pathogens on human, endophytes, terrestrial, America, China, see Perdomo et al. (2013; taxonomy, phylogeny), Desoubeaux et al. (2014; pathogens, phylogeny), Tsang et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), Su et al. (2016; new species), cultures and sequences are available, cultures available for the type: FMR 6632, needs generic revision.

Phialemonium W. Gams & McGinnis 1983, *Cephalothecaceae*, *Sordariomycetes* families *incertae sedis*, six species, type: *P. obovatum* W. Gams & McGinnis, hyphomycetous, sexual morph unknown, saprobes, human pathogen, terrestrial, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Perdomo et al. (2013; new species, phylogeny), Crous et al. (2015; new species), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-1665; CBS 279.76.

Phialoarthrobotryum Matsush. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *P. triseptatum* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen for type: CBS H-7561, needs generic revision.

Phialoascus Redhead & Malloch 1977, *?Saccharomycetales* genera *incertae sedis*, *?Saccharomycetes*, one species, type: *P. borealis* Redhead & Malloch, asexual reproduction unknown, mycoparasitic on the mushroom *Cortinarius huronensis*, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phialocephala W.B. Kendr. 1961 (= *Phaeomollisia* T.N. Sieber & Grünig 2009 *fide* Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomyces*, 27 species, type: *P. dimorphospora* W.B. Kendr., hyphomycetous, sexual morph formerly named in *Phaeomollisia*, saprobes,

terrestrial, aquatic, worldwide, see Grünig et al. (2009; new species), Wang et al. (2009; new species, Missouri), Lumbsch and Huhndorf (2010; outline), Day et al. (2012; new species), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures available for the type: CBS 300.62, needs generic revision.

Phialogeniculata Matsush. 1971, *Ascomycota* genera *incertae sedis*, one species, type: *P. guadalcanalensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Guadeloupe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phialomyces P.C. Misra & P.H.B. Talbot 1964, *Aspergillaceae*, *Eurotiales*, *Eurotiomycetes*, three species, type: *P. macrosporus* P.C. Misra & P.H.B. Talbot, asexual morph unknown, saprobes, terrestrial, worldwide, see Houbraken and Samson (2011; taxonomy, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and culture for type: CBS H-7563; CBS 430.64.

Phialophaeoisaria Matsush. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *P. spongiosa* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Matsushima Fungus Collection, Kobe, MFC-2J770, needs generic revision.

Phialophora Medlar 1915, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, nine species, type: *P. verrucosa* Medlar, hyphomycetous, mostly saprobes, terrestrial, isolated from soil, decaying plant material and other substrates, also including important clinically-relevant fungi, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Réblová et al. (2013; reallocation of selected taxa), Madrid et al. (2016; reallocation), Li et al. (2017; outline, new species), cultures and sequences are available, ex-epitype of the type: CBS 140325.

Phialophorophoma Linder 1944, *Pleosporales* genera *incertae sedis*, one species, type: *P. litoralis* Linder, coelomycetous, sexual morph unknown, marine, saprobes, Europe, USA, see Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), Wijayawardene et al. (2017; outline), cultures and sequences are available, available specimen of type: CBS H-17521, needs generic revision.

Phialosporostilbe Mercado & J. Mena 1985, *Ascomycota* genera *incertae sedis*, five species, type: *P. turbinata* Mercado & J. Mena, hyphomycetous, sexual morph unknown, saprobes, in soil, terrestrial, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available (unpublished), needs generic revision.

Phialostele Deighton 1969, *Ascomycota* genera *incertae sedis*, one species, type: *P. scytopetali* Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phialotubus R.Y. Roy & Leelav. 1966, *Ascomycota* genera *incertae sedis*, one species, type: *P. microsporus* R.Y. Roy & Leelav., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen of type: CBS H-7598, needs generic revision.

Phillipsia Berk. 1881, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, 17 species, type: *P. domingensis* Berk., asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: DHP 7169, needs generic revision.

Phillipsiella Cooke 1878, *Capnodiales* genera *incertae sedis*, *Dothideomycetes*, twelve species, type: *P. atra* Cooke, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Saccardiaceae*), Kirk et al. (2013; genus accepted), da Silva et al. (2016; phylogeny), cultures and sequences are available.

Philobryon Döbbeler 1988, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. anuliferum* Döbbeler, on Bryophyta, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Philonectria Hara 1914, *Dothideomycetes* genera *incertae sedis*, three species, type: *P. variabilis* Hara, saprobes, Japan, Uganda, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phloeopeccania J. Steiner 1902, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, four species, type: *P. pulvinulina* J. Steiner, asexual morph unknown, lichenized, terrestrial, Asia, Africa, North America, see Schultz et al. (2009; Namibia, South Africa), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Candan and Schultz (2015; new species, taxonomy), Lücking et al. (2016; classification), sequence data available for one species, needs generic revision.

Phloeospora Wallr. 1833, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, c. 150 species but need a revision, type: *P. ulmi* (Fr.) Wallr., coelomycetous, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2013; phylogeny), cultures and sequences are unavailable, needs generic revision.

Phloeosporina Höhn. 1924, *Ascomycota* genera *incertae sedis*, one species, type: *P. minor* (Ellis & Kellerm.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phlogicylindrium Crous, Summerb. & Summerell 2006, *Phlogicylindriaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *P. eucalypti* Crous, Summerb. & Summerell, asexual morph unknown, saprobes, all occurring on *Eucalyptus* species, Australia, see Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2012, 2014; phylogeny, morphology), Crous et al. (2016; new species, phylogeny), sequence data available for all species, holotype and ex-type strain of the type: CBS H-19749; CBS 120080.

Phlyctaeniella Petr. 1922, *Ascomycota* genera *incertae sedis*, two species, type: *P. polonica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Australia, see Tiwari et al. (2012; new species, India), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phlyctema Desm. 1847, *Dermateaceae*, *Helotiales*, *Leotiomyces*, c. 30, type: *M. caespitosa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2013; new species), Johnston et al. (2014; treated as a synonym of *Neofabraea*), Chen et al. (2016; resurrected the genus), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

Phlyctis (Wallr.) Flot., 1850, *Phlyctidaceae*, *Lecanorales*, *Lecanoromycetes*, 20 species, type: *P. agelaea* (Ach.) Flot., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Fernandez-Brime et al. (2011; phylogeny), Kelly et al. (2011; DNA barcoding), Kirk et al. (2013; genus accepted), Gasparyan and Sipman (2015; diversity and conservation), Gerra-Inohosa et al. (2015; epiphytes diversity), Lücking et al.

(2016; classification), Weerakoon et al. (2016; new species and records), sequence data available, needs generic revision.

Phoebus R.C. Harris & Ladd, 2007, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *P. hydrophobius* R.C. Harris & Ladd, asexual morph unknown, lichenized, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Phoma Sacc. 1880, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, c. 100 species, type: *P. herbarum* Westend., coelomycetous, sexual morph didymella-like, saprobes, pathogens, terrestrial, worldwide, see de Gruyter et al. (2009, 2010, 2013; taxonomy, phylogeny), Aveskamp et al. (2010; phylogeny), Woudenberg et al. (2009; sexual morph), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Chen et al. (2015; phylogeny), cultures and sequences are available.

Phomachora Petr. & Syd. 1925, *Ascomycota* genera *incertae sedis*, two species, type: *P. lucida* (Berk. & M.A. Curtis) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, America, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phomachorella Petr. 1947, *Ascomycota* genera *incertae sedis*, one species, type: *P. parinari* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phomatospora Sacc., 1875, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, c. 100 species, type: *P. berkeleyi* Sacc., saprobes on submerged wood or decaying twigs, widespread, asexual morph sporothrix-like reported from culture, see Raja and Shearer (2008; overview), Lumbsch and Huhndorf (2010; outline), Jones et al. (2015; marine species, outline), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2016), sequences are available for four species but lacks for the type:, available specimen of type: CBS H-5533.

Phomatosporella Tak. Kobay. & K. Sasaki 1982, *Ascomycota* genera *incertae sedis*, one species, type: *P. albomaculans* Tak. Kobay. & K. Sasaki, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), accepted in as a genus in *Sordariomycetes*), cultures and sequences are unavailable, needs generic revision.

Phomyces Clem. 1931, *Ascomycota* genera *incertae sedis*, one species, type: *P. meliolicola* (Speg.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phragmaspidium Bat. 1960, *Dothideomycetes* genera *incertae sedis*, three species, type: *P. corruscans* (Rehm) Bat., asexual morph unknown, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phragmeriella Hansf. 1946, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. ireninae* Hansf., asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phragmitensis K.M. Wong, Poon & K.D. Hyde 1998, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *P. marina* M.K.M. Wong, Poon & K.D. Hyde, asexual morph unknown, intertidal, in salt marsh, on *Phragmites*, tropical, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: HKU (M) 5151.

Phragmiticola Sherwood 1987, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *P. rhopalospermum* (Kirschst.) Sherwood, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phragmocephala E.W. Mason & S. Hughes 1951, *Pleurotheciaceae*, *Pleurotheciales*, *Sordariomyces*, nine species, type: *P. cookei* E.W. Mason & S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Phragmoconidium G.F. Sepúlveda, Pereira-Carv. & Dianese 2009, *Ascomycota* genera *incertae sedis*, two species, type: *P. cerradense* G.F. Sepúlveda, Pereira-Carv. & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phragmodiaporthe Wehm. 1941, *Melanconidaceae*, *Xylariales*, *Sordariomyces*, five species, type: *P. caryae* (Peck) Wehm., asexual morph unknown, saprobes, North America, China, see Vasilyeva et al. (2008; new species, China), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Phragmodiscus Hansf. 1947, *Sordariomyces* genera *incertae sedis*, two species, type: *P. arundinariae* Hansf., asexual morph unknown, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Phragmogibbera Samuels & Rogerson 1990, *Dothideomyces* genera *incertae sedis*, three species, type: *P. xylariicola* Samuels & Rogerson, saprobes, Venezuela, see Lumbsch and Huhndorf (2010; outline, accepted in *Venturiaceae*), Hyde et al. (2013; not accepted in *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: VEN.

Phragmopeltis Henn. 1904, *Ascomycota* genera *incertae sedis*, five species, type: *P. siparunae* Henn., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phragmoporthes Petr. 1934, *Gnomoniaceae*, *Diaporthales*, *Sordariomyces*, one species, type: *P. ploettneriana* (Henn.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, North America., see Sogonov et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Phragmoscutella Woron. & Abramov 1927, *Dothideomyces* genera *incertae sedis*, one species, type: *P. abchasica* Woron. & Abramov, saprobes, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phragmospathula Subram. & N.G. Nair 1966, *Ascomycota* genera *incertae sedis*, one species, type: *P. phoenicis* Subram. & N.G. Nair, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012,

2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phragmospathulella J. Mena & Mercado 1986, *Ascomycota* genera *incertae sedis*, one species, type: *P. matsushimae* J. Mena & Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phragmotrichum Kunze 1823, *Ascomycota* genera *incertae sedis*, four species, type: *P. chailletii* Kunze, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Asia, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen for type: CBS H-16912, needs generic revision.

Phthora d'Hérelle 1909, *Ascomycota* genera *incertae sedis*, one species, type: *P. vastatrix* d'Hérelle, asexual morph unknown, saprobes, terrestrial, Guatemala, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phurmomyces Thaxt. 1931, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *P. obtusus* Thaxt., asexual morph unknown, saprobes, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Phycomelaina Kohlm., 1968, *Phyllachorales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *P. laminariae* (Rostr.) Kohlm., asexual morph unknown, on marine alga *Laminaria*, temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phyllachoraceae*), Kirk et al. (2013; genus accepted), Jones et al. (2015; review), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Phyllachorales*), cultures and sequences are unavailable, needs generic revision.

Phycorella Döbbeler 1980, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. scytonematis* Döbbeler, parasites, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phylacia Lév. 1845, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, eight species, type: *P. globosa* Lév., asexual morph unknown, terrestrial, saprobes, mainly coprophilous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Phyllachora Nitschke ex Fuckel 1870, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, c. 1000 species (need revision), type: *P. graminis* (Pers.) Fuckel, saprobes, North and South America, see Lumbsch and Huhndorf (2010; outline), Santos et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), DNA sequence available for the voucher UB21307 of the type, available specimen of type: CBS H-5212, needs generic revision.

Phyllachorella Syd. 1914, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, one species, type: *P. micheliae* Syd., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (accepted as a genus in *Botryosphaeriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, available specimen of type: CBS H-4052, needs generic revision.

Phyllactinia Lév. 1851, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, 111 species, type: *P. guttata* (Wallr.: Fr.) Lév., asexual morph hyphomycetous, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Takamatsu et al. (2008b, 2016; phylogeny), Lumbsch and Huhndorf (2010; outline), Braun and Cook (2012; taxonomy), Kirk et al. (2013; genus

accepted), sequences of non-type material of the type species are available, lectotype of type: ex herb. de Candolle (G 00122109).

Phylleutypa Petr. 1934, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *P. dioscoreae* (Wakef.) Petr., saprobes, Africa, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phylliscidiopsis Sambo 1937, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *P. abissinica* Sambo., asexual morph unknown, lichenized, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Phylliscidium Forssell 1885, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *P. monophyllum* (Kremp.) Forssell, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline) Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, Needs generic revision.

Phyllisciella Henssen 1984, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, three species, type: *P. marionensis* Henssen, asexual morph unknown, lichenized, terrestrial, Africa, see De Lange et al. (2012; conservation), Lumbsch and Huhndorf (2010; outline) Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Phylliscum Nyl. 1855, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, eight species, type: *Phylliscum demangeonii* (Moug. & Mont.) Nyl., asexual morph unknown, lichenized, terrestrial, worldwide, see Bajpai et al. (2009a, b; biodeterioration), Sheik et al. (2009, 2016; taxonomy), Lumbsch and Huhndorf (2010; outline), Nayaka and Upreti (2011; Uttar Pradesh), Anderson and Neily (2012, Nova Scotia), Prieto et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Goni et al. (2014; Jammu), Shukla et al. (2014; diversity), Lücking et al. (2016; classification), Uppadhyay et al. (2016, diversity), sequences are available.

Phyllobaeis Kalb & Gierl 1993, *Baeomycetaceae*, *Baeomycetales*, *Lecanoromycetes*, six species, type: *Phyllobaeis imbricata* (Hook.) Kalb & Gierl, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Cao et al. (2013; new species, phylogeny), Kirk et al. (2013; genus accepted), Flakus et al. (2015; taxonomy), Mittermeier et al. (2015; metabolic profiling), Lücking et al. (2016; classification), sequences are available.

Phyllobathelium (Müll. Arg.) Müll. Arg. 1890, *Strigulaceae*, *Strigulales*, *Dothideomycetes*, five species, type: *P. epiphyllum* (Müll. Arg.) Müll. Arg., asexual morph unknown, lichenized fungi, terrestrial, tropical, see Nelsen et al. (2009, 2011; description, phylogeny), Lücking (2008; partial monograph), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Phylloblastia Vain. 1921, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, twelve species, type: *P. dolichospora* Vain., asexual morph unknown, lichenicolous, terrestrial, pantropical, see Flakus and Lücking (2008; new species, Bolivia), Lücking (2008; new species), Lumbsch and Huhndorf (2010; outline), McCarthy (2010; new species), Kirk et al. (2013; genus accepted), McCarthy and Stajsic (2013; new species), van den Broeck et al. (2014; new species), Lücking et al. (2016; classification), cultures and sequences are unavailable for the type, needs generic revision.

Phyllocelis Syd. 1925, *Sordariomycetes* genera *incertae sedis*, two species, type: *P. oyedaeae* Syd., saprobes, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phyllocratera Sérusiaux & Aptroot 1997, *Strigulaceae*, *Strigulales*, *Dothideomycetes*, two species, type: *P. papuana* Sérusiaux & Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in *Strigulaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: LG (Lambinon 87.427).

Phyllocrea Höhn. 1918, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *P. quitensis* (Pat.) Höhn., from living leaves, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phylloedium Fr. 1825, *Ascomycota* genera *incertae sedis*, one species, type: *P. epiphylla* Fr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phyllogyalidea Lücking & Aptroot 2008, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *P. epiphylla* (Vězda) Lücking & Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lücking (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Phyllohendersonia Tassi 1902, *Ascomycota* genera *incertae sedis*, 25 species, type: *P. mahoniae* Unamuno, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phyllopezis Petr. 1949, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *P. andina* Petr., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phylloporthe Syd. 1925, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *P. vernoniae* Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phyllosticta Pers. 1818 (= *Guignardia* Viala & Ravaz 1892 *vide* Wijayawardene et al. 2014), *Phyllostictaceae*, *Botryosphaerales*, *Dothideomycetes*, c. 100 species, type: *P. convallariae* Pers., coelomycetous, sexual morph formerly named in *Guignardia*, saprobes, pathogens, endophytes, terrestrial, worldwide, see Wulandari et al. (2009; pathogens), Glienke et al. (2011; taxonomy), Wikee et al. (2011; review), Su and Cai (2012; phylogeny), Hyde et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Slippers et al. (2013; phylogeny), Wikee et al. (2013a, b; reinstated the family *Phyllostictaceae*), Wijayawardene et al. (2014; outline, phylogeny), cultures and sequences are available, available specimen of type: CBS H-16994, needs generic revision.

Phymatotrichopsis Hennebert 1973, *Rhizinaceae*, *Pezizales*, *Pezizomycetes*, 17 species, type: *P. omnivora* (Duggar) Hennebert, hyphomycetous, sexual morph unknown, pathogens, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Physalidiella Rulamort 1990, *Ascomycota* genera *incertae sedis*, three species, type: *P. elegans* (Mosca) Rulamort, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, Europe, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Physalidiopsis R.F. Castañeda & W.B. Kendr. 1990, *Ascomycota* genera *incertae sedis*, one species, type: *P. carbonis* (R.F. Castañeda) R.F. Castañeda & W.B. Kendr., hyphomycetous,

sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Physalospora Niessl 1876, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, 37 species, type: *P. alpestris* Niessl, asexual morph unknown, terrestrial, aquatic, saprobes and endophytic, widespread, see Raja and Shearer (2008; new species, freshwater), Polashock et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available for three species, needs generic revision.

Physalosporopsis Bat. & H. Maia 1955, *Dothideomycetes* genera *incertae sedis*, 17 species, type: *P. rhizophorica* Bat. & H. Maia, asexual morph unknown, pathogens, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Physcia (Schreb.) Michaux 1803, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, 80 species, type: *P. tenella* (Scop.) DC., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Prieto and Wedin (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Physcidia Tuck 1862, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, ten species, type: *P. wrightii* (Tuck.) Tuck., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot and da Silva Caceres (2014; key), Dong et al. (2015; new records), Liu et al. (2016; taxonomy), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Physciella Essl. 1986, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, four species, type: *P. chloantha* (Ach.) Essl., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Prieto and Wedin (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Physconia Poelt 1965, *Physciaceae*, *Lecanorales*, *Lecanoromycetes*, 25 species, type: *P. pulverulenta* (Schreb.) Poelt, asexual morph unknown, lichenized, terrestrial, worldwide, see Lendemer et al. (2009; taxonomy), Begum and HariKrishna (2010; air pollution), Björk (2010; new record), Esslinger and Dillman (2010; new record), Loppi and Nascimbene (2010; bioindicators), Stamenković and Cvijan (2010; air pollution). Stamenković et al. (2010; bioindicators), Lisowska (2011; air pollution), Lumbsch and Huhndorf (2010; outline), Tsurykau et al. (2011; checklist), Yatsyna (2011; taxonomy), Gaya et al. (2012; sequence), Vicol (2012; list), Jury et al. (2013; list), Kirk et al. (2013; genus accepted), Bilovitz (2014; biodiversity), Goni et al. (2014; checklist), Karakoti et al. (2014; taxonomy), Kondratyuk et al. (2015; new species), Paoli et al. (2015; air pollution), Yavuz et al. (2015; epiphytes diversity), Lücking et al. (2016; classification), Motiejūnaitė et al. (2016; list), sequences are available for few species, needs generic revision.

Physma A. Massal. 1854, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, 51 species, type: *P. boryanum* (Pers.) A. Massal., asexual morph unknown, lichenized, terrestrial, worldwide, see Wedin et al. (2009; phylogeny), Diederich et al. (2010; lectotypification), Otálora et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Din et al. (2010; chemoprofile), Jayalal et al. (2013; Vietnam), Kirk et al. (2013; genus accepted), Magain and Sérusiaux (2014; drivers in lichen symbiosis), Kerr (2014; checklist), Magain and Sérusiaux (2014; partial sequence), Ekman et al. (2014; transferred to *Pannariaceae*), Aptroot and John (2015;

taxonomy), Lücking et al. (2016; classification), Ohmura et al. (2016; Japan), Rangsiruji et al. (2016; phylogeny), sequences are available but lacks for type, needs generic revision.

Physmatomyces Rehm 1900, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. compacti* E.A. Thomas ex Cif. & Tomas., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Picardella I.I. Tav. 1985, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *P. endogaea* (F. Picard) I.I. Tav., asexual morph unknown, biotrophic, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Piccolia A. Massal. 1856, *Lecanoromycetes* genera *incertae sedis*, seven species, type: *P. crocea* (Spreng.) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Pichia E.C. Hansen 1904, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, 35 species, type: *P. membranifaciens* (E.C. Hansen) E.C. Hansen, asexual reproduction is by multilateral budding, saprophytic, but a few strains are of clinical origin, insect frass from various trees, cacti, rotted fruit, spoiled fruit juice, soil, tanning liquor, sputum, cecum of a cow, human and animal feces, various clinical sources (*P. kudriavzevii* = *Candida krusei*), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), a few asexual species of this clade presently remain in *Candida*, but will be transferred to *Pichia* as new combinations, cultures and sequences are available, needs generic revision.

Picoa Vittad. 1831, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *P. juniperi* Vittad., asexual morph unknown, saprobes, hypogeous, terrestrial, worldwide, see Guecin et al. (2010; Turkey), Lumbsch and Huhndorf (2010; outline), Sbissi et al. (2010; DNA, phylogeny), Ammarellou et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Pidoplitchkoviella Kiril. 1975, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *P. terricola* Kiril., asexual morph unknown, from soil, terrestrial, British Isles/raine, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Piedraia Fonseca & Leão 1928, *Piedraiaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *P. hortae* Fonseca & Leão, asexual morph unknown, human pathogen, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Piggotia Berk. & Broome 1851, *Ascomycota* genera *incertae sedis*, three species, type: *P. astroidea* (Berk.) Berk. & Broome, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pileomyces K.L. Pang & Jheng 2012, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *P. formosanus* K.L. Pang & J.S. Jheng, asexual morph unknown, saprobes, marine, Taiwan, see Pang and Jheng (2012b; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of type: BBH 30192, BIOTEC Bangkok Herbarium.

Pilgeriella Henn. 1900, *Parodiopsidaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *P. perisporioides* Henn., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pilidium Kunze 1823 (= *Discohainesia* Nannf. 1932; *Hainesia* Ellis & Sacc. 1884; *Sclerotiopsis* Speg. 1882 *fide* Johnston et al. 2014), *Chaetomellaceae*, *Helotiales*, *Leotiomycetes*, six species, type: *P. acerinum* (Alb. & Schwein.) Kunze, coelomycetous, sexual morph formerly named in *Discohainesia*, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2013, 2015; new species), Johnston et al. (2014; nomenclature, new combination), cultures and sequences are available, available specimen and cultures for the type: CBS H-17074; CBS 736.68.

Pilophorus Th. Fr., 1857, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, 38 species, type: *P. robustus* Th. Fr., asexual morph unknown, lichenized, terrestrial, worldwide, see Wang et al. (2010, 2011a, b; new species, taxonomy), Lim et al. (2010; pyrosequencing), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequence data available, needs generic revision.

Pinatubo J.B. Manandhar & Mew 1996, *Ascomycota* genera *incertae sedis*, one species, type: *P. oryzae* J.B. Manandhar & Mew, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: ?CALP [as 'UPLB'] 10284, needs generic revision.

Piperivora Siboe, P.M. Kirk & P.F. Cannon 1999, *Ascomycota* genera *incertae sedis*, one species, type: *P. nodosa* Siboe, P.M. Kirk & P.F. Cannon, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 376523, needs generic revision.

Piricauda Bubák 1914, *Ascomycota* genera *incertae sedis*, eight species, type: *P. uleana* (Sacc. & P. Syd.) Bubák, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; outline), Whitton et al. (2012; morphology), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Piricaudilium Hol.-Jech. 1988, *Ascomycota* genera *incertae sedis*, two species, type: *P. lobatum* Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Cribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen for type: CBS H-4357, needs generic revision.

Piricaudiopsis J. Mena & Mercado 1987, *Ascomycota* genera *incertae sedis*, one species, type: *P. elegans* J. Mena & Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Zhang et al. (2014; transferred five species to new genus *Xiuguozhangia*), cultures and sequences are unavailable, needs generic revision.

Pirispora Faurel & Schotter 1966, *Ascomycota* genera *incertae sedis*, one species, type: *P. trisetosa* Faurel & Schotter, coelomycetous, sexual morph unknown, saprobes, terrestrial, Algeria, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pirostomella Sacc. 1914, *Ascomycota* genera *incertae sedis*, two species, type: *P. raimundi* Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pirottaea Sacc. 1878, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, 28 species, type: *P. veneta* Sacc. & Speg., asexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Chlebicka and Konvalinkova (2011; new species),

Kirk et al. (2013; genus accepted), cultures available but lacks for the type, needs generic revision.

Pirozynskia Subram. 1972, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. farriae* Subram., sexual morph maurodothina-like, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*), cultures and sequences unavailable, needs generic revision.

Pirozynskiella S. Hughes 2007, *Ascomycota* genera *incertae sedis*, two species, type: *P. solaninum* (Sacc. & P. Syd.) S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pisomyxa Corda 1837, *Ascomycota* genera *incertae sedis*, one species, type: *P. rhacodioides* Corda, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available but lacks for the type, needs generic revision.

Pisorisporium Réblová & J. Fourn. 2015, *Pisorisporiaceae*, *Pisorisporiales*, *Sordariomycetes*, one species, type: *P. cymbiforme* Réblová & J. Fourn., asexual morph unknown, from submerged branch, aquatic, France, Belgium, see Réblová et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type cultures available for the type: PRM 924377; CBS 138884.

Pithomyces Berk. & Broome 1873, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, c. 38 species, type: *P. flavus* Berk. & Broome, hyphomycetous, sexual morph didymella-like, saprobes, human and plant pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Irinyi et al. (2015; DNA barcodes for clinically important species), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Pithosira Petr. 1949, *Ascomycota* genera *incertae sedis*, two species, type: *P. sydowii* Petr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Ecuador, Caribbean, see Seifert et al. (2011; morphology, accepted as a genus in *Venturiaceae*), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pithya Fuckel 1870, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, five species, type: *P. cupressina* (Batsch) Fuckel, asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Pithyella Boud. 1885, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, eight species, type: *P. hypnina* (Quél.) Boud., asexual morph unknown, saprobes, on bryophytes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pittostroma Kowalski & T.N. Sieber 1992, *Ascomycota* genera *incertae sedis*, one species, type: *P. abietinum* Kowalski & T.N. Sieber, coelomycetous, sexual morph unknown, saprobes, terrestrial, Poland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: ZT, needs generic revision.

Placella Syd. 1938, *Ascomycota* genera *incertae sedis*, one species, type: *P. fraseriana* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Placidiopsis Beltr. 1858, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 20 species, type: *P. grappae* Beltr., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2010; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Placidium A. Massal. 1855, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 28 species, type: *P. michelii* A. Massal., asexual morph unknown, lichenicolous, lichenized, terrestrial, worldwide, see Gueidan et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; new species), Kirk et al. (2013; genus accepted), sequences are available for the voucher M. Prieto 702 of the type, needs generic revision.

Placoasterella Sacc. ex Theiss. & Syd. 1915, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, four species, type: *P. schweinfurthii* (Henn.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, keys, transferred to *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Placoasterina Toro 1930, *Dothideomycetes* genera *incertae sedis*, three species, type: *P. antioquiensis* Toro, asexual morph unknown, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Placocarpus Trevis. 1860, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, five species, type: *P. schaereri* (Fr.) Breuss, asexual morph unknown, lichenized, terrestrial, worldwide, see Knudsen et al. (2009; new species, USA), Moon and Aptroot (2009; new species, South Korea), Lumbsch and Huhndorf (2010; outline), Prieto et al. (2010; new species), Roux and Gueidan (2011; new specis, France), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Placocrea Syd. 1939, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *Placocrea pulchella* Syd., asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Placodiplodia Bubák 1916, *Ascomycota* genera *incertae sedis*, two species, type: *P. copelandii* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Placodothis Syd. 1928, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. petrakii* Syd., asexual morph unknown, saprobes, terrestrial, West Indies, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Placolecis Trevis 1857, *Catillariaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *P. balaniana* (Fr.) Trevis., asexual morph unknown, lichenized, terrestrial, Asia, Europe, see Lumbsch and Huhndorf (2010; outline), Rizzi et al. (2011; Sardinia), Tufan-Çetin and Sümbül (2011; taxonomy), Kirk et al. (2013; genus accepted), Aptroot and Moon (2014; Korea), Gupta et al. (2015; checklist), Sipman and Raus (2015; Greece), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Placomaronea Räsänen 1944, *Candelariaceae*, *Lecanorales*, *Lecanoromycetes*, six species, type: *P. candelarioides* Räsänen, asexual morph unknown, lichenized, terrestrial, America, Africa. See Westberg et al. (2009; monograph), Lumbsch and Huhndorf (2010; outline), Westberg and Sohrabi (2012; taxonomy), Kirk et al. (2013; genus accepted), Flakus et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Placomelan Cif. 1962, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. dipteridis* Cif., sexual morph dothidasteroma-like, epiphytes, terrestrial, see Hofmann (2009; review, accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2012, 2014; outline), cultures and sequences are unavailable, needs generic revision.

Placonema (Sacc. & D. Sacc.) Petr. 1921, *Ascomycota* genera *incertae sedis*, three species, type: *P. bambusacearum* (Sacc., Syd. & P. Syd.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Placonemina Petr. 1921, *Ascomycota* genera *incertae sedis*, one species, type: *P. dothideoides* (Mont.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Placopsis (Nyl.) Linds. 1866, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, 60 species, type: *P. gelida* (L.) Linds., asexual morph unknown, lichenized, terrestrial, worldwide, see Brackel and Berger (2010; *Polycoccum* host), Galloway (2010, 2013; taxonomy), Singh et al. (2010; ecology), de los Ríos (2011; ecophysiology), Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; taxonomy, new species), Øvstedal and Lewis Smith (2011; new species), Schnull et al. (2011; phylogeny), Raggio et al. (2012; ecophysiology), Kukwa, et al. (2012; new records), Gao and Ren (2013; new records), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Schneider et al. (2016; phylogeny), sequences are available, needs generic revision.

Placopyrenium Breuss 1987, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 22 species, type: *P. bucekii* (Nádv. & Servít) Breuss, asexual morph unknown, lichenized, terrestrial, worldwide, see Ertz et al. (2008; Europe), Gueidan et al. (2009; phylogeny), Breuss (2009; description, key), Orange (2009; partial sequence), Lumbsch and Huhndorf (2010; outline), Aptroot et al. (2010; biodiversity), Prieto et al. (2010, 2012; genus considered polyphyletic, phylogeny), Breuss (2011; Spain), Miller et al. (2011; USA), Aptroot and Yazici (2012; new species), Kirk et al. (2013; genus accepted), Valadbeigi (2014; Iran), Sipman and Raus (2015; taxonomy), Lücking et al. (2016; classification), Urbanavichus and Ismailov (2016; new records), sequences are available, needs generic revision.

Placosoma Syd. 1924, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *P. nothopanacis* Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, keys, transferred to *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: PDD 1003.

Placosphaerina Maire 1917, *Ascomycota* genera *incertae sedis*, one species, type: *P. myriospora* (Pat.) Maire, coelomycetous, sexual morph unknown, saprobes, terrestrial, Algeria, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Placostromella Petr. 1947, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *P. macrospora* Petr., asexual morph unknown, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Placothea Syd. 1931, *Ascomycota* genera *incertae sedis*, one species, type: *P. philippinensis* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Kirk et al.

(2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Placothelium Müll. Arg. 1893, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *P. staurothelioides* Müll. Arg., asexual morph unknown, lichenized, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Placothyrium Bubák 1916, *Ascomycota* genera *incertae sedis*, one species, type: *P. athyrium* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Placynthiella Elenkin 1909, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, seven species, type: *P. perfurfurea* (Nyl.) Gyeln., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Voytsekhovich et al. (2011; photobiont), Joshi et al. (2011; new records from South Korea), Kirk et al. (2013; genus accepted), Kantvilas et al. (2015; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Placynthiopsis Zahlbr. 1932, *Placynthiaceae*, *Peltigerales*, *Lecanoromycetes*, one species, type: *P. africana* Zahlbr., lichenized, terrestrial, central Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Placynthium (Ach.) Gray. 1821, *Placynthiaceae*, *Peltigerales*, *Lecanoromycetes*, 25 species, type: *P. nigrum* (Huds.) Gray, asexual morph unknown, lichenized, terrestrial, worldwide, see Øvstedal et al. (2009; new species), Wedin, et al. (2009; phylogeny), Schnull et al. (2011; phylogeny) Lumbsch and Huhndorf (2010; outline), Muggia et al. (2011; partial sequence), Westberg, et al. (2011, new records), Urbanavichus et al. (2011; new records), Wirth et al. (2011; checklist), Yatsyna (2011; new record), Hansen (2012; new records, 2014; taxonomy), Aslan (2013; new records), Kirk et al. (2013; genus accepted), Aptroot and Iqbal (2014; checklist), McCarthy and Kantvilas (2014; new species), Miadlikowska et al. (2014; phylogeny, systematics), Aptroot et al. (2015; new records), Malíček et al. (2015; taxonomy), Košuthová et al. (2016; phylogenetic relationship), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Plagiophiale Petr. 1955, *Melanconidaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *Plagiophiale eucarpa* (P. Karst.) Petr., asexual morph unknown, saprobes, North America, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Plagiosphaera Petr. 1941, *Sordariomycetes* genera *incertae sedis*, five species, type: *P. moravica* (Petr.) Petr., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Plagiostigme Syd. 1925, *Melanconidaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. couraliae* Syd., asexual morph unknown, saprobes, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Plagiostigmella Petr. 1949, *Ascomycota* genera *incertae sedis*, one species, type: *P. clypeata* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plagiostoma Fuckel 1870, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, 50 species, type: *P. euphorbiae* (Fuckel) Fuckel, asexual morph unknown, saprobes, terrestrial, tropical, see Sogonov et al. (2008; new species, phylogeny), Lumbsch and Huhndorf (2010; outline), Mejía et al. (2011; new species, phylogeny), Kirk et al. (2013; genus accepted), Walker et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, available specimen and cultures or the type: CBS H-17115; CBS 817.79.

Plagiostromella Höhn. 1917, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. pleurostoma* Höhn., asexual morph unknown, saprobes, India, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Planistroma A.W. Ramaley 1991, *Planistromellaceae*, *Botryosphaeriales*, *Dothideomycetes*, two species, type: *P. yuccigenum* A.W. Ramaley, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Minnis et al. (2012; treated as a synonym of *Kellermania*), Kirk et al. (2013; genus accepted), Monkai et al. (2013; treated as a distinct genus), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Plasia Sherwood 1981, *Ascomycota* genera *incertae sedis*, one species, type: *P. ramicola* (Cooke & Masee) Sherwood, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Platismatia W.L. Culb. & C.F. Culb. 1968, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, ten species, type: *P. glauca* (L.) W.L. Culb. & C.F. Culb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Thell et al. (2012; phylogeny, accepted as a genus in *Parmeliaceae*), Kirk et al. (2013; genus accepted), Mitrovic et al. (2014; antimicrobial properties), cultures available for the type: AFTOL-ID 201, needs generic revision.

Platychora Petr. 1925, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. ulmi* (J. Schröt.) Petr., asexual morph coelomycetous, lichenized, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, 2016; accepted as a genus in *Didymellaceae*, coelomycetous), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Platygramme Fée 1874, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 30 species, type: *Platygramme caesiopruinosa* (Fée) Fée, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2014, 2016; phylogeny, classification), cultures and sequences are available, needs generic revision.

Platypeltella Petr. 1929, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, three species, type: *P. smilacis* Petr., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Microthyriaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hongsanan et al. (2014; keys, accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Asterinaceae*), Wu et al. (2014; taxonomy, transferred to *Asterinaceae*), cultures and sequences are unavailable, holotype of type: W 257.

Platysporoides (Wehm.) Shoemaker & C.E. Babc., *Can. J. Bot.* 1992, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, twelve species, type: *P. chartarum* (Fuckel) Shoemaker & C.E. Babc., asexual morph unknown, saprobes, terrestrial, California, Europe and India, See Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; taxonomy), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Platythecium Staiger 2002, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 25 species, type: *P. grammitis* (Fée) Staiger, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Neuwirth et al. (2017; key), cultures and sequences are available, needs generic revision.

Platytrachelon Réblová 2013, *Sordariomycetes* genera *incertae sedis*, one species, type: *P. abietis* (Réblová) Réblová, asexual morph unknown, saprobes, Czech Republic, Ukraine, see Réblová (2013; taxonomy phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, holotype and cultures available for the type: PRM 842974; CBS 125235.

Plectania Fuckel 1870, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, c. 20 species, type: *P. melastoma* (Sowerby) Fuckel, asexual morph conoplea-like, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Plectocarpon Fée 1825, *Lecanographaceae*, *Arthoniales*, *Arthoniomycetes*, 37 species, type: *P. pseudosticta* (Fée) Fée, sexual morph with mainly multilocular-lirelliform stromatic ascomata, lichenicolous (only one lichenized), terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Frisch et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available but lacks for the type.

Plectomyces Thaxt. 1931, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *P. gracilis* Thaxt., asexual morph unknown, saprobes, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Plectonaemella Höhn. 1915, *Ascomycota* genera *incertae sedis*, one species, type: *P. fuckeliana* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plectopeltis Syd. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *P. egenula* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plectophomopsis Petr. 1922, *Ascomycota* genera *incertae sedis*, one species, type: *P. rivularis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plectosira Petr. 1929, *Ascomycota* genera *incertae sedis*, one species, type: *P. adeana* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Plectosphaerella Kleb. 1929 (= *Plectosporium* M.E. Palm et al. 1995 *vide* Maharachchikumbura et al. 2015, 2016; Réblová et al. 2016), *Plectosphaerellaceae*, *Glomerellales*, *Sordariomycetes*, 13 species, type: *P. cucumeris* Kleb., asexual morph formerly known in *Plectosporium*, pathogens, nematophagous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Carlucci et al. (2012; new species, phylogeny), Liu et al. (2013; new species), Kirk et al. (2013; genus accepted), Crous et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Réblová et al. (2016; nomenclature), cultures and sequences are available but lacks for the type, needs generic revision.

Plectronidiopsis Nag Raj 1979, *Ascomycota* genera *incertae sedis*, one species, type: *P. chilensis* (Speg.) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial,

Chile, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plectronidium Nag Raj 1977, *Ascomycota* genera *incertae sedis*, four species, type: *P. sinense* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plectrothrix Shear 1902, *Ascomycota* genera *incertae sedis*, one species, type: *P. globosa* Shear, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleiochaeta (Sacc.) S. Hughes 1951, *Pleosporineae*, *Pleosporales*, *Dothideomycetes*, four species, type: *P. setosa* (Kirchn.) S. Hughes, hyphomycetous, sexual morph unknown, pathogens, saprobes, terrestrial, North America, see Garibaldi et al. (2012; pathogens, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Gur and Frenkel (2015; pathogens, DNA), Cultures and sequences are available, cultures available for the type: DB50112 (Garibaldi et al. 2012), type specimen of type: CBS H-17161.

Pleioapatella Rehm 1908, *Helotiales* genera *Incertae sedis*, *Leotiomyces*, one species, type: *P. harperi* Rehm, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleioptomellina Bat., J.L. Bezerra & H. Maia 1964, *Dothideomycetes* genera *incertae sedis*, one species, type: *Pleioptomellina pernambucensis* Bat., J.L. Bezerra & Cavalc., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Plenocatenulis Bat. & Cif. 1959, *Ascomycota* genera *incertae sedis*, one species, type: *P. magnoliae* Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plenodomus Preuss 1851, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 18 species, type: *P. lingam* (Tode: Fr.) Höhn., asexual morph coelomycetous, pathogens, saprobes, terrestrial, worldwide, see de Gruyter et al. (2013; taxonomy, phylogeny, treated *Plenodomus rabenhorstii* Preuss as a nom. Dub. and reduced under *Plenodomus lingam*), Hyde et al. (2013; accepted as a genus in *Leptosphaeriaceae*), Wijayawardene et al. (2014, 2016; outline), Ariyawansa et al. (2015; phylogeny), Cultures and sequences are available, cultures available for the type: CBS 260.94 (de Gruyter et al. 2013), needs generic revision.

Plenophysa Syd. & P. Syd. 1920, *Ascomycota* genera *incertae sedis*, one species, type: *P. mirabilis* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, Sri Lanka, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plenotrichaius Bat. & Valle 1961, *Ascomycota* genera *incertae sedis*, one species, type: *P. swartziae* Bat. & Valle, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plenotrichopsis Bat. 1961, *Ascomycota* genera *incertae sedis*, one species, type: *P. coffeae* Bat., H. Maia & C.T. Vasconc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plenotrichum Syd. 1927, *Ascomycota* genera *incertae sedis*, two species, type: *P. mirabile* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, China,

see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plenozythia Syd. & P. Syd. 1916, *Ascomycota* genera *incertae sedis*, two species, type: *P. euphorbiae* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleochaeta Sacc. & Speg. 1881 emend. Kimbrough & Korf 1963, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, five species, type: *P. lyncckii* (Speg.) Speg., sexual and hyphomycetous asexual morphs, biotrophic, obligate plant pathogens, terrestrial, Asia, North and South America, see Lumbsch and Huhndorf (2010; outline), Lee et al. (2011; phylogeny, Korea), Kirk et al. (2013; genus accepted), Takamatsu (2013, 2016; phylogeny, phenotypic evolution), sequences for non-type material of the type species are available, holotype of type: C.L. Spegazini (LPS), needs generic revision.

Pleocouturea G. Arnaud 1911, *Ascomycota* genera *incertae sedis*, two species, type: *P. castagnei* G. Arnaud, coelomycetous, sexual morph unknown, saprobes, terrestrial, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleocryptospora J. Reid & C. Booth 1969, *Sordariomycetes* genera *incertae sedis*, two species, type: *Pleocryptospora bambusae* (Speg.) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Pleogibberella Sacc. ex Berl. & Voglino 1886, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *P. calamia* (Cooke) Berl. & Voglino, asexual morph unknown, saprobe, saprobes, terrestrial, India, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pleomeliola (Sacc.) Sacc. 1899, *Ascomycota* genera *incertae sedis*, one species, type: *P. fenestrata* (Cooke & Ellis) Sacc., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae*), cultures and sequences are unavailable, needs generic revision.

Pleomelogramma Speg. 1909, *Herpotrichiellaceae*, *Chaetothyriales*, *Chaetothyriomycetes*, one species, type: *P. argentinensis* Speg., asexual morph unknown, saprobes, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleomerium Speg. 1918, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. fuscoviridescens* (Rehm) Speg., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae* and placed in *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.

Pleopsidium Körb. 1855, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, four species, type: *P. flavum* Körb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Knudsen (2011; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Pleoscutula Vouaux 1913, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *P. arsenii* Vouaux, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available but lacks for the type, needs generic revision.

Pleoseptum A.W. Ramaley & M.E. Barr 1995, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. yuccaesedum* A.W. Ramaley & M.E. Barr, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; excluded from *Phaeosphaeriaceae* and placed in *Pleosporaceae*), Wijayawardene et al. (2014; accepted as a genus in *Pleosporaceae*), Ariyawansa et al. (2015; did not accept as *Pleosporaceae*), cultures and sequences are unavailable, holotype of the type: BPI 802381, needs generic revision.

Pleosphaerellula Naumov & Czerepan. 1952, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *P. cornicola* Naumov & Czerepan., asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as *Pleosporales*), cultures and sequences are unavailable, needs generic revision.

Pleosphaeria Speg. 1881, *Sordariomycetes* genera *incertae sedis*, 15 species, type: *P. australis* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pleotrichiella Sivan. 1984, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. australiensis* Sivan., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Plesiospora Drechsler 1971, *Ascomycota* genera *incertae sedis*, one species, type: *P. globosa* Drechsler, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleuroascus Masee & E.S. Salmon 1901, *Pseudeurotiaceae*, *Leotiomycetes* families *incertae sedis*, eleven species, type: *P. nicholsonii* Masee & E.S. Salmon, saprobes, from soil, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Crous et al. (2013; new species), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 345.73 (*vide* Malloch et al. 2016), available specimen for type: CBS H-7657, needs generic revision.

Pleuroceras Riess 1854, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, twelve species, type: *P. ciliatum* Riess, asexual morph unknown, saprobes, terrestrial, north temperate, see Mejia et al. (2008; DNA, phylogeny), Sogonov et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type:, needs generic revision.

Pleurocytopora Petr. 1923, *Ascomycota* genera *incertae sedis*, three species, type: *P. vestita* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleurodesmospora Samson, W. Gams & H.C. Evans 1979, *Ascomycota* genera *incertae sedis*, one species, type: *P. coccorum* (Petch) Samson, W. Gams & H.C. Evans, hyphomycetous, sexual morph unknown, parasites, on insects (*Aleyrodes*, aphids, leaf hoppers), mites (*Tydeus*, *Paratetranychus*) and fungi (*Meliola*), Africa, Asia, Central America, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleurodiscula Höhn. 1926, *Ascomycota* genera *incertae sedis*, one species, type: *P. neglecta* (Desm.) Höhn, coelomycetous, sexual morph unknown, saprobes, Europe, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleurodomus Petr. 1934, *Ascomycota* genera *incertae sedis*, one species, type: *P. humuli* Petr., coelomycetous, sexual morph unknown, saprobes, on decaying stems of *Humuli lupuli*, Siberia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleuropedium Marvanová & S.H. Iqbal., 1973, *Ascomycota* genera *incertae sedis*, three species, type: *P. tricladioides* Marvanová & S.H. Iqbal, sexual morph unknown, on submerged dead *Juncus effusus* axes and from foam in mountain streams, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: BRNU 445.796

Pleurophoma Höhn. 1914, *Lentitheciaceae*, *Pleosporales*, *Dothideomycetes*, nine species, type: *P. pleurospora* (Sacc.) Höhn., sexual morph unknown, saprobes, terrestrial, UK, see Wijayawardene et al. (2012, 2017; outline), de Gruyter et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Crous et al. (2015, 2016; new species, phylogeny), cultures and sequences are available, cultures available for the type: CBS 130329, needs generic revision.

Pleurophomopsis Petr. 1924, *Ascomycota* genera *incertae sedis*, seven species, type: *P. salicicola* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Pleurophragmium Costantin 1888, *Sordariomycetes* genera *incertae sedis*, 29 species, type: *P. bicolor* Costantin, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widely distributed, see Réblová (2009; phylogeny), D'Souza and Bhat (2012; key), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline), Dai et al. (2016; morphology, phylogeny), cultures and sequences are available but lacks for type, needs generic revision.

Pleuroplaconema Petr. 1923, *Ascomycota* genera *incertae sedis*, two species, type: *P. sambuci* Petr., coelomycetous, sexual morph unknown, endophytes, Europe and Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleuroplacosphaeria Syd. 1928, *Ascomycota* genera *incertae sedis*, one species, type: *P. negeriana* Syd., coelomycetous, sexual morph unknown, saprobes, Chile, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleurosticta Petr. 1931, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *P. lichenicola* Petr., asexual morph unknown, lichenized, terrestrial, Asia, Europe, Africa, see Lumbsch and Huhndorf (2010; outline), Crespo et al. (2011; generic concept), Hawksworth et al. (2011; checklist), Schnull et al. (2011; sequence), Vicol (2012; Romania), Matwiejuk and Korobkiewicz (2012; taxonomy), Kirk et al. (2013; genus accepted), Millot et al. (2014; cancer), Lumbsch (2014; taxonomy), Favero-Longo et al. (2015; saxicolous community), Papazi et al. (2015; symbiosis), Kaźmierska. and Kossowska (2016; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pleurostoma Tul. & C. Tul. 1863 (= *Pleurostomophora* Vijaykr. et al. 2004 *fide* Maharachchikumbura et al. 2015, 2016; Réblová et al. 2016), *Pleurostomataceae*, *Calosphaeriales*, *Sordariomycetes*, seven species, type: *P. candollei* Tul. & C. Tul., asexual morph hyphomycetous, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2015, 2016; new species, nomenclature), cultures and sequences are available but lacks for the type, needs generic revision.

Pleurostromella Petr. 1922, *Ascomycota* genera *incertae sedis*, 15 species, type: *P. ulmicola* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleurotheciella Réblová, Seifert & J. Fourn. 2012, *Pleurotheciaceae*, *Pleurotheciales*, *Sordariomycetes*, nine species, type: *P. rivularia* Réblová, Seifert & J. Fourn., asexual morph hyphomycetous, saprobes, terrestrial, Europe, Canada, see Réblová et al. (2012; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type cultures of the type: PRM 899852; CBS 125238.

Pleurotheciopsis B. Sutton 1973, *Ascomycota* genera *incertae sedis*, seven species, type: *P. pusilla* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, on litter (*Calophyllum*, *Castanea*, *Rubus*) and bank (*Betula*, *Ilex*, *Salix*), Caribbean, Europe, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: IMI 168990, needs generic revision.

Pleurothecium Höhn. 1919, *Pleurotheciaceae*, *Pleurotheciales*, *Sordariomycetes*, nine species, type: *P. recurvatum* (Morgan) Höhn., asexual morph hyphomycetous, saprobes, terrestrial, Europe, Canada, see Wu and Zhang (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Réblová et al. (2012, 2016; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 138686, needs generic revision.

Pleurothyriella Petr. & Syd. 1925, *Ascomycota* genera *incertae sedis*, one species, type: *P. pinastri* (Oudem.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pleurovularia R. Kirschner & U. Braun 2002, *Ascomycota* genera *incertae sedis*, one species, type: *P. pollinae* (Henn.) R. Kirschner & U. Braun (\equiv *Ovularia pollinae* Henn.), hyphomycetous, terrestrial, plant pathogens, Asia, see Seifert (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of type: Yoshinaga 25 (B).

Pliariona A. Massal. 1860, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *P. montagnei* (Bosch) A. Massal., asexual morph unknown, lichenized, terrestrial, tropical, see Rivas Plata et al. (2013; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Plicaria Fuckel 1870, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, ten species, type: *P. trachycarpa* (Curr.) Boud., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: DAOM 195830, genus needs revision since it is polyphyletic.

Plochmopeltis Theiss. 1914, *Schizothyriaceae*, *Dothideomycetes* families *incertae sedis*, five species, type: *P. intricata* (Ellis & G. Martin) Theiss., asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013, accepted as a genus in *Schizothyriaceae*), Wijayawardene et al. (2014; outline), Phookamsak et al. (2015; taxonomy), cultures and sequences are unavailable, needs generic revision.

Ploettnera Henn. 1900, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, five species, type: *P. caeruleoviridis* (Rehm) Henn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ploioderma Darker 1967 (= *Cryocaligula* Minter 1986 *fide* Johnston et al. 2014), *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, seven species, type: *P. hedgcockii* (Dearn.) Darker, asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Shi et al. (2010; new species, China), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available but lacks for the type, needs generic revision.

Plokamidomyces Bat., C.A.A. Costa & Cif. 1957, *Euantennariaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *P. colensoi* Bat., C.A.A. Costa & Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Oceania, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plowrightia Sacc., *Dothideaceae*, *Dothideales*, *Dothideomycetes*, more than 50 species, type: *P. ribesia* (Pers.) Sacc., asexual morph coelomycetous, parasitic or saprobes on leaves, twigs and wood in terrestrial habitats, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2014b; phylogeny), Wijayawardene et al. (2014; outline), sequence data available for two species, holotype of type: cannot be located.

Plurisperma Sivan. 1970, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *P. dalbergiae* Sivan., asexual morph unknown, saprobes, terrestrial, Pakistan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Plurispermopsis Pereira-Carv., Inácio & Dianese 2010, *Capnodiaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. cerradensis* Pereira-Carvalho, Inacio & Dianese, asexual morph unknown, saprobes, terrestrial, Brazil, see Pereira-Carvalho et al. (2010; taxonomy), cultures and sequences are unavailable, needs generic revision.

Pneumocystis Delanoë & Delanoë 1912, *Pneumocystidaceae*, *Pneumocystidales*, *Pneumocystidomycetes*, five species, type: *P. carinii* P. Delanoë & Delanoë, asexual reproduction occurs by binary fission, pathogens, on mammals (frequent cause of pneumonia in HIV/AIDS patients), worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Poaceicola W.J. Li, Camporesi, D.J. Bhat & K.D. Hyde 2015, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *P. arundinis* W.J. Li, Camporesi, D.J. Bhat & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Italy, see Li et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016; taxonomy, phylogeny), Hyde et al. (2016; taxonomy, phylogeny), holotype of the type: MFLU 15–0702.

Pochonia Bat. & O.M. Fonseca 1965, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *P. humicola* Bat. & O.M. Fonseca, asexual morph unknown, saprobes, from soil, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Nonaka et al. (2013; new species, Japan), Huang et al. (2015; new species, Tibet, China), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, type specimen of type: CBS H-7885, needs generic revision.

Pocillopyncis Dyko & B. Sutton 1979, *Ascomycota* genera *incertae sedis*, one species, type: *P. umensis* (Bubák & Vleugel) Dyko & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Sweden, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pocillum De Not. 1864, *Vibrissaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. cesatii* (Mont.) De Not., asexual morph unknown, saprobes on fruits and leaves, Europe and America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), DNA sequences and cultures unavailable, needs generic revision.

Poculinia Spooner 1987, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. nothofagi* (Rodway) Spooner, asexual morph unknown, saprobes, terrestrial, Tasmania, see

Lumbsch and Huhndorf (2010; outline, listed as *Poculina*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Poculopsis Kirschst. 1935, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. ogrensis* Kirschst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Podocapsa Tiegh. 1887, *Ascomycota* genera *incertae sedis*, one species, type: *P. palmata* Tiegh., asexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pododimeria E. Müll. 1959, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, four species, type: *P. gallica* E. Müll., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Podonectria Petch 1921, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, nine species, type: *P. coccicola* (Ellis & Everh.) Petch, asexual morph unknown, associated with scale insects, widespread in tropical regions, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Podophacidium Niessl 1868, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *P. terrestre* Niessl, asexual morph unknown, saprobes, terrestrial, Europe, North America see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Podoplaconema Petr. 1921, *Ascomycota* genera *incertae sedis*, one species, type: *P. melaenum* (Fr.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2014; genus accepted, in *Dothideaceae*), Hyde et al. (2013; genus accepted, in *Dothideaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; listed genus as *Ascomycota*), cultures and sequences are unavailable, isosyntype of type: B (also distributed in *Scleromyceti Suecicae* no. 200), needs generic revision.

Podosordaria Ellis & Holw. 1897, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. mexicana* Ellis & Holw., asexual morph hyphomycetous, saprobes, coprophilous, terrestrial, worldwide, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; phylogeny), sequences are available for the voucher 176 (WSP) of the type, needs generic revision.

Podosphaera Kunze 1823 emend. Braun & Takamatsu 2000, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, 95 species, type: *P. myrtillina* (Schub.: Fr.) Kunze, sexual and hyphomycetous asexual morphs, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Braun and Cook (2012; taxonomy), Kirk et al. (2013; genus accepted), sequences for non-type species available, neotype of type: Fungi Saxon. Exs. 72b. (HAL).

Podospora Ces. 1856, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, c. 100 species, type: *P. fimiseda* (Ces. & De Not.) Niessl, asexual morph consist of dark celled phialides such as *Cladorrhinum*, *Phialophora*, *Rhizoctonia*, *Ramophialophora*, saprobes on dung of animals, worldwide, see Doveri (2008; key), Lumbsch and Huhndorf (2010; outline), Chang et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Kruys et al. (2015; phylogeny), about 24 species have sequence data, cultures available for the type: CBS 482.64, needs generic revision.

Podosporiella Ellis & Everh. 1895, *Ascomycota* genera *incertae sedis*, four species, type: *P. humilis* Ellis & Everh, hyphomycetous, sexual morph unknown, saprobes, on leaves (*Garry, Faurea*), Africa, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Podosporium Schwein. 1832, *Ascomycota* genera *incertae sedis*, 67 species, type: *P. rigidum* Schwein, hyphomycetous, sexual morph unknown, saprobes, on dead stems and litter (*Ampelopsis, Bambusa, Rhus* and others), terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Podostictina Clem. 1909, *Lobariaceae, Peltigerales, Lecanoromycetes*, six species, type: *P. endochrysooides* (Müll. Arg.) Clem., lichenized, see Moncada et al. (2013a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Podotara Malcolm & Vězda 1996, *Pilocarpaceae, Lecanorales, Lecanoromycetes*, one species, type: *P. pilophoriformis* Malcolm & Vězda, asexual morph unknown, lichenized, terrestrial, New Zealand, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type: CHR 486638.

Poeltiaria Hertel 1984, *Lecideaceae, Lecideales, Lecanoromycetes*, six species, type: *P. turgescens* (Körb.) Hertel, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Fryday and Hertel (2014; new species, Antarctica, Tasmania), Lücking et al. (2016; classification), cultures and sequences are available for an unidentified species but lacks for the type, needs generic revision.

Poeltidea Hertel & Hafellner 1984, *Lecideaceae, Lecideales, Lecanoromycetes*, three species, type: *P. perusta* (Nyl.) Hertel & Hafellner, asexual morph unknown, lichenized, terrestrial, Kerguelen, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Fryday and Hertel (2014; new species, New Zealand), Lücking et al. (2016; classification), cultures and sequences are unavailable, lectotype of type: BM.

Poeltinula Hafellner 1984, *Rhizocarpaceae, Rhizocarpales, Lecanoromycetes*, two species, type: *P. cerebrina* (DC.) Hafellner, asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Poetschia Körb. 1861, *Patellariaceae, Patellariales, Dothideomycetes*, four species, type: *P. buellioides* Körb., asexual morph unknown, saprobes, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; taxonomy), cultures and sequences are unavailable, needs generic revision.

Poikilosperma Bat. & J.L. Bezerra 1961, *Ascomycota* genera *incertae sedis*, one species, type: *P. scutellare* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, on leaves of *Brosimum*, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Polaroscyphus Huhtinen 1987, *Hyaloscyphaceae, Helotiales, Leotiomyces*, one species, type: *P. spetsbergianus* Huhtinen, asexual morph unknown, saprobes, terrestrial, Svalbard, Norway, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Polistroma Clemente 1807, *Graphidaceae, Ostropales, Lecanoromycetes*, one species, type: *P. fernandezii* Clemente, asexual morph unknown, lichenized, terrestrial, tropical, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lumbsch et al. (2014; did not accept in *Graphidaceae*), Lücking et al. (2016; classification), sequences and cultures are unavailable, needs generic revision.

Polyancora Voglmayr & Yule. 2006, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. globosa* Voglmayr & Yule, sexual morph unknown, saprobes, submerged leaves, Peninsular Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type strains of type: WU 26489; CBS 118182.

Polyandromyces Thaxt. 1920, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *P. coptosomatis* Thaxt., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Polyascomyces Thaxt. 1900, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *P. trichophyae* Thaxt., asexual morph unknown, saprobes, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Polyblastia A. Massal. 1852, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 120 species, type: *P. cupularis* A. Massal., asexual morph unknown, saprobes, terrestrial, worldwide, see Savić et al. (2008; phylogeny), Lumbsch and Huhndorf (2010; outline), Savić and Leif (2012; northern Europe, adjacent Arctic), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Polyblastidium Kalb 2015, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, 18 species, type: *P. japonicum* (M. Satō) Kalb, lichenized, worldwide, see Mongkolsuk et al. (2015; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Polybulbophiale Goh & K.D. Hyde 1998, *Ascomycota* genera *incertae sedis*, one species, type: *P. palmicola* Goh & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, on palm petiole (*Licuala*), Brunei, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: HKU (M) 4717, needs generic revision.

Polycauliona Hue 1908, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 25 species, type: *P. regalis* (Vain.) Hue, lichenized, see Arup et al. (2013; phylogeny), Kondratyuk et al. (2014b; phylogeny), Jaklitsch et al. (2016a; notes), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Polycephalomyces Kobayasi 1941, *Ophiocordycipitaceae*, *Hypocreales*, *Sordariomycetes*, twelve species, type: *P. formosus* Kobayasi, hyphomycetous, on insects, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kepler et al. (2013; new species), Kirk et al. (2013; genus accepted), Matošec et al. (2014; revision), Quandt et al. (2014; nomenclature), cultures and sequences are available.

Polychaetella Speg. 1918, *Ascomycota* genera *incertae sedis*, three species, type: *P. schweinitzii* (Berk. & Desm.) Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Polychidium (Ach.) Gray 1821, *Massalongiaceae*, *Peltigerales*, *Lecanoromycetes*, c. 10 species, type: *P. muscicola* (Sw.) Gray, asexual morph unknown, lichenized, terrestrial, worldwide, see Wedin et al. (2009; phylogeny), Hansen (2009; Iceland), Lumbsch and Huhndorf (2010; outline), Muggia et al. (2011; phylogeny, systematics), Anderson and Neily (2012; Nova Scotia), Jayalal et al. (2012; new records), Kirk et al. (2013; genus accepted), Aptroot (2016; checklist), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Polycladium Ingold. 1959, *Ascomycota* genera *incertae sedis*, one species, type: *P. equiseti* Ingold, sexual morph unknown, found on dead internodes of *Equisetum fluviatile*, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of type: IMI 73532.

Polyclypeolina Bat. & I.H. Lima 1959, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. brideliae* (Hansf.) Bat., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Aulographaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Aulographaceae*), Hyde et al. (2013; review, excluded from *Aulographaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*), cultures and sequences are unavailable, holotype of type: K(M) 177972.

Polycoccum Saut. ex Körb. 1865, *Polycoccaceae*, *Trypetheliales*, *Dothideomycetes*, 66 species, type: *P. sauteri* Körb., asexual morph unknown, saprobes, lichenicolous, terrestrial, worldwide, see Halc et al. (2009; new species), Etayo (2010; new species), Brackel and Berger (2010; new species), Lumbsch and Huhndorf (2010; outline), Zhurbenko and Dillman (2010; new species), van den Boom (2012; new species), Hyde et al. (2013; outline, accepted as a genus in *Dacampiaceae*), Halici et al. (2013; new species, Turkey), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Ertz et al. (2015; phylogeny, introduced *Polycoccaceae*), Hafellner (2015; new species), cultures and sequences are available but lacks for the type, needs generic revision.

Polycyclina Theiss. & Syd. 1915, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, one species, type: *P. rhytismoides* (Speg.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Polycyclinopsis Bat., A.F. Vital & I.H. Lima 1958, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. solani* Bat., A.F. Vital & I.H. Lima, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Dothideomycetes* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Polycyclus Höhn. 1909, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, two species, type species: *P. andinus* (Pat.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, São Paulo, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Polydesmia Boud. 1885, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, seven species, type: *P. pruinosa* (Berk. & Broome) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Polydesmus Mont. 1845, *Ascomycota* genera *incertae sedis*, 14 species, type: *P. elegans* Durieu & Mont., hyphomycetous, sexual morph unknown, saprobes, terrestrial, American, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Polydiscidium Wakef. 1934, *Helotiaceae*, *Helotiales*, *Leotiomyces*, seven species, type: *P. martynii* Wakef., asexual morph unknown, saprobes, Africa, Guyana, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Polydiscina Syd. 1930, *Helotiales* genera *Incertae sedis*, *Leotiomyces*, one species, type: *P. boliviana* Syd., asexual morph unknown, saprobes, terrestrial, Bolivia, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Polyetron Bat. & Peres 1963, *Ascomycota* genera *incertae sedis*, one species, type: *P. myrtaceicola* Bat. & Peres, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Polylobatispora Matsush. 1996, *Ascomycota* genera *incertae sedis*, two species, type: *P. deltoidea* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: Matsushima Fungus Collection, Kobe, 5T195, needs generic revision.

Polymeridium (Müll. Arg.) R.C. Harris 1980, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, 50 species, type: *P. contendens* (Nyl.) R.C. Harris, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot and Cáceres (2014; key), Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Polypedia Bat. & Peres 1959, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *P. leopoldinensis* Bat. & Peres, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013; not accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; not accepted as a genus in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Polyphialoseptoria Quaedvl., R.W. Barreto, Verkley & Crous 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. terminaliae* Quaedvlieg, R.W. Barreto, Verkley & Crous, coelomycetous, sexual morph unknown, pathogens, terrestrial, Brazil, see Quaedvlieg et al. (2013; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of the type: CBS H-21298; CBS 135106.

Polyplosphaeria Kaz. Tanaka & K. Hiray. 2009, *Tetraplosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. fusca* Kaz. Tanaka & K. Hiray., asexual morph hyphomycetous, saprobes, terrestrial, Japan, Thailand, see Tanaka et al. (2009; morphology, phylogeny), Li et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type: HHUF 29399; JCM 13175.

Polypyrenula D. Hawksw. 1985, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, one species, type: *P. sexlocularis* (Müll. Arg.) D. Hawksw., asexual morph unknown, on bark, doubtfully lichenized, terrestrial, Caribbean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type: G.

Polyrhizon Theiss., Syd. & P. Syd. 1914, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. terminaliae* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, India, South Africa, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Polyrostrata T.P. Devi & N. Mathur 2009, *Ascomycota* genera *incertae sedis*, two species, type: *P. indica* T.P. Devi & N. Mathur, coelomycetous, sexual morph unknown, pathogens, terrestrial, India, see Mathur et al. (2009; taxonomy), Wijayawardene et al. (2016; outline), cultures and sequences are unavailable, holotype of the type: HClO 46892, needs generic revision.

Polyschema H.P. Upadhyay 1966, *Latoruaceae*, *Pleosporales*, *Dothideomycetes*, 21 species, type: *P. terricola* H.P. Upadhyay 1966, hyphomycetous, sexual morph not unknown,

Saprobies, one species from human clinical sample, terrestrial, cosmopolitan, see Mota et al. (2008; new species, key), Castañeda Ruíz et al. (2009; new species), Shenoy et al. (2010; monophyly within *Pleosporales*), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015; placement in *Latoruaceae*), ex-type culture of the type: CBS 301.65.

Polyscytalum Riess 1853, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, 13 species, type: *P. fecundissimum* Riess, hyphomycetous, saprobies, pathogens, terrestrial, worldwide, see Cheewangkoon et al. (2009; new species, Portugal), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), Senanayake et al. (2015; phylogeny), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-6049; CBS 100506.

Polysporidiella Petr. 1960, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. iranica* Petr., asexual morph unknown, saprobies, terrestrial, Iran, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Polysporina Vězda [nom.cons.] 1978, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, ten species, type: *P. simplex* (Taylor) Vězda, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Polystigma DC. 1815 (= *Polystigmina* Sacc. 1884, *Rhodoseptoria* Naumov 1913 *fide* Maharachchikumbura et al. 2015, 2016; Réblová et al. 2016), *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, 25 species, type: *Polystigma rubrum* (Pers.) DC., pathogens, worldwide, see Suzuki et al. (2008; pathogens, Japan), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Habibi and Banihashemi (2015, 2016; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Polystomellina Bat. & A.F. Vital 1958, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. didymopanacis* Bat. & A.F. Vital, asexual morph unknown, saprobies, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Dothideomycetes* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Polystomellomyces Bat. 1959, *Ascomycota* genera *incertae sedis*, one species, type: *P. atheniensis* Bat., coelomycetous, sexual morph unknown, saprobies, terrestrial, Greece, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Polystomellopsis F. Stevens 1924 [1923], *Dothideomycetes* genera *incertae sedis*, one species, type: *P. mirabilis* F. Stevens, asexual morph unknown, saprobies, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Polystratorictus Matsush. 1993, *Ascomycota* genera *incertae sedis*, two species, type: *P. fusarioideus* Matsush., hyphomycetous, sexual morph unknown, saprobies, terrestrial, Peru, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Matsushima Fungus Collection, Kobe, 0P-353, needs generic revision.

Polythrincium Kunze 1817 (= *Cymadothea* F.A. Wolf 1935 *fide* Wijayawardene et al. 2014; Rossmann et al. 2015), *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, type: *Polythrincium trifolii* Kunze, hyphomycetous, sexual morph *Cymadothea*, saprobies,

terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline, sexual morph), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; nomenclature), Rossman et al. (2015; nomenclature), cultures and sequences are available.

Polytolypa J.A. Scott & Malloch 1993, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *P. hystricis* J.A. Scott & Malloch, asexual morph unknown, coprophilous, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hirooka et al. (2016; phylogeny), cultures and sequences are available, cultures available for the type: UAMH 7299, holotype of type: TRTC 51349.

Polytretophora Mercado 1983, *Ascomycota* genera *incertae sedis*, one species, type: *P. calcarata* Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pontogeneia Kohlm. 1975, *Koralionastetaceae*, *Koralionastetales*, *Sordariomycetes*, eight species, type: *P. padinae* Kohlm., asexual morph unknown, saprobes, marine, worldwide, Campbell et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequence data available for one species, holotype of type: J.K. 3541a = 00985934, NYBG.

Pontoporeia Kohlm. 1963, *Haloththiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. biturbinata* (Durieu & Mont.) Kohlm., asexual morph coelomycetous, saprobes, marine, Mediterranean Sea, see Jones et al. (2009, 2015; classification), Suetrong et al. (2009; phylogeny, morphology), Zhang et al. (2012, 2013; morphology, phylogeny), Hyde et al. (2013; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, nomenclature), cultures and sequences are available, needs generic revision.

Populocrescentia Wanasinghe, E.B.G. Jones & K.D. Hyde 2015, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. forlicesenensis* Wanas., Camporesi, E.B.G. Jones & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Europe, Russia, see Ariyawansa et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strains of type: MFLU 15-1504; MFLUCC 14-0651.

Porina Müll. Arg. [nom.cons.] 1883, *Porinaceae*, *Ostropales*, *Lecanoromycetes*, 140 species, type: *P. nucula* Ach., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Porobeltraniella Gusmão 2004, *Beltraniaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. porosa* (Piroz. & S.D. Patil) Gusmão, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Grandi and da Silva (2014; South America), Maharachchikumbura et al. (2015, 2016; outline), Rajeshkumar et al. (2016; phylogeny), cultures and sequences are available, available specimen and cultures available for the type: IMI 234741; NFCCI 3994 (Rajeshkumar et al. 2016).

Porocercospora Amaradasa, Amundsen, Madrid & Crous 2014, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. seminalis* (Ellis & Everh.) Amaradasa, Amundsen, H. Madrid & Crous, hyphomycetous, sexual morph unknown, pathogens, USA, see Amaradasa et al. (2014; morphology, phylogeny), cultures and sequences are available, epitype and ex-epitype culture of type: CBS H-21149, CBS 134906.

Porocladium Descals., 1976, *Ascomycota* genera *incertae sedis*, one species, type: *P. aquaticum* Descals, hyphomycetous, sexual morph unknown, saprobes, terrestrial, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 199900.

Porocyphus Körb. 1855, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, eight species, type: *P. coccodes* Flot. ex Körb., asexual morph unknown, lichenized, terrestrial, worldwide, see Högnabba et al. (2009; evolution of photobiont), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type, needs generic revision.

Poroleprieuria M.C. González, Hanlin, Ulloa & Elv. Aguirre 2004, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. rogersii* M.C. González, Hanlin, Ulloa & Elv. Aguirre, asexual morph hyphomycetous, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; phylogeny), cultures and sequences are unavailable, holotype of the type: MEXU 23019.

Poronia Willd. 1787, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. gleditschii* Willd., asexual morph unknown, saprobes, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hembrom et al. (2013; new species, India), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; phylogeny), cultures and sequences are available but lacks for the type:, needs generic revision.

Poropeltis Henn. 1904, *Ascomycota* genera *incertae sedis*, one species, type: *P. davillae* Henn., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Porophilomyces U. Braun 2000, *Ascomycota* genera *incertae sedis*, one species, type: *P. poricola* (Bonar) U. Braun, hyphomycetous, terrestrial, fungiicolous, North America, see Seifert (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype and isolectotype of type: UC 1272179; UC 568840.

Porophoromyces Thaxt. 1926, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *P. tmesiphori* Thaxt., asexual morph unknown, biotrophic, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Porosubramaniana Hol.-Jech. 1985, *Ascomycota* genera *incertae sedis*, two species, type: *P. moniliformis* Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Porpidia Körb. 1855, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, 50 species, type: *P. trullisata* (Kremp.) Körb., lichenized, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Schmull et al. (2011; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Porpidinia Timdal 2010, *Porpidiaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *Porpidinia tumidula* (Sm.) Timdal (*Lichen tumidulus* Sm.), lichenized fungi, saxicolous, Europe, North Africa, see Timdal (2010; phylogenetic placement based on anatomical characters), sequences are unavailable, holotype of type: Smith s.n., LINN.

Psora Hoffm. 1796, *Psoraceae*, *Lecanorales*, *Lecanoromycetes*, c. 35 species, type: *P. decipiens* (Hedw.) Hoffm. (*Lichen decipiens* Hedw.), lichenized fungi, saxicolous, terricolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psorinia Gotth. Schneid. 1980, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *P. conglomerata* (Ach.) Gotth. Schneid. (*Lecidea conglomerata* Ach.), lichenized, saxicolous, temperate northern hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Mischoblastia A.Massal. 1852, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, three species,

type: *M. oxydata* A. Massal., lichenized, see Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Prieto & Wedin (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Porrectotheca Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *P. divaricata* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Matsushima Fungus Collection, Kobe, 5H436, needs generic revision.

Potamomyces K.D. Hyde 1995, *Ascomycota* genera *incertae sedis*, one species, type: *P. armatisporus* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: BRIP 21490, needs generic revision.

Potridiscus Döbbeler & Triebel 2000, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *P. polymorphus* Döbbeler & Triebel, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: M Rambold 3269, needs generic revision.

Potriphila Döbbeler 1996, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *P. navicularis* Döbbeler, asexual morph unknown, saprobes, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: M (Döbbeler 6759), needs generic revision.

Praelongicaulis E.B.G. Jones, Abdel-Wahab & K.L. Pang 2015, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *P. kandeliae* (Abdel-Wahab & E.B.G. Jones) E.B.G. Jones, Abdel-Wahab & K.L. Pang, asexual morph unknown, saprobes, marine, Hong Kong, see Sakayaroj et al. (2011; phylogeny), Jones et al. (2015, phylogeny, nomenclature), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type strain of the type: IMI 379307; CY 1492.

Pragmopora A. Massal 1855 (= *Pragmopycnis* B. Sutton & A. Funk 1975 *vide* Johnston et al. 2014), *Tympanidaceae*, *Phacidiales*, *Leotiomyces*, seven species, type: *Pragmopora amphibola* A. Massal., asexual morph formerly known in *Pragmopycnis*, saprobes, common in temperate northern hemisphere, see Kirk et al. (2013; genus accepted), Quijada et al. (2015; phylogeny), living cultures or cultures and sequences are unavailable for the type of the type, lectotype in Royal Botanic Gardens (K).

Prataprajella Hosag. 1992, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, two species, type: *P. turpiniicola* (Hosag.) Hosag., asexual morph unknown, saprobes, terrestrial, India, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; treated as a doubtful genus in *Meliolaceae*), cultures and sequences are unavailable, needs generic revision.

Preussia Fuckel 1867, *Sporormiaceae*, *Pleosporales*, *Dothideomycetes*, 49 species, type: *P. funiculata* (Preuss) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Chang and Wang (2009; new species), Kruys and Wedin (2009; new species), Schoch et al. (2009; phylogeny), Asgari and Zare (2010; new species), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Sporormiaceae*, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Kruys (2015; new species, Sweden), cultures and sequences are available, type specimen and cultures available for the type: CBS H-17339; CBS 659.74.

Priceomyces Kurtzman & M. Suzuki 2010, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, nine species, type: *P. haplophilus* (Shifrine & Phaff) M. Suzuki, asexual reproduction is by multilateral budding, saprophytic, in tree fluxes, spoiled wine, alpechin,

soil, insect frass in various trees, worldwide, see Kurtzman and Suzuki (2010; taxonomy), Crous et al. (2016; new species), cultures and sequences are available.

Prillieuxina G. Arnaud 1918 (= *Leprieurina* G. Arnaud 1918 *fide* Wijayawardene et al. 2014; Rossman et al. 2015), *Asterinaceae*, *Asterinales*, *Dothideomycetes*, 55 species, type: *P. winteriana* (Pazschke) G. Arnaud, asexual morph unknown, parasymbiont on *Pertusaria*, terrestrial, tropical, see Hosagoudar and Chandraprabha (2009; new species), Lumbsch and Huhndorf (2010; outline), Hosagoudar (2012; new species, India), Hosagoudar and Divya (2013; new species, India), Hyde et al. (2013; accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Gautam (2015; new species), Guatimosim et al. (2015; phylogeny), Rossman et al. (2015; nomenclature), cultures and sequences are available but lacks for the type, needs generic revision.

Pringsheimia Schulzer 1866, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, nine species, type: *P. rosarum* Schulzer, asexual morph unknown, parasitic or saprobes, terrestrial habitats, worldwide, see Kirk et al. (2013; genus accepted), Thambugala et al. (2014; review), Wijayawardene et al. (2014; outline), sequence data available for one species, but no ex-type sequence data are available, needs generic revision.

Proboscispora Punith. 1984, *Ascomycota* genera *incertae sedis*, one species, type: *P. manihotis* Punith., coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Proliferodiscus J.H. Haines & Dumont 1983, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, eight species, type: *P. inspersus* (Berk. & M.A. Curtis) J.H. Haines & Dumont, asexual morph unknown, saprobes, terrestrial, worldwide, see Hofton et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Proliferosphaera T.P. Devi 2012, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. capsici* T.P. Devi, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Devi et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), Cultures and sequences are available, cultures available for the type: PP-2011 isolate 6494, holotype of type: ITCC 6494, needs generic revision.

Prolixandromyces R.K. Benj. 1970, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, eight species, type: *P. veliae* R.K. Benj., asexual morph unknown, parasitic on Veliid bugs, semiaquatic, Africa, Asia, Central America, Europe, see Weir (2008; review), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pfliegler et al. (2016; Hungary), cultures and sequences are available, cultures available for the type: DAH 18, needs generic revision.

Pronectria Clem. 1931, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, 41 species, type: *P. lichenicola* (Ces.) Clem., asexual morph hyphomycetous, parasymbiont to parasites on lichens, more rarely algae, worldwide, see Etayo and Sancho (2008; morphology, keys), Brackel (2014; morphology), Maharachchikumbura et al. (2015, 2016; outline), sequence data only for the type *P. robergei* as *Illosporium carneum* (ATCC 201590), lectotype of type: PC, Roberge.

Propolidium Sacc. 1884, *Rhytismatales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *P. glaucum* (Ellis) Sacc., asexual morph unknown, saprobes, terrestrial, Africa, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Propolina Sacc. 1884, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. cervina* Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf

(2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Propolis (Fr.) Corda 1838, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. farinosa* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, Asia, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Proprioscypha Spooner 1987, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. corticicola* Spooner, asexual morph unknown, saprobes, pathogens, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Prosopidicola Crous & C.L. Lennox 2004, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *P. mexicana* Crous & C.L. Lennox, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012, 2017; outline), Crous et al. (2016; new species, phylogeny), cultures are available.

Prosthemium Kunze 1817 (= *Pleomassaria* Speg. 1880 *fide* Wijayawardene et al. 2014; Rossman et al. 2015), *Pleomassariaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. betulinum* Kunze, coelomycetous, sexual morph formerly known in *Pleomassaria*, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline, sexual morph), Tanaka et al. (2010; taxonomy, phylogeny), Wijayawardene et al. (2012, 2014, 2016; outline, taxonomy, nomenclature), Zhang et al. (2012; accepted as a genus in *Pleomassariaceae*, phylogeny), Hyde et al. (2013; accepted as a genus in *Pleomassariaceae*), Rossman et al. (2015; nomenclature), cultures available for the type: CBS 279.74, needs generic revision.

Prostratus Sivan., W.H. Hsieh & Chi Y. Chen 1993, *Melanconidaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. cyclobalanopsidis* Sivan., W.H. Hsieh & Chi Y. Chen, asexual morph unknown, saprobes, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, holotype of type: IMI 354625.

Protoblastenia (Zahlbr.) J. Steiner 1911, *Psoraceae*, *Lecanorales*, *Lecanoromycetes*, 30 species, type: *P. rupestris* (Scop.) J. Steiner, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available for the type: Prorup415 (Gaya et al. 2008), needs generic revision.

Protocrea Petch 1937, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, six species, type: *P. farinosa* (Berk. & Broome) Petch, asexual morph acremonium-like, saprobes, terrestrial, worldwide, see Jaklitsch et al. (2008, 2015; new species, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, epitype and cultures available for the type: BPI 747356; CBS 121554.

Protocreopsis Yoshim. Doi 1977, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, twelve species, type: *P. zingibericola* Yoshim. Doi, asexual morph acremonium-like, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lechat and Fournier (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Protocucurbitaria Naumov 1951, *Sordariomycetes* genera *incertae sedis*, six species, type: *P. ribicola* Naumov, asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Protomicarea Hafellner 2001, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *P. limosa* (Ach.) Hafellner, asexual morph unknown, lichenized, terrestrial, Europe, Turkey, see Lumbsch and Huhndorf (2010; outline), Kinalioglu and Aptroot (2011; new

records in Turkey), Schnull et al. (2011; phylogeny), cultures available for the type: Obermayer 07939 (Schnull et al. 2011), needs generic revision.

Protomyces Unger 1833, *Protomycetaceae*, *Taphrinales*, *Taphrinomycetes*, ten species, type: *P. macrosporus* Unger, asexual morph unknown, biotrophic on plants, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available, available specimen of type: CBS H-17359, needs generic revision.

Protomycopsis Magnus 1905, *Protomycetaceae*, *Taphrinales*, *Taphrinomycetes*, ten species, type: *P. leucantheri* Magnus, asexual morph unknown, biotrophic on plants, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Protopannaria (Gyeln.) P.M. Jørg. & S. Ekman 2000, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, five species, type: *P. pezizoides* (Weber) P.M. Jørg. & S. Ekman, lichenized, Southern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Protoparmelia M. Choisy 1929, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 35 species, type: *P. badia* (Hoffm.) Hafellner, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Papong et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Protoparmeliopsis Choisy 1929, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, 20 species, type: *P. muralis* (Schreb.) M. Choisy, lichenized, see Zhao et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Protorocella Follmann 2011, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *P. minima* (R. Sant.) Follmann ex Follmann, lichenized, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Protoscypha Syd. 1925, *Protoscyphaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. pulla* Syd., asexual morph unknown, biotrophic, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Protostegia Cooke 1880, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. eucleae* Kalchbr. & Cooke, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Kirk et al. (2013; genus accepted), Crous et al. (2015; phylogeny, epitypification), Wijayawardene et al. (2017; outline), epitype and ex-epitype of the type: PREM 60879; CPC 23549.

Protostegiomyces Bat. & A.F. Vital 1955, *Ascomycota* genera *incertae sedis*, one species, type: *P. lembosiae* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Protostroma Bat. 1957, *Ascomycota* genera *incertae sedis*, one species, type: *P. hyphaenes* Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Protothelenella Räsänen 1943, *Protothelenellaceae*, *Ostropales*, *Lecanoromycetes*, eleven species, type: *P. reducta* (Th. Fr.) Räsänen, lichenized, Asia, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Protothyrium G. Arnaud 1917, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *P. salvadorae* (Cooke) G. Arnaud, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al.

(2016; outline), cultures and sequences are unavailable, isotype of type: IMI 158625, needs generic revision.

Protounguicularia Raitv. & R. Galán 1986, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *P. brevicapitata* Raitv. & R. Galán, asexual morph unknown, saprobes, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Protousnea (Motyka) Krog 1976, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, eight species, type: *P. magellanica* (Mont.) Krog, lichenized, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Proxipyricularia Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, two species, type: *P. zingiberis* (Y. Nisik.) Klaubauf, Lebrun & Crous, hyphomycetous, sexual morph unknown, pathogens, terrestrial, Japan, see Klaubauf et al. (2014; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Wijayawardene et al. (2016; outline), available cultures for the type: CBS 133594, needs generic revision.

Psamma Sacc. & M. Rousseau ex E. Bommer & M. Rousseau 1891, *Ascomycota* genera *incertae sedis*, eight species, type: *P. bommeriae* Sacc. & M. Rousseau, hyphomycetous, sexual morph unknown, saprobes, lichenicolous, terrestrial, Africa, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-17363, needs generic revision.

Psathyrophlyctis Brusse 1987, *Phlyctidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *P. serpentaria* Brusse, asexual morph unknown, lichenized, terrestrial, South Africa, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Pselaphidomyces Speg. 1917, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *P. corticalis* (Peck) J.L. Crane & Schokn., asexual morph unknown, biotrophic, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Pseudaegerita J.L. Crane & Schokn. 1981, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, eight species, type: *P. pselapti* Speg., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Yamaguchi et al. (2012; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Pseudaleuria Lusk 1987, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *P. quinaultiana* Lusk, asexual morph unknown, from soil, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Xu et al. (2012; soil fungi), Kirk et al. (2013; genus accepted), Nouhra et al. (2013; DNA, ectomycorrhizal), sequences are available, needs generic revision.

Pseudallescheria Negroni & I. Fisch. 1944, *Microascaceae*, *Microascales*, *Sordariomycetes*, nine species, type: *P. shearii* Negroni & I. Fisch., asexual morph unknown, saprobes, human pathogens, terrestrial, worldwide, see Gilgado et al. (2010; new species, human pathogen), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Pseudarctomia Gyeln. 1939, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *P. microleuca* (Nyl.) Gyeln., asexual morph unknown, lichenized, terrestrial, France, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Pseudascozonus Brumm. 1985, *Thelebolaceae*, *Thelebolales*, *Leotiomyces*, one species, type: *P. racemosporus* Brumm., asexual morph unknown, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudephebe M. Choisy 1930, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *P. pubescens* (L.) M. Choisy, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Wang and McCune (2010; China), Thell et al. (2012; phylogeny, accepted as a genus in *Parmeliaceae*), Wang et al. (2012; China), Kirk et al. (2013; genus accepted), Mitrovic et al. (2014; antimicrobial properties), Boluda et al. (2016; cryptic species), sequences are available, needs generic revision.

Pseudeurotium J.F.H. Beyma 1937, *Pseudeurotiaceae*, *Leotiomyces* family *incertae sedis*, six species, type: *P. zonatum* J.F.H. Beyma, asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Minnis and Lindner (2013; new species), cultures and sequences are available.

Pseudevernia Zopf 1903, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *P. furfuracea* (L.) Zopf, lichenized, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pseudoacrodictys W.A. Baker & Morgan-Jones 2003, *Ascomycota* genera *incertae sedis*, 14 species, type: *P. eickeri* (Morgan-Jones) W.A. Baker & Morgan-Jones, sexual morph unknown, saprobes, terrestrial, see Castaneda Ruiz et al. (2010; new species), Zhao et al. (2011; outline), Zhang et al. (2011; new species), Dubey et al. (2012; a new species), Fiuza et al. (2014; new species), Ma et al. (2015; new species), two species have sequence data, needs generic revision.

Pseudoamauroascus Cano, M. Solé & Guarro 2002, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *P. australiensis* Cano, M. Solé & Guarro, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), sequences are available for the type (unpublished), holotype of type: IMI 370014.

Pseudoanguillospora S.H. Iqbal 1974, *Ascomycota* genera *incertae sedis*, two species, type: *P. stricta* S.H. Iqbal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudoaristastoma Suj. Singh 1979, *Ascomycota* genera *incertae sedis*, one species, type: *P. indicum* Suj. Singh, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudoascochyta Valenzuela-Lopez, Stchigel, Cano-Canals, Guarro & Cano 2016, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. pratensis* Valenzuela-Lopez, Cano-Canals, Stchigel, Guarro & Cano, coelomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Crous et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22735, FMR 14524.

Pseudoasperisporium U. Braun 2000, *Ascomycota* genera *incertae sedis*, three species, type: *P. tupae* (Speg.) U. Braun, hyphomycetous, terrestrial, plant pathogens, leaf-spotting, Asia, South America, see Seifert (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of type: LPS 959.

Pseudoasteromassaria Matsumura & Kaz. Tanaka 2015, *Latoruaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. fagi* M. Matsum. & Kaz. Tanaka, asexual morph coelomycetous (*stagonospora*-like), saprobes, terrestrial, Japan, see Ariyawansa et al. (2015;

morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type: HHUF 30471; MAFF 245221.

Pseudobaeomyces M. Satô 1940, *Icmadophilaceae*, *Pertusariales*, *Lecanoromycetes*, one species, type: *P. insignis* (Zahlbr.) M. Satô, asexual morph unknown, lichenized, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudobasidiospora Dyko & B. Sutton., 1978, *Ascomycota* genera *incertae sedis*, one species, type: *P. caroliniana* Dyko & B. Sutton, coelomycetous, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sexual morph unknown, cultures and sequences are unavailable, holotype of type: IMI 208458.

Pseudobeltrania Henn. 1902, *Beltraniaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. cedrelae* Henn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), Rajeshkumar et al. (2016; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Pseudocalopadia Lücking 1999, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *P. mira* Lücking, lichenized, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type: M.

Pseudocamarosporium Wijayaw. & K.D. Hyde 2014, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, ten species, type: *P. propinquum* (Sacc.) Wijayaw., Camporesi & K.D. Hyde, coelomycetous, sexual morph unknown, has camarosporium-like and coniothyrium-like morphologies, saprobes, Europe, see Wijayawardene et al. (2014, 2016a, b; morphology, phylogeny), Crous et al. (2015; new species, phylogeny, coniothyrium-like species), sequence data available, holotype and ex-type strains of type: MFLU 14-0090; MFLUCC 14-0192 = ICMP 20203.

Pseudocanalisporium R.F. Castañeda & W.B. Kendr. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *P. circumfecundum* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudocatenomyopsis Crous & L.A. Shuttlew. 2013, *Coronophorales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *P. rothmanniae* Crous & L.A. Shuttlew., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Zambia, see Crous et al. (2013; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), holotype and ex-type of the type: CBS H- 21432; CBS 22733.

Pseudocenangium P. Karst. 1886, *Ascomycota* genera *incertae sedis*, one species, type: *P. pinastri* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudocercospora Speg. 1910, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, c. 1500 accepted species (Mycobank), type: *P. vitis* (Lév.) Speg., asexual morph mycosphaerella-like, plant pathogens, endophytes or saprobes, cosmopolitan, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Yusef M (2013; review), Crous et al. (2013; phylogeny), Bakhshi et al. (2014; phylogeny), Shivas et al. (2015; new species), Li et al. (2015; new species), Osorio et al. (2015; new species), Silva et al. (2016; new species), sequences are available, epitype of type: CBS HAL (MBT 102230).

Pseudocercospora Deighton 1973, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 150 species, type: *P. ipomoeae* Sawada ex Deighton, hyphomycetous, sexual morph mycosphaerella-like, plant pathogens, terrestrial, five species confirmed based on DNA, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Frank et al. (2010; morphology, phylogeny), epitype and ex-epitype of type: CBS H-20409; CBS 125685.

Pseudocercosporidium Deighton 1973, *Ascomycota* genera *incertae sedis*, one species, type: *P. venezuelanum* (Syd.) Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudochapsa Parnmen, Lücking & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 17 species, type: *Pseudochapsa dilatata* (Müll. Arg.) Parnmen, Lücking & Lumbsch, asexual morph unknown, lichenized, terrestrial, tropical, see Parnmen et al. (2012; genus proposed), cultures and sequences are available, needs generic revision.

Pseudochuppia Kamal, A.N. Rai & Morgan-Jones 1984, *Ascomycota* genera *incertae sedis*, one species, type: *P. sarcinispota* Kamal, A.N. Rai & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudociboria Kanouse 1944, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, one species, type: *P. umbrina* Kanouse, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudoclathrosphaerina Voglmayr 1997, *Ascomycota* genera *incertae sedis*, one species, type: *P. evamariae* Voglmayr, hyphomycetous, sexual morph unknown, saprobes, from submerged deciduous leaves, USA, New Zealand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable (unpublished), holotype of the type: WU 17015, needs generic revision.

Pseudocoleodictyospora Doilom & K.D. Hyde 2016, *Pseudocoleodictyosporaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *P. tectonae* Doilom, D.J. Bhat & K.D. Hyde, saprobes, terrestrial, see Doilom et al. (2016; phylogeny), cultures and sequences are available, holotype and ex-holotype type strains of type: MFLU 15-3527; MFLUCC 12-0385, MKT 058, ICMP 21160.

Pseudocoleophoma Kaz. Tanaka & K. Hiray. 2015, *Dictyosporiaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. calamagrostidis* Kaz. Tanaka & K. Hiray., asexual morph coelomycetous, saprobes, terrestrial, Japan, see Tanaka et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type: HHUF 30450; CBS 139700.

Pseudoconium Petr. 1969, *Ascomycota* genera *incertae sedis*, one species, type: *P. pallescens* (Bäumler) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision.

Pseudocosmopora C. Herrera & P. Chaverri 2013, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *P. eutypellae* C. Herrera & P. Chaverri, asexual morph hyphomycetous (acremonium-like to verticillium-like), saprobes, terrestrial, worldwide, see Herrera et al. (2013; taxonomy, phylogeny), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type cultures of the type: BPI 884165; CBS 133966 = A.R. 4562.

Pseudocryptosporella J. Reid & C. Booth 1969, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *P. polylepidis* (E. Müll.) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pseudocyphellaria Vain. [nom. cons.] 1890, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, 100 species, type: *Ps. curvata* (Ach.) Vain., lichenized, South America, Asia, see Lumbsch and Huhndorf (2010; outline), Quilhot, et al. (2010; taxonomy), Miller et al. (2011; taxonomy), Pandit and Sharma (2012; new record), Fritis et al. (2013; biological activity), Kirk et al. (2013; genus accepted), Moncada et al. (2014; taxonomy, phylogeny), Yoshiaki and Ohmura (2014; transplant experiment), Beese et al. (2015; ecology), Lücking et al. (2016; classification), Messuti et al. (2016; sequence), sequences are available but lacks for type, needs generic revision.

Pseudocytoplacosphaeria Punith. & Spooner 2002, *Ascomycota* genera *incertae sedis*, one species, type: *P. conicola* Punith. & Spooner, coelomycetous, sexual morph unknown, saprobes, British Isles, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: K(M) 85582, needs generic revision.

Pseudocytospora Petr. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *P. allantospora* Petr., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudodichomera Höhn. 1918, *Ascomycota* genera *incertae sedis*, three species, type: *P. varia* (Pers.) Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudodictyosporium Matsush. 1971, *Dictyosporiaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *P. wauense* Matsush., hyphomycetous, sexual morph unknown, saprobes, Asia, South America, see Menkis and Vasaitis (2011; DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Kirschner et al. (2013; new species, Taiwan), Hyde et al. (2016; new species, Thailand), Boonmee et al. (2016; phylogeny), Cultures and sequences are available, type specimen and cultures available for the type: CBS H-5642; KRP88-6 (Menkis and Vasaitis 2011).

Pseudodidymaria U. Braun 1993, *Ascomycota* genera *incertae sedis*, three species, type: *P. wyethiae* (Ellis & Everh.) U. Braun, hyphomycetous, sexual morph unknown, terrestrial, foliicolous, leaf-spotting, Asia, North America, see Seifert (2011; morphology), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are unavailable, lectotype of type: NY 1087025.

Pseudodidymella C.Z. Wei, Y. Harada & Katum. 1997 (= *Pycnopleiospora* C.Z. Wei et al. *vide* Wijayawardene et al. 2014; Rossman et al. 2015), *Dothideomycetes* genera *incertae sedis*, one species, type: *P. fagi* C.Z. Wei, Y. Harada & Katum., asexual morph formerly known in *Pycnopleiospora*, saprobes, Japan, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012, 2014, 2016; outline, nomenclature), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures and sequences are unavailable, holotype of type: HHUF 22903, needs generic revision.

Pseudodidymosphaeria Thambugala & K.D. Hyde 2015, *Massarinaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. spartii* Thambugala, Camporesi & K.D. Hyde, asexual morph coelomycetous, saprobes, Europe, see Thambugala et al. (2015a; morphology, phylogeny), Li et al. (2016; new species), sequence data available, reference specimen and ex-type of type: MFLU 14-0578; MFLUCC 13-0273.

Pseudodinemasporium A. Hashim. & Kaz. Tanaka 2015, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *P. fabiformis* A. Hashim., G. Sato & Kaz. Tanaka, coelomycetous, sexual morph unknown, saprobes, Japan, Malaysia, see Hashimoto et al. (2015b; morphology, phylogeny), Crous et al. (2015b; phylogeny), holotype and ex-type strain of the type: HHUF 29716; MAFF 244361.

Pseudodiplodia (P. Karst.) Sacc. 1884, *Ascomycota* genera *incertae sedis*, 45 species, type: *P. ligniaria* (P. Karst.) Sacc., coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), culture and sequences are available for an unidentified species, needs generic revision.

Pseudodiscula Laubert 1911, *Ascomycota* genera *incertae sedis*, two species, type: *P. endogenospora* Laubert, coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudodiscus Arx & E. Müll. 1959, *Saccardiaceae*, *Ascomycota* families *incertae sedis*, one species, type: *P. nootkatensis* (Terrier) Arx & E. Müll., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen of type: CBS H-17396, needs generic revision.

Pseudoectinomyces W. Rossi 1977, *Euceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *P. zuphiicola* (Speg.) W. Rossi, asexual morph unknown, biotrophic, Africa, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Pseudoepicoccum M.B. Ellis 1971, *Ascomycota* genera *incertae sedis*, two species, type: *P. cocos* (F. Stevens) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudofuscophialis Sivan. & H.S. Chang 1995, *Ascomycota* genera *incertae sedis*, one species, type: *P. lignicola* Sivan. & H.S. Chang, hyphomycetous, sexual morph unknown, saprobes, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 356633, needs generic revision.

Pseudofusicoccum Mohali, Slippers & M.J. Wingf. 2006, *Pseudofusicoccumaceae*, *Botryosphaeriales*, *Dothideomycetes*, seven species, type: *P. stromaticum* (Mohali, Slippers & M.J. Wingf.) Mohali, Slippers & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, endophytes, terrestrial, cosmopolitan, see Pavlic et al. (2008; new species), Phillips et al. (2008, 2013; taxonomy, phylogeny), Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny), Dissanayake et al. (2016; taxonomy), Yang et al. (2017; phylogeny), holotype and ex-type culture of the type: PREM 58237, CMW 13366.

Pseudogaster Höhn. 1907, *Ascomycota* genera *incertae sedis*, one species, type: *P. singularis* Höhn., hyphomycetous, sexual morph unknown, saprobes, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudogibbellula Samson & H.C. Evans 1973, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. formicarum* (Mains) Samson & H.C. Evans, hyphomycetous, sexual morph unknown, on insects, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted),

Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Pseudogliophragma Phadke & V.G. Rao 1980, *Wiesneriomycetaceae*, *Tubeufiales*, *Dothideomycetes*, one species, type: *P. indicum* [as india] Phadke & V.G. Rao, hyphomycetous, sexual morph unknown, saprobes, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Pratibha et al. (2015; phylogeny, typification), cultures and sequences are available, ex-type of the type: MTCC 11985.

Pseudographiella E.F. Morris 1966, *Ascomycota* genera *incertae sedis*, one species, type: *P. variiseptata* E.F. Morris., hyphomycetous, sexual morph unknown, saprobes, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudographis Nyl. 1855, *Triblidiaceae*, *Triblidiales*, *Ascomycota* orders *incertae sedis*, three species, type: *P. elatina* (Ach.) Nyl., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen of type: CBS H-17399, needs generic revision.

Pseudogymnoascus Raillo 1929, *Myxotrichaceae*, *Leotiomyces* family *incertae sedis*, ten species, type: *P. roseus* Raillo, asexual morph unknown, animal pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Minnis and Lindner (2013; new species), Hoyt et al. (2015; control disease), cultures and sequences are available.

Pseudohalonectria Minoura & T. Muroi 1978, *Magnaporthales* genera *incertae sedis*, *Sordariomyces*, eleven species, type: *P. lignicola* Minoura & T. Muroi, asexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Hu et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Perera et al. (2016; new species, phylogeny), type specimen and cultures available for the type: CBS H-19515; SMH2440 IFRDCC 3110.

Pseudohelicomyces Garnica & E. Valenz. 2000, *Ascomycota* genera *incertae sedis*, one species, type: *P. albus* Garnica & E. Valenz., hyphomycetous, sexual morph unknown, saprobes, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: AH 19575, needs generic revision.

Pseudohelotium Fuckel 1870, *Helotiaceae*, *Helotiales*, *Leotiomyces*, c. 50 species, type: *P. pineti* (Batsch) Fuckel, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Pseudohendersonia Crous & M.E. Palm 1999, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. proteae* Crous & M.E. Palm, coelomycetous, sexual morph unknown, saprobes, associated with leaf spots, USA, Italy, see Wijayawardene et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype of type: BPI 1107849.

Pseudohepatica P.M. Jørg. 1993, *Ascomycota* genera *incertae sedis*, one species, type: *P. pachyderma* P.M. Jørg., asexual morph unknown, lichenized, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: US, Steyermark 93298, needs generic revision.

Pseudoheppia Zahlbr. 1903, *Heppiaceae*, *Lichinales*, *Lichinomyces*, one species, type: *P. schuleri* Zahlbr., asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudohypocrea Yoshim. Doi 1972, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. citrinella* (Ellis) Yoshim. Doi, asexual morph acremonium-like, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pseudoidriella Crous & R.G. Shivas 2011, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. syzygii* Crous & R.G. Shivas, hyphomycetous, sexual morph unknown, saprobe, associated with insect damaged leaves, terrestrial, Australia, see Crous et al. (2011; morphology, DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type culture of type: CBS H-20758; CBS 131307.

Pseudolachnea Ranoj. 1910, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, five species, type: *P. insignis* Velen., coelomycetous, sexual morph unknown, terrestrial, saprobes, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hashimoto et al. (2015; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Pseudolachnella Teng. 1936, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, 18 species, type: *P. scoleospora* (Teng & C.I. Chen) Teng, coelomycetous, sexual morph unknown, saprobes, worldwide, see Hashimoto et al. (2015b; morphology, phylogeny), Li et al. (2016; new species), cultures and sequences are available, holotype of the type: “Ling 138.”

Pseudolachnum Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *P. lateritium* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudolecanactis Zahlbr. 1907, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *P. filicicola* Zahlbr., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; phylogenetic study), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

Pseudolembosia Theiss. 1913, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *P. geographica* (Masse) Theiss., asexual morph unknown, saprobes, terrestrial, Australia, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2016; outline), cultures and sequences are unavailable, holotype of type: NY, needs generic revision.

Pseudoleptogium Müll.Arg. 1885, *Collemaataceae*, *Peltigerales*, *Lecanoromycetes*, one species, type: *P. diffractum* (Kremp.) Müll. Arg., lichenized, see Otálora et al. (2013a, 2014; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Pseudolignicola Chatmala & E.B.G. Jones 2006, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *P. siamensis* Chatmala & E.B.G. Jones, asexual morph unknown, on wood, marine, tropical, see Sakayaroj et al. (2010; phylogeny), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), sequences are available, needs generic revision.

Pseudolophiostoma Thambugala, Kaz. Tanaka & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. vitigenum* (Kaz. Tanaka & Y. Harada) Thambugala, Kaz. Tanaka & K.D. Hyde, asexual morph unknown, saprobes, terrestrial,

Japan, see Thambugala et al. (2015b; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of type: HHUF 26930; MAFF 239459.

Pseudomassaria Jacz. 1894, *Pseudomassariaceae*, *Xylariales*, *Sordariomycetes*, c. 20 species, type: *P. chondrospora* (Ces.) Jacz., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Jaklitsch and Voglmayr (2012; phylogeny), Senanayake et al. (2015; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016, outline, phylogeny), cultures available for type: MFLUCC 15-0545.

Pseudomassariosphaeria Phukhams., Ariyaw., Campor. & K.D. Hyde 2015, *Amniculicolaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. bromicola* Phukhams., Ariyaw., Campor. & K.D. Hyde, asexual morph unknown, saprobes, aquatic and terrestrial, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of type: MFLU 15-1403, MFLUCC 15-0031.

Pseudombrophila Boud. 1885, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 28 species, type: *P. pedrottii* Boud., asexual morph unknown, coprophilous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Pseudomeliola Speg. 1889, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, four species, type: *P. brasiliensis* Speg., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pseudomeria G.L. Barron 1980, *Ascomycota* genera *incertae sedis*, one species, type: *P. mucosa* G.L. Barron, hyphomycetous, sexual morph unknown, on nematodes, terrestrial, Canada, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Pseudomicrodochium B. Sutton 1975, *Ascomycota* genera *incertae sedis*, nine species, type: *P. aciculare* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Reblova et al. (2013; compare with *Cyphellophora*), cultures and sequences are unavailable, holotype of type: IMI 169711, needs generic revision.

Pseudomitrla Gamundí 1980, *Leotiomyces* genera *incertae sedis*, one species, type: *P. horakii* Gamundí, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudomonodictys Doilom, Ariyawansa, D.J. Bhat & K.D. Hyde 2015, *Macrodiplodiopsidaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. tectonae* Doilom, Ariyawansa, D.J. Bhat & K.D. Hyde, saprobes, terrestrial, see Ariyawansa et al. (2015; phylogeny), Doilom et al. (2016; phylogeny), cultures and sequences are available, holotype and ex-holotype type strains of type: MFLU 15-1413; MFLUCC 12-0552.

Pseudomorfea Punith. 1981, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. coffeae* Punith., asexual morph unknown, saprobes, terrestrial, India, Argentina, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pseudonaevia Dennis & Spooner 1993, *Dermateaceae*, *Helotiales*, *Leotiomyces*, two species, type: *P. caricina* Dennis & Spooner, asexual morph unknown, saprobes, terrestrial, British Isles, see Raitviir (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk

et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: K, needs generic revision.

Pseudonectria Seaver 1909, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, c. 10 species, type: *P. rousseliana* (Mont.) Wollenw., hyphomycetous, Seifert et al. (2011; outline), Lumbsch & Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016, outline), cultures available for type: AFTOL-ID 191, AR2716, CBS 114049, CBS 122566, CBS 114049, AR 2714.

Pseudoneottiospora Faurel & Schotter 1965, *Ascomycota* genera *incertae sedis*, two species, type: *P. cunicularia* Faurel & Schotter, coelomycetous, sexual morph unknown, saprobes, Algeria, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudoneurospora Dania García, Stchigel & Guarro 2004, *Sordariaceae*, *Sordariales*, *Sordariomycetes*, two species, type: *P. amorphoporcata* (Udagawa) Dania García, Stchigel & Guarro, asexual morph unknown, saprobes, from soil, terrestrial, Thailand, Spain, see Lumbsch and Huhndorf (2010; outline), Nygren et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Pseudonitschkia Coppins & S.Y. Kondr. 1995, *Dacampiaceae*, *Dothideomycetes Incertae sedis*, one species, type: *P. parmotrematis* Coppins & S.Y. Kondr., asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*), Hyde et al. (2013; outline, accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of the type: BM, Alston 5836.

Pseudopannaria (B.de Lesd.) Zahlbr. 1924, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *P. marcii* (B. de Lesd.) Zahlbr., lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Pseudoparmelia Lynge 1914, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 15 species, type: *P. cyphellata* Lynge, lichenized, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Buaruang et al. (2015; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pseudoparodia Theiss. & Syd. 1917, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *P. pseudopeziza* (Pat.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), cultures and sequences are unavailable, holotype of type: FH 7735, needs generic revision.

Pseudoparodiella F. Stevens 1927, *Venturiaceae*, *Venturiales*, *Dothideomycetes*, one species, type: *P. vernoniae* F. Stevens, asexual morph unknown, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; morphology, phylogeny), Hyde et al. (2013; accepted as in *Venturiaceae*, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pseudopassalora Crous 2011, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *P. gouriqua* Crous, hyphomycetous, sexual morph unknown, saprobes, South Africa, see Crous et al. (2011; morphology, phylogeny), Wijayawardene et al. (2014, 2017; outline), epitype and ex-epitype culture of type: CBS H-20682, CBS 101954.

Pseudopatellina Höhn. 1908, *Ascomycota* genera *incertae sedis*, one species, type: *P. conigena* (Niessl) Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-17414, needs generic revision.

Pseudopaulia M.Schultz 2002, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *P. tessellata* M. Schultz, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type: B (Schultz 14042a).

Pseudopeltis L. Holm & K. Holm 1978, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *P. filicum* L. Holm & K. Holm, asexual morph unknown, saprobes, terrestrial, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudopeltistroma Katum. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *P. kyusyuense* Katum., coelomycetous, sexual morph unknown, saprobes, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudopeltula Henssen 1995, *Gloeoheppiaceae*, *Lichinales*, *Lichinomycetes*, four species, type: *P. myriocarpa* Henssen, lichenized, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type: COLO.

Pseudopenidiella Crous & Koukol 2012, *Ascomycota* genera *incertae sedis*, one species, type: *P. piceae* Crous & Koukol, hyphomycetous, saprobes, Czech Republic, see Crous et al. (2012; morphology; phylogeny), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype of the type: CBS H-20964, ex-type strain of the type: CPC 19969.

Pseudoperitheca Elenkin 1922, *Ascomycota* genera *incertae sedis*, one species, type: *P. murmanica* Elenkin, asexual morph unknown, saprobes, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudopestalotiopsis Maharachch., K.D. Hyde & Crous 2014, *Pestalotiopsidaceae*, *Xylariales*, *Sordariomyces*, seven species, type: *P. theae* (Sawada) Maharachch., K.D. Hyde & Crous, coelomycetous, sexual morph unknown, saprobes or pathogens on leaves, China, India, Indonesia, Malaysia, Thailand, see Maharachchikumbura et al. (2014, 2016; morphology, phylogeny), Wijayawardene et al. (2016; outline, taxonomy), all species have sequence data, epitype and ex-epitype strain of the type: MFLU 12-0116, MFLUCC 12-0055.

Pseudopetrakia M.B. Ellis 1971, *Ascomycota* genera *incertae sedis*, two species, type: *P. kambakkamensis* (Subram.) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, Asia, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudopezicula Korf 1986, *Drepanopezizaceae*, *Helotiales*, *Leotiomyces*, two species, type: *P. tetraspora* Korf, Pearson & Zhuang, asexual morph *Phialophora*-like, pathogen of *Vitaceae*, Europe and North America, see Kirk et al. (2013; genus accepted), living cultures or cultures and sequences are unavailable, holotype of the type: CUP-061765.

Pseudopeziza Fuckel 1870, *Dermateaceae*, *Helotiales*, *Leotiomyces*, three species, type: *P. trifolii* (Biv.) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished) but lacks for the type, needs generic revision.

Pseudophacidium P. Karst. 1885, *Phacidiaceae*, *Phacidiales*, *Leotiomyces*, five species, type: *P. ledi* (Alb. & Schwein.) P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in

Ascodichaenaceae), Crous et al. (2014; phylogeny), cultures and sequences are available for the type: CBS 377.59, needs generic revision.

Pseudophaeomoniella Nigro, Antelmi & Crous 2015, *Phaeomoniellaceae*, *Phaeomoniellales*, *Eurotiomycetes*, one species, type: *P. oleae* Nigro, Antelmi & Crous, coelomycetous, sexual morph unknown, on living leaves, pathogens, terrestrial, Italy, see Crous et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type culture of type: CBS H-22250, FV84 = CBS 139191.

Pseudophaeosphaeria Jayasiri, Camporesi & K.D. Hyde 2016, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. rubi* Jayasiri, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-1400, MFLUCC 14-0259.

Pseudophloeospora Crous & R.G. Shivas 2010, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *P. syzygii* Crous & M.J. Wingf., coelomycetous, associated with leaf spots, terrestrial, Australia, see Crous et al. (2010, 2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H 20493, CPC 17051.

Pseudophloeosporella U. Braun 1993, *Ascomycota* genera *incertae sedis*, one species, type: *P. dioscoreae* (Miyabe & S. Ito) U. Braun, coelomycetous, sexual morph unknown, terrestrial, plant pathogens, leaf-spotting, Asia, see Hong et al. (2010; Korea), Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Miyabe & Hanzawa 9 (SAPA).

Pseudophragmotrichum W.P. Wu, B. Sutton & Gange 1998, *Ascomycota* genera *incertae sedis*, one species, type: *P. cubense* W.P. Wu, B. Sutton & Gange, coelomycetous, sexual morph unknown, saprobes, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 372456, needs generic revision

Pseudopithomyces Ariyawansa & K.D. Hyde 2015, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, seven species, type: *P. chartarum* (Berk. & M.A. Curtis) J.F. Li, Ariyawansa & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, from human, cosmopolitan, see Ariyawansa et al. (2015; taxonomy, phylogeny), Crous et al. (2016; new species, phylogeny), cultures and sequences are available.

Pseudopithyella Seaver 1928, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *P. minuscula* (Boud. & Torrend) Seaver, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: AFTOL-ID 69 (unpublished), needs generic revision.

Pseudoplagiostoma Cheew., M.J. Wingf. & Crous 2010, *Pseudoplagiostomataceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *P. eucalypti* Cheew., M.J. Wingf. & Crous, asexual morph coelomycetous, saprobes, terrestrial, tropical, see Cheewangkoon et al. (2010; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), holotype and ex-type cultures of the type: CBS H-20303, CPC 13341=CBS 124807.

Pseudoplatystomum Thambugala & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. scabridisporum* (Abdel-Wahab & E.B.G. Jones) Thambugala & K.D. Hyde, asexual morph unknown, saprobes, on marine driftwood, Australia, see Thambugala et al. (2015b; taxonomy), cultures and sequences are available, holotype of type: IMI 379750.

Pseudoplectania Fuckel 1870, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, ten species, type: *P. nigrella* (Pers.) Fuckel, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny),

Holec and Kříž (2013; morphology), Kirk et al. (2013; genus accepted), Glejdura et al. (2015; new species), cultures available for the type: KL BK-4914 (Carbone et al. 2013), neotype of type: KL BK-4914.

Pseudopleospora Petr. 1920, *Dothideomycetes* genera *incertae sedis*, three species, type: *P. a ruthenica* Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pseudopolystigmina Murashk. 1928, *Ascomycota* genera *incertae sedis*, two species, type: *P. spiraeicola* Murashk., coelomycetous, sexual morph unknown, saprobes, Russia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudoproboscispora Punith. 1999, *Annulatascales*, *Annulatascales*, *Sordariomycetes*, two species, type: *P. aquatica* (S.W. Wong & K.D. Hyde) Punith., asexual morph unknown, saprobes, aquatic, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of type: CC63 (HKU(M) 2792).

Pseudopyrenidium Nav.-Ros., Zhurb. & Cl. Roux 2010, *Adelococcaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *P. tartaricola* (Linds.) Nav.-Ros., Zhurb. & Cl. Roux, coelomycetous, asexual morph unknown, lichenicolous, Asia, USA, see Navarro-Rosinés et al. (2010; taxonomy), cultures and sequences are unavailable, needs generic revision.

Pseudopyrenula Müll. Arg. 1883, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, 20 species, type: *P. diluta* (Fée) Müll. Arg., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pseudopyricularia Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *P. kyllingae* Klaubauf, Lebrun & Crous, sexual morph unknown, pathogens, terrestrial, worldwide, see Klaubauf et al. (2014; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), holotype and ex-type cultures for the type: CBS H-21840, CBS 133595.

Pseudoramichloridium Cheew. & Crous 2009, *Extremaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. henryi* Cheew. & Crous, hyphomycetous, sexual morph unknown, saprobes, pathogens, Australia, see Cheewangkoon et al. (2010; taxonomy, phylogeny), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2014, 2016; outline), holotype and ex-type cultures for the type: CBS H-20293, CPC 13121 = CBS 124775.

Pseudoramonia Kantvilas & Vězda 2000, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *P. stipitata* (Vězda & Hertel) Kantvilas & Vězda, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; key), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pseudoramularia Matsush. 1983, *Ascomycota* genera *incertae sedis*, two species, type: *P. ponapensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, Uganda, Pacific islands, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudorbilia Y. Zhang bis, Z.F. Yu, Baral & K.Q. Zhang 2007, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, one species, type: *P. bipolaris* Y. Zhang bis, Z.F. Yu, Baral & K.Q. Zhang, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, holotype of type: XBL17 (M H.B. 8310), needs generic revision.

Pseudorhizopogon Kobayasi 1983, *Ascomycota* genera *incertae sedis*, one species, type: *P. sudae* Kobayasi, coelomycetous, sexual morph unknown, saprobes, Japan, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudorhytisma Juel 1894, *Cryptomycetaceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *P. bistortae* (DC.) Juel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-17420, needs generic revision.

Pseudorobillarda M. Morelet 1968, *Dothideomycetes* genera *incertae sedis*, twelve species, type: *P. phragmitis* (Cunnell) M. Morelet, coelomycetous, sexual morph unknown, saprobes, marine, terrestrial, worldwide, see Suetrong et al. (2009; phylogeny, morphology), Rungindamai et al. (2012; morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Moreno-Pérez et al. (2014; antagonist), Tangthirasunun et al. (2014; new species, Thailand), Crous et al. (2015; phylogeny), Jones et al. (2015; outline), available specimen and cultures for the type: CBS 842.84, CBS H-17422.

Pseudosaccharomyces Briosi & Farneti 1906, *Ascomycota* genera *incertae sedis*, 20 species, type: *P. citri* Briosi & Farneti, hyphomycetous, sexual morph unknown, saprobes, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudosagedia (Müll.Arg.) Choisy 1949, *Porinaceae*, *Ostropales*, *Lecanoromycetes*, 80 species, type: *P. cerasi* (Schrad.) M. Choisy, lichenized, see Brodo et al. (2013; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Pseudosarcosoma M. Carbone, Agnello & P. Alvarado 2013, *Chorioactidaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *P. latahense* (Paden & Tylutki) M. Carbone, Agnello & P. Alvarado, asexual morph unknown, saprobes, terrestrial, USA, see Carbone et al. (2013; taxonomy), sequences are available of the voucher TUR-A 195801 of the type:, holotype of the type: WTU-F-33051.

Pseudoschismatomma Ertz & Tehler 2014, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *P. rufescens* (Pers.) Ertz & Tehler, sexual morph with lirelliform ascomata, lichenized, terrestrial, Europe, Macaronesia, North America, Asia, Australia, see Ertz et al. (2014; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.

Pseudoschizothyra Punith. 1980, *Ascomycota* genera *incertae sedis*, one species, type: *P. thaungii* Punith., coelomycetous, sexual morph unknown, saprobes, Myanmar, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudoscopulariopsis Sandoval-Denis, Gené & Guarro 2015, *Microascaceae*, *Microascales*, *Sordariomycetes*, one species, type: *P. schumacheri* (E.C. Hansen) M. Sandoval-Denis, J. Gené & J. Guarro, asexual morph hyphomycetous, saprobes, terrestrial, North America, see Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Sandoval-Denis et al. (2015; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Pseudoscypha Duby 1861, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, three species, type: *P. abietis* J. Reid & Piroz., asexual unknown, terrestrial, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences are unavailable, needs generic revision.

Pseudoseptoria Speg. 1911, *Sacchotheciaceae*, *Dothideales*, *Dothideomycetes*, eight species, type: *P. donacicola* Speg., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014, 2016; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2013; accepted as a genus in *Dothioraceae*, phylogeny), Thambugala et al.

(2015c; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Pseudosigmoidea K. Ando & N. Nakam. 2000, *Ascomycota genera incertae sedis*, one species, type: *P. cranei* K. Ando & N. Nakam., hyphomycetous, sexual morph unknown, saprobes, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Diene et al. (2013; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Pseudosporidesmium K.D. Hyde & McKenzie 2016, *Xylariomycetidae genera incertae sedis*, *Sordariomycetes*, one species, type: *P. knawiae* (Crous) K.D. Hyde & McKenzie, hyphomycetous, sexual morph unknown, saprobes, KwaZulu-Natal, see Su et al. (2016; phylogeny), Wijayawardene et al. (2017; outline), holotype of the type: CBS H-20158 (as *Sporidesmium knawiae* Crous).

Pseudostegia Bubák 1906, *Ascomycota genera incertae sedis*, one species, type: *P. nubilosa* Bubák, coelomycetous, sexual morph unknown, saprobes, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudostigmidium Etayo 2008, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, five species, type: *P. nephromiarium* (Linds.) Etayo, asexual morph unknown, lichenicolous, South America, see Etayo and Sancho (2008; morphology, keys), Hyde et al. (2013; accepted as a genus in *Mycosphaerellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of the type: E, J.D. Hooker.

Pseudostrickeria Q. Tian, Wanasinghe, Camporesi & K.D. Hyde 2015, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. muriformis* Wanasinghe, Q. Tian, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Tian et al. (2015; taxonomy), cultures and sequences are available for type, holotype and ex-type strains of type: MFLU 15–1407; MFLUCC 13–0764 = KUMCC15-0062.

Pseudosydowia K.M. Thambugala & K.D. Hyde 2014, *Sacchotheciaceae*, *Dothideales*, *Dothideomycetes*, one species, type: *P. eucalypti* (Verwoerd & du Plessis) Thambug. & K.D. Hyde, asexual morphs unknown, saprobes, terrestrial, South Africa, see Thambugala et al. (2015c; phylogeny), cultures and sequences are available, holotype of type: PREM 46423.

Pseudotaeniolina J.L. Crane & Schokn. 1986, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *P. convolvuli* (Esfand.) J.L. Crane & Schokn., hyphomycetous, sexual morph unknown, on litter, rock-inhabiting, cosmopolitan, see Egidi et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Pseudotapesia Velen. 1939, *Helotiales genera incertae sedis*, *Leotiomyces*, one species, type: *P. pilatii* Velen., asexual morph unknown, saprobes, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudoteratosphaeria Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, six species, type: *P. perpendicularis* (Crous & M.J. Wingf.) Quaedvl. & Crous, asexual morph unknown, foliicolous, pathogens, saprobes, Brazil, Colombia, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), cultures and sequences are available, holotype and ex-type culture of type: CBS H-19691, CBS 118367.

Pseudotetraploa Kaz. Tanaka & K. Hiray. 2009, *Tetraplosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *P. curviappendiculata* (Sat. Hatak., Kaz. Tanaka & Y. Harada) Kaz. Tanaka & K. Hiray., hyphomycetous, saprobes, terrestrial, Indonesia, Japan, see Tanaka et al. (2009; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type strain of the type: HHUF 28582, JCM 12852.

Pseudothelomma M.Prieto & Wedin 2016, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, two species, type: *P. ocellatum* (Körb.) M. Prieto and Wedin, lichenized, see Prieto & Wedin (2016; genus proposed, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, voucher specimen of type: Tehler 8063 (S), needs generic revision.

Pseudothiella Petr. 1928 (= *Pseudothiopsella* Petr. 1928 *fide* Reblova et al. 2016), *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, six species, type: *P. hirtellae* (Henn.) Petr., from living leaves, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Reblova et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Pseudothis Theiss. & Syd. 1914, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *Pseudothis machaerii* (Rehm) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pseudothyrium Höhn. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *P. polygonati* (Tassi) Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudotopeliopsis Parmen, Lücking & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *P. laceratula* (Müll. Arg.) Parmen, Lücking & Lumbsch, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Parmen et al. (2012; genus proposed, phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, lectotype of type: Sayer s.n. – G (Australia).

Pseudotorula Subram. 1958, *Ascomycota* genera *incertae sedis*, three species, type: *P. heterospora* Subram., hyphomycetous, sexual morph unknown, saprobes, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudotracylla B. Sutton & Hodges 1976, *Ascomycota* genera *incertae sedis*, three species, type: *P. dentata* B. Sutton & Hodges, coelomycetous, sexual morph unknown, saprobes, Brazil, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudotrichia Kirschst. 1939, *Pleomassariaceae*, *Pleosporales*, *Dothideomycetes*, eight species, type: *P. stromatophila* Kirschst., asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Melanommataceae*), Hyde et al. (2013; accepted as a genus in *Melanommataceae*), Wijayawardene et al. (2014; outline), Liu et al. (2015; new species, Thailand), Tian et al. (2015; phylogeny, accepted as a genus in *Pleomassariaceae*), cultures and sequences are available.

Pseudotrichoconis W.A. Baker & Morgan-Jones 2001, *Ascomycota* genera *incertae sedis*, one species, type: *P. echinophila* (C. Massal.) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudotriporidium Z.F. Yu & K.Q. Zhang 2011, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, one species, type: *P. sinense* Z.F. Yu & K.Q. Zhang, saprobes, terrestrial, China, see Yu et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: YMF 1.01843, needs generic revision.

Pseudotrochila Höhn. 1917, *Rhytismatales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *P. rhododendri* (Racib.) Höhn., asexual morph unknown, saprobes, terrestrial, Java, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudotryblidium Rehm 1890, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *P. neesii* (Flot.) Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudotulostoma O.K. Mill. & T.W. Henkel 2001, *Elaphomycetaceae*, *Eurotiales*, *Eurotiomyces*, two species, type: *P. volvatum* O.K. Mill. & T.W. Henkel, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Smith et al. (2011; DNA), cultures and sequences are available.

Pseudovalsaria Spooner 1986, *Boloniaceae*, *Boloniales*, *Sordariomyces*, four species, type: *P. foedans* (P. Karst.) Spooner, asexual morphs unknown, saprobes, terrestrial, Europe, China, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Clypeosphaeriaceae*), Untereiner et al. (2013; accepted as a genus in *Boloniaceae*, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Pseudovalsella Höhn. 1918, *Melanconidaceae*, *Xylariales*, *Sordariomyces*, one species, type: *P. thelebola* (Fr.) Höhn., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pseudoveronaea Crous & Batzer 2012, *Dissoconiaceae*, *Capnodiales*, *Dothideomyces*, two species, type: *P. ellipsoidea* Batzer & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Li et al. (2012; morphology; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype and ex-type of the type: CBS H-20927, CBS 132086.

Pseudovirgaria H.D. Shin, U. Braun, Arzanlou & Crous 2007, *Capnodiales* genera *incertae sedis*, *Dothideomyces*, two species, type: *P. hyperparasitica* H.D. Shin, U. Braun, Arzanlou & Crous, asexual morphs hyphomycetous, fungicolous, Asia, Europe, see Braun et al. (2011, taxonomy), Seifert (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type strains of type: HAL 2054 F; CBS 121739–121741.

Pseudoxylomyces Kaz. Tanaka & K. Hiray. 2015, *Pleosporales* genera *incertae sedis*, *Dothideomyces*, one species, type: *P. elegans* (Goh, W.H. Ho, K.D. Hyde & K.M. Tsui) Kaz. Tanaka & K. Hiray., sexual morph unknown, saprobes, aquatic, worldwide, see Tanaka et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype of the type: HKU (M) 2777.

Pseudoyuconia Lar.N. Vassiljeva 1983, *Pleosporaceae*, *Pleosporales*, *Dothideomyces*, one species, type: *P. thalictri* (G. Winter) Lar.N. Vassiljeva, asexual morph unknown, saprobe, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in *Pleosporaceae*), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; accepted as a genus in *Pleosporaceae*), cultures and sequences are unavailable, needs generic revision.

Pseudozythia Höhn. 1902, *Ascomycota* genera *incertae sedis*, one species, type: *P. pusilla* Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Psilachnum Höhn. 1926, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, 28 species, type: *P. lateritioalbum* (P. Karst.) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Han et al. (2009, 2014; new species, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Psilocistella Svrček 1977, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, ten species, type: *P. obsoleta* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Psilolechia A.Massal. 1860, *Psilolechiaceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *P. lucida* (Ach.) M. Choisy, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psiloparmelia Hale 1989, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 13 species, type: *P. distincta* (Nyl.) Hale, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psilopezia Berk. 1847, *Rhizinaceae*, *Pezizales*, *Pezizomycetes*, five species, type: *P. nummularia* Berk., asexual morph unknown, pathogens, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Pezizales*), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Psilophana Syd. 1939, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *P. andina* Syd., asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Psilosphaeria Cooke 1879, *Ascomycota* genera *incertae sedis*, one species, type: need typification, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Psora Hoffm. [nom. cons.] 1796, *Psoraceae*, *Lecanorales*, *Lecanoromycetes*, 35 species, type: *Lecidea decipiens* (Hedw.) Ach., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psoroglaena Müll. Arg. 1891, *Verrucariaceae*, *Verrucariales*, *Eurotiomyces*, 17 species, type: *P. cubensis* Müll. Arg., lichenized, see Muggia et al. (2010; phylogeny), Czarnota et al. (2011; sequence), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), McCarthy and Kantvilas (2013; new species), Yatsyna (2014; new records), Himelbrant et al. (2015; new records), Käffer et al. (2015; new records), Kondratyuk et al. (2016; new species), Kubiak et al. (2016; biodiversity), Lücking et al. (2016; classification), Weerakoon and Aptroot (2016; new records), cultures and sequences are available, needs generic revision.

Psoroma Michaux 1803, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, 70 species, type: *P. hypnorum* (Vahl) Gray, lichenized, worldwide, see Ekman et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psoromella Gyeln. 1940, *Lecanorales* genera *incertae sedis*, *Lecanoromycetes*, one species, type: *P. a pampana* Gyeln., lichenized, see Lumbsch and Huhndorf (2010; outline), Thell et al. (2012; overview), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Psoromidium Stirt. 1877, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *P. wellingtonii* Stirt., lichenized, Southern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Rubio et al. (2013; taxonomy), Jørgensen and Andersen (2015; genus re-evaluation, sequence), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psoronactis Ertz & Tehler 2015, *Roccellaceae*, *Arthoniales*, *Arthoniomyces*, one species, type: *P. dilleniana* (Ach.) Ertz & Tehler, sexual morph with apothecioid ascomata, asexual morph coelomycetous, lichenized, terrestrial, Euro-Siberian, see Ertz et al. (2015;

morphology, phylogeny), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Psorophorus Elvebakk & S.G. Hong 2010, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *P. pholidotus* Elvebakk & S.G. Hong, asexual morph unknown, lichenized, terrestrial, South America, see Elvebakk et al (2010; new genus, sequence), sequences are available, needs generic revision.

Psorotheciopsis Rehm 1900, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, seven species, type: *P. decipiens* Rehm, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Psorotichia A.Massal. 1855, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, 50 species, type: *P. murorum* A. Massal., lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psorula Gotth. Schneid. 1980, *Psoraceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *Psorula rufonigra* (Tuck.) Gotth. Schneid., lichenized, North America, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Pteridiosperma J.C. Krug & Jeng 1979, *Ceratostomataceae*, *Melanosporales*, *Sordariomycetes*, one species, type: *Pteridiosperma foveolatum* (Udagawa & Y. Horie) J.C. Krug & Jeng, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pteridiospora Penz. & Sacc. 1897, *Astrosphaeriellaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. javanica* Penz. & Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as *Dothideomycetes*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*), Phookamsak et al. (2015; pylogeny, introduced *Astrosphaeriellaceae*), available cultures for the type: MFLUCC 11-0195, needs generic revision.

Pteromyces E. Bommer, M. Rousseau & Sacc. 1906, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *P. ambiguus* E. Bommer, M. Rousseau & Sacc. ex Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pteromycula P.F. Cannon 1997, *Ascomycota* genera *incertae sedis*, one species, type: *P. clypeiformis* P.F. Cannon, asexual morph unknown, saprobes, terrestrial, Great Britain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 362154a, needs generic revision.

Pterosporidium W.H. Ho & K.D. Hyde 1996, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *P. rhizophorae* (Vizioli) W.H. Ho & K.D. Hyde, from living leaves, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pterulopsis Wakef. & Hansf. 1943, *Ascomycota* genera *incertae sedis*, one species, type: *P. dummeri* Wakef. & Hansf., hyphomycetous, sexual morph unknown, saprobes, Uganda, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pterygiopsis Vain. 1890, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, 17 species, type: *P. atra* Vain., lichenized, North America, South America, Europe, Australia, Africa, see Eichler et al. (2010; list), Schultz and Moon (2011; taxonomy), Lumbsch and Huhndorf (2010; outline),

Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pterygosporopsis P.M. Kirk 1983, *Ascomycota* genera *incertae sedis*, two species, type: *P. fragilis* P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ptychographa Nyl. 1874, *Xylographaceae*, *Trapeliales*, *Lecanoromycetes*, one species, type: *P. xylographoides* Nyl., lichenized, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Spribille et al. (2014; sequence), Resl et al. (2015; sequence, partial sequence), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Puccinospora Speng. 1886, *Ascomycota* genera *incertae sedis*, one species, type: *P. chusqueae* Speng., coelomycetous, sexual morph unknown, saprobes, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pulchromyces Hennebert 1973, *Ascomycota* genera *incertae sedis*, one species, type: *P. fimicola* (V. Dring) Hennebert, coelomycetous, sexual morph unknown, coprophilous, Ghana, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: ATCC 18595 (unpublished), needs generic revision.

Pulmosphaeria Joanne E. Taylor, K.D. Hyde & E.B.G. Jones 1996, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *P. archontophoenicis* Joanne E. Taylor, K.D. Hyde & E.B.G. Jones, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pulvinaria Bonord. 1851, *Sordariomycetes* genera *incertae sedis*, one species, type: *P. bohémica* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pulvinella A.W. Ramaley 2001, *Ascomycota* genera *incertae sedis*, one species, type: *P. nolinae* A.W. Ramaley, hyphomycetous, sexual morph unknown, coprophilous, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: UC 1512945, needs generic revision.

Pulvinodecton Henssen & G.Thor 1998, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *P. kurzii* (Kremp.) Henssen & G. Thor, lichenized, Seychelles, Asia, Australia, see Jaklitsch et al. (2016a; phylogeny), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

Pulvinula Boud. 1885, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 28 species, type: *P. convexella* (P. Karst.) Pfister, asexual morph unknown, coprophilous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), sequences are available, voucher specimen of the type: KH.03.19 (FH), needs generic revision.

Punctelia Krog 1982, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 45 species, type: *P. borrieri* (Sm.) Krog, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Punctillina Toro 1934, *Ascomycota* genera *incertae sedis*, one species, type: *P. solteroi* Toro, coelomycetous, sexual morph unknown, saprobes, South America, see Wijayawardene et al.

(2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Punctillum Petr. & Syd. 1924, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. hepaticarum* (Cooke) Petr. & Syd., asexual morph unknown, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Punctonora Aptroot 1997, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *P. nigropulvinata* Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: B, Aptroot 33356.

Pureke P.R. Johnst. 1991, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, seven species, type: *P. zelandicum* P.R. Johnst., asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, holotype of type: PDD 45591, needs generic revision.

Purpleocillium Luangsa-ard, Hywel-Jones, Houbraken & Samson 2011, *Ophiocordycipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. lilacinum* (Thom) Luangsa-ard, Houbraken, Hywel-Jones & Samson, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Luangsa-ard et al. (2011; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), Spatafora et al. (2015; new combinations), Hyde et al. (2016; new species), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Pustulipora P.F. Cannon 1982, *Ceratostomataceae*, *Melanosporales*, *Sordariomycetes*, one species, type: *P. corticola* P.F. Cannon, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Pustulomyces D.Q. Dai, D.J. Bhat & K.D. Hyde 2014, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *P. bambusicola* D.Q. Dai, D.J. Bhat & K.D. Hyde, asexual morph coelomycetous, sexual morph unknown, saprobes on dead bamboo culms, terrestrial, only know in Thailand, see Dai et al. (2014; phylogeny, morphology), Wijayawardene et al. (2016; morphology, phylogeny), sequence data available, holotype and ex-type strain of type: MFLU 13-0369; MFLUCC 11-0436.

Puttea S.Stenroos & Huhtinen 2009, *Lecanorales* genera *incertae sedis*, *Lecanoromycetes*, three species, type: *P. margaritella* (Hulting) S. Stenroos & Huhtinen, lichenized, Eastern Europe, America, Russia, see Stenroos, et al. (2009; taxonomy), Stenroos et al. (2010; sequence), Lumbsch and Huhndorf (2010; list), Davydov and Printzen (2012; taxonomy), Czarnota and Hernik (2013; taxonomy, new report), Dillman et al. (2014; new combination), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Puttemansia Henn. 1902, *Paranectriellaceae*, *Dothideomycetes* families *incertae sedis*, 19 species, type: *Puttemansia lanosa* Henn., asexual morph hyphomycetous, parasitic on *Nectandra*, worldwide, see Hyde et al. (2013; accepte as a genus in *Paranectriellaceae*), Wijayawardene et al. (2014; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnidioarxiella Punith. & N.D. Sharma 1980, *Ascomycota* genera *incertae sedis*, one species, type: *P. indica* Punith. & N.D. Sharma, coelomycetous, sexual morph unknown, saprobes, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnidiopeltis Bat. & C.A.A. Costa 1959, *Ascomycota* genera *incertae sedis*, one species, type: *P. smilacina* Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, USA, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnis Bref. 1881, *Ascomycota* genera *incertae sedis*, one species, type: *P. sclerotivora* Bref., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnocarpon Theiss. 1913, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. magnificum* (Syd., P. Syd. & E.J. Butler) Theiss., asexual morph unknown, saprobes, terrestrial, India, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pycnodactylus Bat., A.A. Silva & Cavalc. 1967, *Ascomycota* genera *incertae sedis*, one species, type: *P. maranhensis* Bat., A.A. Silva & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnodallia Kohlm. & Volkm.-Kohlm. 2001, *Ascomycota* genera *incertae sedis*, one species, type: *P. dupla* Kohlm. & Volkm.-Kohlm., coelomycetous, sexual morph unknown, saprobes, marine, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; marine genera), cultures and sequences are unavailable, holotype of type: IMS Kohlmeyer & Volkmann-Kohlmeyer 5650, needs generic revision.

Pycnoderma Syd. & P. Syd. 1914, *Cookellaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. bambusinum* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Cookellaceae*), Hongsanan et al. (2014; accepted as a genus in *Cookellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pycnoharknessia Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *P. pakistanica* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: Matsushima Fungus Collection, Kobe, IPX295, needs generic revision.

Pycnomma Syd. 1924, *Ascomycota* genera *incertae sedis*, one species, type: *P. canariense* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Canary Islands, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnomoreletia Rulamort 1990, *Ascomycota* genera *incertae sedis*, two species, type: *P. aristata* (J. Ahmad) Rulamort, coelomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Pakistan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnopeziza W.L. White & Whetzel 1938 (= *Acarosporium* Bubák & Vleugel ex Bubák 1911; *Chaetalysis* Peyronel 1922; *Ciliosira* Syd. 1942 *fide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *P. sympodialis* W.L. White & Whetzel, asexual morphs formerly known in *Acarosporium*, *Chaetalysis*, *Ciliosira*, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available, needs generic revision.

Pycnopsammina Diederich & Etayo 1995, *Ascomycota* genera *incertae sedis*, one species, type: *P. lobariae* Diederich & Etayo, coelomycetous, sexual morph unknown, lichenicolous,

non-lichenized, terrestrial, France, Spain, UK, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: LG (Diederich 9697).

Pycnora Hafellner 2001, *Pycnoraceae*, *Candelariales*, *Lecanoromycetes*, three species, type: *Pycnora xanthococca* (Sommerf.) Hafellner, lichenized, Europe, Asia, North America, see Bendiksby & Timdal (2013; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Pycnoseynesia Kuntze 1898, *Ascomycota* genera *incertae sedis*, one species, type: *P. caronae* (Pass.) Kuntze, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnothelia Duf. 1821, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *P. papillaria* (Ehrh.) L.M. Dufour, lichenized, see Coste and Dufrêne (2009; checklist), Crisan and Ardelean (2010; ecology), Ketner-Oostra et al. (2010; outline), Lumbsch and Huhndorf (2010; outline), Schnull et al. (2011; sequence), Zarabska and Rosadzinski (2011; new records), Grochowski (2012; ecology), Kirk et al. (2013; genus accepted), McCune and Rosentreter (2014; new record), Miadlikowska et al. (2014; sequence), Lücking et al. (2016; classification), Şenkardeşler et al (2016; taxonomy), cultures and sequences are available, needs generic revision.

Pycnothera N.D. Sharma & G.P. Agarwal 1974, *Ascomycota* genera *incertae sedis*, two species, type: *P. cordiae* G.P. Agarwal & N.D. Sharma, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnothyriella Bat. 1952, *Ascomycota* genera *incertae sedis*, two species, type: *P. discreta* Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnothyrium Died. 1913, *Ascomycota* genera *incertae sedis*, six species, type: *P. litigiosum* (Desm.) Died., Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pycnotrema Rivas Plata & Lücking 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *P. pycnoporellum* (Nyl.) Rivas Plata & Lücking, lichenized, terrestrial, tropical, see Rivas Plata et al. (2012a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pyramidospora Sv. Nilsson., 1962, *Ascomycota* genera *incertae sedis*, seven species, type: *P. casuarinae* Sv. Nilsson, hyphomycetous, sexual morph unknown, on submerged decaying branches of *Casuarina*, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pyrenidium Nyl. 1865, *Dacampiaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. actinellum* Nyl., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pyrenobotrys Theiss. & Syd. 1914, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. conferta* (Fr.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, America, Scandinavia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Zhang et al. (2012; not accepted as a genus in *Venturiaceae*), Hyde et al. (2013; not accepted as a genus in *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pyrenocarpon Trevis. 1855, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *P. flotowianum* (Hepp) Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Medeiros et al. (2014; ecology and new record), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Pyrenochaeta De Not. 1849, *Cucurbitariaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *P. nobilis* De Not., coelomycetous, saprobes, plant endophytes, terrestrial, aquatic, worldwide, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk (2013; genus accepted), de Gruyter et al. (2010, 2013; phylogeny), Doilom et al. (2013; phylogeny), cultures and sequences are available, holotype and ex-type strains of type: CBS H-500; CBS 407.76.

Pyrenochaetopsis Gruyter, Aveskamp & Verkley 2010, *Cucurbitariaceae*, *Pleosporales*, *Dothideomycetes*, seven species, type: *P. leptospora* (Sacc. & Briard) Gruyter, Aveskamp & Verkley, coelomycetous, saprobes, plant endophytes, terrestrial, aquatic, worldwide, see de Gruyter et al. (2010, 2013; phylogeny), Wijayawardene et al. (2012, 2014, 2017; outline) Kirk (2013; genus accepted), Doilom et al. (2013; phylogeny), Papizadeh et al. (2017; phylogeny), cultures and sequences are available, holotype and ex-type strains of type: CBS H-20313; CBS 101635= PD 71/1027.

Pyrenochium Link 1833, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. pini* Link, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pyrenocollema Reinke 1895, *Ascomycota* genera *incertae sedis*, 19 species, type: *P. tremelloides* Reinke, lichenized, marine, terrestrial, near sea shores, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Pérez-Ortega et al. (2016; phylogeny), cultures and sequences are available, holotype of type: H9505110.

Pyrenocyclus Petr. 1955, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. ambiguus* Petr., asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pyrenodesmia A.Massal. 1853, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, six species, type: *P. chalybaea* (Fr.) A. Massal., lichenized, Europe, North America, China, see Arup et al. (2013; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pyrenographa Aptroot 1991, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, three species, type: *P. xylographoides* Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: CBG, Streimann 37582.

Pyrenopeziza Fuckel 1870 (= *Cylindrosporium* Grev. 1822 *vide* Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *P. chailletii* (Pers.) Fuckel, asexual morph formerly named in *Cylindrosporium*, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Carter et al. (2013; DNA, pathogens), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available but lacks for the type, needs generic revision.

Pyrenophora Fr. 1849, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, 16 species, type: *P. phaeocomes* (Rebent.) Fr., asexual morph hyphomycetous, saprobes or pathogens (phytopathogens) in terrestrial habitats, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Pleosporaceae*), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014c, 2015;

taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Pyrenopsis Nyl. [nom. cons.] 1858, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, 40 species, type: *P. fuscata* Nyl., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pyrenostigma Syd. 1926, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. siparunae* Syd., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Pyrenothrix Riddle 1917, *Pyrenotrichaceae*, *Chaetothyriales*, *Eurotiomycetes*, two species, type: *P. nigra* Riddle, lichenized, asexual morph unknown, saprobes, terrestrial, North America, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Pyrenowilmsia R.C. Harris & Aptroot 1991, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, one species, type: *P. ferruginosa* (Müll. Arg.) R.C. Harris & Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pyrenula Ach. 1814, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, 175 species, type: *Pyrenula nitida* (Weig.) Ach., asexual morph unknown, lichenized, terrestrial, mostly tropical, see Lumbsch and Huhndorf (2010; outline), Aptroot (2012; key), Weerakoon et al. (2012; phylogeny), Aptroot et al. (2013a; taxonomy), Kirk et al. (2013; genus accepted), Gueidan et al. (2016; phylogeny), Lücking et al. (2016; classification), sequences are available for the voucher F 5929 of the type, needs generic revision.

Pyrenyllum Clem. 1909, *Ascomycota* genera *incertae sedis*, two species, type: *P. analeptum* (Ach.) Clem., coelomycetous, sexual morph unknown, lichenized, terrestrial, distribution unknown, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pyrgidium Nyl. 1867, *Sphinctrinaceae*, *Mycocaliciales*, *Eurotiomycetes*, twelve species, type: *P. bengaliense* Nyl., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pyrgillus Nyl. 1857, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, four species, type: *Pyrgillus americanus* Nyl., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Weerakoon et al. (2012; phylogeny), Gueidan et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type, needs generic revision.

Pyrgostroma Petr. 1951, *Ascomycota* genera *incertae sedis*, two species, type: *P. shearii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pyricularia (Sacc.) Sacc. 1886, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, 83 species, type: *Pyricularia grisea* (Sacc.) Sacc., sexual morph *Magnaporthe*, plant pathogens, saprobes, terrestrial, worldwide. See Consolo et al. (2008; pathotype diversity in Argentina), Hayashi and Fukuta (2009; Blast differentiation), Park and Shin (2009; new species), McKenzie et al. (2010; new species), Suzuki et al. (2010; fungicide resistance), Zhang et al. (2010; spot disease in banana), Kohli et al. (2011; pathology), Netam et al. (2011; plant extract for controlling rice blast), Zhang et al. (2011; phylogeny), Debona et al. (2012; pathological biochemistry), Yang et al. (2012; early detection of rice blast), Alexandrova et al.

(2013; new species), Crous et al. (2013, 2015, 2016; new species), Choi et al. (2013; relationship of pathogenicity and phylogeny), Sousa et al. (2013; phytopathology), Klaubauf et al. (2014; phylogeny, new species), Murata et al. (2014; phylogeny), Castroagudín et al. (2016; new species), sequence data available for most of the species, including type, epitype and ex-epitype of the type: CBS H-22280, CBS 138707.

Pyriculariopsis M.B. Ellis 1971, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, six species, type: *P. parasitica* (Sacc. & Berl.) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Thongkantha et al. (2009; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Silva et al. (2015; new species), cultures and sequences are available, needs generic revision.

Pyriiformiascoma Daranagama, Camporesi & K.D. Hyde 2015, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. trilobatum* Daranagama, Camporesi & K.D. Hyde, asexual morph hyphomycetous, saprobes, terrestrial, Italy, Europe, see Daranagama et al. (2015; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type strains of type: MFLU 14-0231; MFLUCC 14-0012.

Pyrigemmula D. Magyar & Shoemaker 2011, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *P. aurantiaca* D. Magyar & R. Shoemaker, hyphomycetous, sexual morph unknown, terrestrial, saprobes, worldwide, see Magyar et al. (2011; taxonomy), Crous et al. (2012; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2016; outline), cultures and sequences are available, holotype and ex-type cultures of the type: BP 101176, CBS 126743.

Pyriptomycetes Cavalc. 1972, *Ascomycota* genera *incertae sedis*, one species, type: *P. maranhensis* Cavalc., coelomycetous, sexual morph unknown, lichenized, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pyronema Carus 1834, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *P. marianum* Carus, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Traeger et al. (2013; evolution), sequences are available but lacks for the type, needs generic revision.

Pyropyxis Egger 1984, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *P. rubra* (Peck) Egger, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), sequences are available for the voucher K. Egger 323 (DAOM) of the type, needs generic revision.

Pyrrhospora Körb. 1855, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *P. querneae* (Dicks.) Körb., lichenized, see Rotter (2010; checklist), Lumbsch and Huhndorf (2010; list), Perlmutter et al. (2012; checklist), Kirk et al. (2013; genus accepted), Singh et al. (2015; sequence), Urbanavichus and Urbanavichene (2015; checklist), Gasparyan and Sipman (2016; new records), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Pyxidiophora Bref. & Tavel 1891, *Pyxidiophoraceae*, *Pyxidiophorales*, *Laboulbeniomycetes*, 17 species, type: *P. nyctalidis* Bref. & Tavel, asexual morph hyphomycetous, mainly coprophilous, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Pyxine Fr. 1825, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 75 species, type: *P. soredata* (Ach.) Mont., lichenized, see Maier (2009; natural product), Bajpai et al. (2010;

bioaccumulation), Rout et al. (2010; ecology), Jungbluth and Marcelli (2011; taxonomy), Jungbluth et al. (2011; new species and new records), Lumbsch and Huhndorf (2010; list), Bajpai and Upreti (2012; ecology), Gaya et al. (2012; sequence), Mongkolsuk et al. (2012; taxonomy), Danesh et al. (2013; air pollution), Kirk et al. (2013; genus accepted), Nayaka et al. (2013; new species), Prieto et al. (2013; taxonomy, phylogeny), Shukla et al. (2013; bioaccumulation), Karakoti et al. (2014; ecology), Aptroot et al. (2014a, b; key, taxonomy), Pandit (2014; ecology), Bajpai et al. (2015; genotoxicity), Aptroot (2016; new records), Prieto and Wedin (2016; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Quadracaea Lunghini, Pinzari & Zucconi 1996, *Ascomycota* genera *incertae sedis*, three species, type: *Q. mediterranea* Lunghini, Pinzari & Zucconi, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology), Zhang et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Barbosa et al. (2013; new species), Kirk et al. (2013; genus accepted), holotype of the type: IMI 367816, cultures and sequences are unavailable, needs generic revision.

Quadricladium Nawawi & Kuthub. 1989, *Ascomycota* genera *incertae sedis*, one species, type: *Q. aquaticum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 327415, cultures and sequences are unavailable, needs generic revision.

Quadricrura Kaz. Tanaka, K. Hiray. & Sat. Hatak. 2009, *Tetraplosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *Q. septentrionalis* Kaz. Tanaka, K. Hirayama & Sat. Hatak., sexual morph unknown, saprobes, terrestrial, Japan, see Tanaka et al. (2009; morphology, phylogeny), Hyde et al. (2013; accepted as a genus in *Tetraplosphaeriaceae*), Wijayawardene et al. (2014; outline), holotype and ex-type strain of the type: HHUF 28782, CBS 125430, cultures and sequences are available.

Quasiconcha M.E. Barr & M. Blackw. 1981, *Mytilinidiaceae*, *Mytilinidiales*, *Dothideomycetes*, one species, type: *Q. reticulata* M.E. Barr & M. Blackw., asexual morph hyphomycetous, mainly coprophilous, terrestrial, USA, see Boehm et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mytilinidiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Quasidiscus B. Sutton 1991, *Ascomycota* genera *incertae sedis*, one species, type: *Q. simmondsii* B. Sutton, coelomycetous, sexual morph unknown, saprobes, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 263349c, cultures and sequences are unavailable, needs generic revision.

Quasiphloeospora B. Sutton, Crous & Shamoun 1996, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *Q. saximontanensis* (Deighton) B. Sutton, Crous & Shamoun, sexual morph unknown, one species, foliicolous, pathogens, North America, see Seifert et al. (2011; morphology), Braun et al. (2013; Cercosporoid fungi), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014, 2017; outline), holotype of type: IMI 98069, cultures and sequences are unavailable.

Queenslandia Bat. & H. Maia 1959, *Ascomycota* genera *incertae sedis*, five species, two varieties, type: *Q. pulchella* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Queenslandipendiella Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *Q. kurandae* (Crous & J.K. Stone) Quaedvlieg & Crous, hyphomycetous, sexual morph unknown, pathogens, saprobes, Australia, see Quaedvlieg et al.

(2014; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of type: CBS H-19932, CPC 13333. GenBank number: KF903538.

Queirozia Viégas & Cardoso 1944, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, one species, type: *Q. turbinata* Viégas & Cardoso, sexual and hyphomycetous asexual morph, biotrophic, obligate plant pathogens, terrestrial, South America, see Liberato et al. 2006 (morphology, phylogeny, taxonomy), Braun and Cook 2012 (taxonomy), Kirk et al. (2013; genus accepted), holotype of the type: IACM 26560, sequences of non-type material of the type species are available.

Quezelia Faurel & Schotter 1965, *Ascomycota* genera *incertae sedis*, one species, type: *Q. hoggariana* Faurel & Schotter, coelomycetous, sexual morph unknown, coprophilous, Sahara, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Quintaria Kohlm. & Volkm.-Kohlm. 1991, *Dothideomycetes* genera *incertae sedis*, four species, type: *Q. lignatilis* (Kohlm.) Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, freshwater or marine, worldwide, see Zhang et al. (2008), Schoch et al. (2009; phylogenetic assessment), Suetrong et al. (2009; placement in *Testudinaceae*), Hirayama et al. (2010), Wijayawardene et al. (2014; accepted as a genus in *Dothideomycetes*), cultures and sequences are available, holotype of type: J.K.4365a = 01097442, NYBG.

Rachicladosporium Crous, U. Braun & C.F. Hill 2007, *Cladosporiaceae*, *Capnodiales*, *Dothideomycetes*, twelve species, type: *R. luculiae* Crous, U. Braun & C.F. Hill, asexual morphs hyphomycetous, terrestrial, Antarctica, Europe, New Zealand, North America, See Crous et al. (2009; phylogeny), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2014, 2017; outline) Egidi et al. (2014; rock-inhabiting species), Qadri et al. (2014; endophyte), Selbmann et al. (2015; distributional records of Antarctic fungi), Yang et al. (2015; taxonomy, phylogeny), ex-type strains of type: CBS 121620 = CPC 11407, holotype of type: CBS H-19891.

Rachidicola K.D. Hyde & J. Fröhl. 1995, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *R. palmae* K.D. Hyde & J. Fröhl., asexual morph unknown, saprobes, terrestrial, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BRIP 22762, cultures and sequences are unavailable, needs generic revision.

Racodium Fr. [nom. cons.] 1829, *Racodiaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *R. rupestre* Pers., lichenized, see Muggia et al. (2008; phylogeny), Nelsen et al. (2009; phylogeny), Kantvilas and Jarman (2012; ecology and conservation), Anderson (2014; checklist), Schoch and Grube (2015; systematics), Lücking et al. (2016; classification); sequences are available, holotype of type: UPS:BOT:L-024182.

Racoleus R. Sant. & D. Hawksw. 2011, *Capnodiales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *R. trichoporus* R. Sant. & D. Hawksw., filamentous lichen, tropical, Africa, Asia, and South America, sexual morph unknown, see Hawksworth et al. (2011; morphology, taxonomy), Jaklitsch et al. (2016; position), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type: UPS:BOT:L-638266.

Radiatispora Matsush. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *R. yunnanensis* Matsush., coelomycetous, sexual morph unknown, coprophilous, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of type: MFC-0Y237.

Radotinea Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *R. caudata* Velen., asexual morph unknown, saprobes, former Czechoslovakia, see Kirk et al. (2008; mentioned as *Helotiales*, genera *incertae sedis*, Lumbsch and Huhndorf (2010; did not accept as genus in *Helotiales*), Kirk et al. (2013; genus accepted), data inadequate, cultures and sequences are unavailable, needs generic revision.

Radulidium Arzanlou, W. Gams & Crous 2007, *Dothideomycetes genera incertae sedis*, three species, type: *R. subulatum* (de Hoog) Arzanlou, W. Gams & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Czech Republic, USA, see Wu et al. (2013; new species, morphology), Wijayawardene et al. (2017; outline), ex-type culture of type: CBS 405.76.

Raesaenenia D. Hawksw. C. Boluda & H. Lindgren 2015, *Parmeliaceae, Lecanorales, Lecanoromycetes*, one species, type: *R. huuskonenii* (Räsänen) D. Hawksw. C. Boluda & H. Lindgren, asexual morph unknown, on lichens, Europe, terrestrial, see Divakar et al. (2015; phylogeny), cultures and sequences are unavailable, isotype of type: K(M)-IMI 209424.

Raesaeneniana S.Y.Kondr., Kärnefelt, A.Thell, Elix & Hur 2015, *Teloschistaceae, Teloschistales, Lecanoromycetes*, one species, type: *R. maulensis* (S.Y. Kondr. & J.-S. Hur) S.Y. Kondr., Elix, Kärnefelt & A. Thell, lichenized, see Kondratyuk et al. (2015b; classification), Lücking et al. (2016; classification), sequences are available.

Raffaelea Arx & Hennebert 1965, *Ophiostomataceae, Ophiostomatales, Sordariomycetes*, 31 species, type: *R. ambrosiae* Arx & Hennebert, sexual morph unknown, symbionts of Ambrosia beetle, plant pathogen, terrestrial, worldwide, see Harrington et al. (2008, new species), Mayfield et al. (2008; laurel wilt on avocado), Kim et al. (2009a, 2009b; effect of Silver nanoparticles, new species), Kolarík and Hulcr (2009; *Scolytodes unipunctatus* mycobiota), Smith et al. (2009; laurel wilt on Camphor), Harrington et al. (2010; phylogeny, new species), Matsuda et al. (2010; phylogeny), Harrington et al. (2011; origin of *Raffaelea lauricola*), Seo et al. (2012; phylogeny), Dreaden et al. (2014a; multilocus PCR assays), Dreaden et al. (2014b; phylogeny), Jeyaprakash et al. (2014; molecular diagnostics), Musvuugwa et al. (2015; sexual state), Simmons et al. (2016; new species), cultures and sequences are available, holotype and ex type of the type: CBS H-7710, CBS 185.64.

Raizadenia S.L. Srivast. 1981, *Ascomycota genera incertae sedis*, one species, type: *R. garhwalensis* S.L. Srivast., hyphomycetous, sexual morph unknown, saprobes, India, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Chomnunti et al. (2014; morphology), cultures and sequences are unavailable, needs generic revision.

Ramakrishnanella Kamat & Ullasa ex Ullasa 1970, *Ascomycota genera incertae sedis*, one species, type: *R. indica* Ullasa, coelomycetous, sexual morph unknown, saprobes, India, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ramalea Nyl. 1866, *Lecanorales genera incertae sedis, Lecanoromycetes*, four species; type: *Ramalea tribulosa* Nyl.; lichenized; see Lücking et al. (2016; classification); sequences are available.

Ramalina Ach. 1809, *Ramalinaceae, Lecanorales, Lecanoromycetes*, c. 230 species, type: *R. fraxinea* (L.) Ach., lichenized, worldwide, see Bermudez et al. (2009; air pollution), Del Campo et al (2010; taxonomy), Hoskeri et al. (2010; bactericidal study), Lumbsch and Huhndorf (2010; outline), Luo et al (2010; antioxidant study), Paudel et al. (2010, 2011; chemistry), Riddle et al. (2010; air quality), Werth and Sork (2010; photobiont genetics), Aptroot and Bruyn (2011; new record), Arroyo et al. (2011; new species), Cordeiro et al. (2011; experimental study), Casano et al. (2011; physiology), del Hoyo et al. (2011; oxidative stress), Quedensley and Véliz Pérez (2011; new species), Timsina et al. (2012; phylogeny), Türkez et al. (2012; cytogenetic and biochemical study), Verma et al. (2012; culture study), Del Campo et al. (2013; photobiont coexistence), Kirk et al. (2013; genus accepted), Sisodia et al. (2013; bioactivity study), Duman et al. (2014; genotoxicity), Moncada et al. (2014, Oh et al. (2014; taxonomy), Perez-Vargas and Perez-Ortega (2014; new and endemic species), Sork and Werth (2014; phylogeography), Moncada et al. (2014), Blanchon et al. (2015; new records), Ly et al. (2015; chemistry), Moreira et al. (2015; chemistry and biological activity),

Catala et al. (2016; phylogenomic analyses), Cornejo et al. (2016; chemistry), Lücking et al. (2016; classification), Ristic et al. (2016; biopharmaceutical potential study), Zrnzević et al. (2016; Gc-Ms analysis), sequences are available for few species, needs generic revision.

Ramalodium Nyl. 1879, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, five species, type: *R. succulentum* Nyl., lichenized, see Wedin et al. (2009; molecular), Hill et al. (2011; new record), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), de Lange and Blanchon (2014; endemic record), Ekman et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Ramboldia Kantvilas & Elix 1994, *Ramboldiaceae*, *Lecanorales*, *Lecanoromycetes*, 33 species, two varieties, type: *R. stuartii* (Hampe) Kantvilas & Elix, lichenized, see Kalb et al. (2009; new species), Upreti et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirika et al. (2012; new record), Kuznetsova et al. (2012; new record), Mayrhofer et al. (2012; new record), Gumboski (2014; new records), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Resl et al. (2015; partial sequence), Singh et al. (2015; molecular), Kantvilas (2016; new species, taxonomy), Zhao et al. (2016; classification), Miadlikowska et al. 2014, Lücking et al. (2016; classification), sequences are available for few species, needs generic revision.

Ramgea Brumm. 1992, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, one species, type: *R. annulispora* Brumm., asexual morph unknown, saprobes, terrestrial, Netherlands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ramicapitulum Whitton, K.D. Hyde & McKenzie 2012, *Ascomycota genera incertae sedis*, one species, type: *R. chinense* Whitton, K.D. Hyde & McKenzie, hyphomycetous, sexual morph unknown, saprobes, Hong Kong, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ramicephala Voglmayr & G. Delgado 2002, *Ascomycota genera incertae sedis*, one species, type: *R. sphaerospora* Voglmayr & G. Delgado, hyphomycetous, sexual morph unknown, saprobes, aquatic, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: WU 22035, cultures and sequences are unavailable, needs generic revision.

Ramichloridium Stahel ex de Hoog 1977, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 35 species, type: *R. apiculatum* (J.H. Mill., Giddens & A.A. Foster) de Hoog, hyphomycetous, sexual morph unknown, saprobes, from soil terrestrial, USA, see Braun et al. (2009; new species), Crous et al. (2009; phylogeny), Kirschner and Chen (2010; new species), Shivas et al. (2010; new species), Li et al. (2012; new species; phylogeny), Wijayawardene et al. (2012, 2014, 2016; outline), Crous et al. (2014; new species), cultures and sequences are available, ex-type cultures of the type: QM 7716, MUCL 7991, MUCL 15753, JCM 6972, IMI 100716, CBS 156.59, ATCC 13211 (fide Videira et al. 2016).

Ramimonilia Stielow & Quaedvl. 2014, *Dothideomycetes genera incertae sedis*, one species, type: *R. apicalis* B. Stielow & W. Quaedvl., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Egidi et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014, 2017; outline), cultures and sequences are available, holotype of type: CBS 118327.

Ramoconidiifera B. Sutton, Carmarán & A.I. Romero 1996, *Ascomycota genera incertae sedis*, three species, type: *R. verrucosa* B. Sutton, Carmarán & A.I. Romero, hyphomycetous, sexual morph unknown, saprobes, South America, see Seifert et al. (2011; morphology), Whitton et al. (2012; new species, morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype BAFC 33.275, needs generic revision.

Ramonia Stizenb. 1862, *Gyalectaceae*, *Ostropales*, *Lecanoromycetes*, 24 species, type: *R. valenzueliana* (Mont.) Stizenb., lichenized, cosmopolitan, see Lendemer et al. (2009; new species), Knudsen and Kocourková (2010; checklist), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stepanchikova et al. (2013; new records), Aptroot et al. (2015; new species), Lücking et al. (2016; classification), sequences are available.

Ramopenidiella Crous & R.G. Shivas 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *R. cycadicola* Crous & R.G. Shivas, hyphomycetous, sexual morph unknown, saprobe, associated with leaf spots, terrestrial, Australia, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2017; outline), culture and sequence are available, holotype and ex-type culture of type: CBS 137973, CBS H-21684.

Ramophialophora M. Calduch, Stchigel, Gené & Guarro 2004, *Sordariales*, genera *incertae sedis*, *Sordariomycetes*, two species, type: *R. vesiculosa* M. Calduch, Stchigel, Gené & Guarro, hyphomycetous, sexual morph unknown, in soil, terrestrial, Europe, see Madrid et al. (2010; new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Ramsbottomia W.D. Buckley 1924, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *R. lamprosporoidea* W.D. Buckley, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Shcherbakova (2016, new record), cultures and sequences are available, needs generic revision.

Ramularia Unger 1833 (= *Mycosphaerella* Johanson 1884 *fide* Wijayawardene et al. 2014; Rossman et al. 2015), *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 1047 species, of which 100 species are presently recognized based on DNA, type: *R. pusilla* Unger, hyphomycetous, sexual morph formerly named in *Mycosphaerella*, plant pathogens, terrestrial, mostly foliicolous, see Walters et al. (2008; pathology), Crous (2009, 2011, 2016; taxonomy, phylogeny, new species), Kirschner (2009; monograph), Taylor et al. (2010; molecular); Bakhshi et al. (2012; checklist), Braun (2013; monograph), Jaiman et al. (2013; pathology), Bruckart et al. (2014; characterization and evaluation, biological control), Ruskiewicz-Michalska and Połec (2014; new species, records), Kaczmarek (2015; infection biology and life cycle), Videira et al. (2015, 2016; morphology, phylogeny), McGrann et al. (2016; whole genome sequencing), Park and Shin (2016; new species, taxonomy), cultures and sequences are available for most of the species, epitype and ex-epitype culture of type: CBS H-22527, CBS 124973.

Ramulariopsis Speg. 1910, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, five species, type: *R. cnidoscoli* Speg., hyphomycetous, with mycosphaerella-like sexual morph (only known for *R. gossypii*), plant pathogens, associated with leaf spots, Africa, Asia, Australia, Europe, North and South America, Oceania, see Delgado (2011; checklist), Seifert (2011), Pirnia et al. (2012; taxonomy), Wijayawardene (2012, 2014, 2017; outline), Videira et al. (2016, phylogeny), sequence data only available for the non-type: *R. gossypii* and *R. pseudoglycines*, holotype of type: LPS 12851.

Ramulispora Miura 1920, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, twelve species, type: *R. andropogonis* Miura, hyphomycetous, sexual morph unknown, plant pathogens, on Poaceae, see Malinski (2008; antimicrobial), Crous et al. (2009; review, phylogeny, taxonomy), Brady et al. (2011; pathology), Wijayawardene et al. (2012, 2017; outline), Videira et al. (2017; morphology, phylogeny), cultures and sequences are available.

Rasamsonia Houbraken & Frisvad 2011, *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, twelve species, type: *R. emersonii* (Stolk) Houbraken & Frisvad, thermotolerant, saprobes, human pathogen, terrestrial, worldwide, see Houbraken et al. (2012; description, morphology, phylogeny), Doyon et al. (2013; pulmonary and graft infection), Giraud et al. (2013;

pathogenesis), Houbraken et al. (2013; antifungal susceptibility), Salguero et al. (2013; infection in dog), Su and Cai (2013; new species), Tanney and Seifert (2013; new species), Steinmann et al. (2014; real time PCR, clinical diagnosis), Matos et al. (2015; isolation from cystic fibrosis patient), Crous et al. (2016; new species, phylogeny), Gudmundsson et al. (2016; extrolite profiling), Ishiwada et al. (2016; mixed infection), Jurjevic et al. (2016; new species), Mouhajir et al. (2016; rep-PCR, clinical diagnosis), Steinmann et al. (2016; isavuconazole drug response), cultures and sequences are available for all species, holotype and ex-type of type: CBS H-7817; CBS 393.64.

Rasutoria M.E. Barr 1987, *Euantennariaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *R. abietis* (Dearn.) M.E. Barr, asexual morph unknown, plant pathogens, see Crous et al. (2009; morphology, phylogeny), Wijayawardene et al. (2012, 2014; outline), GenBank: GU371809, holotype of type: BPI 691065, cultures are unavailable.

Rattania Prabhug. & Bhat 2009, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *R. setulifera* Prabhug. & Bhat, hyphomycetous, sexual morph unknown, Endophytic, Terrestrial, India, see Shenoy et al. (2010; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, ex-type culture: GUFCC15501 (MTCC 9698).

Readeriella Syd. & P. Syd. 1908, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, five species, type: *R. mirabilis* Syd. & P. Syd., coelomycetous, sexual morph unknown, with *Cibiessia* synasexual morph, saprobes, pathogens, terrestrial, cosmopolitan, see Crous et al. (2009, 2016; new species, phylogeny), Wijayawardene et al. (2012, 2014, 2016, 2017; outline, taxonomy, phylogeny), Quaedvlieg et al. (2014; new species, phylogeny), cultures and sequences are available.

Readeriellipsoidis Crous & C. Decock 2015, *Capnodiales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *R. fuscoporiae* Crous & C. Decock, coelomycetes, sexual morph unknown, saprobes, French Guiana, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016, 2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22229, CPC 24637.

Rebentischia P. Karst. 1869, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, 16 species, type: *R. pomiformis* P. Karst., saprobes on decaying wood, widespread, asexual morph unknown, Virginia Bianchinotti, M. and Sánchez (2009; new record: Argentina), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Rechingeriella Petr. 1940, *Zopfiaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *R. insignis* Petr., asexual morph unknown, saprobes, terrestrial, Asia, Europe, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Hyde et al. (2013; morphology, outline), Wijayawardene et al. (2014b; outline), cultures and sequences are unavailable, needs generic revision.

Reconditella Matzer & Hafellner 1990, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *R. physconiarum* Matzer & Hafellner, asexual morph unknown, lichenicolous, terrestrial, Europ, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rectifusarium L. Lombard, Crous & W. Gams 2015, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *R. ventricosum* (Appel & Wollenw.) L. Lombard & Crous, asexual morph hyphomycetous, saprobes, terrestrial, Germany, see Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), holotype and ex-type cultures of the type: CBS H-21948, CBS 430.91 = NRRL 25729.

Recurvomyces Selbmann & de Hoog 2008, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, hyphomycetous, one species, type: *R. mirabilis* Selbmann & de Hoog, sexual morph unknown, saprobes, terrestrial, Antarctica, see Selbmann et al. (2008; morphology; phylogeny), Onofri et al. (2011; biodiversity, Italy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Quaedvlieg et al. (2014; phylogeny), Selbmann et al. (2015; distributional pattern), holotype and ex-type strain of the type: CBS H-20178, CBS 119434.

Redbia Deighton & Piroz. 1972, *Ascomycota genera incertae sedis*, two species, type: *R. pucciniicola* Deighton & Piroz., hyphomycetous, sexual morph unknown, fungicolous, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Reddellomyces Trappe, Castellano & Malajczuk 1992, *Tuberaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *R. westraliensis* (G.W. Beaton & Malajczuk) Trappe, Castellano & Malajczuk, asexual morph unknown, saprobes, saprobes, terrestrial, Australasia, Mediterranean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kušan et al. (2014: review of the hypogeous species), Rana et al. 92015: biodiversity), cultures and sequences are available for unidentified species (unpublished).

Redingeria Frisch 2006, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, twelve species, type: *R. leiostoma* (Nyl.) Frisch, asexual morph unknown, lichenized fungi, terrestrial, tropical, placement in *Graphidaceae* supported by molecular data, see Lumbsch and Huhndorf (2010; outline), da Silva Caceres et al. (2012; new combinations), Rivas Plata et al. (2012a, b; molecular, classification), Kirk et al. (2013; genus accepted), Van den Broeck et al. (2014; new species), Lücking et al. (2016; classification), sequences are available.

Redonia C.W.Dodge 1973, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, two species, type: *R. chilena* C.W. Dodge, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are unavailable.

Redonographa Lücking, Tehler & Lumbsch 2013, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *R. chilensis* (Zahlbr.) Lücking & Tehler, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lücking et al. (2013, 2014, 2016; phylogeny, new species, classification), sequences are available.

Refractohilum D. Hawksw. 1977, *Ascomycota genera incertae sedis*, six species, type: *R. galligenum* D. Hawksw., hyphomycetous, sexual morph unknown, lichenicolous, fungicolous, widespread, terrestrial, see Seifert et al. (2011; genus accepted), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: K(M)-IMI 212682.

Regiocrella P. Chaverri & K.T. Hodge 2006, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *R. camerunensis* P. Chaverri & H.C. Evans, asexual morph unknown, mainly coprophilous, terrestrial, Cameroon, China, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: CUP 67512, cultures and sequences are available.

Rehmiodothis Theiss. & Syd. 1914, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *R. osbeckiae* (Berk. & Broome) Theiss. & Syd., from living leaves, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rehmiomycella E. Müll. 1962, *Sordariomycetes genera incertae sedis*, one species, type: *Rehmiomycella phoradendri* (Rehm) E. Müll., saprobes, Brazil, see Lumbsch and Huhndorf

(2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Reichlingia Diederich & Scheid. 1996, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, four species, type: *R. leopoldii* Diederich & Scheid., two species known from the sexual stage, the generic type only known from the asexual stage with loose, sporodochia-like conidiomata, lichenized, on saxicolous and corticolous, Europe and Africa (Uganda), see Motiejūnaitė (2011; taxonomy), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Frisch et al. (2014a, b), Lücking et al. (2016; classification), holotype of the type: STU Wirth 23450, sequences are available.

Reimnitzia Kalb 2001, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *R. santensis* (Tuck.) Kalb, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Rivas Plata et al. (2012a; phylogeny), see Lumbsch and Huhndorf (2010; outline), Kraichak et al. (2014; phylogeny), Lücking et al. (2015, 2016; phylogeny, classification), sequences are available.

Relicina (Hale & Kurok.) Hale, 1974, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 60 species, type: *R. eumorpha* (Hepp) Hale, asexual morph, undetermined, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Benatti (2011; taxonomy), Kirk et al. (2013; genus accepted), Sethy et al. (2012; taxonomy), Crespo et al. (2010; phylogeny), De Paz et al. (2011; phylogeny), Buaruang et al. (2015; lineage), Kirika et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Remersonia Samson & Seifert 1997, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *R. thermophila* (Fergus) Seifert & Samson, hyphomycetous, sexual morph unknown, in soil, terrestrial, Asia, Australasia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Remispora Barghoon & Linder 1944, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, six species, type: *R. maritima* Linder, asexual morph unknown, saprobes, marine, worldwide, see Jones et al. (2009, 2015; outline), Lumbsch and Huhndorf (2010; outline), Abdel-Wahab (2011; phylogeny), Sakayaroj et al. (2011; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Remleria Raitv. 2004, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *R. myrtillinoides* (Rehm) Raitv., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Remototrachyna Divakar & A. Crespo 2009, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes* 20 species, type: *R. flexilis* (Kurok.) Divakar & A. Crespo, asexual morph, undetermined, terrestrial, see Flakus et al. (2012; taxonomy), Crespo et al. (2010; phylogeny), De Paz et al. (2011; origin and diversification), Divakar et al. (2012; data partial sequencing), Thell et al. (2012; review of the family Parmeliaceae), Masson et al. (2015; sequencing data), Lücking et al. (2016; classification), cultures and sequences are available.

Renispora Sigler & J.W. Carmich. 1979, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, two species, type: *R. flavissima* Sigler, P.K. Gaur, Lichtw. & J.W. Carmich., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pitt et al. (2013; partial sequence), cultures available for the type: ATCC 38503.

Repetoblastiella R.F. Castañeda, Minter & M. Stadler 2010, *Ascomycota* genera *incertae sedis*, one species, type: *R. olivacea* R.F. Castañeda, Minter & M. Stadler, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011;

morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Repetophragma Subram. 1992, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, 29 species, type: *R. biseptatum* (M.B. Ellis) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Marincowitz et al. (2008; new species), Silvera-Simon et al. (2009; new species), Zhang et al. (2009; phylogeny), Castañeda-Ruiz et al. (2011, 2013; new species, revision), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Ma et al. (2014; new species), cultures and sequences are available but lacks for the type, needs generic revision.

Requienella Fabre 1883, *Requienellaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *R. seminuda* (Pers.) Boise, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Nordén and Jordal (2014; new record), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures available for the type: RS12, RS13, sequences are available.

Resendea Bat. 1961, *Dothideomycetes* genera *incertae sedis*, two species, type: *R. paraguayensis* Bat., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Retiarius D.L. Olivier 1978, *Orbiliaceae*, *Orbiliiales*, *Orbiliomycetes*, two species, type: *R. superficialis* D.L. Olivier, hyphomycetous, sexual morph unknown, on pollen, South Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Reticulosphaeria Sivan. & Bahekar 1982, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *R. indica* Sivan. & Bahekar, asexual morph unknown, on stems of *Achyranthes aspera*, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 254813, cultures and sequences are unavailable.

Retroa P.F. Cannon 1991, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *R. dimorphandrae* (F. Stevens) P.F. Cannon, from living leaves, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Retroconis de Hoog & Bat. Vegte 1989, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *R. fusiformis* (S.M. Reddy & Bilgrami) de Hoog & Bat. Vegte, hyphomycetous, sexual morph unknown, saprobes, on human skin, terrestrial, Africa, Asia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 452.71, needs generic revision.

Retrostium Nakagiri & Tad. Ito 1997, *Spathulosporaceae*, *Lulworthiales*, *Sordariomycetes*, one species, type: *R. amphiroae* Nakagiri & Tad. Ito, spermatophores or asexual morph hyphomycetous, biotrophic on marine red alga, Japan, see Nakagiri and T. Ito (1997; morphology), Inderbitzin et al. (2004), Business et al. (2012; taxonomy), Loque et al. (2014; taxonomy), holotype of the type: IFO H-12210, cultures and sequences are unavailable

Rhabdoclema Syd. 1939, *Ascomycota* genera *incertae sedis*, two species, type: *R. chusqueae* Syd., coelomycetous, sexual morph unknown, saprobes, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhabdocline Syd. 1922 (= *Meria* Vuill. 1896; *Hartigiella* Syd. & P. Syd. 1900, *Rhabdogloeum* Syd. 1922, *fide* Johnston et al. 2014), *Hemiphacidiaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *R. pseudotsugae* Syd., asexual morph hyphomycetous,

saprobies, pathogens, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Morgenstern et al. (2013; pathogens), Johnston et al. (2014; nomenclature), Sweet et al. (2015; pathogens, DNA), cultures available for the type.

Rhabdodiscus Vain. 1921, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 42 species, type: *R. auberianus* (Mont.) Vain., asexual morph unknown, lichenized, terrestrial, tropical, see Rivas Plata et al. (2012; phylogeny), Singh et al. (2013; new species, India), Caceres et al. (2014; taxonomy), Papong et al. (2014; taxonomy), Peláez et al. (2014; new combination), Lücking et al. (2016; classification), Ohmura et al. (2016; taxonomy), sequences are available

Rhabdogloeopsis Petr. 1925, *Ascomycota* genera *incertae sedis*, two species, type: *R. balsameae* (Davis) Petr., coelomycetous, sexual morph unknown, saprobies, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhabdomyces Balbiani 1889, *Ascomycota* genera *incertae sedis*, one species, type: *R. lobjoyi* Balbiani., coelomycetous, sexual morph unknown, saprobies, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhabdopsora Müll. Arg. 1888, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, two species, type: *R. polymorpha* Müll. Arg., lichenized; see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Rhabdospora (Durieu & Mont.) Sacc. 1884, *Dothideomycetes* genera *incertae sedis*, c. 150 species, type: *S. oleandri* Durieu & Mont., coelomycetous, sexual morph unknown, saprobies, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Rhabdostromella Höhn. 1915, *Ascomycota* genera *incertae sedis*, one species, type: *R. rubi* Höhn., coelomycetous, sexual morph unknown, saprobies, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhabdostromina Died. 1921, *Ascomycota* genera *incertae sedis*, three species, type: *R. empetri* (Rostr.) Died., coelomycetous, sexual morph unknown, saprobies, terrestrial, Europe, see Punithalingam and Spooner (2011; reinstated the genus, morphology, new comb.), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Rhachomyces Thaxt. 1895, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, c. 80 species, type: *R. lasiophorus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic, worldwide, see Rossi and Proano (2009; new species), Santamaría and Faille (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015; DNA, review), sequences are available.

Rhagadolobiosis Guatim. & R.W. Barreto 2014, *Parmulariaceae*, *Asterinales*, *Dothideomycetes* families *incertae sedis*, two species, type: *R. thelypteris* Guatimosim & R.W. Barreto, asexual morph unknown, saprobies, terrestrial, Brazil, see Guatimosim et al. (2014; taxonomy), holotype of the type: VIC 31939, cultures and sequences are available.

Rhagadlobium Henn. & Lindau 1897, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, seven species, type: *R. hemitheliae* Henn. & Lindau, asexual morph unknown. Epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Inácio et al. (2012; taxonomy), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Rhagadostoma Körb. 1865, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, six species, type: *R. corrugatum* Körb., asexual morph unknown, saprobies, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),

Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rhagadostomella Etayo 2002, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, one species, type: *R. gregaria* Etayo, asexual morph unknown, lichenicolous on *Sticta*, terrestrial, South America, see Etayo (2002; morphology, distinction of similar lichenicolous genera), Maharachchikumbura et al. (2015, 2016; outline), need revision, holotype of the type: COL, Etayo 15943, cultures and sequences are unavailable.

Rhamphoria Niessl 1876, *Annulatascales*, *Annulatascales*, *Sordariomycetes*, 14 species, type: *R. delicatula* Niessl, asexual morph hyphomycetous (phaeoisaria-like), saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Reblova et al. (2016: new species), sequences are available.

Rhamphosphaeria Kirschst. 1936, *Sordariomycetes* genera *incertae sedis*, one species, type: *R. capillata* Kirschst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rhaphidicyrtis Vain. 1921, *Pyrenulales incertae sedis*, *Eurotiomycetes*, one species, type: *R. trichosporella* (Nyl.) Vain., asexual morph unknown, lichenized, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Rhexoacrodityps W.A. Baker & Morgan-Jones 2002, *Ascomycota* genera *incertae sedis*, five species, type: *R. erecta* (Ellis & Everh.) W.A. Baker & Morgan-Jones, sexual morph unknown, saprobes, terrestrial, see Seifert et al. (2011; morphology), Zhao et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Rhexoampullifera P.M. Kirk 1982, *Pyrenulales incertae sedis*, *Eurotiomycetes*, three species, type: *R. fagi* (M.B. Ellis) P.M. Kirk & C.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, British Isles, Brazil, Czech Republic, see Seifert et al. (2011; morphology), Koukol (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhexocercosporidium U. Braun 1994, *Helotiales incertae sedis*, *Leotiomycetes*, two species, type: *R. carotae* (Årsvoll) U. Braun, hyphomycetous, terrestrial, soil-borne pathogens, root-inhabiting and on foliage, Asia, Europe, North America, see Nekoduka et al. (2010, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), ex-type strains of type: ATCC 18513 = CBS 418.65 = DAOM 116857.

Rhexodenticula W.A. Baker & Morgan-Jones 2001, *Cordanaceae*, *Cordanales*, *Sordariomycetes*, four species, type: *R. cylindrospora* (R.F. Castañeda, Saikawa & Hennebert) W.A. Baker & Morgan-Jones, saprobes, cosmopolitan, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Klaubauf et al. (2014; taxonomy, phylogeny), Crous et al. (2016; new species, phylogeny), cultures and sequences are available.

Rhexophiale Th. Fr. 1860, *Sagirolechiaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *R. coronata* Th. Fr., lichenized, see Baloch et al. (2010; phylogeny), Kondratyuk et al. (2016; new reports), Lücking et al. (2016; classification), sequences are available.

Rhexoprolifer Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *R. variabilis* Matsush., hyphomycetous, sexual morph unknown, saprobes, France, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhexosporium Udagawa & Furuya 1977, *Sordariales incertae sedis*, *Sordariomycetes*, one species, type: *R. terrestre* Udagawa & Furuya, asexual morph unknown, saprobes, terrestrial,

Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rhexothecium Samson & Mouch. 1975, *Eremomycetaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *R. terrestre* Udagawa & Furuya, asexual morph hyphomycetous (trichosporiella-like), saprobes, terrestrial, Egypt, Kenya, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Eremomycetaceae*), Kirk et al. (2013; genus accepted), Giraldo et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Rhinoclaadiella Nannf. 1934, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, c. 13 species, type: *R. atrovirens* Nannf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Wu et al. (2013; new species), Hernandez-Restrepo et al. (2016; new species), Madrid et al. (2016; new species, phylogeny), cultures and sequences are available.

Rhinocladium Sacc. & Marchal 1885, *Microascaceae*, *Microascales*, *Sordariomycetes*, nine species, type: *R. coprogenum* Sacc. & Marchal ex Marchal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Lackner et al. (2012; DNA), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available but lacks for the type.

Rhinotrichella G. Arnaud ex de Hoog 1977, *Ascomycota* genera *incertae sedis*, four species, type: *R. globulifera* G. Arnaud ex de Hoog, hyphomycetous, sexual morph unknown, saprobes, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhipidiomyces Thaxt. 1926, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *R. acriti* Thaxt., asexual morph unknown, biotrophic, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Rhipidocarpon (Theiss.) Theiss. & Syd. 1915, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *R. javanicum* (Pat.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, Java, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Rhipidocephalum Trail 1888, *Ascomycota* genera *incertae sedis*, two species, type: *R. abietis* Trail, hyphomycetous, sexual morph unknown, saprobes, British Isles, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhizina Fr. 1815, *Rhizinaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *R. undulata* Fr., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Palomares-Rius et al. (2014; DNA), cultures available for the type: AFTOL-ID 918.

Rhizoblepharia Rifai 1968, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *R. jugispora* Rifai, asexual morph unknown, saprobes, terrestrial, Australia, Jamaica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhizocarpon Ramond ex DC., 1805, *Rhizocarpaceae*, *Lecanorales*, *Lecanoromycetes*, 325 species, 71 subspecies, 197 varieties, 188 forma species, type: *Rhizocarpon geographicum* (L.) DC. morph, undetermined, terrestrial, Europe, Middle East, South Korea, Turkey, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bradwell (2010;

applied studies), Matthews and Trenbirth (2011; lichenometry), Sánchez et al. (2014; physiology), Joshi et al. (2010; rare lichens), Aptroot and Aslan (2011; rare lichens), Fleischhacker et al. (2015; partial sequencing, ribosomal RNA), Lücking et al. (2016; classification), sequences are available.

Rhizocladosporium Crous & U. Braun 2007, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *R. argillaceum* (Minoura) Crous & U. Braun asexual morph hyphomycetous, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), ex-type strains of type: CBS 241.67 = IFO 7055; holotype of type: Tubaki 4262 (IFO).

Rhizodermea Verkley & Zijlstra, 2010, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *R. veluwensis* Verkley & Zijlstra, produced only chlamydospores, sexual morph unknown, from roots, terrestrial, Europe, see Verkley and Hofland-Zijlstra (2010; taxonomy), holotype of the type: CBS 110605 (deposited as culture).

Rhizodiscina Hafellner 1979, *Patellariaceae*, *Patellariales*, *Dothideomyces*, one species, type: *R. lignyota* (Fr.) Hafellner, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), cultures and sequences are unavailable, needs generic revision.

Rhizogene Syd. & P. Syd. 1921, *Dothideomyces* genera *incertae sedis*, one species, type: *R. symphoricarpi* (Syd. & P. Syd.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Zhang et al. (2012; provisionally accepted as a genus in *Venturiaceae*), Hyde et al. (2013; excluded the genus from *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Rhizolecia Hertel 1984, *Lecideaceae*, *Lecanorales*, *Lecanoromyces*, one species, one species, type: *R. hybrida* (Zahlbr.) Hertel, asexual morph, undetermined, terrestrial, See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hertel (2014; taxonomy revision), cultures and sequences are unavailable.

Rhizomyces Thaxt. 1896, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, ten species, type: *R. ctenophorus* Thaxt., asexual morph unknown, biotrophic, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Rhizophila K.D. Hyde & E.B.G. Jones 1989, *Sordariomyces* genera *incertae sedis*, one species, type: *R. marina* K.D. Hyde & E.B.G. Jones, asexual morph unknown, saprobes, marine, Seychelles, Brunei, Thailand, North Sumatra, Bali, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: IMI 325411, cultures and sequences are unavailable.

Rhizoplaca Zopf 1905, *Lecanoraceae*, *Lecanoromyces*, *Lecanorales*, eleven species, five sub species, seven varieties, type: *R. opaca* (Ach.) Zopf., asexual morph unknown, lichenized, terrestrial, see Castello (2010; new combination), Leavitt (2010; circumscription), Sinha and Jagadeesh Ram (2011; taxonomy), Leavitt et al. (2011; species delimitation, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Leavitt et al. (2013a, 2016; phylogeny), Tuthill (2013; checklist), Goni et al. (2014; checklist), Houshyar et al. (2014; antimicrobial), Kondratyuk et al. (2014; molecular phylogeny), Zhao et al. (2016; generic concepts, taxonomy), Lücking et al. (2016; classification), sequences are available.

Rhizopodomycetes Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, seven species, type: *R. merragatae* Thaxt., asexual morph unknown, biotrophic, Africa, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Rhizosphaera L. Mangin & Har. 1907, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, six species, type: *R. abietis* L. Mangin & Har., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014; outline), Thambugala et al. (2014; accepted as a genus in *Dothideaceae*, phylogeny), Kirk et al. (2013; genus accepted), Azeem et al. (2015; DNA, fungi on conifer), cultures and sequences are available but lacks for the type, needs generic revision.

Rhizosphaerina B. Sutton 1986, *Ascomycota* genera *incertae sedis*, two species, type: *R. variabilis* B. Sutton, coelomycetous, sexual morph unknown, saprobes, Australia, South East Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhizotexis Theiss. & Syd. 1917, *Dothideomycetes* genera *incertae sedis*, one species, type: *R. bauhiniarum* (Henn.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014; taxonomy), cultures and sequences are unavailable, needs generic revision.

Rhizothyrium Naumov 1915 (= *Rhizocalyx* Petr. 1928; *Bactrexipula* Höhn. 1918 *fide* Johnston et al. 2014), *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *R. abietis* Naumov, asexual morph coelomycetous, saprobes, terrestrial, Russia, Chile, Siberia, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.

Rhodesia Grove 1937, genera *Ascomycota* genera *incertae sedis*, two species, type: *R. subpecta* (Roberge ex Desm.) Grove, coelomycetous, sexual morph unknown, saprobes, Germany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhodesiopsis B. Sutton & R. Campb. 1979, *Ascomycota* genera *incertae sedis*, two species, type: *R. gelatinosa* B. Sutton & R. Campb., coelomycetous, sexual morph unknown, saprobes, British Isles, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhodopeziza Hohmeyer & J. Moravec 1995, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *R. tuberculata* (Gamundí) J. Moravec & Hohmeyer, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhodoscypha Dissing & Sivertsen 1983, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *R. ovilla* (Peck) Dissing & Sivertsen, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: HMAS97505, needs generic revision.

Rhodosticta Woron. 1911, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *R. caraganae* Woron., coelomycetous, sexual morph unknown, saprobes, Asia, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhodotarzetta Dissing & Sivertsen 1983, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *R. rosea* (Rea) Dissing & Sivertsen, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Rhodothallus Bat. & Cif. 1959, *Ascomycota* genera *incertae sedis*, two species, type: *R. caseariaefolius* Bat., Cif. & C.A.A. Costa ex Bat. & Cif., coelomycetous, sexual morph

unknown, saprobes, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhodoveronaea Arzanlou, W. Gams & Crous, 2007, *Sordariomycetes* genera *incertae sedis*, type: *R. varioseptata* Arzanlou, W. Gams & Crous, hyphomycetous, sexual morph unknown, one species, saprobes, terrestrial, Germany, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type culture of type: CBS-H 19932, CBS 431.88.

Rhombostilbella Zimm. 1902, *Ascomycota* genera *incertae sedis*, two species, type: *R. rosae* Zimm., hyphomycetous, sexual morph unknown, fungicolous, Asia, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhopalocladium Schroers, Samuels & W. Gams 1999, *Ascomycota* genera *incertae sedis*, two species, type: *R. myxophilum* Schroers, Samuels & W. Gams, hyphomycetous, sexual morph unknown, fungicolous, Asia, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhopalostroma D. Hawksw. 1977, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, eleven species, type: *R. indicum* D. Hawksw. & Muthappa, on wood and bark, tropical, Africa and Asia, asexual morph nodulisporium-like, see Lumbsch and Huhndorf (2010; outline), Stadler et al. (2010, 2013; phylogeny), Kirk et al. (2013; genus accepted), Darangama et al. (2014; phylogeny), Darangama et al. (2015; includes description of type), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; position), cultures and sequences are available but lacks for the type:), holotype of type: K(M)-IMI 190605.

Rhopographella (Henn.) Sacc. & Trotter 1913, *Sordariomycetes* genera *incertae sedis*, one species, type: *R. gaduae* (Henn.) Sacc. & Trotter, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rhopographus Nitschke ex Fuckel 1870, *Dothideomycetes* genera *incertae sedis*, six species, type: *R. filicinus* (Fr.) Nitschke ex Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phyllopsora Müll. Arg. 1894, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, 70 species, type: *P. breviuscula* (Nyl.) Müll. Arg. (*Lecidea breviuscula* Nyl.), lichenized, corticolous, tropical, extending into oceanic temperate, see Rikkinen and Poinar (2008; new species), Timdal (2008; Peru), Timdal (2011; West Indies), Mishra et al. (2011; India), Lücking et al. (2016; classification), sequence data available.

Rhymbocarpus Zopf 1896, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, 17 species, type: *R. punctiformis* Zopf, asexual morph unknown, lichenicolous, terrestrial, Europe, see Diederich et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Suija et al. (2015; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Rhynchodiplodia Briosi & Farneti 1904, *Ascomycota* genera *incertae sedis*, one species, type: *R. citri* Briosi & Farneti, coelomycetous, sexual morph unknown, saprobes, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhynchomeliola Speg. 1884, *Rhynchostomataceae*, *Eurotiomycetes* families *incertae sedis*, three species, type: *R. pulchella* Speg., asexual morph unknown, lichenicolous, terrestrial,

South America, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Rhynchophoromyces Thaxt. 1908, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomyces*, eight species, type: *R. rostratus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic on Coleoptera (Hydrophilidae), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhynchoseptoria Unamuno 1940, *Ascomycota* genera *incertae sedis*, one species, type: *R. caballeroana* Unamuno, coelomycetous, sexual morph unknown, saprobes, Morocco, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rhynchospaeria (Sacc.) Berl. 1890, *Sordariomycetes* genera *incertae sedis*, one species, type: *R. dusenii* Henn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rhynchosporina Arx 1957, *Ascomycota* genera *incertae sedis*, two species, type: *R. meinersii* (R. Sprague) Arx, hyphomycetous, sexual morph unknown, saprobes, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species not preserved, needs generic revision.

Rhynchosporium Heinsen ex A.B. Frank 1897, *Helotiales* genera *incertae sedis*, *Leotiomyces*, five species, type: *R. graminicola* Heinsen ex A.B. Frank, hyphomycetous, terrestrial, plant pathogens, leaf spotting, worldwide, see Seifert et al. (2011; morphology), Zaffarano et al. (2011, taxonomy, phylogeny), King et al. (2013, 2014, genetics, taxonomy), Torriani et al. (2014, genetics), Braun (2016, nomenclature of the type), ex-epitype: RS99CH6-C1a.

Rhytidenglerula Höhn. 1918, *Englerulaceae*, *Dothideomycetes* families *incertae sedis*, eleven species type: *R. carnea* (Ellis & G. Martin) Höhn., asexual morph coelomycetous, saprobes, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014, morphology), cultures and sequences are unavailable, type specimen need recollect and sequence.

Rhytidhysterion Speg. 1881, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, 19 species, type: *R. brasiliense* Speg, diplodia- and aposphaeria-like, saprobes, terrestrial, worldwide, see Boehm et al. (2009a, b; phylogeny), Murillo et al. (2009; morphology, chemistry, phylogeny), Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Méndez-Mayboca et al. (2010; diversity), Hyde et al. (2013; outline, key, phylogeny), Almeida et al. (2014; diversity), Chacón et al. (2014; diversity), Mahajan et al. (2014; pathogenesis), Mishra et al. (2014; pathogenesis), Pudhom and Teerawatananond (2014; chemistry), Yacharoe et al. (2015; revision, classification, morphology), Chokpaiboon et al. (2016; chemistry), Doilom et al. (2016; morphology, phylogeny), Thambugala et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype of type: LPS 1189.

Rhytidiella Zalasky 1968, *Cucurbitariaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *Rhytidiella moriformis* Zalasky, asexual morph coelomycetous (phaeoseptoria-like), pathogen, terrestrial, see Lumbsch and Huhndorf (2010; outline), Doilom et al. (2013; accepted as a genus in *Cucurbitariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Rhytidospora Jeng & Cain 1977, *Ceratostomataceae*, *Melanosporales*, *Sordariomycetes*, five species, type: *R. tetraspora* Jeng & Cain, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),

Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rhytisma Fr. 1819 (= *Melasmia* Lév. 1846 *vide* Johnston et al. 2014), *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, 127 species, type: *R. acerinum* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Suto (2009; new species, Japan), Wang et al. (2009; new species), Hou et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Masumoto et al. (2014, 2015; new species, Japan, phylogeny), sequences are available for voucher Hou 203 (AAUF), needs generic revision.

Ricasolia De Not. 1846, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, 15 species; type: *Ri. amplissima* (Scop.) De Not.; lichenized; see Moncada et al. (2013a; taxonomy), Cornejo and Scheidegger (2015; phylogeny), Lücking et al. (2016; classification), Tønsberg et al. (2016; new combination), sequences are available.

Rickia Cavara 1899, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 161 species, type: *R. wasmannii* Cavara, asexual morph unknown, biotrophic hosts are Acari (Chelicerata), Diplopoda (Myriapoda), Formicidae (Hexapoda: Hymenoptera), and several other groups of insects (Hexapoda: Blattodea, Coleoptera, Orthoptera), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015; PCR amplification of DNA), Santamaría et al. (2016; most recent species descriptions), Pfliegler et al. (2016; host specificity), sequences are available.

Rikatlia P.F. Cannon 1993, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *R. lungusaensis* (Henn.) P.F. Cannon, from living leaves, Eastern America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rileya A. Funk 1979, *Ascomycota* genera *incertae sedis*, one species, type: *R. piceae* A. Funk, coelomycetous, sexual morph unknown, saprobes, Canada, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rimaconus Huhndorf, F.A. Fernández, Joanne E. Taylor & K.D. Hyde 2001, *Chaetosphaeriales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *R. jamaicensis* (Seaver) Huhndorf, F.A. Fernández, Joanne E. Taylor & K.D. Hyde, hyphomycetous, sexual morph unknown, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariomycetidae*, genera *incertae sedis*), Huhndorf and Miller (2011; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures available for voucher SMH 5212 of the type.

Rimora (Kohlm. & Vittal) Kohlm., Volkm.-Kohlm., Suetrong, Sakay. & E.B.G. Jones 2009, *Aigialiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *R. mangrovei* (Kohlm. & Vittal) Kohlm., Volkm.-Kohlm., Suetrong, Sakay. & E.B.G. Jones, asexual morph unknown, saprobes, Marine, Belize, India, Thailand, see Suetrong et al. (2009; morphology, phylogeny), Hyde et al. (2013; accepted as a genus in *Aigialiaceae*), Wijayawardene et al. (2014; outline, accepted as *Aigialiaceae*), Jones et al. (2015; outline, marine), sequences are available.

Rimula Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *R. faginea* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rimularia Nyl., 1868, *Trapeliaceae*, *Baeomycetales*, *Lecanoromycetes*, 40 species, type, *R. limborina* Nyl., asexual morph, undetermined, terrestrial, terricolous, See Lumbsch and Huhndorf (2010; outline), Øvstedal (2012; taxonomy), Kirk et al. (2013; genus accepted), Kantvilas (2014; taxonomy), Spribille et al. (2014; molecular systematics, Resl et al. (2015;

phylogenetic studies), Lücking et al. (2016; classification), cultures and sequences are available.

Rinodina (Ach.) Gray, 1821, *Physciaceae*, *Lecanorales*, *Lecanoromycetes*, 692 species, nine sub species, 148 varieties, 122 forma species, type: *R. sophodes* (Ach.) A. Massal., asexual morph unknown, terrestrial, corticolous, muscicolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Giralt et al (2009; new species), Giralt and Klaus (2010; taxonomy), Nadyeina et al. (2010; sequencing and taxonomy), Sheard (2010; taxonomy), Kinalioglu and Aptroot (2011; new records), Muggia et al (2011; molecular,data, unpublished), Sheard et al. (2011; new species),), Gaya et al (2012; comprehensive phylogenetic studies), Upreti and Patel (2012; environmental studies, ecology), Lücking et al. (2016; classification), Resl et al (2016, sequencing data, unpublished), sequences are available.

Rinodinella H. Mayrhofer & Poelt, 1978, *Physciaceae*, *Lecanorales*, *Lecanoromycetes*, six species, four varieties, type: *R. controversa* (A. Massal.) H. Mayrhofer & Poelt, asexual morph unknown, terrestrial, see Elix (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Gasparyan and Sipman (2013; new records), Kirk et al. (2013; genus accepted), Grube and Arup (2001; molecular). Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Riomyces A. Ferrer, A.N. Mill., C. Sarmiento et Shearer 2012, *Sordariomycetes* genera *incertae sedis*, one species, type: *R. rotundus* A. Ferrer, A.N. Mill., Costa Rica, see Ferrer et al. (2012; taxonomy), cultures and sequences are available.

Rivilata Kohlm., Volkm.-Kohlm. & O.E. Erikss. 1998, *Dothideomycetes* genera *incertae sedis*, one species, type: *R. ius* Kohlm., Volkm.-Kohlm. & O.E. Erikss, asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rivulicola K.D. Hyde 1997, *Sordariomycetes* genera *incertae sedis*, three species, type: *R. incrustata* K.D. Hyde, saprobes, found on decaying woody substrates in freshwater habitats, Queensland, Florida, Hong Kong, see Raja et al. (2009; morphology), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al (2015, 2016; outline), holotype of type: BRIP 23340.

Rizalia Syd. & P. Syd. 1914, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, two species, type: *R. fasciculata* Syd. & P. Syd, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Robakia Petr. 1952, *Ascomycota* genera *incertae sedis*, one species, type: *R. arctica* Petr., coelomycetous, sexual morph unknown, saprobes, Norway, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Robergea Desm., 1847, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, 13 species, two varieties and two forma species, type: *R. unica* Desm., asexual morph, undetermined, terrestrial, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Robillarda Sacc. 1880, *Robillardaceae*, *Xylariales*, *Sordariomycetes*, eight species, type: *R. sessilis* (Sacc.) Sacc., sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015; phylogeny, epitypification, new species), Maharachchikumbura et al. (2015, 2016; outline), epitype and ex-epitype culture of the type: CBS H-22273, CBS114312.

Robincola Velen. 1947, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *R. gregaria* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Roburnia Velen. 1947, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *R. karschioides* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Roccella DC. 1805, *Roccellaceae*, *Arthoniales*, *Arthoniomyces*, 24 species, type: *R. fuciformis* (L.) DC., asexual morph unknown, lichenized, terrestrial, Africa, Asia, see Karthikaidevi et al. (2009; antibacterial activity), Lumbsch and Huhndorf (2010; outline), Tehler et al. (2009a b, 2010; evolution, molecular taxonomy), Aptroot and Schumm (2011; worldwide key), Bates et al. (2011; ecology), Devi et al. (2011; antimicrobial activities), Tehler (2011, 2012; taxonomy), Aydin and Kinalioglu (2013, 2016; antibacterial study, antioxidant activity), Jayalal and Aptroot (2013; new report), Kirk et al. (2013; genus accepted), Ertz et al. (2014; taxonomy), Doherty et al. (2014; experimental), Kamar et al. (2014; antimicrobial), Notov (2014; taxonomy), Shukla et al. (2014; natural dyes), Fiorentino (2015; notes), Fiorentino (2016; taxonomy), Lücking et al. (2016; classification, but wrongly citing 40 species), sequences are available.

Roccellina Darb. 1898, *Roccellaceae*, *Arthoniales*, *Arthoniomyces*, 35 species, type: *R. condensata* Darb., asexual morph unknown, lichenized, terrestrial, see Kocourková et al. (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Norvell (2010; nomenclature), Printzen (2010; systematic study), Rotter (2010; list), Ertz and Tehler (2011; phylogeny), Tehler (2012; taxonomy), Kirk et al. (2013; genus accepted), Tehler et al. (2013; molecular study), de Lange (2014; taxonomy), Ertz et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Roccellinastrum Follmann 1968, *Micareaaceae*, *Lecanorales*, *Lecanoromyces*, six species, type: *Roccellinastrum spongoideum* Follmann, asexual morph unknown, lichenized, terrestrial, Chile, Tasmania, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification); cultures and sequences are unavailable, needs generic revision.

Roccellographa J. Steiner, 1902, *Roccellaceae*, *Arthoniales*, *Arthoniomyces*, four species, type: *R. cretacea* J. Steiner, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Rodauea W. Rossi & Santam. 2012, *Teratomyceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *R. salgadoi* W. Rossi & Santam., asexual morph unknown, biotrophic only host known is *Eucatops curtus* Salgado (Coleoptera, Cholevidae), Ecuador, see Rossi and Santamaría (2012; taxonomy, morphology), Haelewaters et al. (2015; extracted ribosomal DNA).

Rodentomyces Doveri, Pecchia, Sarrocco & Vannacci 2010, *Nectriaceae*, *Hypocreales*, *Sordariomyces*, two species, type: *R. reticulatus* Doveri, Pecchia, Sarrocco & Vannacci, asexual morph unknown, saprobes, terrestrial, Italy, see Doveri et al. (2010; taxonomy, phylogeny), Lombard et al. (2015; taxonomy, phylogeny, doubt the placement in *Nectriaceae* since low bootstrap values in phylogenetic analyses), Maharachchikumbura et al. (2015, 2016; outline), Index Fungorum (2016; fixed the nomenclature issue), holotype and ex-type cultures of the type: CBS H-21948, CBS 128675.

Rodwayella Spooner 1986, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, three species, type: *R. sessilis* (Rodway) Spooner, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Roesleria Thüm. & Pass. 1877, *Helotiaceae*, *Helotiales*, *Leotiomyces*, c. 50 species, type: *R. subterranea* (Weinm.) Redhead, asexual morph unknown, saprobes, terrestrial, Europe, see Kirchmair et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Roeslerina Redhead 1985, *Ascomycota* genera *incertae sedis*, two species, type: *R. radicella* Redhead, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available for the type (unpublished), needs generic revision.

Rogellia Döbbeler 1999, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *R. nectrioidea* Döbbeler, asexual morph unknown, saprobes, terrestrial, Tierra del Fuego, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rogergoosiella A. Hern.-Gut. & J. Mena 1996, *Ascomycota* genera *incertae sedis*, one species, type: *R. roystoneicola* A. Hern. Gut. & J. Mena, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rogersonia Samuels & Lodge 1996, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *R. striolata* Samuels & Lodge, asexual morph unknown, saprobes, terrestrial, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rolfidium Moberg, 1986, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, two species, *R. peltatum* Moberg, asexual morph, undetermined, terrestrial, East Africa, Sri Lanka, Mascarenes, see Ekman et al. (2008; evolution of the ascus), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); Molecular and culture data unavailable.

Rolueckia Papong, Thammath. & Boonpr. 2008, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, three species; type: *R. conspersa* (Stirt.) Papong, Thammath. & Boonpr., lichenized, see Lumbsch and Huhndorf (2010; outline), Plata et al. (2012; classification), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

Romellina Petr. 1955, *Sordariomycetes* genera *incertae sedis*, one species, type: *Romellina variabilis* Petr., asexual morph unknown, on insects, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Romjularia Timdal 2007, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *R. lurida* (Ach.) Timdal, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmuil et al. (2011; phylogeny), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Rommelaarsia Baral & Haelew. 2015, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *R. flavovirens* Baral, Tanchaud & Romm., asexual morph hyphomycetous, saprobes, terrestrial, see Baral and Haelewaters (2015; morphology, DNA, phylogeny), Guatimosim et al. (2016; phylogeny), sequences are available.

Ronnigeria Petr. 1947, *Leptopeltidaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *R. arctica* (Oudem.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Ropalospora A. Massal. 1860, *Ropalosporaceae*, *Umbilicariales*, *Lecanoromycetes*, eight species and three forma species, type: *R. caffra* A. Massal., asexual morph, unknown,

terrestrial, Europe, Japan, see Hauck et al. (2009; biochemical studies), Löhmus and Löhmus (2010; conservation studies), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lendemer (2012; floristic studies), Lücking et al. (2016; classification), sequences re available.

Rosasphaeria Jaklitsch & Voglmayr 2012, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *R. moravica* (Petr.) Jaklitsch & Voglmayr, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), epitype and ex-epitype of the type: WU 31334, LMM = CBS124270.

Roscoepoundia Kuntze 1898, *Ascomycota* genera *incertae sedis*, one species, type: *Roscoepoundia croceola* (Sacc.) Kuntze, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rosellinia De Not. 1844, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *R. aquila* (Fr.) Ces. & De Not., asexual morph unknown, saprobes, terrestrial, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Petrini and Petrini (2013; taxonomy, monograph), Maharachchikumbura et al. (2015, 2016; outline), Li et al. (2016; taxonomy, phylogeny), cultures and sequences are available.

Roselliniella Vain. 1921, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, 15 species, type: *Roselliniella nephromatis* (P. Crouan & H. Crouan) Matzer & Hafellner, asexual morph unknown, saprobes, lichenicolous, terrestrial, worldwide, see Zhurbenko et al. (2009; new species), Hawksworth et al. (2010; new species, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariales*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), van den Boom (2015; new species), cultures and sequences are available but lacks for the type, needs generic revision.

Roselliniomyces Matzer & Hafellner 1990, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *R. trichotheliorum* Matzer & Hafellner, asexual morph unknown, lichenicolous, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Roselliniopsis Matzer & Hafellner 1990, *Sordariales*, genera *incertae sedis*, *Sordariomycetes*, nine species, type: *R. groedensis* (Zopf) Matzer & Hafellner, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kaur And Gehlot (2011; new species, India), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2013; new species, South Korea), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Rosellinula R. Sant. 1986, *Dothideomycetes* genera *incertae sedis*, one species, type: *R. haplospora* (Th. Fr. & Almq.) R. Sant., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Rosenscheldia Speg. 1885, *Dothideomycetes* genera *incertae sedis*, *incertae sedis*, one species, type: *R. paraguayana* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Rosenscheldiella Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, one species, type: *R. styracis* (Henn.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Sultan et al. (2011; new species, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae*

sedis), cultures and sequences are available only for *R. korthalsellae* Sultan, P.R. Johnst., D.C. Park & A.W. Robertson, needs generic revision.

Roseodiscus Baral 2006, *Leotiomyces*, *Helotiales*, *Helotiaceae*, six species, type: *R. rhodoleucus* (Fr.) Baral, asexual morph unknown, from soil, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Hyaloscyphaceae*), Wieschollek et al. (2011; new species), Kirk et al. (2013; genus accepted), Zheng and Zhuang (2013; new species, China), Baral and Haelewaters (2015; DNA, phylogeny), cultures and sequences are available.

Rossiomyces R.K. Benj. 2001, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *Rossiomyces falcatus* (T. Majewski) R.K. Benj., asexual morph unknown, biotrophic on Coleoptera in fungi (*Cryptophagus* species, *Cryptophagidae*), Europe, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Rossmania Lar.N. Vassiljeva 2001, *Sydowiellaceae*, *Diaporthales*, *Sordariomyces*, one species, type: *R. ukurunduensis* Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, temperate north-eastern Asia, see Cheewangkoon et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Kruys and Castlebury (2012; phylogeny), Voglmayr and Jaklitsch (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype of type: VLA P-2944.

Rostania Trevis. 1880, *Collemataceae*, *Peltigerales*, *Lecanoromyces*, eight species, type: *R. quadrata* (J. Lahm ex Körb.) Trevis., lichenized, see Otálora et al. (2013a, 2014; classification), Tagirdzhanova et al. (2014; new report, Russia), Jørgensen and Palice (2015; new combination), McMullin (2015; checklist), Stehn et al. (2015; list), Lücking et al. (2016; classification), Westberg et al. (2016; new records, Sweden), culture and sequences are unavailable.

Rostraureum Gryzenh. & M.J. Wingf. 2005, *Cryphonectriaceae*, *Diaporthales*, *Sordariomyces*, three species, type: *R. tropicale* Gryzenh. & M.J. Wingf., asexual morph unknown, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type cultures of type: PREM 57519, CMW 9972.

Rostrohypoxylon J. Fourn. & M. Stadler 2010, *Xylariaceae*, *Xylariales*, *Sordariomyces*, eight species, type: *R. terebratum* J. Fourn. & M. Stadler, asexual morph hyphomycetous (sporothrix-like to virgariella-like), terrestrial, saprobes, Thailand, see Fournier et al. (2010; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Rostrupiella Jørg. Koch, K. L. Pang & E. B. G. Jones 2007, *Lulworthiaceae*, *Lulworthiales*, *Sordariomyces*, one species, type: *R. danica* Jørg. Koch, K.L. Pang & E.B.G. Jones, asexual morph unknown, saprobes, marine, Denmark, Norway, see Rama et al. (2012; taxonomy, new species), Maharachchikumbura et al. (2015, 2016; review), sequences are available, holotype of type: JK 539.

Rosulomyces S. Marchand & Cabral 1976, *Ascomycota* genera *incertae sedis*, one species, type: *R. arthrosporioides* Marchand & Cabral, hyphomycetous, sexual morph unknown, from soil, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rota Bat., Cif. & Nascim. 1959, *Ascomycota* genera *incertae sedis*, one species, type: *R. pulchra* Bat., Cif. & Nascim., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rotiferophthora G.L. Barron 1991, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, 27 species, type: *R. globospora* G.L. Barron, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Roumegueria (Sacc.) Henn. 1908, *Dothideomycetes* genera *incertae sedis*, one species, type: *R. goudotii* (Lév.) Sacc. ex Clem. & Shear, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Roumegueriella Speg. 1880, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *R. muricospora* Speg., asexual morph gliocladium-like, coprophilous, saprobes, terrestrial, temperate, see Hirooka et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Roussoella Sacc. 1888, *Roussoellaceae*, *Pleosporales*, *Dothideomycetes*, 34 species, type: *R. nitidula* Sacc. & Paol., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ahmed et al. (2014; new species, opportunist pathogens), Crous et al. (2014, 2015, 2016; new species), Liu et al. (2014; new species, phylogeny), Ariyawansa et al. (2015; new species), Wijayawardene et al. (2014, 2016; taxonomy), Dai et al. (2016; new species, phylogeny), cultures available for the type: MFLUCC 11-0182, MFLUCC 11-0634.

Roussoellopsis I. Hino & Katum. 1965, *Roussoellaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *R. japonica* (I. Hino & Katum.) I. Hino & Katum., asexual morph coelomycetous, saprobes, terrestrial, Asia, see Kirk et al. (2013; genus accepted), Liu et al. (2014; new species, phylogeny), Phookamsak et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Rubikia H.C. Evans & Minter 1985, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *R. samsonii* H.C. Evans & Minter, coelomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

Rubrotricha Lücking, Sérus. & Vězda 2005, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *R. helminthospora* (R. Sant.) Lücking, Sérus. & Vězda; lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Rufoplaca Arup, Søchting & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, six species, type: *R. subpallida* (H. Magn.) Arup, Søchting & Frödén, asexual morph unknown, lichenized, terrestrial, worldwide, see Gaya et al. (2012; phylogeny), Arup et al. (2013, 2015; taxonomy, phylogeny), Montes (2013; new species), Diederich et al. (2014; new records), Halıcı et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

Ruggieria Cif. & Montemart. 1958, *Ascomycota* genera *incertae sedis*, one species, type: *R. glaucescens* (Trab.) Cif. & Montemart., coelomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Rugonectria P. Chaverri & Samuels 2011, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *R. rugulosa* (Pat. & Gaillard) Samuels, P. Chaverri & C. Salgado,

hyphomycetous asexual morph (cylindrocarpon-like), saprobes, pathogens, terrestrial, pantropical, Japan, Indonesia, see Chaverri et al. (2011; morphology, phylogeny), Zeng et al. (2013; new species), Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 126565.

Ruhlandiella Henn. 1903, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *R. berolinensis* Henn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Rubio et al. (2010; new species), Lantieri et al. (2012; new species, Italy), Kirk et al. (2013; genus accepted), sequence are available for the voucher Mycoflora of Macaronesia 1230 (C) of the type, needs generic revision.

Ruptoseptoria Quaedvl., Verkley & Crous 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *R. unedonis* (Roberge ex Desm.) Quaedvl., Verkley & Crous, coelomycetous, sexual morph unknown, pathogens, terrestrial, France, see Quaedvlieg et al. (2013; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-14645, CBS 355.86.

Rusavskia S.Y.Kondr. & Kärnefelt 2003, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 17 species, type: *R. elegans* (Link) S.Y. Kondr. & Kärnefelt, lichenized, see Arup et al. (2013; taxonomy), Kondratyuk et al. (2013, 2015; new species), Urbanavichus and Ismailov (2013; taxonomy), Ahti et al. (2015; new combinations), Halici (2015; new record), Kaźmierska and Kossowska (2016; taxonomy), Kondratyuk et al. (2016; new species, China), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Rutola J.L. Crane & Schokn. 1978, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *R. graminis* (Desm.) J.L. Crane & Schokn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology). Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Crous et al. (2015; typification, phylogeny), isotype of the type: L0054599, cultures and sequences are unavailable, needs generic revision.

Rutstroemia P. Karst. 1871, *Rutstroemiaceae*, *Helotiales*, *Leotiomycetes*, c. 111 species, type: *R. firma* (Pers.) P. Karst., asexual morph unknown, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; phylogeny), Dougoud (2015; new species), Galán et al. (2015; new species), Pärtel et al. (2016; phylogeny), cultures available for the type: KL292.

Ruwenzoria J. Fourn., M. Stadler, Læssøe & Decock 2010, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, eight species, type: *R. pseudoannulata* J. Fourn., M. Stadler, Laessøe & Decock, asexual morph hyphomycetous (sporothrix- or nodulisporium-like), terrestrial, saprobes, Democratic Republic of Congo, see Stadler et al. (2010; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: MUCL 51394, cultures and sequences are available.

Ruzenia Hilber 2002, *Lasiochaeriacae*, *Sordariales*, *Sordariomycetes*, one species, type: *R. spermoides* (Hoffm.) O. Hilber, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Miller et al. (2014; new species, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), culture available for the type: SMH4655.

Saagaromyces K. L. Pang & E. B. G. Jones 2003, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, four species, type: *S. ratnagiriensis* (S.D. Patil & Borse) K.L. Pang & E.B.G. Jones, asexual morph unknown, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2015; new species), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Sabahriopsis Crous & M.J. Wingf. 2015, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *S. eucalypti* Crous & M.J. Wingf., hyphomycetous, saprobes, Malaysia, see

Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22235, CPC 24957.

Sabalicola K.D. Hyde 1995, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *S. sabalensioides* (Ellis & G. Martin) K.D. Hyde, asexual morph unknown, terrestrial, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: MUCL 51394, cultures and sequences are unavailable.

Sablicola E.B.G. Jones, K.L. Pang & Vrijmoed 2004, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *S. chinensis* E.B.G. Jones, K.L. Pang & Vrijmoed, asexual morph unknown, on beached driftwood, Guangdong-China, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011; phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype of the type: IMI 389302.

Sabuloglossum Hustad, A.N. Mill, Dentinger & P.F. Cannon 2013, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, one species, type: *S. arenarium* (Rostr.) Hustad, A.N. Mill., Dentinger & P.F. Cannon, asexual morph unknown, saprobes, terrestrial, worldwide, see Hustad et al. (2013; taxonomy, phylogeny), holotype of the type: C, no. C-F-70804, sequences are available, NCBI RefSeq: NR_120040, NG_042605.

Saccardia Cooke 1878, *Saccardiaceae*, *Ascomycota* families *incertae sedis*, three species, type: *S. quercina* Cooke, asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Saccardinula Speg. 1885, *Trichopeltinaceae*, *Dothideomycetes* families *incertae sedis*, eleven species, type: *S. guaranitica* Speg., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Elsinoaceae*), Kirk et al. (2013; genus accepted), Jayawardena et al. (2014; excluded from *Elsinoaceae* and placed in *Trichopeltinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Saccardoëlla Speg. 1879, *Sordariomycetes* genera *incertae sedis*, 18 species, type: *S. montellica* Speg., asexual morph unknown, terrestrial, saprobes, aquatic, widespread, see Suetrong et al. (2009; molecular), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available for *S. rhizophorae* in GenBank: GU479860.

Saccharata Denman & Crous 2004, *Saccharataceae*, *Botryosphaeriales*, *Dothideomycetes*, 19 species, type: *S. proteae* (Wakef.) Denman & Crous, asexual morph coelomycetous, saprobes, associated with leaf spots, terrestrial, South Africa, see Crous et al. (2008; morphology, phylogeny), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2017; outline), Crous et al. (2016; new species, phylogeny, key), holotype and ex-type culture of type: K(M) 49510 as *Phyllachora proteae* Wakef., CBS 115206.

Saccharomyces Meyen 1870, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, seven species, type: *S. cerevisiae* Meyen ex E.C. Hansen, asexual reproduction is by multilateral budding, saprophytic, but some strains are of clinical origin, in beer, wine and other alcoholic beverages, grain-based fermented foods, occasionally in soil, tree bark, fruit flies, occasional clinical isolates, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), *Saccharomyces cerevisiae* is a model organism for studies of genetics and molecular biology and was the first eukaryote to have its genome sequence determined.

Saccharomycodes E.C. Hansen 1904, *Saccharomycodaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *S. ludwigii* (E.C. Hansen) E.C. Hansen, asexual reproduction is by bipolar budding on a broad base (bud-fission) and are lemon-shaped (apiculate), saprophytic, in tree exudates, soil, spoiled alcoholic beverages, worldwide, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Saccharomycopsis Schiønning 1903, *Saccharomycosidaceae*, *Saccharomycetales*, *Saccharomycetes*, 15 species, type: *S. capsularis* Schiønning, asexual reproduction is by multilateral budding and production of arthroconidia by some species, saprophytic, on hawthorne fruit, grapes and other fruit, soil of fruit orchards, starchy foods, beetles, tree exudates, tanning fluids, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Saccobolus Boud. 1869, *Ascobolaceae*, *Pezizales*, *Pezizomycetes*, about 27 species, type: *S. kervernii* (P. Crouan & H. Crouan) Boud., asexual morph hyphomycetous, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Ramos et al. (2011; molecular studies), Mungai et al. (2012; ecology, taxonomy), Kirk et al. (2013; genus accepted), Doveri (2014; taxonomy, keys), Melo et al. (2014; ecology, taxonomy, keys), evolutionary lineages of *Pezizales* has been confirmed and refined by ascus septal ultrastructure, number of nuclei in spores and molecular phylogenetics.

Saccothecium Fr. 1836, *Saccotheciaceae*, *Dothideales*, *Dothideomycetes*, two species, type: *S. sepincola* (Fr.) Fr., asexual morph hyphomycetous, terrestrial, Italy, saprobes, terrestrial, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Li et al. (2016; new species), cultures available for the type: CBS 278.32.

Sadasivania Subram. 1957, *Ascomycota* genera *incertae sedis*, three species, type: *Sadasivania girisa* Subram., hyphomycetous, sexual morph unknown, saprobes, Asia, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sagedia Ach. 1809, *Megasporaceae*, *Pertusariales*, *Lecanoromycetes*, three species, type: *S. zonata* Ach., lichenized, see Nordin et al. (2010; reinstated the genus), Lücking et al. (2016; classification), sequences are available.

Sagediopsis Sacc. ex Vain. 1921, *Adelococcaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *S. tartarina* (Nyl.) Vain., asexual morph unknown, lichenicolous, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sagema Poelt & Grube 1993, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *S. potentillae* Poelt & Grube, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Sagenidiopsis R.W.Rogers & Hafellner 1987, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, six species; type: *S. merrotsyi* R.W. Rogers & Hafellner, lichenized, Africa, Asia, Europe, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Zambare and Christopher (2012; biopharmaceutical potential), da Silva Caceres et al. (2014; new records), Lumbsch et al. (2014; new species), Kirk et al. (2013; genus accepted), Ram (2014; new species - Andaman), Ertz et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Sagenomella W. Gams 1978, *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, 13 species, type: *S. diversispora* (J.F.H. Beyma) W. Gams, asexual morph unknown, saprobes, terrestrial, worldwide, see Hsieh et al. (2009; new species), Houbraken and Samson (2011; phylogeny), Samson et al. (2011; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 399.69, CBS 398.69.

Sagiolechia A. Massal. 1854, *Sagiolechiaceae*, *Ostropales*, *Lecanoromycetes*, nine species, three varieties, three forma species, type: *S. protuberans* (Ach.) A. Massal., asexual morph

unknown, lichenized, terrestrial, Europe, see Baloch et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Gomphillaceae*), Thor and Nascimbene (2010; checklist), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures available for the type: AFTOL-ID 4896.

Saitoella S. Goto, Sugiyama, Hamamoto & Komagata 1987, *Protomycetaceae*, *Taphrinales*, *Taphrinomycetes*, two species, type: *S. complicata* Goto, Sugiyama, Hamamoto & Komagata, asexual reproduction is mainly by multipolar enteroblastic budding, saprophyte, soil, insect frass, Bhutan, western USA, see Kirk et al. (2013; genus accepted), cultures and sequences are available.

Salsuginea K.D. Hyde 1991, *Salsugineaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *S. ramicola* K.D. Hyde, asexual morph unknown, saprobes, marine, worldwide, see Suetrong et al. (2009; phylogeny, morphology), Jones et al. (2009, 2015; classification), Alias et al. (2010; diversity), Zainuddin et al. (2010; antimicrobial activity), Zhang et al. (2012; phylogeny, morphology), Hyde et al. (2013; morphology, phylogeny), Wijayawardene et al. (2014; outline), holotype of type: BRIP 17102, cultures and sequences are available.

Samarospora Rostr. 1892, *Eurotiomycetes* genera *incertae sedis*, one species, type: *S. potamogetonis* Rostr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sambucina Velen. 1947, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *S. aculeata* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Samuelsia P. Chaverri & K.T. Hodge 2008, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *S. rufobrunnea* Chaverri & K.T. Hodge, asexual morph coelomycetous (aschersonia-like), saprobes, on insects, terrestrial, Bolivia, Thailand, see Chaverri et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Mongkolsamrit et al. (2011; new species), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: CUP 067858, cultures and sequences are available.

Sandersoniomyces R.K. Benj. 1968, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *S. divaricatus* R.K. Benj., asexual morph unknown, biotrophic on Coleoptera, Staphylinidae (*Quedius* sp.), America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sanguinotrema Lücking 2015, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *S. rightii* (Taylor) Lücking, asexual morph unknown, lichenized, terrestrial, tropical, see Lücking et al. (2015, 2016; phylogeny, classification), cultures and sequences are unavailable,

Santessonia Hale & Vobis 1978, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, ten species, type: *S. namibensis* Hale & Vobis, asexual morph unknown, lichenized, terrestrial, see Farkas (2011; list), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Physciaceae*), Mayrhofer and Wirth (2011; taxonomy), Gaya et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Sapucchaka K. Ramakr. 1956, *Dothideomycetes* genera *incertae sedis*, two species, type: *S. madreya* K. Ramakr., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Sarcinella Sacc. 1880 (= *Schiffnerula* Höhn. 1909; = *Questieriella* G. Arnaud ex S. Hughes 1983 *vide* Rossman et al. 2016), *Englerulaceae*, *Dothideomycetes* genera *incertae sedis*, 71 species type: *S. heterospora* Sacc., schiffnerulaceous fungi, *Questieriella*, *Digitosarcinella* and *Mitteriella* synanamorphs of *Schiffnerula*, saprobes, plant pathogens, terrestrial,

worldwide. See Hosagoudar and Riju (2009; description), Hosagoudar et al. (2010; new species), Hosagoudar and Riju (2011; new species), Hosagoudar et al. (2011a; Schiffnerulaceous fungi), Hosagoudar et al. (2011b; new species), Soni et al. (2011; neem disease) Singh and Singh (2012; new species), Bhise et al. (2014; new species), Dai et al. (2014; family description), Rossmann et al. (2016; nomenclature), sequences are unavailable.

Sarcinomyces Lindner 1898, *Eurotiomycetes* genera *incertae sedis*, five species, type: *S. crustaceus* Lindner, sexual morph unknown, saprobes, plant and animal pathogen, terrestrial, worldwide, see Ruibal et al. (2008; phylogeny, ecology), Ruibal et al. (2009; phylogeny), Hallman et al. (2011; Burg Gleichen), Tsuneda et al. (2011; phylogeny), Zhang et al. (2012; acid mine drainage lake), Muggia et al. (2013; lichen connection), Nagano et al. (2014; deep sea), sequences are available.

Sarcinosporon D.S. King & S.C. Jong 1975, *Ascomycota* genera *incertae sedis*, one species, type: *S. inkin* (Oho) D.S. King & S.C. Jong, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sarcoexcipula Etayo 2008, *Ascomycota* genera *incertae sedis*, one species, type: *S. pannariae* Etayo, asexual morph unknown, parasymbiont on *Pannaria*, terrestrial, South America, see Etayo and Sancho (2008; morphology, distinction of similar lichenicolous genera), needs generic revision, holotype of the type: MAF Etayo 23100, cultures and sequences are unavailable.

Sarcographa Fée 1921, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 40 species, type: *S. cinchonarum* Fée, asexual morph unknown, lichenized, terrestrial, tropical, see Rivas Plata et al. 2012a, Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted). Lücking et al. (2016; classification); sequences are available.

Sarcographina Müll. Arg. 1887, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, eight species, type: *S. cyclospora* Müll. Arg., asexual morph unknown, lichenized, terrestrial, tropical, see Plata et al. (2012; classification), Kirk et al. (2013; genus accepted), Joshi et al. (2014; report), Kraichak et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Sarcogyne Flot., 1851, *Acarosporaceae*, *Lecanorales*, *Lecanoromycetes*, 88 species, 38 varieties, two subspecies, 32 forma species, type: *S. corrugata* Flot., asexual morph unknown, terrestrial, terricolous, saxicolous, crustose, squamulose, America, Australia, Japan, Turkey, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Knudsen et al. (2011; new species), Nayaka and Upreti (2011; distribution), Knudsen and Kocourková (2012; neotypification), McCarthy and Kantvilas (2013; new species), Knudsen and McCune (2013; new species), Knudsen et al. (2013; new species), Westberg et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Sarcoleotia S. Ito & S. Imai 1934, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, one species, type: *S. nigra* S. Ito & S. Imai, asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny, accepted as a genus in *Rutstroemiaceae*), Lumbsch and Huhndorf (2010; outline), Hustad et al. (2013; taxonomy, phylogeny), sequences are available but lacks for type.

Sarcomyces Masee 1891, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *S. vinosus* Masee, asexual morph unknown, saprobes, America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sarconiptera Raitv. 2003, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *S. vinacea* Raitv., asexual morph unknown, saprobes, terrestrial, Greenland, see Lumbsch and

Huhndorf (2010; outline), holotype of the type: TAA 137803, cultures and sequences are unavailable, needs generic revision.

Sarcophoma Höhn. 1916, *Ascomycota* genera *incertae sedis*, three species, type: *S. endogenospora* Höhn., asexual morph unknown, saprobes, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sarcopodium Ehrenb. 1818 (= *Lanatonectria* Samuels & Rossman 1999; *Actinostilbe* Petch 1925 *vide* Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, 14 species, type: *S. circinatum* Ehrenb., hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures available for the type: CBS 587.92.

Sarcopyrenia Nyl. 1858, *Sordariomycetes* genera *incertae sedis*, one species, type: *S. gibba* Nyl., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Sarcosagium A. Massal. 1856, *Thelocarpaceae*, *Leotiomycetes* families *incertae sedis*, one species, type: *S. biatorellum* A. Massal., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Sarcoscypha (Fr.) Boud. 1885 (= *Molliardiomyces* Paden 1984 *vide* Healy et al. 2016), *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, c. 30 species, type: *S. coccinea* (Jacq.) Sacc., asexual morph formerly named in *Molliardiomyces*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Wang et al. (2016; new species), cultures available for the type: AFTOL-ID 930 (unpublished).

Sarcosoma Casp. 1891, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, five species, type: *S. globosum* (Schmidel) Casp., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Sarcosphaera Auersw. 1869, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *S. macrocalyx* (Riess) Auersw., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Wang et al. (2016; new species), cultures and sequences are available.

Sarcostroma Cooke 1871, *Sporocadaceae*, *Xylariales*, *Sordariomycetes*, 28 species, type: *S. berkeleyi* Cooke, asexual morph coelomycetous, sexual morph unknown, saprobes, endophytes, foliar pathogens in tropical and temperate regions, see Maharachchikumbura et al. (2015, 2016; outline), Norphanphoun et al. (2015; phylogeny), need generic revision.

Sarcotrochila Höhn. 1917, *Hemiphacidiaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *S. alpina* (Fuckel) Höhn., asexual morph unknown, saprobes, terrestrial, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; phylogeny), cultures and sequences are available but lacks for the type.

Sarcoxydon Cooke 1883, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *S. compunctum* (Jungh.) Cooke, asexual morph unknown, terrestrial, saprobes, Asia, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; DNA, phylogeny), cultures and sequences are available.

Sardiniella Linaldeddu, A. Alves & A.J.L. Phillips 2016, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, nine species, type: *S. urbana* Linaldeddu, A. Alves & A.J.L. Phillips, coelomycetous, sexual morph unknown, pathogens, terrestrial, Italy, see Linaldeddu et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: LISE 96308, CBS 141580 = BL179.

Sarea Fr. 1825, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, two species, type: *S. difformis* (Fr.) Fr., asexual morph unknown, on resins, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; reinstated the genus), Kirk et al. (2013; genus accepted), Sanz-Ros et al. (2015; DNA, phylogeny), Burneviča et al. (2016; DNA), Lücking et al. (2016; classification), cultures and sequences are available.

Sarimanas Matsumura, K. Hiray. & Kaz. Tanaka 2015, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *S. shirakamiense* Matsumura, K. Hiray. & Kaz. Tanaka, asexual morph unknown, saprobes, terrestrial, Japan, see Liu et al. (2015; morphology, phylogeny), Tian et al. (2015; phylogeny), holotype and ex-type strain of the type: HHUF 30454, MAFF 244768.

Sarocladium W. Gams & D. Hawksw. 1976, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, eight species, type: *S. oryzae* (Sawada) W. Gams & D. Hawksw., hyphomycetous, sexual morph unknown, on plants, isolated from soil, human tissues, widespread, terrestrial, see Seifert et al. (2011; genus accepted), Summerbell et al. (2011; phylogeny and circumscription), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; position), cultures and sequences are available, holotype of type: TAI.

Sarrameana Vězda & P. James 1973, *Sarrameanaceae*, *Sarrameanales*, *Lecanoromycetes*, three species, type: *S. paradoxa* Vězda & P. James, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Satchmopsis B. Sutton & Hodges 1975, *Ascomycota* genera *incertae sedis*, one species, type: *S. brasiliensis* B. Sutton & Hodges, coelomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, needs generic revision.

Sativumoides S.C. Ren, Jian Ma & X.G. Zhang 2012, *Ascomycota* genera *incertae sedis*, one species, type: *S. punicae* S.C. Ren, Jian Ma & X.G. Zhang, hyphomycetous, saprobes, terrestrial, China, see Ren et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Saturnispora Liu & Kurtzman 1991, *Pichiaceae*, *Saccharomycetales*, *Saccharomycetes*, 20 species, type: *S. dispersa* (Dekker) Z.W. Liu & Kurtzman, asexual reproduction is by multilateral budding, saprophytic, in plant rhizosphere in salt marsh, tree exudates, grapes, fruit flies, sauerkraut, soil, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), many species in this genus represent asexual taxa originally classified in the genus *Candida*, but have been transferred to the genus *Saturnispora* as new combinations, cultures and sequences are available.

Savoronala Ertz, Eb.Fisch., Killmann, Razafindr. & Sérus. 2013, *Malmideaceae*, *Lecanorales*, *Lecanoromycetes*, one species; type: *S. madagascariensis* Ertz, Eb. Fisch., Killmann, Razafindr. & Sérus., lichenized, see Ertz et al. (2013c; taxonomy), Lücking et al. (2016; classification), sequences are available.

Savoryella E.B.G. Jones & R.A. Eaton. 1969, *Savoryellaceae*, *Savoryellales*, *Sordariomycetes*, ten species, type: *S. lignicola* E.B.G. Jones & R.A. Eaton, asexual morph unknown, saprobes, freshwater and marine, Australia, Brunei, China, Hong Kong, India, Japan, Malaysia, Mauritius, Mexico, Philippines, South Africa, Thailand, Taiwan, UK, see

Gayatri Mambiar and Raveendran et al. (2009; diversity), Nambiar and Raveendran (2009; diversity), Nambiar et al. (2009; diversity), Dethoup and Manoch (2009; diversity), Kurniawati et al. (2010; diversity), Alias et al. (2010; diversity), Boonyuen et al. (2011; outline, phylogeny, morphology, classification), Awaluddin et al. (2015; diversity), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of type: IMI 129784.

Sawadaea Miyabe 1914, *Erysiphaceae*, *Erysiphales*, *Leotiomyces*, ten species, type: *S. bicornis* (Wallr. Fr.) Homma, sexual and hyphomycetous asexual morphs, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Takamatsu et al. (2008; phylogeny and taxonomy of *S. nankinensis*), Lumbsch and Huhndorf (2010; outline), Braun and Cook (2012; taxonomy), Kirk et al. (2013; genus accepted), sequences of non-type material of the type species are available, lectotype of type species: France, on *Acer campestre*, “fl. Fr. 732” [ex herb. de Candolle] (G 00298361).

Sawantomyces R. Dubey & Neelima A. Moonambeth 2013, *Ascomycota* genera *incertae sedis*, one species, type: *S. indica* R. Dubey & Neelima A. Moonambeth, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Dubey et al. (2013; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Saxomyces Selbmann & Isola, MB802899. For diagnosis see Fungal Diversity 65(1): 174 2014, *Dothideomycetes* genera *incertae sedis*, type: *Saxomyces alpinus* Zucconi & Selbmann, MB802892, rock-inhabiting fungus; teleomorph unknown; For diagnosis see Fungal Diversity 65(1): 174 (2014). From granite, Val de La Mare, Passo Stelvio, Alps, Italy; CCFEE 5470. Culture preserved in liquid nitrogen and in dried condition (NCBI accession numbers: KC315861 (SSU), KC315872 (LSU), KC315883 (mtSSU), taxonomic species delimitation supported by molecular data.

Notes: The genus *Saxomyces* was invalidly published because the type: *S. alpinus* was invalidly published [ICN (Melbourne) Art. 40].

The genus and the type: are here validated as follows:

***Saxomyces Selbmann & Isola* gen. nov.**, MB819855. For diagnosis see Fungal Diversity 65(1): 174 (2014).

Type: *Saxomyces alpinus* Zucconi & Selbmann sp. nov., MB819851. For diagnosis see Fungal Diversity 65(1): 174 (2014). Holotype: CBS 135222. From granite, Val de La Mare, Passo Stelvio, Alps, Italy; = CCFEE 5470.

Additional species: *Saxomyces penninicus* Zucconi & Onofri, MB802900. For diagnosis see Fungal Diversity 65(1): 175 (2014). From sandstone, Punta Indren, Monte Rosa, Alps, Italy; CCFEE 5495. Culture preserved in dried condition (NCBI accession numbers: KC315864 (SSU), KC315875 (LSU), KC315886 (mtSSU)), taxonomic species delimitation supported by molecular data. The species was invalidly published because the type: *S. alpinus* was invalidly published [ICN (Melbourne) Art. 40]. It is here validated as follows:

***Saxomyces penninicus* Zucconi & Onofri sp. nov.**, MB819852. For diagnosis see Fungal Diversity 65(1): 175 (2014). Holotype: CBS H-22053. From sandstone, Punta Indren, Monte Rosa, Alps, Italy; = CCFEE 5495.

Saxophila Selbmann & de Hoog 2016, *Extremaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *S. tyrrhenica* Selbmann & de Hoog, sexual morph unknown, rock-inhabiting, see Isola et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 139725 = CCFEE 5935.

Scaphidiomyces Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, five species, type: *S. baeocerae* Thaxt., asexual morph unknown, biotrophic on Coleoptera (Scaphidiinae), South America, West Africa, see Lumbsch and Huhndorf (2010; outline),

Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scaphidium Clem. 1901, *Ascomycota* genera *incertae sedis*, one species, type: *S. boutelouae* Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available, needs generic revision.

Scedosporium Sacc. ex Castell. & Chalm. 1919, *Microascaceae*, *Microascales*, *Sordariomycetes*, seven species, type: *S. apiospermum* Sacc. ex Castell. & Chalm., hyphomycetous, sexual morph unknown, saprobes, human pathogen, terrestrial, worldwide, see Gilgado et al. (2008; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lackner et al. (2014; new species), Vandeputte et al. (2014; genome study), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Crous et al. (2016; taxonomy, phylogeny), cultures available for the type: IHEM 14462.

Scelophoromyces Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *S. osorianus* Thaxt., asexual morph unknown, biotrophic on Coleoptera (Staphylinidae, *Osorius* sp.), South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scepastocarpus Santam. 2004, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *S. peritheciiformis* Santam., asexual morph unknown, biotrophic on aquatic Coleoptera (Hydrophilidae, *Hydrochus* sp.), Spain, see Lumbsch and Huhndorf (2010; outline), related to *Zodiomyces* Thaxt., cultures and sequences are unavailable, needs generic revision.

Sceptrifera Deighton 1965, *Ascomycota* genera *incertae sedis*, one species, type: *S. pulchra* Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schadonia Körb. 1859, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *S. alpina* Körb., asexual morph unknown, lichenized, terrestrial, see Ekman et al. (2008; molecular), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), culture and sequences are unavailable for type.

Schaereria Th. Fr. 1855, *Schaereriaceae*, *Sarrameanales*, *Lecanoromycetes*, 16 species, type: *S. lugubris* (A. Massal.) Körb., lichenized, Africa, Europe, Asia, see Kukwa and Flakus (2009; taxonomy), Lewis Smith (2009; taxonomy), Spribille et al. (2009; taxonomy, new species), Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer 2011, Schmull et al (2011; phylogeny), Klepsland and Tønsberg (2012; taxonomy), Kirk et al. (2013; genus accepted), Resl et al. (2015; phylogeny), Tarasova et al. (2016; ecology), Lücking et al. (2016; classification), sequences are available.

Scharifia Petr. 1955, *Sordariomycetes* genera *incertae sedis*, one species, type: *S. procumbens* Petr., asexual morph unknown, saprobes, terrestrial, Iran, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Scheffersomyces Kurtzman & M. Suzuki 2010, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, ten species, type: *S. stipitis* (Pignal) Kurtzman & M. Suzuki, asexual reproduction is by multilateral budding, saprophytic, in beetles and beetle larvae in various trees, rotted wood, one species (*S. spartinae*) was isolated from oyster grass (*Spartina alterniflora*) marshes, worldwide, see Kurtzman and Suzuki (2010; taxonomy), *S. stipitis* (formerly *Pichia stipitis*) and *S. shehatae* (formerly *Candida*) are important for biomass utilization because of their ability to ferment D-xylose, cultures and sequences are available.

Schenckiella Henn. 1893 (= *Allothyrium* Syd. 1939 *vide* Hongsanan et al. 2014), *Asterinaceae*, *Asterinales*, *Dothideomycetes*, one species, type: *S. marcgraviae* Henn., asexual morph unknown. Epiphytes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline; accepted as a genus in *Saccardiaceae*), Hongsanan et al. (2014; taxonomy, keys, nomenclature, accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; outline), placement in *Asterinaceae* supported by morphology, cultures and sequences are unavailable.

Schiffnerula Höhn. 1909, *Englerulaceae*, *Dothideomycetes* families *incertae sedis*, 98 species, type: *S. mirabilis* Höhn. 1909, asexual morph hyphomycetous, epiphytes, pathogens, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Hosagoudar (2011; morphology, key), Kirk et al. (2013; genus accepted), Dai et al. (2014, morphology), cultures and sequences are unavailable, type specimen need recollect and sequence.

Schismatomma Flot. & Körb. ex A. Massal. 1852, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, ten species, type: *S. pericleum* (Ach.) Branth & Rostr., Asia, North America, Europe, see Hauck and Wirth (2010; ecology), Kocourková et al. (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; phylogeny), Stepanchikova et al. (2011; new records), Kirk et al. (2013; genus accepted), Tehler et al. (2013; phylogeny), Lendemmer and Harris (2014; taxonomy), Himelbrant et al. 2016; new records), London (2016; new record), Motiejūnaitė et al. (2016; new records), Lücking et al. (2016; classification), sequences are available.

Schistophoron Stirt. 1876, *Graphidaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *S. tenue* Stirt., Asia, see Tehler et al. (2009; systematic study), Lumbsch and Huhndorf (2010; outline), Singh and Swarnalatha (2011; new species), Plata et al. (2012; classification), Luecking et al. (2013; molecular phylogeny), Prieto et al. (2012; classification), Kirk et al. (2013; genus accepted), Weerakoon and Aptroot (2016; new species from Sri Lanka), sequences are available.

Schizochora Syd. & P. Syd. 1913, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *S. elmeri* Syd. & P. Syd., from living leaves, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Schizodiscus Brusse 1888, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *S. afroalpinus* Brusse, subpolar region, see Lumbsch and Huhndorf (2010; outline), Hertel (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Schizopelte Th. Fr. 1875, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, four species, type: *S. californica* Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline), Ertz, and Tehler (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Schizosaccharomyces Lindner 1893, *Schizosaccharomycetaceae*, *Schizosaccharomycetales*, *Schizosaccharomycetes*, four species, type: *S. pombe* Lindner, asexual reproduction is by fission, saprophytic, fruit wines and fruit, honey, dried figs, sugar cane molasses, tree fluxes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Schizothecium Corda 1838, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *S. fimicola* Corda, asexual morph unknown, on dung, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariales* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Schizothyra Bat. & C.A.A. Costa 1957, *Ascomycota* genera *incertae sedis*, one species, type: *S. minuta* Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schizothyrella Thüm. 1880, *Ascomycota* genera *incertae sedis*, one species, type: *S. quercina* (Lib.) Thüm., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schizothyrioma Höhn. 1917, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *Sc. ptarmicae* (Desm.) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schizothyrium Desm. 1849, *Schizothyriaceae*, *Dothideomycetes* family *incertae sedis*, five species, type: *S. acerinum* Desm., asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013, accepted as a genus in *Schizothyriaceae*), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), Phookamsak et al. (2015; taxonomy), cultures and sequences are available, needs generic revision.

Schizothyropsis Bat. & A.F. Vital 1960, *Ascomycota* genera *incertae sedis*, one species, type: *S. citri* Bat. & A.F. Vital., coelomycetous, sexual morph unknown, saprobes, terrestrial, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schizotrema Mangold & Lumbsch 2009, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 13 species, type: *S. zebrinum* Mangold, asexual morph unknown, lichenized, terrestrial, tropical, see Kalb et al. (2009; new report), Rivas Plata et al. (2010a; key), Sipman et al. (2012; key), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Schizotrichum McAlpine 1903, *Ascomycota* genera *incertae sedis*, one species, type: *S. lobeliae* McAlpine, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schizoxylon Pers. 1811, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *S. sepincola* Pers., Asia, see Lumbsch and Huhndorf (2010; outline), Muggia et al. (2011; partial sequence), Kirk et al. (2013; genus accepted), Aptroot et al. (2014; molecular phylogeny), Konoreva et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Schnablia Sacc. & P. Syd. 1899, *Helotiales*, genera *incertae sedis*, *Leotiomyces*, one species, type: *B. schnablianum* Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Schnablia Sacc. & P. Syd. 1899, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *S. ptarmicae* (Desm.) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schroeteria G. Winter 1881, *Ascomycota* genera *incertae sedis*, one species, type: *S. delastrina* (Tul. & C. Tul.) G. Winter, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schwanniomyces Klöcker emend. M. Suzuki & Kurtzman 2010, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *S. occidentalis* Klöcker, asexual reproduction is by multilateral budding, saprophytic, soil, tree exudates, cucumber brines, fruit flies, human feces, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al.

(2013; genus accepted), Kurtzman and Suzuki (2010; revision), cultures and sequences are available.

Schwarzmannia Pisareva 1968, *Ascomycota* genera *incertae sedis*, one species, type: *S. goebeliae* Pisareva, coelomycetous, sexual morph unknown, saprobes, terrestrial, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schweinitziella Speg. 1888, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, three species, type: *S. styracum* Speg., asexual morph unknown, fungicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Scirrhia Nitschke ex Fuckel 1870, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, ten species, type: *S. rimosa* (Alb. & Schwein.) Fuckel, asexual morph unknown, saprobes, pathogens, terrestrial, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Crous et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes* genera *incertae sedis*), cultures and sequences are available but lacks for the type, needs generic revision.

Scirrhophoma Petr. 1941, *Ascomycota* genera *incertae sedis*, one species, type: *S. dothideoides* (Mont.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sclerococcum Fr. 1825, *Dactylosporaceae*, *Eurotiomycetes* families *incertae sedis*, 18 species, type: *S. sphaerale* (Ach.) Fr., hyphomycetous, sexual morph unknown, saprobes, lichenicolous, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); sequences are available.

Scleroconidioma Tsuneda, Currah & Thormann 2000, *Dothideomycetes* genera *incertae sedis*, one species, type: *S. sphagnicola* Tsuneda, Currah & Thormann, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), cultures available for the type: UAMH 9731.

Sclerocrana Samuels & L.M. Kohn 1987, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *S. atra* Samuels & L.M. Kohn, asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sclerographiopsis Deighton 1973, *Ascomycota* genera *incertae sedis*, one species, type: *S. dalbergiae* Deighton, hyphomycetous, sexual morph unknown, saprobes, Africa, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sclerographium Berk. 1854, *Ascomycota* genera *incertae sedis*, three species, type: *S. aterrimum* Berk., hyphomycetous, sexual morph unknown, saprobes, Africa, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scleromeris Syd. 1926, *Ascomycota* genera *incertae sedis*, three species, type: *S. guazumae* Syd., coelomycetous, sexual morph unknown, saprobes, Central America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scleromitrla S. Imai 1941, *Rutstroemiaceae*, *Helotiales*, *Leotiomycetes*, six species, type: *S. shiraiana* (Henn.) S. Imai, asexual morph unknown, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016;

phylogeny, strains of type were grouped in *Rutstroemiaceae* and *Sclerotiniaceae*), needs generic revision.

Scleropezicula Verkley 1999 (= *Cryptosymmodula* Verkley 1999 *vide* Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomyces*, six species, type: *S. alnicola* (J.W. Groves) Verkley, asexual morph formerly known in *Cryptosymmodula*, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.

Sclerophoma Höhn. 1909, *Ascomycota genera incertae sedis*, 30 species, type: needs typification, coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sclerophora Chevall. 1826, *Coniocybaceae*, *Coniocybales*, *Coniocybomyces*, six species; type: *S. furfuracea* (L.) Chevall., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), sequences are available.

Sclerophyton Eschw. 1824, *Opegraphaceae*, *Arthoniales*, *Arthoniomyces*, 14 species, (probably less, needs revision), type: *S. elegans* Eschw., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Ertz. and Tehler (2011; phylogeny, molecular), Kirk et al. (2013; genus accepted), Seavey and Seavey (2014; new records), Lücking et al. (2016; classification), sequences are available

Scleropycnis Syd. & P. Syd. 1911, *Ascomycota genera incertae sedis*, two species, type: *S. abietina* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scleropyrenium H. Harada 1993, *Verrucariaceae*, *Verrucariales*, *Eurotiomyces*, two species, type: *S. japonicum* H. Harada, asexual morph unknown, lichenized, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Sclerostagonospora Höhn. 1917, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomyces*, eight species, type: *S. heraclei* (Sacc.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Crous et al. (2011, 2016; new species, phylogeny), Quaedvlieg et al. (2013; new species, phylogeny), Wijayawardene et al. (2016, 2017; taxonomy, outline, phylogeny), cultures are available.

Sclerotinia Fuckel 1870, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, 15 species, type: *S. libertiana* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; phylogeny), cultures and sequences are available, needs generic revision.

Sclerotium Tode 1790, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, c. 100 species (probably more than this), type: *S. complanatum* Tode, hyphomycetous, sexual morph unknown, see Seifert et al. (2011; outline), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type, needs generic revision.

Sclerozythia Petch 1937, *Ascomycota genera incertae sedis*, one species, type: *S. brassicae* Petch, coelomycetous, sexual morph unknown, saprobes, British Isles, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scolecobasidiella M.B. Ellis 1971, *Ascomycota genera incertae sedis*, two species, type: *S. avellanea* (Sappa & Mosca) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, Africa, Caribbean, see Shenoy et al. (2010; DNA), Seifert et al. (2011; morphology),

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available, needs generic revision.

Scolecobasidium E.V. Abbott 1927, *Pleosporales genera incertae sedis*, *Dothideomycetes*, one species, type: *S. terreum* E.V. Abbott, hyphomycetous, sexual morph unknown, saprobes, British Isles, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scolecobasidium E.V. Abbott 1927, *Sympoventuriaceae*, *Venturiales*, *Dothideomycetes*, 64 species, type: *S. terreum* E.V. Abbott, sexual stage unknown, animal pathogens, saprobes, terrestrial, aquatic, worldwide, see Hamada and Niichiro (2008; bathroom), Jiang and Zhang (2008; new species), YueMing and TianYu (2008; China, soil), Hamayun et al. (2009; growth enhancement in plant), Abe and Hamada (2011; detergent rich environment), Punithalingam and Spooner (2011; new species), Ge et al (2012; human pathogen), Muthukrishnan et al. (2012; alkalotolerance in scrub forest), D'Souza and Bhat (2013; litter and endophyte), Hao et al. (2013; new species), Mahmoud and Narisawa (2013; new species), Ren et al. (2013; new species), Samerpitak et al. (2014; phylogeny, taxonomy, classification), Garzoli et al. (2015; marine), Hou et al. (2015; corals), Oliveira et al. (2016; drinking water, Brazil), Pundhir et al. (2016; pneumonia), Shi et al. (2016; human pathogen), sequences are available, ex type of type: CBS 203.27.

Scolecobeltrania Iturr., R.F. Castañeda & R. Fernández 2013, *Ascomycota genera incertae sedis*, one species, type: *S. vermispota* Iturr., R.F. Castañeda & R. Fernández, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Venezuela, see Iturriaga et al. (2013; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Scolecobonaria Bat. 1962, *Dothideomycetes genera incertae sedis*, two species, type: *S. filiformis* (W. Yamam.) Bat., asexual morph unknown, saprobes, terrestrial, Taiwan, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Scolecodochium K. Matsush. & Matsush. 1996, *Ascomycota genera incertae sedis*, one species, type: *S. malayense* K. Matsush. & Matsush., hyphomycetous, sexual morph unknown, saprobes, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scolecopeltidium F. Stevens & Manter 1925, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, c. 80 species, type: *S. salacensis* (Racib.) F. Stevens & Manter, asexual morph unknown, epiphytes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Wu et al. (2011; taxonomy), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Scolecosporiella Petr. 1921, *Ascomycota genera incertae sedis*, six species, type: *S. typhae* (Oudem.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scolecostigmia U. Braun 1998, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 25 species, type: *S. mangiferae* (Koord.) U. Braun & Mouch., hyphomycetous, plant pathogens, leaf spotting, Africa, Asia, Australia, North and South America, Oceania, West Indies, see Seifert (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Crous et al. (2012; phylogeny), Braun et al. (2014; taxonomy), cultures available for the type: CBS

125467, holotype of type species: Indonesia, Java, Prov. Kedu, Purworedjo, on *Mangifera indica*, 21 Sep. 1905, S.H. Koorders, no. 6, ser. 5 (unknown).

Scolecotheca Søchting & B. Sutton 1997, *Ascomycota* genera *incertae sedis*, one species, type: *S. cornuta* Søchting & B. Sutton, coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scolecoxyphium Cif. & Bat. 1956, *Dothideomycetes* genera *incertae sedis*, four species, type: *S. fraseriae* Cif. & Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scolecozythia Curzi 1927, *Ascomycota* genera *incertae sedis*, one species, type: *S. valsivora* Curzi, coelomycetous, sexual morph unknown, saprobes, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scoliciosporum A. Massal. 1852, *Scoliciosporaceae*, *Lecanorales*, *Lecanoromycetes*, 15 species; type: *S. holomelaeum* (Flörke) A. Massal., lichenized, see Spribille et al. (2009; new species), Dolnik et al. (2010; new report: Germany), Lumbsch and Huhndorf (2010; outline), Dymytrova (2011; notes), Kukwa et al. (2012; new records: poland), Matwiejuk et al. (2012; new report), Kirk et al. (2013; genus accepted), Marmor et al. (2013; new record), Ardelean et al. (2015; ecology), Lücking et al. (2016; classification), sequences are available.

Scolicosporium Lib. ex Roum. 1880, *?Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 13 species, type: *S. fagi* Lib. ex Roum., coelomycetous, sexual morph unknown, saprobes, worldwide, see Seifert et al. (2011; treated as hyphomycetous), Wijayawardene et al. (2012, 2013, 2016; outline, treated as coelomycetous, phylogeny, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Scoliocarpon Nyl. 1858, *Sordariomycetes* genera *incertae sedis*, one species, type: *S. pupula* (Tuck.) Nyl., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Scolionema Theiss. & Syd. 1918, *Perisporiopsidaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *S. palmarum* (Kunze & Fr.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Scoliotidium Bat. & Cavalc. 1963, *Ascomycota* genera *incertae sedis*, one species, type: *S. lauracearum* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scopaphoma Dearn. & House 1925, *Ascomycota* genera *incertae sedis*, one species, type: *S. corioli* Dearn. & House, coelomycetous, sexual morph unknown, saprobes, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scopinella Lév. 1846, *Stachybotryaceae*, *Hypocreales*, *Sordariomycetes*, nine species, type: *S. pleiospora* (J. Schröt.) Sacc., asexual morph unknown, saprobes, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Hypocreales*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), Sánchez et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Scopulariella Gjaerum 1971, *Ascomycota* genera *incertae sedis*, one species, type: *S. vaccinii* Gjaerum, hyphomycetous, sexual morph unknown, saprobes, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scopulariopsis Bainier 1907, *Microascaceae*, *Microascales*, *Sordariomycetes*, 32 species, type: *S. brevicaulis* (Sacc.) Bainier, hyphomycetous, sexual morph unknown, from soil, saprobes, human pathogen, terrestrial, worldwide, see Seifert et al. (2011; morphology), Iwen et al. (2012; human pathogen, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Pan et al. (2014; new species, China), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Grum-Grzhimaylo et al. (2016; DNA), cultures available for the type: UAMH 10915.

Scoriadopsis J.M. Mend. 1930, *Capnodiaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *S. miconiae* J.M. Mend., asexual morph unknown, epiphytes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2011; taxonomy), Hyde et al. (2013; accepted as a genus in *Capnodiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Scorias Fr. 1832, *Capnodiaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *S. spongiosa* (Schwein.) Fr., asexual morph unknown, epiphytes, terrestrial, tropical, see Crous et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2011; taxonomy), Hyde et al. (2013; accepted as a genus in *Capnodiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Scothelius Bat., J.L. Bezerra & Cavalc. 1965, *Ascomycota* genera *incertae sedis*, one species, type: *S. guianensis* Bat., J.L. Bezerra & Cavalc., coelomycetous, sexual morph unknown, saprobes, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scotiosphaeria Sivan. 1977, *Sordariomycetes* genera *incertae sedis*, one species, type: *S. endoxylinae* Sivan., asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Sculptolumina Marbach 2000, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, three species, type: *S. japonica* (Tuck.) Marbach, asexual morph unknown, lichenized, terrestrial, see Giralt et al. (2009; taxonomy), Joshi et al. (2010; new record, taxonomy), Lumbsch and Huhndorf (2010; outline), Giralt et al. (2014; taxonomy), Kondratyuk (2015; new records), Lücking et al. (2016; classification), sequences are unavailable.

Scutaria Søchting, Arup & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *S. andina* (Räsänen) Søchting, Frödén & Arup., lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Scutellinia (Cooke) Lambotte 1887, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 75 species, type: *Scutellinia scutellata* (L.) Lambotte, asexual morph unknown, from soil, saprobes, terrestrial, Europe, see Zhuang and Yang (2008; new species), Han et al. (2010; new species, Korea), Lumbsch and Huhndorf (2010; outline), Zhuang (2010; new species), Choi et al. (2013; new species), Hansen et al. (2013; phylogeny), Izquierdo-San et al. (2013; new species, Mexico), Kirk et al. (2013; genus accepted), Zhuang et al. (2013; new species, key to species in China), cultures and sequences are available but lacks for the type.

Scutisporus Ando & Tubaki 1985, *Ascomycota* genera *incertae sedis*, one species, type: *S. brunneus* K. Ando & Tubaki, hyphomycetous, saprobes, terrestrial, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Fiuza et al. (2015a; taxonomy), holotype of type: TKB-F-5093, cultures and sequences are unavailable, needs generic revision, compare with *Biflagellosporella*.

Scutobelonium Graddon 1984, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *S. amorilens* Graddon, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scutomollisia Nannf. 1976, *Dermateaceae*, *Helotiales*, *Leotiomyces*, 14 species, type: *S. punctum* (Rehm) Nannf., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scutopeltis Bat. & H. Maia 1957, *Ascomycota* genera *incertae sedis*, two species, type: *S. alafiae* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, Ghana, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scutopycnis Bat. 1957, *Ascomycota* genera *incertae sedis*, two species, type: *S. osmanthi* Bat., coelomycetous, sexual morph unknown, saprobes, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scutula Tul. 1852, *Micareaaceae*, *Lecanorales*, *Lecanoromycetes*, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutulopsis Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *S. pinacea* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scytalidium Pesante 1957, *Helotiaceae*, *Helotiales*, *Leotiomyces*, 23 species, type: *S. lignicola* Pesante, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Russia, Chile, Siberia, see Kang et al. (2010; new species), Wu and Zhang (2010; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Gautam et al. (2015; new species, India), ex-type culture available for the type: UAMH 1502, needs generic revision as genus is heterogenous (fide Seifert et al. 2011).

Scytinium (Ach.) Gray 2014, *Collemataceae*, *Lecanorales*, *Lecanoromycetes*, 48 species; type: *S. palmatum* (Huds.) Gray, lichenized; see Otálora et al. (2013a, 2014; taxonomy, new combination), Diederich et al. (2014; new records: France), Carlberg et al. (2016; new species: California), Gasparyan et al. (2016; new records, Armenia), Lücking et al. (2016; classification), sequences unavailable.

Seaverinia Whetzel 1945 (= *Verrucobotrys* Hennebert 1973 *fide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, two species, type: *Verrucobotrys geranii* (Seaver) Hennebert, asexual morph formerly named in *Verrucobotrys*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.

Sedecimiella K. L. Pang, Alias & E. B. G. Jones 2010, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *S. taiwanensis* K.L. Pang, Alias & E.B.G. Jones, asexual morph unknown, saprobes, marine, Hong Kong, Taiwan, see Pang et al. (2010; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: BBH 26390.

Segestria Fr. 1825, *Porinaceae*, *Ostropales*, *Lecanoromycetes*, 70 species, type: *S. lectissima* Fr., lichenized, see Lücking (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification); sequences are available but lcks for type.

Seifertia Partr. & Morgan-Jones 2002, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *S. azaleae* (Peck) Partr. & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Li et al. (2016; new species, China), cultures available for the type: DAOM 239135.

Seimatosporiopsis B. Sutton, Ghaffer & Abbas 1972, *Ascomycota* genera *incertae sedis*, two species, type: *S. salvadorae* B. Sutton, Ghaffer & Abbas, coelomycetous, sexual morph unknown, saprobes, Pakistan, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Seimatosporium Corda 1833 (= *Discostroma* Clem. 1909 *fide* Reblova et al. 2016), *Sporocadaceae*, *Xylariales*, *Sordariomycetes*, 75 species, type: *S. rosae* Corda, asexual morph coelomycetous, saprobes, ?pathogens, worldwide, see Barber et al. (2011; new species, phylogeny), Tanaka et al. (2011; phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, new species), Crous et al. (2014c; new species), Ariyawansa et al. (2015a; new species), Norphanphoun et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Senanayake et al. (2015; outline, phylogeny), Reblova et al. (2016; nomenclature), cultures available for the type: MFLUCC 14-0621 (*fide* Norphanphoun et al. 2015).

Seiridium Nees 1816 (= *Blogiascospora* Shoemaker et al. 1966 *fide* Reblova et al. 2016), *Pestalotiopsidaceae*, *Xylariales*, *Sordariomycetes*, 35 species, type: *S. marginatum* Nees, asexual morph coelomycetous, saprobes, ?pathogens, worldwide, see Wijayawardene et al. (2012, 2016; outline, taxonomy, new species), Crous et al. (2012, 2014; new species), Senanayake et al. (2015; outline, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Jaklitsch et al. (2016; phylogeny), Reblova et al. (2016; nomenclature), cultures available for the type: SE11.

Seirophora Poelt 1983, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, twelve species, type: *S. magara* (Kremp.) Poelt, lichenized, see Lumbsch and Huhndorf (2010; outline), Moniri and Sipman (2011; new record), Arup et al. (2013; phylogeny), Benesperi et al. (2013; ecology), Kirk et al. (2013; genus accepted), Zhurbenko (2013; new record), Giordani et al. (2015; ecology), Kondratyuk et al. (2014, 2015a, b; taxonomy, phylogeny), Moniri (2015; new record), Lücking et al. (2016; classification), sequences are available.

Selenaspora R. Heim & Le Gal 1936, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *S. batava* R. Heim & Le Gal, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for the type.

Selenodriella R.F. Castañeda & W.B. Kendr. 1990, *Microdochiaceae*, *Xylariales*, *Sordariomycetes*, seven species, type: *S. fertilis* (Piroz. & Hodges) R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Hernández-Restrepo et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Selenophoma Maire 1907, *Sacchettoeciaceae*, *Dothideales*, *Dothideomycetes*, 13 species, type: *S. catananches* Maire, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Cheewangkoon et al. (2009; new species, phylogeny), Wijayawardene et al. (2012, 2014, 2016; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2015c; phylogeny), cultures and sequences are available but lacks for the type.

Selenosira Petr. 1957, *Ascomycota* genera *incertae sedis*, one species, type: *S. unica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene

et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Selenosporella G. Arnaud ex MacGarvie 1968, *Ascomycota* genera *incertae sedis*, twelve species, type: *S. curvispora* G. Arnaud ex MacGarvie, hyphomycetous, saprobes, on decaying leaves, terrestrial, worldwide, Castañeda-Ruiz et al. (2009; key and new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Fiuza et al. (2015b; new species), holotype of type: IMI 129890, cultures and sequences are unavailable.

Selenosporopsis R.F. Castañeda & W.B. Kendr. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *S. elegans* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Selenozyma Yarrow 1977, *Saccharomycetes* genera *incertae sedis*, two species, type: *S. intestinalis* (Krassiln.) Yarrow, yeast, sexual morph unknown, saprobes, terrestrial, Netherlands, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for the type.

Selinia P. Karst. 1876, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *S. pulchra* (G. Winter) Sacc., asexual morph tubercularia-like, coprophilous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Chaverri et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures are available.

Semidelitschia Cain & Luck-Allen 1969, *Delitschiaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *S. agasmatica* Cain & Luck-Allen, asexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Delitschiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Semifissispora H.J. Swart 1982, *Massarinaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *S. fusiformis* H.J. Swart, asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Crous et al. (2015; DNA, new species, phylogeny), cultures and sequences are available but lacks for the type:.

Semigyalecta Vain. 1921, *Gyalectaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *S. paradoxa* Vain., lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Semisphaeria K. Holm & L. Holm 1991, *Dothideomycetes* genera *incertae sedis*, one species, type: *S. sigmundii* K. Holm & L. Holm, asexual morph unknown, saprobes, terrestrial, Norway, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Septocyta Petr. 1927, *Capnodiales* genera *incertae sedis*, *Dothideomycetes*, five species, type: *S. ramealis* (Roberge ex Desm.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Aleksić et al. (2011; use in disease control, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Septocytella Syd. 1929, *Ascomycota* genera *incertae sedis*, one species, type: *S. bambusina* Syd., coelomycetous, sexual morph unknown, saprobes, China, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Septofusidium W. Gams 1971, *Tilachlidiaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *S. elegantulum* (Pidopl.) W. Gams, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Septogloeum Sacc. 1880, *Ascomycota* genera *incertae sedis*, two species, type: *S. carthusianum* (Sacc.) Sacc., coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Septomyrothecium Matsush. 1971 (= *Sporothrix* Hektoen & C.F. Perkins 1901 *vide* Maharachchikumbura et al. 2016), *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *S. uniseptatum*, asexual morph unknown, saprobes, terrestrial, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), Lombard et al. (2016; phylogeny), cultures available for the type: CBS 100966.

Septomyxella (Höhn.) Höhn. 1923, *Ascomycota* genera *incertae sedis*, one species record, type species: *Myxosporium spaethianum* Allesch., coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Septonema Corda 1837, *Dothideomycetes* genera *incertae sedis*, c. 15 species, type: *S. secedens* Corda, sexual stage unknown, terrestrial, saprobes, lichenized, Asia, Europe, Africa, North America. See Jankowiak and Rossa (2008; associations with *Pityogenes*), Wang et al. (2008; fallen leaves), Koukol (2010; new species), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Wiewiora (2012; seed health), Chigoziri and Ekefan (2013; seed borne fungi), Alvarez et al. (2015; ophiostomatoid fungus), sequences are unavailable.

Septopatella Petr. 1925, *Ascomycota* genera *incertae sedis*, one species, type: *S. septata* (Jaap) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Septopezizella Svrček 1987, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *S. oreadum* (Velen.) Svrček, asexual morph unknown, sabrobe of pine scale, Czech Republic, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), lectotype of the type: PRM 148822a, cultures and sequences are unavailable.

Septoria Sacc. 1884, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, c. 1000 (200 are presently recognized based on DNA), type: *Septoria cytisi* Desm., coelomycetous, sexual morph mycosphaerella-like, of which, plant pathogens, terrestrial, worldwide, see Quaedvlieg et al. (2011, 2013; morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Verkley et al. (2013; morphology, phylogeny), cultures and sequences are available.

Septoriella Oudem. 1889 (including *Wojnowicia* Sacc. 1892), *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 19 species, type: *S. phragmitis* Oudem., coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2014, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Crous et al. (2014, 2015; new species, phylogeny), Li et al. (2015; new species), epitype and ex-epitype cultures of the type: CBS H-22281, CPC 24118 = CBS 140065.

Septorioides Quaedvli., Verkley & Crous 2013, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, one species, type: *S. pini-thunbergii* (S. Kaneko) Quaedvlieg, Verkley &

Crous, coelomycetous, sexual morph unknown, pathogens, terrestrial, Japan, see Quaedvlieg et al. (2013; morphology, phylogeny), cultures and sequences are available.

Septosporiopsis W.A. Baker & Morgan-Jones 2009, *Ascomycota* genera *incertae sedis*, one species, type: *S. elaeidis* (J.M. Yen & Sulmont) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, on palm litter, Africa, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Septosporium Corda 1831, *Ascomycota* genera *incertae sedis*, 28 species, type: *S. atrum* Corda, hyphomycetous, sexual morph unknown, saprobes, on wood (*Acer*, *Carpinus*, *Sorbus*, and many others) and litter (*Bambusa*), cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted),), cultures and sequences are unavailable, needs generic revision.

Septotinia Whetzel ex J.W. Groves & M.E. Elliott 1961 (= *Septotis* N.F. Buchw. ex Arx 1970 *fide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *S. podophyllina* Whetzel, asexual morph formerly known in *Septotis*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.

Septotrapelia Aptroot & Chaves 2007, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, four species, seven species, type: *S. glauca* Aptroot & Chaves, lichenized, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Bungartz et al. (2013; taxonomy), Aptroot and Iqbal (2014; new report, Pakistan), Aptroot and Moon (2014; new species: Korea), Kukwa and Piątek (2014; new record: Africa), Lücking et al. (2016; classification), holotype of the type: INB, Aptroot 60426, cultures and sequences are unavailable

Septotrullula Höhn. 1902, *Ascomycota* genera *incertae sedis*, four species, type: *S. elaeidis* (J.M. Yen & Sulmont) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, on bark (*Betula*, *Fagus*, *Quercus*), Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Serenomyces Petr. 1952, *Lasiochaeriacae*, *Sordariales*, *Sordariomycetes*, five species, type: *S. shearii* Petr., saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeochoaraceae*), Kirk et al. (2013; genus accepted), Elliott et al. (2014; species associated with palms in southeastern USA), Maharachchikumbura et al. (2015, 2016; outline), cultures are available for unidentified species (unpublished), needs generic revision.

Seriascoma Phookamsak, D.Q. Dai & K.D. Hyde 2016, *Occultibambusaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *S. didymospora* Phook., D.Q. Dai, Karunar. & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Thailand, see Dai et al. (2016; phylogeny, morphology, sexual and asexual morphs), ex-type culture of type: MFLUCC 11–0179.

Servazziella J. Reid & C. Booth 1987, *Sordariomycetes* genera *incertae sedis*, five species, type: *S. longispora* (Servazzi) J. Reid & C. Booth, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Elliott et al. (2014; species associated with palms in southeastern USA), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Servitia M.S. Christ. & Alstrup 2001, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, species, type: *S. inconspicuum* (Lynge) M.S. Christ. & Alstrup, asexual morph unknown, lichenized, terrestrial, Greenland, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Sessiliospora D. Hawksw. 1979, *Ascomycota genera incertae sedis*, one species, type: *S. bicolor* D. Hawksw., sexual morph unknown, lichenicolous on foliicolous lichens, Asia, terrestrial, see Seifert et al. (2011; genus accepted), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: K(M)-IMI 41011c.

Setameliola D.R. Reynolds 2010, *Meliolaceae, Meliolales, Sordariomycetes*, 26 species, type: *Setameliola argentina* (Speg.) D.R. Reynolds, asexual morph unknown, saprobes, terrestrial, Singapore, see Reynolds (2010; taxonomy), cultures and sequences are unavailable, needs generic revision.

Setiferotherca Matsush. 1995, *Ceratostomataceae, Melanosporales, Sordariomycetes*, one species, type: *S. nipponica* Matsush., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Setocampanula Sivan. & W.H. Hsieh 1989, *Trichosphaeriaceae, Trichosphaeriales, Sordariomycetes*, one species, type: *S. taiwanensis* Sivan. & W.H. Hsieh, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences unavailable, needs generic revision.

Setolibertella Punith. & Spooner 1999, *Ascomycota genera incertae sedis*, one species, type: *S. solani* Punith. & Spooner, sexual morph unknown, coelomycetous, saprobes, on dead stems of *Solanum mauritanium*, Azores, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: KM 58669, cultures and sequences are unavailable, needs generic revision.

Setomelanomma M. Morelet 1980, *Phaeosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *S. holmii* M. Morelet, asexual morph coelomycetous, saprobes or pathogens, terrestrial, cosmopolitan, see Zhang et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Setophaeosphaeria Crous & Y. Zhang ter 2014, *Pleosporales genera incertae sedis, Dothideomycetes*, three species, type: *S. hemerocallidis* Crous & Y. Zhang ter, with coelomycetous asexual morph, saprobes, ?pathogens, terrestrial, China, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), holotype and ex-type culture of type: CBS H-21720, CPC 23645.

Setophiale Matsush. 1995, *Ascomycota genera incertae sedis*, one species, type: *S. unisetulata* Matsush., sexual morph unknown, hyphomycetous, saprobes, on palm petioles, Peru, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: Matsushima Fungus Collection, Kobe, MFC-4P766, cultures and sequences are unavailable, needs generic revision.

Setophoma Gruyter, Aveskamp & Verkley 2010, *Phaeosphaeriaceae, Pleosporales, Dothideomycetes*, asexual morph coelomycetous, five species, type: *S. terrestris* (H.N. Hansen) Gruyter, Aveskamp & Verkley, saprobes, ?pathogens, terrestrial, Brazil, North America, see de Gruyter et al. (2010; morphology, phylogeny), Quaedvlieg et al. (2013; morphology, phylogeny), Crous et al. (2014, 2016; morphology, phylogeny, sexual morph), Wijayawardene et al. (2014; outline), lectotype and ex-lectotype culture of type: CBS H-20311, CBS 335.29.

Setoseptoria Quaedvl., Verkley & Crous 2013, *Lentitheciaceae, Pleosporales, Dothideomycetes*, one species, type: *S. phragmitis* Quaedvlieg, Verkley & Crous coelomycetous, sexual morph unknown, pathogens, terrestrial, Hong Kong, see Quaedvlieg et al. (2013; morphology, phylogeny), Wijayawardene et al. (2014; outline), holotype of the type: CBS H-21324, culture ex-type CBS 114802.

Setosporella Mustafa & Abdul-Wahid 1989, *Ascomycota* genera *incertae sedis*, one species, type: *S. mahmoudii* Moustafa & Abdul-Wahid, sexual morph unknown, hyphomycetous, saprobes, isolated from soil, Egypt, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 326932, cultures and sequences are unavailable, needs generic revision.

Setosynnema D.E. Shaw & B. Sutton 1985, *Ascomycota* genera *incertae sedis*, one species, type: *S. isthmosporum* D.E. Shaw & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Seuratiopsis Woron. 1934, *Seuratiaceae*, *Ascomycota* families *incertae sedis*, one species, type: *S. epiphylla* Woron., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Seychellomyces Matsush. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *S. hexagonus* Matsush, sexual morph unknown, hyphomycetous, saprobes, isolated from soil, Seychelles, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Seynesia Sacc. 1883, *Cainiaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *S. nobilis* (Welw. & Curr.) Sacc., tropical, see Lumbsch & Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type, needs generic revision.

Seynesiella G. Arnaud 1918, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, c. 80 species, type: *S. juniperi* (Desm.) G. Arnaud, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Seynesiopeltis F. Stevens & R.W. Ryan 1925, *Seynesiopeltidaceae*, *Dothideomycetes*, *incertae sedis*, one species, type: *S. epiphylla* Woron., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Seynesiopsis Henn. 1904, *Ascomycota* genera *incertae sedis*, one species, type: *S. rionegrensis* Henn., sexual morph unknown, coelomycetous, saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Shackletonia Søchting, Frödén & Arup 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, five species, type: *S. hertelii* (Søchting, Øvstedal & Sancho) Søchting, Frödén & Arup, asexual morph unknown, lichenized, terrestrial, see Arup et al. (2013; taxonomy), Kondratyuk et al. (2014; phylogeny), Garrido-Benavent et al. (2016; new species), Lücking et al. (2016; classification), sequences are available.

Shanorella R.K. Benj. 1956, *Arthrodermataceae*, *Onygenales*, *Eurotiomycetes*, 17 species, type: *S. spirotricha* R.K. Benj., a sexual morph unknown, on humans and other mammals, causing microsporoses, terrestrial, USA, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), culture available for the type: CBS 305.56.

Shawiella Hansf. 1957, *Ascomycota* genera *incertae sedis*, one species, type: *S. grevilleae* Hansf., sexual morph unknown, coelomycetous, saprobes, on leaves of *Grevillea robusta*, New Guinea, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Shearia Petr. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *S. magnoliae* (Shear) Petr., coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sheariella Petr. 1952, *Ascomycota* genera *incertae sedis*, one species, type: *S. carbonacea* Petr., sexual morph unknown, coelomycetous, saprobes, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sheathnema Dubey & Moonambeth 2014, *Ascomycota* genera *incertae sedis*, two species, type: *S. indicum* Dubey & Moonambeth, hyphomycetous, sexual morph unknown, saprobes, epiphytes, India, see Dubey and Moonambeth (2014; taxonomy), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Shimizuomyces Kobayasi 1981, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *S. paradoxus* Kobayasi, asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Sung et al. (2010, 2011; culture characters of the type, applications), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: EFCC 6279.

Shiraiia Henn. 1900, *Shiraiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *S. bambusicola* Henn., asexual morph coelomycetous, parasitic, terrestrial, China and Japan, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2013; morphology, nomenclature, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; 2016; outline; phylogeny, coelomycetous taxa), cultures and sequences are available, ex-epitype strains of type: GZAAS2.0708 = CGMCC 3.15200 = MFLUCC 13-0408; holotype of type: Shirai (B!), epitype of type: GZAAS K-2002.

Shivomyces Hosag. 2004, *Ascomycota* genera *incertae sedis*, two species, type: *S. ligustri* Hosag. & Kamar., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Shrungabeeja V.G. Rao & K.A. Reddy 1981, *Tetraplosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *S. vadirajensis* V.G. Rao & K.A. Reddy, hyphomycetous, saprobes, on bamboo (*Bambusa*) and other plants (*Begonia*, *Melicope*), Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2015; new species, phylogeny), cultures and sequences are unavailable, needs generic revision.

Siemaszkoa I.I. Tav. & T. Majewski 1976, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, seven species, type: *S. flexa* (T. Majewski) I.I. Tav. & T. Majewski, asexual morph unknown, biotrophic on Coleoptera (Ptiliidae), Europe, Southern America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sigarispora Thambugala & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, eight species, type: *S. ravennica* (Tibpromma, Camporesi & K.D. Hyde) Thambug. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy and Japan, six species, see Thambugala et al. (2015b; morphology, phylogeny), Li et al. (2016; new species), holotype of type: MFLU 14-0692, ex-type strains of type: MFLUCC 14-0005.

Sigmatomyces Sacc. & P. Syd. 1913, *Ascomycota* genera *incertae sedis*, one species, type: *S. bakeri* Sacc., Syd. & P. Syd., sexual morph unknown, hyphomycetous, saprobes, Philippines, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sigmoidea J.L. Crane 1968, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, six species, type: *S. prolifera* (R.H. Petersen) J.L. Crane, hyphomycetous, polyphyletic, marine, freshwater, sexual morph unknown, on wood and leaves, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sigridea Tehler 1993, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, six species, type: *S. californica* (Tuck.) Tehler, lichenized (only one lichenicolous), terrestrial, tropical to subtropical with a preference for coastal habitats with a Mediterranean climate, see Ertz and Tehler (2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; morphology, phylogeny), Lücking et al. (2016; classification), lectotype and ex-type strain of type: Bolander 129 (FH).

Sillia P. Karst. 1873, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, three species, type: *S. ferruginea* (Pers.) P. Karst., asexual morphs unknown, saprobes, terrestrial, Europe, America, see Da Silva et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kruys and Castlebury (2012; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 126567.

Simonyella J. Steiner 1902, *Lecanographaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *S. variegata* J. Steiner, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification, treated as *Roccellaceae*), sequences are available.

Simplicillium W. Gams & Zare 2001, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, nine species, type: *S. lanosoniveum* (J.F.H. Beyma) Zare & W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, Europe, North America, see Seifert et al. (2011; morphology), Liu and Cai (2012; new species, China), Wijayawardene et al. (2012, 2017; outline), Nonaka et al. (2013; new species, Japan), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Sinodidymella J.Z. Yue & O.E. Erikss. 1985, *Dacampiaceae*, *Dothideomycetes* families *incertae sedis*, five species, type: *S. verrucosa* (Petr.) J.Z. Yue & O.E. Erikss., see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, needs generic revision.

Sinotrichium Juan Wang, S.Q. Xu & Strongman 2010, *Ascomycota* genera *incertae sedis*, one species, type: *S. chironomidarum* Juan Wang, S.Q. Xu & Strongman, asexual morph unknown, from the hindgut of a chironomid larva, China, see Wang et al. (2010; taxonomy), holotype of the type: XIN-4, cultures and sequences are unavailable, needs generic revision.

Siphula Fr. [nom. cons.] 1824, *Icmadophilaceae*, *Pertusariales*, *Lecanoromycetes*, 26 species; type: *S. ceratites* (Wahlenb.) Fr., lichenized, see Valadbeigi and Sipman (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Siphulastrum Müll.Arg. 1889, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, four species; type: *S. triste* Müll. Arg., lichenized see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ekman et al. (2014; phylogeny), Jørgensen and Andersen (2015; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Siphulella Kantvilas, Elix & P. James 1992, *Icmadophilaceae*, *Pertusariales*, *Lecanoromycetes*, one species, type: *S. coralloidea* Kantvilas, Elix & P. James, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Sipmania Egea & Torrente 1994, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *S. peltata* Egea & Torrente, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Sipmaniella Kalb 2009, *Megalosporaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *S. sulphureofusca* (Fée) Kalb, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Lücking et al. (2016; classification), sequences are available.

Sirastachys L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, seven species, type: *S. phaeospora* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22460, CBS 100155.

Sirenophila Søchting, Arup & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, seven species, type: *S. gintarasii* (S.Y. Kondr. & Kärnefelt) Arup, Frödén & Søchting, lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), Søchting et al. (2016; new species, southern hemisphere), sequences are available.

Sirexipula Bubák 1907, *Ascomycota* genera *incertae sedis*, one species, type: *S. kabatiana* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirococcus Preuss 1855, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, three species, type: *S. strobilinus* Preuss, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Crous et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species, phylogeny), cultures and sequences are available but lacks for the type:.

Sirocypis Clem. 1909, *Ascomycota* genera *incertae sedis*, one species, type: *S. kabatiana* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirogloea Petr. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *S. euonymi* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Siroligniella Naumov 1926, *Ascomycota* genera *incertae sedis*, one species, type: *S. salicicola* Naumov, coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirophoma Höhn. 1917, *Ascomycota* genera *incertae sedis*, three species, type: *S. singularis* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Siroplacodium Petr. 1940, *Ascomycota* genera *incertae sedis*, six species, type: *S. atrum* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, China, see Wijayawardene et al. (2012, 2017; outline), Zhao and Zhao (2012; new species, China), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Siropleura Petr. 1934, *Ascomycota* genera *incertae sedis*, one species, type: *S. pulchella* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Siroscypheolina Petr. 1923, *Ascomycota* genera *incertae sedis*, two species, type: *S. arundinacea* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Austria, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirosperma Syd. & P. Syd. 1917, *Ascomycota* genera *incertae sedis*, two species, type: *S. hypocrellae* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Papua New Guinea, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirosphaera Syd. & P. Syd. 1913, *Ascomycota* genera *incertae sedis*, two species, type: *S. botryosa* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirosporium Bubák & Serebrian. 1912, *Dothideomycetes* genera *incertae sedis*, c. 26 species, type: *S. antenniforme* (Berk. & M.A. Curtis) Bubák & Serebrian., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Kamal (2010; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, needs generic revision.

Sirosporonaemella Naumov 1951, *Ascomycota* genera *incertae sedis*, one species, type: *S. strobilina* Naumov, coelomycetous, sexual morph unknown, saprobes, terrestrial, Russia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirothecium P. Karst. 1887, *Ascomycota* genera *incertae sedis*, three species, type: *S. saepiarium* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirothyrium Syd. & P. Syd. 1916, *Ascomycota* genera *incertae sedis*, one species, type: *Sirothyrium taxi* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirozythia Höhn. 1904, *Ascomycota* genera *incertae sedis*, two species, type: *S. rosea* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirozythiella Höhn. 1909, *Ascomycota* genera *incertae sedis*, one species, type: *S. sydowiana* (Sacc.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sitochora H.B.P. Upadhyay 1964, *Ascomycota* genera *incertae sedis*, one species, type: *S. ellipsospora* H.B.P. Upadhyay, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sivanesia W.H. Hsieh & Chi Y. Chen 1996, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, one species, type: *S. rubi* W.H. Hsieh & Chi Y. Chen, asexual morph unknown, saprobes, terrestrial, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (accepted as a genus in *Botryosphaeriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Sivanesiella Gawande & D.K. Agarwal 2004, *Dothideomycetes* genera *incertae sedis*, one species, type: *S. prunicola* Gawande & D.K. Agarwal, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (2013; did not accept as a genus in *Venturiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Skottsbergiella Petr. 1927, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *S. diaporthoides* Petr., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Skylathea Spooner & Dennis 1986, ?*Gelatinodiscaceae*, *Helotiales*, *Leotiomyces*, one species, type: *S. hederiae* Spooner & Dennis, asexual morph unknown, sabrobe of wood, Skye Island, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: K 32267, cultures and sequences are unavailable, needs generic revision.

Skyttea Sherwood, D. Hawksw. & Coppins 1981, *Cordieritidaceae*, *Leotiomyces* families *incertae sedis*, 29 species, type: *S. nitschkei* (Körb.) Sherwood, D. Hawksw. & Coppins (syn. *Nesolechia nitschkei* Körb.), lichenicolous, widespread, terrestrial, see Diederich (20xx; taxonomy), Lumbsch & Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Suija et al. (2014, 2015; phylogeny), Jaklitsch et al. (2016; position), sequences are available, holotype of type: L 910.195-559.

Skyttella D. Hawksw. & R. Sant. 1988, ?*Cordieritidaceae*, *Leotiomyces* families *incertae sedis*, one species, type: *S. muelleri* (Willey) D. Hawksw. & R. Sant., on lichens, terrestrial, Europe and North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), sequences are available, holotype of type: FH.

Slimacomycetes Minter 1986, *Ascomycota* genera *incertae sedis*, two species, type: *S. monosporus* (W.B. Kendr.) Minter, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology), Koukol et al. (2012; enzymes), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Slopeiomyces Klaubauf, Lebrun & Crous 2014, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *S. cylindrosporus* (D. Hornby, Slope, Gutter. & Sivan.) Klaubauf, Lebrun & Crous, asexual morph hyphomycetous, saprobes, terrestrial, UK, see Klaubauf et al. (2014; morphology, phylogeny), Maharachchikumbura et al. (2015; outline), ex-type culture of type: CBS 609.75.

Smaragdiniseta L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *S. bisetosa* (V.G. Rao & de Hoog) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), ex-type culture of the type: CBS 459.82.

Smardea Svrček 1969, *Pyronemataceae*, *Pezizales*, *Pezizomyces*, eight species, type: *S. amethystina* (W. Phillips) Svrček, asexual morph unknown, saprobes, terrestrial, North temperate, see Van Vooren (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Smarodsia Raitv. & Vimba 2006, *Pyronemataceae*, *Pezizales*, *Pezizomyces*, one species, type: *S. stollii* Raitv. & Vimba, asexual morph unknown, from soil, terrestrial, Latvia, see Lumbsch and Huhndorf (2010; outline), holotype of the type: RIG 6493, cultures and sequences are unavailable, needs generic revision.

Smeringomyces Thaxt. 1908, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, four species, type: *S. anomalus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic on Coleoptera (Staphilinidae), USA, Europe, Japan, Trinidad, Sumatra, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Solanella Vaňha 1910, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *S. rosea* Vaňha, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Soleella Darker 1967, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, seven species, type: *S. striiformis* (Darker) Darker, asexual morph unknown, saprobes, terrestrial, North America, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Solenopezia Sacc. 1889, *Lachnaceae*, *Helotiales*, *Leotiomyces*, seven species, type: *S. solenia* Sacc., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type, needs generic revision.

Solenopsora A. Massal. 1855, *Catillariaceae*, *Rhizocarpales*, *Lecanoromycetes*, 20 species, type: *S. requienii* A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Van Den Boom (2010; new records, Spain), Farkas et al. (2011; distribution Hungary), Kınalıoğlu and Aptroot (2011; new records, Turkey), Kirk et al. (2013; genus accepted), Yazıcı and Aslan (2013; new records, Turkey), Guttová et al. (2014; generic diversity), Lücking et al. (2016; classification), sequences are available.

Solicorynespora R.F. Castañeda & W.B. Kendr. 1990, *Ascomycota* genera *incertae sedis*, 27 species, type: *S. zapatensis* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see McKenzie (2010; new species), Seifert et al. (2011; morphology), Ma et al. (2012, 2016; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hernández-Restrepo et al. (2014; new species), cultures and sequences are unavailable, needs generic revision.

Solitaria Arup, Søchting & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *S. chrysophthalma* (Degelius) Arup, Søchting & Frödén, asexual morph unknown, lichenized, terrestrial, see Arup et al. (2013; taxonomy), Gaya et al. (2015; phylogeny), Lücking et al. (2016; classification); sequences are

Soloacrospora W.B. Kendr. & R.F. Castañeda 1991, *Ascomycota* genera *incertae sedis*, two species, type: *S. flagellisetosa* W.B. Kendr. & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Soloacrosporiella Crous & M.J. Wingf. 2015, *Dothideomycetes* genera *incertae sedis*, one species, type: *S. acaciae* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, Malaysia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22223, CPC 24871.

Solorina Ach. 1808, *Peltigeraceae*, *Peltigerales*, *Lecanoromycetes*, ten species, type: *S. crocea* (L.) Ach., lichenized, Asia, Europe, North America, see Gagunashvili et al. (2009; molecular), Björk (2010; new record), Lumbsch and Huhndorf (2010; outline), Wedin et al. (2011; molecular), Grube et al. (2012; symbiosis), Lisov et al. (2012; ecology), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; molecular), Centeno et al. (2016; metabolic profiling), Magain et al. (2016; molecular), Lücking et al. (2016; classification), sequences are available.

Solorina Ach. 1808, *Peltigeraceae*, *Peltigerales*, *Lecanoromycetes*, 21 species, type: *S. crocea* (L.) Ach., asexual morph unknown, lichenized, terrestrial, Asia, Europe, North America, see Gagunashvili et al. (2009; molecular), Björk (2010; new record), Lumbsch and Huhndorf (2010; outline), Wedin et al. (2011; molecular), Grube et al. (2012; symbiosis), Lisov et al. (2012; ecology), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; molecular), Centeno et al. (2016; metabolic profiling), Magain et al. (2016; molecular), sequences are available.

Solorinaria (Vain.) Gyeln., 1935, *Lichinaceae*, *Lichinales*, *Lichinomyces*, one species, type: *S. fuscata* (Vain.) Gyeln., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Brackel (2013; taxonomy),

Aptroot and Iqbal (2014; checklist), Lücking et al. (2016; classification), sequences are unavailable.

Solosympiella Matsush. 1971, *Ascomycota* genera *incertae sedis*, eight species, type: *S. clavata* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Solotermynospora Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *S. caffra* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: Matsushima Fungus Collection, Kobe, 5A089, cultures and sequences are unavailable, needs generic revision.

Sonderhenia H.J. Swart & J. Walker 1988, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *S. eucalyptorum* (Hansf.) H.J. Swart & J. Walker coelomycetous, sexual morph mycosphaerella-like, two species, plant pathogens on *Eucalyptus*, terrestrial, see Crous et al. (2013; morphology, phylogeny), Videira et al. (2017; typification), Wijayawardene et al. (2017; outline), holotype DAR 45719, isotype IMI 280474 (sexual morph), holotype WARI 2007 (asexual morph); representative cultures CBS 120220 = CPC 12553, CPC 12554–12555.

Soosiella Hujslová & M. Kolařík 2013, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *S. minima* Hujslová & M. Kolařík, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Czech Republic, see Hujslová et al. (2013, 2014; phylogeny), holotype and ex-type of the type: PRM 922619, CBS 136257.

Sordaria Ces. & De Not. 1863, *Sordariaceae*, *Sordariales*, *Sordariomyces*, twelve species, type: *S. fimicola* (Roberge ex Desm.) Ces. & De Not., asexual morph unknown, terrestrial, saprobes, coprophilous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; phylogeny), cultures and sequences are available.

Sorokina Sacc. 1892, *Dermateaceae*, *Helotiales*, *Leotiomyces*, six species, type: *S. microspora* (Berk.) Sacc., asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sorokinella J. Fröhl. & K.D. Hyde 2000, *Dermateaceae*, *Helotiales*, *Leotiomyces*, two species, type: *S. appendicospora* J. Fröhl. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Hong Kong, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Sowerbyella Nannf. 1938, *Pyronemataceae*, *Pezizales*, *Pezizomyces*, eight species, type: *S. radiculata* (Sowerby) Nannf., asexual morph unknown, saprobes, terrestrial, Europe, China, see Zhuang (2009; new species), Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available.

Spadicoides S. Hughes 1958, *Sordariomyces* genera *incertae sedis*, c. 40 species, type: *S. bina* (Corda) S. Hughes 1958, hyphomycetous, sexual morph unknown, phialophora-like and selenosporella-like synanamorphs, saprobes, terrestrial and aquatic, cosmopolitan, see Wongsawas (2008, new record from China), Li (2010, new species), Ma et al. (2010, 2014, 2016; new species), Shenoy et al. (2010, polyphyly, affinities with *Dothideomyces* and *Sordariomyces*), Seifert et al. (2011; morphology), Ma et al. (2012a, new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Xia et al. (2013, new species), Heredia et al. (2015, new species), sequences are available but lacks for the type.

Sparria Ertz & Tehler 2011, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *S. cerebriformis* (Egea & Torrente) Ertz & Tehler, lichenized, see Californian coast, Baja California and Europe, see Ertz and Tehler (2011; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.

Sparticola Phukhams., Ariyaw., Camporesi & K.D. Hyde 2016, *Sporormiaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *S. forlicesenae* Wanas., Phukhams., Camporesi & K.D. Hyde, asexual morph hyphomycetous, saprobes, terrestrial, Italy, see Phukhamsakda et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: MFLU 15-1405, MFLUCC 15-0030.

Spathaspora N.-H. Nguyen, S.-O. Suh & M. Blackwell 2006, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, ten species, type: *S. passalidarum* N.H. Nguyen, S.O. Suh & M. Blackwell, asexual reproduction is by multilateral budding, saprophytic, associated with wood boring insect larvae, possibly worldwide, see Lumbsch and Huhndorf (2010; outline), *S. passalidarum* and other species in the clade are noted for fermentation of D-xylose, which is important for fermentation of biomass to fuel ethanol, many species in this genus represent asexual taxa originally classified in the genus *Candida*, but which have been transferred to the genus *Spathaspora* as new combinations, cultures and sequences are available.

Spathularia Pers. 1797, *Cudoniaceae*, *Rhytismatales*, *Leotiomycetes*, twelve species, type: *S. flavida* Pers., asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ge et al. (2014; DNA, phylogeny), cultures and sequences are available, needs generic revision.

Spathulospora A.R. Caval. & T.W. Johnson 1965, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, five species, type: *S. phycophila* A.R. Caval. & T.W. Johnson, spermatophores or asexual morph hyphomycetous, biotrophic on marine red alga, temperate to Antarctic sea of Southern hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: (R.E. Norris, 3892), needs generic revision.

Speerschneidera Trevis. 1861, *Leprocaulaceae*, *Leprocaulales*, *Lecanoromycetes*, one species, type: *S. euploca* (Tuck.) Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lecanorales*, genera incertae sedis), Kirk et al. (2013; genus accepted), Lendemer and Hodkinson 2013, Lücking et al. (2016; classification); sequences are available.

Spegazzinia Sacc. 1880, *Apiosporaceae*, *Xylariales*, *Sordariomycetes*, nine species, type: *S. ornata* Sacc., hyphomycetous, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Hyde et al. (2011; outline), Whitton et al. (2012; morphology with two types of conidia), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Speiropsis Tubaki 1958, *Dothideomycetes* genera *incertae sedis*, nine species, type: *S. pedatospora* Tubaki, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Pratibha et al. (2016; DNA, phylogeny), cultures available for the type: GUFCC 18008.

Spencermartinsia A.J.L. Phillips, A. Alves & Crous 2008, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, nine species, type: *S. viticola* (A.J.L. Phillips & J. Luque) A.J.L. Phillips, A. Alves & Crous, asexual morph coelomycetous, saprobes, weakly pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2012; phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; phylogeny), Abdollahzadeh et al. (2014; new species), Slippers et al. (2014;

phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy), Dissanayake et al. (2016; taxonomy), holotype and ex-type culture of the type: LISE 95177, CBS 117009.

Spencermartinsiella Péter, Dlačhy, Tornai-Lehoczki, M. Suzuki & Kurtzman 2011, *Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, four species, type: *S. europaea* G. Péter, Dlačhy, Tornai-Leh., M. Suzuki & Kurtzman, cell division is by multilateral budding, saprophytic, rotted wood, Europe, South America, see Péter et al. (2011; taxonomy), cultures and sequences are available.

Spermatoloncha Speg. 1908, *Ascomycota* genera *incertae sedis*, one species, type: *S. maticola* Speg., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spermochaetella Cif. 1954, *Ascomycota* genera *incertae sedis*, one species, type: *S. tecomae* (Chardón & Toro) Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spermospora R. Sprague 1948, *Ascomycota* genera *incertae sedis*, nine species, type: *S. subulata* (R. Sprague) R. Sprague, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spermosporella Deighton 1969, *Ascomycota* genera *incertae sedis*, nine species, type: *S. aggregata* Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Asia, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spermotrichum Kuntze 1898, *Ascomycota* genera *incertae sedis*, one species, type: *S. pulchellum* (Speg.) Kuntze, coelomycetous, sexual morph unknown, saprobes, terrestrial, Paraguay, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphacelia Lév. 1827, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, seven species, type: *S. segetum* Lév., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Pažoutová et al. (2008; DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Sphaerellopsis Cooke 1883, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *S. quercuum* Cooke, asexual morph coelomycetous, pathogens, lichenicolous, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014, 2017; outline), Trakunyingcharoen et al. (2014; new species, phylogeny), Crous et al. (2016; new species, phylogeny), cultures and sequences are available but lacks for the type.

Sphaerellothecium Zopf 1897, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, type: *S. araneosum* (Rehm) Zopf, asexual morph unknown, terrestrial, on lichens, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mycosphaerellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Sphaeristromella Bubák 1916, *Ascomycota* genera *incertae sedis*, one species, type: *S. pteridina* (Sacc. & Roum.) Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphaeriothyrium Bubák 1916, *Ascomycota* genera *incertae sedis*, two species, type: *S. filicinum* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphaerocordyceps Kobayasi 1981, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *Sphaerocordyceps palustris* (Berk.) Kobayasi, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: CUP 067858, cultures and sequences are unavailable.

Sphaerodes Clem. 1909, *Ceratostomataceae*, *Melanosporales*, *Sordariomycetes*, 13 species, type: *S. episphaerium* (W. Phillips & Plowr.) Clem., asexual morph unknown, saprobes, terrestrial, worldwide, see Vujanovic and Goh (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Sphaerodothella C.A. Pearce & K.D. Hyde 2001, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *S. danthoniae* (McAlpine) C.A. Pearce & K.D. Hyde, saprobes, Australia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Sphaerodothis (Sacc. & P. Syd.) Shear 1909, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, 20 species, type: *S. arengae* (Racib.) Shear ex Theiss. & Syd., saprobes, South East Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Sphaerognomoniella Naumov & Kusnezowa 1952, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *S. cornicola* Naumov & Kusnezowa, asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Sphaerographium Sacc. 1884, *Chaetomellaceae*, *Helotiales*, *Leotiomycetes*, twelve species, type: *S. squarrosum* Riess, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Minnis et al. (2010; new species, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; accepted as valid genus), cultures available but lacks for the type.

Sphaeromma H.B.P. Upadhyay 1964, *Ascomycota* genera *incertae sedis*, two species, type: *S. mazosiae* H.B.P. Upadhyay, coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphaeronaemella P. Karst. 1884 (= *Gabarnaudia* Samson & W. gams 1974 *vide* Reblova et al. 2016), *Microascales* genera *incertae sedis*, *Sordariomycetes*, ten species, type: *S. helvella* (P. Karst.) P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), de Beer et al. (2013; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Reblova et al. (2016; nomenclature), Wijayawardene et al. (2017; outline), sequences are available.

Sphaerophoma Petr. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *S. brencklei* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphaerophoropsis Vain. 1890, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *S. stereocauloides* Vain., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Sphaerophorus Pers. 1794, *Sphaerophoraceae*, *Lecanorales*, *Lecanoromycetes*, 69 species, type: *S. coralloides* Pers., asexual morph unknown, fruticose, terrestrial, saxicolous, see Wedin et al. (2009; taxonomy), Hua Jie et al. (2010; metal studies), Lumbsch and Huhndorf (2010; outline), Miller et al. (2011; ecological data), Cameron and Bondrup-Nielsen (2012; indicator species), Gielwanowska and Olech (2012; physiological and ultrastructure studies), Lang et al. (2012; species richness), Williams et al. (2012; biochemical and ecological studies), Kirk et al. (2013; genus accepted), Liu et al. (2014; new species), McMullin and Arsenault (2016; new records), Root et al. (2014; climate indicator), Chamizo et al. (2016; spatial distribution), Lücking et al. (2016; classification), sequences are available.

Sphaeropsis Sacc. 1880 (= *Phaeobotryosphaeria* Speg. 1908 *fide* Phillips et al. 2013; Wijayawardene et al. 2014; Rossman et al. 2015), *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, five species, type: *S. visci* (Alb. & Schwein.) Sacc, coelomycetous, sexual morph formerly known in *Phaeobotryosphaeria*, saprobes, endophytes, terrestrial, cosmopolitan, see Phillips et al. (2008, 2013; taxonomy, phylogeny), Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny, nomenclature), Rossman et al. (2015; nomenclature), Dissanayake et al. (2016; taxonomy), neotype and ex-neotype culture of the type: CWU (MYC) AS 2271 (MBT176099), CBS 122527.

Sphaerosoma Klotzsch 1839, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *S. fuscescens* Klotzsch, asexual morph unknown, hypogeous, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphaerosporella (Svrček) Svrček & Kubička 1961, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *S. brunnea* (Alb. & Schwein.) Svrček & Kubička, asexual morph hyphomycetous, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Sánchez et al. (2014; asexual reproduction, DNA), cultures and sequences are available for the type.

Sphaerosporium Schwein. 1832, *Onygenales* genera *incertae sedis*, two species, type: *S. lignatile* Schwein., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North and South America, see Seifert et al. (2011; morphology), Ropars et al. (2012; DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Sphaerostilbella (Henn.) Sacc. & D. Sacc. 1905 (= *Gliocladium* Corda 1840 *fide* Rossman et al. 2013; Maharachchikumbura et al. 2016), *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *S. lutea* (Henn.) Sacc. & D. Sacc., asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Sphaerozone Zobel 1854, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *S. tulasnei* Zobel, asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphaerulina Sacc. 1878, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 66 species, type: *S. myriadea* (DC.) Sacc., asexual morph coelomycetous, asexual morph septoria-like, saprobes or plant pathogens, terrestrial, freshwater or marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Crous et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Mycosphaerellaceae*), Verkley et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Sphaerulomyces Marvanová. 1977, *Ascomycota* genera *incertae sedis*, one species, type: *S. coralloides* Marvanová, hyphomycetous, saprobes, Czechoslovakia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphalteromyces Thaxt. 1894, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, four species, type: *S. lathrobii* Thaxt., asexual morph unknown, biotrophic on Coleoptera (Staphylinidae), Europe, America, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spheconisca (Norman) Norman 1876, *Verrucariaceae*, *Verrucariales*, *Eurotiomyces*, twenty species, type: *S. hypocrita* Norman, asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Sphinctrina Fr. 1825, *Sphinctrinaceae*, *Mycocaliciales*, *Eurotiomyces*, ten species, type: *S. turbinata* (Pers.) De Not., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Muniz et al. (2013; new species), Tibell et al. (2014; new species, DNA), cultures available for the type: AFTOL-ID 1721.

Sphinctrinopsis Woron. 1927, *Caliciaceae*, *Caliciales*, *Lecanoromyces*, one species, type: *S. pertusariae* Woron., lichenized, see Gaya et al. (2012; taxonomy), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are unavailable.

Spicellum Nicot & Roquebert 1976, *Bionectriaceae*, *Hypocreales*, *Sordariomyces*, two species, type: *S. roseum* Nicot & Roquebert, hyphomycetous, sexual morph unknown, saprobes, terrestrial, France, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

Spilodochium Syd. 1927, *Ascomycota* genera *incertae sedis*, four species, type: *S. vernoniae* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, Neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spilonema Bornet 1856, *Coccocarpiaceae*, *Peltigerales*, *Lecanoromyces*, five species, type: *S. paradoxum* Bornet, lichenized, see Lumbsch and Huhndorf (2010; outline), Anderson and Neily (2012; new records), Kirk et al. (2013; genus accepted), Medeiros et al. (2014; ecology), Spribille et al. (2014; phylogeny), McMullin et al. (2015; new records), Prieto et al. (2015; new record), Lücking et al. (2016; classification), sequences are available.

Spilopodia Boud. 1885, *Dermateaceae*, *Helotiales*, *Leotiomyces*, four species, type: *S. nervisequa* (Pers.) Boud., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spilopodiella E. Müll. 1989, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *S. arxii* E. Müll., asexual morph unknown, saprobes, terrestrial, Switzerland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spinulosphaeria Sivan. 1974, *Chaetosphaerellaceae*, *Coronophorales*, *Sordariomyces*, 14 species, type: *S. thaxteri* (Pat.) Sivan., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; new species, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type.

Spinulospora Deighton 1973, *Ascomycota* genera *incertae sedis*, four species, type: *S. pucciniiphila* Deighton, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline),

Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spiralum J.L. Mulder 1975, *Ascomycota* genera *incertae sedis*, two species, type: *S. helicosporum* J.L. Mulder, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spirodecospora B.S. Lu, K. D. Hyde & W. H. Ho 1998, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *S. bambusicola* B.S. Lu et al., asexual morph unknown, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016: outline), cultures and sequences are unavailable.

Spiromastigoides Doweld 2013, *Spiromastigaceae*, *Onygenales*, *Eurotiomycetes*, 17 species, type: *S. warcupii* (Kuehn & G.F. Orr) Doweld, asexual morph unknown, saprobes?, from soil, terrestrial, Australia, see Index Fungorum (2013), culture available for the type: AFTOL-ID 430.

Spiroplana Voglmayr, M.J. Park & H.D. Shin 2011, *incertae sedis*, *Pleosporales*, *Dothideomycetes*, two species, type: *S. centripetala* Voglmayr, M.J. Park & H.D. Shin, hyphomycetous, sexual morph unknown, parasitic, terrestrial, Korea, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type culture of the type: KUS-F22135, KACC42611.

Spirosphaera Beverw. 1953, *Helotiales* genera *incertae sedis*, nine species, type: *S. floriformis* Beverw, hyphomycetous, sexual morph unknown, on decaying birch leaves in water, see Seifert et al. (2011; morphology), Voglmayr et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Splanchnonema Corda 1829, *Pleomassariaceae*, *Pleosporales*, *Dothideomycetes*, 37 species, type: *S. pustulatum* Corda, asexual morph unknown, saprobes, terrestrial, Europe, North America, China, India, see Lumbsch and Huhndorf (2010; outline, sexual morph), Zhang et al. (2012; accepted as a genus in *Pleomassariaceae*, phylogeny), Zhao and Zhao (2012; new species, China), Hyde et al. (2013; accepted as a genus in *Pleomassariaceae*, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type.

Splanchospora Lar.N. Vassiljeva 1998, *Ascomycota* genera *incertae sedis*, one species, type: *S. ampullacea* (Pers.) Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, North temperate zone, see Honda et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Spondylocladiella Linder 1934, *Ascomycota* genera *incertae sedis*, two species, type: *S. botrytioides* Linder, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spondylocladiopsis M.B. Ellis 1963, *Ascomycota* genera *incertae sedis*, two species, type: *S. cupulicola* M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, India, see Pratibha et al. (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Spooneromyces T. Schumach. & J. Moravec 1989, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, five species, type: *S. laeticolor* (P. Karst.) T. Schumach. & J. Moravec, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Van Vooren (2014; new species), cultures and sequences are available.

Sporastatia A. Massal. 1854, *Sporastatiaceae*, *Rhizocarpales*, *Lecanoromycetes*, four species, type: *S. testudinea* (Ach.) A. Massal., lichenized, saxicolous, worldwide temperate, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; phylogenetic placement), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogenetic placement), Lücking et al. (2016; classification), sequences are available.

Sporendocladia G. Arnaud ex Nag Raj & W.B. Kendr. 1975, *Microascales* genera *incertae sedis*, *Sordariomycetes*, seven species, type: *S. castaneae* G. Arnaud ex Nag Raj & W.B. Kendr., asexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Kiyuna et al. (2012; DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Sporhaplus H.B.P. Upadhyay 1964, *Ascomycota* genera *incertae sedis*, one species, type: *S. rondoniensis* H.B.P. Upadhyay, asexual morph unknown, lichenized, terrestrial, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Sporidesmajora Batzer & Crous 2010, *Dothideomycetes* genera *incertae sedis*, *Dothideomycetes*, one species, type: *S. pennsylvaniensis* Batzer & Crous, hyphomycetous, sexual morph unknown, one species, saprobes, ?pathogens, terrestrial, USA, see Yang et al. (2010; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of type: CBS H-20326, CPC 16112.

Sporidesmiella P.M. Kirk 1982, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, 32 species, type: *S. claviformis* P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, on dung, terrestrial, worldwide, see Braun and Heuchert (2010; new species), Seifert et al. (2011; morphology), Ma et al. (2012, 2016; new species, China), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Monteiro et al. (2014; new species, Brazil), Heredia et al. (2015; new species, Mexico), Zhurbenko et al. (2015; new species), holotype of the type: IMI 246982, cultures and sequences are available but lacks for the type, needs generic revision.

Sporidesmina Subram. & Bhat 1989, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *S. malabarica* Subram. & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: NN43118.

Sporidesmium Link 1809, *Sporidesmiaceae*, *Diaportheomycetidae* families *incertae sedis*, *Sordariomycetes*, around 330 species, type: *S. atrum* Link, hyphomycetous, saprobes, mycoparasites, terrestrial and aquatic, cosmopolitan, see Iturriaga et al. (2008; new species), Seifert et al. (2011; morphology), Ma et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Dubey and Sengupta (2015; new species), Hyde et al. (2016; new species, phylogeny), Mena-Portales et al. (2016; new species), Su et al. (2016; phylogeny of *Sporidesmiaceae*), cultures and sequences are available.

Sporoctomorpha J.V. Almeida & Sousa da Câmara 1903, *Sordariomycetes* genera *incertae sedis*, one species, type: *S. magnoliae* J.V. Almeida & Sousa da Câmara, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Sporodictyon A. Massal. 1852, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, five species, 38 species, type: *S. schaeerianum* A. Massal., lichenized, see Savić and Tibell (2009; taxonomy), Dillman et al. (2014; new records, Alaska), Lücking et al. (2016; classification); sequences are available.

Sporodochiolichen Aptroot & Sipman 2011, *Ascomycota* genera *incertae sedis*, four species, type: *S. lecanoricus* Aptroot & Sipman, hyphomycetous, sexual morph unknown, lichenized, terrestrial, pantropical, see Aptroot and Sipman (2011; taxonomy), Diederich (2013; taxonomy), holotype of the type: ABL, Aptroot 31060, cultures and sequences are unavailable, needs generic revision.

Sporodophoron Frisch, Y. Ohmura, Ertz & G. Thor 2015, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, four species, type: *S. gossypinum* Frisch, Y. Ohmura & G. Thor, lichenized, see Frisch et al. (2015), Lücking et al. (2016; classification), sequences are available.

Sporomega Corda 1842, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, seven species, type: *S. degenerans* (Fr.) Corda, asexual morph unknown, saprobes, terrestrial, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available.

Sporopachydermia Rodrigues de Miranda 1978, *Saccharomycetales* genera *incertae sedis*, *Saccharomycetes*, five species, type: *S. lactativora* Rodrigues de Miranda, asexual reproduction is by multilateral budding, saprophytic, in cacti, seawater, tree exudates, waste lagoon, clinical, Europe, North America, Antarctica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Sporophagomyces K. Pöldmaa & Samuels 1999, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *S. chrysostomus* (Berk. & Broome) K. Pöldmaa & Samuels., asexual morph unknown, fungicolous, terrestrial, worldwide, see Jaklitsch et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Sporopodiopsis Sérusiaux 1997, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *S. sipmanii* Sérus., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Sporopodium Mont. 1851, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, 24 species, type: *S. leprieurii* Mont., lichenized, see Nelson et al. (2008; molecular), Lumbsch and Huhndorf (2010; outline), Weerakoon et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Rashmi and Rajkumar (2015; new report), Lücking et al. (2016; classification), sequences are available.

Sporormia De Not. 1845, *Sporormiaceae*, *Pleosporales*, *Dothideomycetes*, 29 species, type: *Sporormia fimetaria* De Not., asexual morph unknown, saprobes on dung, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; accepted genus), Hyde et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Sporoschismopsis Hol.-Jech. & Hennebert 1972 (= *Porosphaerellopsis* Samuels & E. Müll. 1982 *vide* Réblová et al. 2014, 2016), *Reticulascaceae*, *Glomerellales*, *Sordariomycetes*, eight species, type: *S. moravica* Hol.-Jech. & Hennebert, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Zhao and Zhao (2012; new species, China), Kirk et al. (2013; genus accepted), Réblová (2014; new species, holomorph, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Réblová et al. (2016; nomenclature), cultures and sequences are available but lacks for the type.

Sporostigma Grube 2001, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *S. melaspora* (Tuck.) Grube, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Sporotretophora Whitton, K.D. Hyde & McKenzie 2012, *Ascomycota* genera *incertae sedis*, one species, type: *S. punctata* Whitton, K.D. Hyde & McKenzie, hyphomycetous, sexual

morph unknown, saprobes, terrestrial, Philippines, see Whitton et al. (2012; taxonomy), cultures and sequences are unavailable, needs generic revision.

Spumatoria Masee & E.S. Salmon 1901, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, one species, type: *S. longicollis* Masee & E.S. Salmon, asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Squamarina Poelt, 1958, *Stereocaulaceae*, *Lecanorales*, *Lecanoromycetes*, species, sub species, varieties, forma species, type: *S. gypsacea* (Sm.) Poelt, asexual morph, undetermined, terricolous, saxicolous, widespread, see Dietrich and Buergi-Meyer, (2010; taxonomy, rare occurrences in surroundings), Lumbsch and Huhndorf (2010; outline), Miralles-Mellado et al. (2011; indicator species), Jorge-Villar et al. (2011; Raman spectroscopy study), Bevan et al. (2012; transplant experiments), Cansaran-Duman and Halici (2012; biochemistry and antimicrobial study), Kirk et al. (2013; genus accepted), Bastida et al. (2014, ecology), Martellos et al. (2014; ecology, species distribution) Delgado Baquerizo et al. (2015, chemistry), Lange and Belnap (2016; soil crust studies), Lücking et al. (2016; classification); sequences are available.

Squamella S. Hammer 2001, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *S. spumosa* S. Hammer, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Squamotubera Henn. 1903, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *Squamotubera le-ratii* Henn., see Maharachchikumbura et al. (2015, 2016; outline), Daranagama et al. (2016), this genus was not accepted as a genus in Lumbsch and Huhndorf (2010), Kirk et al. (2013).

Squamulea Arup, Søchting & Frödén, 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetidae*, five species, type: *S. subsoluta* (Nylander) Arup, Søchting & Frödén, asexual morph unknown, lichenized, terrestrial, Antarctica, see Arup et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Kondratyuk and Kondratyuk (2014; taxonomy), Kondratyuk et al. (2014, 2016; revised taxonomy), Søchting et al. (2014; taxonomy and new species), Lücking et al. (2016; classification), sequences are available.

Squamulea Arup, Søchting & Frödén, 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, five species, type: *S. subsoluta* (Nylander) Arup, Søchting & Frödén, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Arup et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2014, 2016; taxonomy, phylogeny), Søchting et al. (2014; taxonomy and new species), Kondratyuk and Kondratyuk (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Stachybotryna Tubaki & T. Yokoy. 1971, *Ascomycota* genera *incertae sedis*, five species, type: *S. columaris* Tubaki & T. Yokoy., hyphomycetous, sexual morph unknown, saprobes, ?pathogens, terrestrial, Asia, Caribbean, Europe, see Seifert et al. (2011; morphology), Heredia et al. (2012; new species, Mexico), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), culture available for an unidentified species, needs generic revision.

Stachybotrys Corda 1837, *Stachybotryaceae*, *Hypocreales*, *Sordariomycetes*, c. 60 species, type: *S. chartarum* (Ehrenb.) S. Hughes, hyphomycetous, sexual morph available, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Wang et al. (2015; new species, revision, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Lombard et al. (2016; phylogeny, revision, sexual morph), cultures and sequences are available, needs generic revision.

Stachylidium Link 1809, *Plectosphaerellaceae*, *Glomerellales*, *Sordariomycetes*, two species, type: *S. bicolor* Link, hyphomycetous, sexual morph unknown, pathogens, nematophagous, terrestrial, worldwide, see Réblová et al. (2011; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures sequences are available for the type: DAOM 226658.

Stagonopatella Petr. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *S. aeruginosa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stagonopsis Sacc. 1884, *Ascomycota* genera *incertae sedis*, four species, type: *S. pallida* (Berk. & M.A. Curtis) Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stagonospora (Sacc.) Sacc. 1884, *Massarinaceae*, *Pleosporales*, *Dothideomycetes*, 220 species, type: *S. paludosa* (Sacc. & Speg.) Sacc., coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014, 2016; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2013; new species, phylogeny), Crous et al. (2014, 2015; DNA, new species, phylogeny), Tanaka et al. (2015; new species, phylogeny), neotype and ex-neotype of the type: CBS H-21317, S601 = CBS 135088.

Stagonosporina Tassi 1902, *Ascomycota* genera *incertae sedis*, one species, type: *S. sparti* Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stagonosporopsis Died. 1912, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, 22 species, type: *S. hortensis* (Sacc. & Malbr.) Petr., coelomycetous, with sexual morph, saprobes, ?pathogens, terrestrial, cosmopolitan, see Vaghefi et al. (2012; species associated with ray blight disease of Asteraceae), Chen et al. (2015; taxonomy, phylogeny), Hyde et al. (2016; sexual morph), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Stagonostromella Petr. & Syd. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *S. sparti* Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Staheliella Emden 1974, *Ascomycota* genera *incertae sedis*, two species, type: *S. nodosa* Emden, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Staibia Bat. & Peres 1966, *Leptopeltidaceae*, *Dothideomycetes*, *incertae sedis*, one species, type: *S. connari* Bat. & Peres, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Stalagmochaetia Cif. & Bat. 1963, *Ascomycota* genera *incertae sedis*, two species, type: *S. basilisca* Bat., Cif. & Nascim., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stannaria Fuckel 1870 (= *Titaeospora* Bubák 1916 *vide* Johnston et al. 2014), *Helotiaceae*, *Helotiales*, *Leotiomyces*, five species, type: *S. persoonii* (Moug.) Fuckel, asexual morph formerly known in *Titaeospora*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature),

Baral and Haelewaters (2015; DNA), Wijayawardene et al. (2016; outline), cultures and sequences are available but lacks for the type.

Stanhughesia Constant. 1989, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, four species, type: *S. linnaeae* Constant., sexual morph unknown, epiphytes, epiphyllous, hyphomycetous, terrestrial, Sweden, South Africa, see Seifert et al. (2011; morphology), Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Staninwardia B. Sutton 1971, *Extremaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *S. breviscula* B. Sutton, coelomycetous, sexual morph unknown, saprobes, pathogens, Australia, see Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2014, 2017; outline, taxonomy), cultures and sequences are available but lacks for the type.

Stanjehughesia Subram. 1992, *Sordariomycetes* genera *incertae sedis*, 16 species, type: *S. hormiscioides* (Corda) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Delgado (2008; new species, USA), Marincowitz et al. (2008; new species), Ma et al. (2011; new species, China), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Carneiro et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Stanjemonium W. Gams, O'Donnell, Schroers & M. Chr. 1999, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, four species, type: *S. grisellum* W. Gams, Schroers & M. Chr., hyphomycetous, sexual morph unknown, from soil, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 655.79.

Staphylotrichum J. Mey. & Nicot 1957, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, four species, type: *S. coccosporum* J.A. Mey. & Nicot, sexual morph unknown, saprobes, from soil, terrestrial, Africa, Asia, Europe, see Seifert et al. (2011; morphology), Nonaka et al. (2012; new species, Japan phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for the type.

Starbaeckia Rehm ex Starbäck 1899, *Helotiales incertae sedis*, *Leotiomycetes*, one species, type: *S. pseudotryblidioides* Rehm & Starbäck, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Starmera Y. Yamada, Higashi, Ando & Mikata 1997, *Phaffomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, ten species, type: *S. amethionina* (Starmer, Phaff, M. Miranda & M.W. Miller) Y. Yamada, Higashi, S. Ando & Mikata, cell division is by multilateral budding, saprophytic, in cacti, tunnels of wood boring insects, slime fluxes of trees, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Starmerella Rosa & Lachance 1998, *Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, 25 species, type: *S. bombicola* C.A. Rosa & Lachance, cell division is by multilateral budding, saprophytic, in honey, fruit juice concentrate, flowers, various beetles, bees, worldwide, see Kurtzman et al. (2010; phylogeny, revision), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), most of the species in this genus represent asexual forms originally classified in the genus *Candida* thus, they they will be transferred to *Starmerella* as new combinations, cultures and sequences are available.

Staurolemma Körb. 1867, *Pannariaceae*, *Peltigerales*, *Lichinomycetes*, three species, type: *S. dalmaticum* Körb., asexual morph unknown, lichenized, terrestrial, see Wedin et al. (2009; taxonomy), Jørgensen (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bendiksby et al. (2014; long-distance dispersal), Dixon et al. (2014;

mapping), Ekman et al. (2014; taxonomy), Otálora et al. (2013, 2014; revised generic classification), Tapper et al. (2014; endemics on granite), Boutabia et al. (2015; floristic), Paoli et al. 2015; indicator species), Lücking et al. (2016; classification), sequences are available..

Stauronema (Sacc.) Syd., P. Syd. & E.J. Butler 1916, *Ascomycota* genera *incertae sedis*, four species, type: *S. cruciferum* (Ellis) Syd., P. Syd. & E.J. Butler, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stauronematopsis Abbas, B. Sutton & Ghaffar 2002, *Ascomycota* genera *incertae sedis*, one species, type: *S. sojiae* (Uecker & Kulik) Abbas, B. Sutton & Ghaffar, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Staurophoma Höhn. 1907, *Ascomycota* genera *incertae sedis*, one species, type: *S. panici* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Hong Kong, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Staurothele Norman [nom. cons.] 1853, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 40 species; type: *S. clopima* (Wahlenb.) Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); sequences are available.

Staurothele Norman 1853, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 80 species, type: *S. clopima* (Wahlenb.) Th. Fr., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Thüs et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Gueidan et al. (2014; phylogeny), sequences are available, needs generic revision.

Stearophora L. Mangin & Viala 1905, *Sordariomycetes* genera *incertae sedis*, one species, type: *S. radicolola* L. Mangin & Viala, asexual morph unknown, saprobes, terrestrial, North Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Steganopycnis Syd. & P. Syd. 1916, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *S. oncospermatis* Syd. & P. Syd., see Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016: outline), the genus was not accepted as a genus in Kirk et al. (2008, 2013).

Stegasphaeria Syd. & P. Syd. 1916, *Mesnieraceae*, *Dothideomycetes* families *incertae sedis*, five species, type: *S. pavonina* Syd. & P. Syd., see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mesnieraceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Stegobolus Mont. 1845, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 15 species, type: *S. berkeleyanus* Mont., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Sipman et al. (2012; key: Costa Rica), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); sequences are available.

Stegonsporiopsis Van Warmelo & B. Sutton 1981, *Ascomycota* genera *incertae sedis*, one species, type: *S. cenangioides* (Ellis & Rothr.) Van Warmelo & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Hong Kong, South America, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stegonsporium Corda 1827, *Stilbosporaceae*, *Diaporthales*, *Sordariomycetes*, eight species, type: *S. pyriforme* (Hoffm.) Corda, asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Voglmayr and Jaklitsch (2008, 2014; phylogeny, taxonomy, holomorph), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; taxonomy, outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Stegophora Syd. & P. Syd. 1916, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, three species, type: *S. ulmea* (Fr.) Syd. & P. Syd., asexual morphs unknown, saprobes, terrestrial, North America, see Da Silva et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stegophorella Petr. 1947, *Sordariomycetes* genera *incertae sedis*, one species, type: *S. lagerheimii* Petr., asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stegothyrium Höhn. 1918, *Dothideomycetes* genera *incertae sedis*, two species, type: *S. denudans* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wu et al. (2011) and Hyde et al. (2013) did not accept as *Microthyriaceae*, Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Steinera Zahlbr. 1906, *Koerberiaceae*, *Peltigerales*, *Lecanoromycetes*, four species, type: *S. molybdoplaca* (Nyl.) Zahlbr., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Spribille and Muggia (2013; evolutionary), Lücking et al. (2016; classification), sequences are available.

Steineropsis T. Sprib. & Muggia 2010, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, one species, type: *S. alaskana* T. Sprib. & Muggia, lichenized, Europe, Africa, mostly along the Atlantic coast, see Spribille et al. (2010; taxonomy), Spribille and Muggia (2013; phylogenetics), Arup et al. (2014; taxonomy), Schneider et al. (2015; DNA, pylogeny), Lücking et al. (2016; classification), sequences are available.

Steinia Körb., 1873, *Aphanopsidaceae*, *Pezizomycotina* families *incertae sedis*, three species, type: *S. luridescens* Körb., asexual morph unknown, lichenized, terrestrial, european distribution, see Lumbsch and Huhndorf (2010; outline), Kärnefelt et al. (2012; systematic, biodiversity), Printzen et al. (2012; partial sequencing), Kirk et al. (2013; genus accepted), Czarnota and Hernik (2014; ecology), Yatsyna and Motiejūnaitė (2015; new contributions), Kondratyuk et al (2015; molecular phylogeny), Lücking et al. (2016; classification); sequences are available.

Stellarangia Frödén, Arup & Söchting 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *S. elegantissima* (Nyl.) Frödén, Arup & Söchting, lichenized, see Arup et al. (2013; taxonomy), Gaya et al. (2015; adaptations, phylogeny), Lücking et al. (2016; classification), sequences are available.

Stellatospora Tad. Ito & Nakagiri 1994, *Sordariaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *Stellatospora terricola* Tad. Ito & Nakagiri asexual morph unknown, saprophytic, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: IFO H-12166, ex-type cultures of type: NBRC 32597.

Stellifraga Alstrup & Olech 1993, *Ascomycota* genera *incertae sedis*, one species, type: *S. cladoniicola* Alstrup & Olech, asexual morph unknown, saprobes, terrestrial, Spitsbergen, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stellomyces Morgan-Jones, R.C. Sinclair & Eicker 1987, *Ascomycota* genera *incertae sedis*, two species, type: *S. suidafrikanus* Morgan-Jones, R.C. Sinclair & Eicker, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stellopeltis Bat. & A.F. Vital 1959, *Ascomycota* genera *incertae sedis*, two species, type: *S. philodendricola* (Bat.) Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stellosetifera Matsush. 1996, *Sordariomycetes* genera *incertae sedis*, one species, type: *Stellosetifera malaysiana* Matsush., asexual morph unknown, saprobes, terrestrial, Malaysia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stellospora Alcorn & B. Sutton 1984, *Ascomycota* genera *incertae sedis*, two species, type: *S. appendiculellae* Alcorn & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Phillipines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stellothyriella Bat. & Cif. 1959, *Ascomycota* genera *incertae sedis*, two species, type: *S. graminis* (Wehm.) Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stemmatomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *S. anoplischii* (Thaxt.) Thaxt., asexual morph unknown, biotrophic on Coleoptera (Elateridae), USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stemphylium Wallr. (= *Pleospora* Rabenh. ex Ces. & De Not. 1863 *vide* Wijayawardene et al. 2014), *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, 56 species, type: *S. botryosum* Sacc., hyphomycetous, sexual morph formerly known in *Pleospora*, saprobes or pathogens in terrestrial habitats, worldwide, see Seifert et al. (2011; morphology), Zhang et al. (2012; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Ariyawansa et al. (2015; taxonomy, phylogeny), Rossman et al. (2015; nomenclature), Crous et al. (2016; new species, phylogeny), sequences are available.

Stenella Syd. 1930, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, c. 140 species, type: *S. araguata* Syd., hyphomycetous, saprobes, pathogens, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2014; phylogeny), cultures and sequences are available, needs generic revision.

Stenhammarella Hertel 1967, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *S. turgida* (Ach.) Hertel, asexual morph unknown, lichenized, terrestrial, Europe, Central Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures available for the type: Stetur3861.

Stenocarpella Syd. & P. Syd. 1917, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *S. zaeae* Syd. & P. Syd., coelomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Wicklow et al. (2011; bioactive metabolites), Wijayawardene et al. (2012, 2016; phylogeny, taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for the type: NRRL:13609.

Stenocephalopsis Chamuris & C.J.K. Wang 1998, *Ascomycota* genera *incertae sedis*, one species, type: *S. subalutacea* (Peck) Chamuris & C.J.K. Wang, hyphomycetous, sexual

morph unknown, saprobes, terrestrial, Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stenocladia Marvanová & Descals 1987, *Ascomycota* genera *incertae sedis*, one species, type: *S. neglecta* (Marvanová & Descals) Marvanová & Descals, hyphomycetous, sexual morph unknown, saprobes, aquatic, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stenocybe Nyl. ex Körb. 1855, *Mycocaliciaceae*, *Mycocaliciales*, *Eurotiomycetes*, 14 species, type: *S. byssacea* (Fr.) Nyl. ex Körb., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type.

Stenospora Deighton 1969, *Ascomycota* genera *incertae sedis*, one species, type: *S. neglecta* (Marvanová & Descals) Marvanová & Descals, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stephanocyclos Hertel 1983, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *S. henssenianus* Hertel; lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Schmull et al. (2011; phylogeny), Lücking et al. (2016; classification), sequences are available.

Stephanonectria Schroers & Samuels 1999, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *S. keithii* (Berk. & Broome) Schroers & Samuels, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Stephanotheca Syd. & P. Syd. 1914, *Dothideomycetes* genera *incertae sedis*, four species, type: *S. micromera* Syd. & P. Syd., asexual morph unknown, foliar epiphytes, terrestrial, India, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jayawardena et al. (2014; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of the species S-F6581.

Stephembruneria R.F. Castañeda 1988, *Ascomycota* genera *incertae sedis*, one species, type: *S. elegans* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stephensia Tul. & C. Tul. 1845, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, seven species, type: *S. bombycina* (Vittad.) Tul., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wang et al. (2016; DNA, phylogeny), sequences are available.

Stereocaulon Hoffm. 1795. *Stereocaulaceae*, *Lecanorales*, *Lecanoromycetes*, 140 species, type: *S. paschale* (L.) Hoffm., asexual morph unknown, lichenized, terrestrial, worldwide, see Khare et al. (2009; taxonomy), Morita et al. (2009; antimutagenic study), Seo et al. (2009; bioactivity study), Wedin et al. (2009; molecular), Fryday (2010; taxonomy), Hafellner et al. (2010; biodiversity), Huang (2010; environment), Lumbsch and Huhndorf (2010; outline), Melechín (2010; taxonomy), Goel et al. (2011; antifungal study), Hansen (2011; taxonomy), Ismed et al. (2012; chemistry), Bhattarai et al. (2013; bioactivity study), Kim et al. (2013; antimicrobial study), Kirk et al. (2013; genus accepted), Rincon-Espitia et al. (2013; taxonomy), Motiejūnaitė (2013; taxonomy), Singh et al. (2013; physiology), Högnabba et al. (2014; phylogeny), Meunier et al. (2014; environment), Nayaka and Saxena (2014;

physiology), Oset and Kukwa (2014; typification), Ranković et al. (2014; bioactivity), Oset (2015; taxonomy), Doering et al. (2016; taxonomy), Kossowska and Szczepańska (2016; taxonomy), Lücking et al. (2016; classification), Shukla et al. (2016; amino acids), sequences are available.

Stereocrea Syd. & P. Syd. 1917, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *S. schizostachyi* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, paleotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: CUP 067858, cultures and sequences are unavailable.

Stereosphaeria Kirschst. 1939, *Sordariomycetes* genera *incertae sedis*, two species, type: *S. phloeophila* Kirschst., widespread in temperate regions, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016), one sequence is available.

Sterigmatobotrys Oudem. 1886, *Pleurotheciaceae*, *Pleurotheciales*, *Sordariomycetes*, three species, type: *S. elata* (Sacc.) Oudem., hyphomycetous, sexual morph unknown, saprobes, terrestrial, north temperate, see Réblová and Seifert (2011; epitypification, holomorph), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; phylogeny), cultures available but lacks for the type.

Stevensonula Petr. 1952, *Ascomycota* genera *incertae sedis*, one species, type: *S. ciliata* Petr., coleomycetous, sexual morph unknown, saprobes, terrestrial, USA, New Caledonia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stichomyces Thaxt. 1901, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *S. conosomatis* Thaxt., asexual morph unknown, biotrophic on Coleoptera (Staphylinidae), Europe, Africa, USA, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stictis Pers. 1800, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *S. radiata* (L.) Pers., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures available for type: AFTOL-ID 398, MW6493, P164, F907E267.

Stictopatella Höhn. 1918, *Ascomycota* genera *incertae sedis*, one species, type: *S. euonymi* (Desm.) Höhn., coleomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stictosepta Petr. 1964, *Ascomycota* genera *incertae sedis*, one species, type: *S. cupularis* Petr., coleomycetous, sexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stictospora Cif., 1957, *Stictidaceae*, *Ostropales*, *Ostropomycetes*, one species, type: *S. oleae* (De Not.) Cif., asexual morph unknown, lichenized, terrestrial, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Stigmatellina Bat. & H. Maia 1960, *Ascomycota* genera *incertae sedis*, one species, type: *S. epilobii* Bat. & H. Maia, coleomycetous, sexual morph unknown, saprobes, terrestrial, Belgium, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stigmatochroma Marbach, 2000, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, nine species, type: *S. epimarta* (Nyl.) Marbach, asexual morph unknown, lichenized, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Cavalcante (2012; comparative studies), Gaya et al.

(2012; taxonomy), Kirk et al. (2013; genus accepted), Menezes et al. (2013; taxonomy), Prieto et al. (2013; phylogeny), Giralt et al. (2014; new species), Logesh et al. (2015; floristics), Mohabe et al. (2015; new species), Prieto and Wedin (2016; phylogeny), Lücking et al. (2016; classification), sequences are available.

Stigmatodothis Syd. & P. Syd. 1914, *Dothideomycetes* genera *incertae sedis*, one species, type: *S. palawanensis* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Philippines, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013; did not recognize this genus as in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline) cultures and sequences are unavailable, needs generic revision.

Stigmatomyces H. Karst. 1869, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 145 species, type: *S. baeri* (Knoch) Peyritsch, asexual morph unknown, biotrophic on Diptera, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossi and Leonardi (2012, most recent species descriptions Africa), cultures and sequences are available but lacks for the type.

Stigmatophragma Tehon & G.L. Stout 1929, *Dothideomycetes* genera *incertae sedis*, one species, type: *S. sassafrasicola* Tehon & G.L. Stout, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013; did not recognize this genus as in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Stigmatula (Sacc.) Syd. & P. Syd. 1901, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, ten species, type: *S. sutherlandiae* (Kalchbr. & Cooke) Syd. & P. Syd., saprobes, temperate, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stigmaea Fr. 1836, *Ascomycota* genera *incertae sedis*, one species, type: *S. submaculans* Mont., saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stigmella Lév. 1842, *Ascomycota* genera *incertae sedis*, 28 species, type: *S. dryina* (Corda) Lév., coleomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wang et al. (2012; new species, China), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stigmatidium Trevis. 1860, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *S. schaeereri* (A. Massal.) Trevis., lichenicolous or lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Stigmochora Theiss. & Syd. 1914, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, twelve species, type: *S. controversa* (Starbäck) Theiss. & Syd., saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stigmopeltis Syd. 1927, *Ascomycota* genera *incertae sedis*, two species, type: *S. roupalae* Syd., coleomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stilbella Lindau 1900, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, four species, type: *S. fimetaria* (Pers.) Lindau, hyphomycetous, sexual morph unknown, from soil and dung, saprobes, worldwide, see Mazzaferro et al. (2010; secondary metabolites), Seifert et al. (2011; morphology), Summerbell et al. (2011; phylogeny), Wijayawardene et al. (2012, 2017;

outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Stilbellula Boedijn 1951, *Ascomycota* genera *incertae sedis*, one species, type: *S. pallida* Boedijn, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stilbocrea Pat. 1900, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *S. dussii* Pat., asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Sung et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Stilbodendron Syd. & P. Syd. 1916, *Ascomycota* genera *incertae sedis*, one species, type: *S. camerunense* Syd. & P. Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stilbohypoxylon Henn. 1902, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, ten species, type: *S. moelleri* Henn., asexual morph unknown, terrestrial, saprobes, subtropical, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Stilbopeziza Speg. 1908, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *S. yerbae* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stilbophoma Petr. 1942, *Ascomycota* genera *incertae sedis*, one species, type: *S. microspora* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, Africa, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stilbospora Pers. 1794 (= *Prosthecium* Fresen. 1852 *vide* Voglmayr and Jaklitsch 2014), *Stilbosporaceae*, *Diaporthales*, *Sordariomycetes*, 20 species, type: *S. macrosperma* Pers., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Voglmayr and Jaklitsch (2008, 2014; phylogeny, taxonomy, holomorph), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2016, 2017; taxonomy, outline, phylogeny), cultures and sequences are available.

Stioclettia Dennis 1975, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *S. luzulina* Dennis, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stirtonia A.L. Sm. 1926, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, 25 species, type: *S. obvallata* A.L. Sm., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Stirtoniella D.J. Galloway, Hafellner & Elix 2005, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *S. kelica* (Stirt.) D.J. Galloway, Hafellner & Elix, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Stomatogene Theiss. 1917, *Perisporiopsidaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *S. agaves* (Ellis & Everh.) Theiss., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013;

genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Stomatogenella Petr. 1955, *Sordariomycetes* genera *incertae sedis*, *incertae sedis*, two species, type: *Stomatogenella mirabilis* Petr., asexual morph unknown, saprobes, terrestrial, North Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stomiopeltis Theiss. 1914, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, 25 species, type: *S. aspersa* (Berk.) Theiss., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for type, needs generic revision.

Stomiopeltopsis Bat. & Cavalc. 1963, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, two species, type: *S. linacearum* Bat. & Cavalc., asexual morph unknown, saprobes, terrestrial, Brazil, New Mexico, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Stomiotheca Bat. 1959, *Micropeltidaceae*, *Microthyriales*, *Dothideomycetes*, two species, type: *S. amazonensis* Bat., asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Wu et al. (2011; new combination), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Stouffera Kovács & Trappe 2011, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *S. longii* (Gilkey) Kovács, Trappe, asexual morph unknown, hypogeous, terrestrial, Argentina, USA, see Kovács et al. (2011; taxonomy, phylogeny), sequences and cultures are unavailable.

Strangospora Körb. 1860, *Strangosporaceae*, *Pezizomycotina* families *incertae sedis*, nine species, type: *S. pinicola* (A. Massal.) Körb., asexual morph unknown, lichenized, terrestrial distribution, Reeb et al. (2004; sequencing), Lumbsch and Huhndorf (2010; outline), Stepanchikova et al (2011; new records), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylogeny), Rogers et al. (2015; lichen monitoring), Urbanavichene and Zapovednik (2015; new findings), Lücking et al. (2016; classification), Urbanavichus et al. (2016; new records), sequences are available.

Strasseria Bres. & Sacc. 1902, *Ascomycota* genera *incertae sedis*, one species, type: *S. carpophila* Bres. & Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Strasseriosis B. Sutton & Tak. Kobay. 1970, *Ascomycota* genera *incertae sedis*, one species, type: *S. tsugae* (Tak. Kobay.) B. Sutton & Tak. Kobay., coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stratiphoromyces Goh & K.D. Hyde 1998, *Ascomycota* genera *incertae sedis*, one species, type: *S. brunneisporus* Goh & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Strattonia Cif. 1954, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, nine species, type: *S. tetraspora* (R. Stratton) Cif., asexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariales* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Streimannia G. Thor 1991, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *S. varieseptata* G. Thor., lichenized, terrestrial, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); sequences unavailable.

Streimanniella S.Y.Kondr., Kärnefelt, A.Thell, Elix & Hur 2015, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, four species, type: *S. michelagoensis* (Elix, S.Y. Kondr. & Kärnefelt) S.Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A.S. Kondr. & Hur, lichenized, see Kondratyuk et al. (2015b; taxonomy), Lücking et al. (2016; classification), sequences are available.

Strelitziana Arzanlou & Crous 2006, *Strelitzianaceae*, *Chaetothyriales*, *Eurotiomycetes*, seven species, type: *S. africana* Arzanlou & Crous, hyphomycetous, sexual morph unknown, saprobes, cosmopolitan, see Crous et al. (2010, 2015; new species, phylogeny), Zhang et al. (2010; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Streptotinia Whetzel 1945 (= *Streptobotrys* Hennebert 1973 *vide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *S. arisaematis* Whetzel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Striatibotrys L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, six species, type: *S. eucylindrospora* (D.W. Li) L. Lombard & Crous, asexual morph hyphomycetous, saprobes, from soil, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), ex-type culture of the type: MUCL 9483.

Striaticonidium L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *S. cinctum* (Corda) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype, ex-epitype culture of the type: CBS H-22471, CBS 932.69.

Striatodecospora D.Q. Zhou, K.D. Hyde & B.S. Lu. 2000, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *S. bambusae* D.Q. Zhou, K.D. Hyde & B.S. Lu., asexual morph unknown, on dead bamboo culm, see Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Striatosphaeria Samuels & E. Müll. 1979, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *S. codinaeaphora* Samuels & E. Müll., asexual morph unknown, saprobes, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for the type.

Strickeria Körb. 1865, *Sporocadaceae*, *Xylariales*, *Sordariomycetes*, ten species, type: *S. kochii* Körb., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariales* genera incertae sedis), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; taxonomy, phylogeny, holomorph), cultures available for the type: C149, C138.

Strigopodia Bat. 1957, *Euantennariaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *S. piceae* Bat., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Euantennariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Strigula Fr. 1823, *Strigulaceae*, *Strigulales*, *Dothideomycetes*, one species, type: *S. smaragdula* Fr., asexual morph unknown, lichenized, foliicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; DNA, phylogeny), Hyde et al. (2013; accepted as a genus in *Strigulaceae*), Jayalal et al. (2013; DNA), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Lücking et al. (2016; classification), sequences are available.

Striosphaeropsis Verkley & Aa 1997, *Ascomycota* genera *incertae sedis*, one species, type: *S. mirabilis* Verkley & Aa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Papua New Guinea, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Strobiloscypha N.S. Weber & Denison 1995, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *S. keliae* N.S. Weber & Denison, asexual morph unknown, saprobes, terrestrial, Montenegro, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Perić et al. (2013; new species, DNA, phylogeny), sequences are available.

Stromaster Höhn. 1930, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, twelve species, type: *S. tuberculatus* (Pat.) Höhn., saprobes, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stromatella Henssen 1989, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, one species, type: *S. bermudana* (Riddle) Henssen, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Stromatinia (Boud.) Prill. 1907, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *S. rapulum* (Bull.) Boud., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence available for the type: Z73801 (ITS), needs generic revision.

Stromatocrea W.B. Cooke 1952, *Ascomycota* genera *incertae sedis*, one species, type: *S. cerebriformis* W.B. Cooke, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, treated as a genus in *Bionectriaceae* or *Hypocreaceae*), cultures and sequences are unavailable, needs generic revision.

Stromatographium Höhn. 1907, *Ascomycota* genera *incertae sedis*, one species, type: *S. stromaticum* (Berk.) Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stromatonectria Jaklitsch & Voglmayr 2011, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *S. caraganae* (Höhn.) Jaklitsch & Voglmayr, asexual morph coelomycetous, saprobes, terrestrial, Austria, see Jaklitsch and Voglmayr (2011; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; phylogeny), ex-epitype culture of the type: CBS 127387.

Stromatoneurospora S.C. Jong & E.E. Davis. 1973, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *S. phoenix* S.C. Jong & E.E. Davis., tropical, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), a sequence is available.

Stromatopogon Zahlbr. 1897, *Ascomycota* genera *incertae sedis*, three species, type: *S. baldwinii* Zahlbr., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stromatopycnis A.F. Vital 1956, *Ascomycota* genera *incertae sedis*, one species, type: *Stromatopycnis rosetum* A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stromatoseptoria Quaedvl., Verkley & Crous 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *S. castaneicola* (Desmazières) Quaedvlieg, Verkley & Crous, coelomycetous, sexual morph unknown, pathogens, terrestrial, Austria, France, Netherlands, one species, see Quaedvlieg et al. (2013; morphology, phylogeny), holotype PC0084574, reference specimens: CBS H-21200, culture CBS 102322; requires epitypification.

Stromatostyanus Höhn. 1919, *Ascomycota* genera *incertae sedis*, three species, type: *S. caprifoliorum* (Desm.) Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stromatothecia D.E. Shaw & D. Hawksw. 1971, *Odontotemataceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *S. nothofagi* D.E. Shaw & D. Hawksw, on bark, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), cultures and sequences are unavailable, holotype of type: K(M)-IMI 151852a.

Stromatothelium Trevis. 1861, *Pyrenulales* genera *incertae sedis*, *Eurotiomycetes*, four species, need typification, hyphomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Strongylothallus Bat. & Cif. 1959, *Ascomycota* genera *incertae sedis*, one species, type: *S. scutatus* Bat., Cif. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Strossmayeria Schulzer 1881 (= *Pseudospiropes* M.B. Ellis 1971 *vide* Johnston et al. 2014), *Helotiaceae*, *Helotiales*, *Leotiomycetes*, 16 species, type: *S. rackii* Schulzer, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hustad and Miller (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are available but lacks for the type.

Stuartella Fabre 1879, *Dothideomycetes*, *incertae sedis*, *incertae sedis*, three species, type: *S. formosa* Fabre, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Stygiomyces Coppins & S.Y. Kondr. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *S. galliformis* Coppins & S.Y. Kondr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Tasmania, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: HO 34310, cultures and sequences are unavailable, needs generic revision.

Stylaspergillus B. Sutton, Alcorn & P.J. Fisher 1982, *Ascomycota* genera *incertae sedis*, one species, type: *S. laxus* B. Sutton, Alcorn & P.J. Fisher, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stylodothis Arx & E. Müll. 1975, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, two species, type: *S. puccinioides* (DC.) Arx & E. Müll., asexual morph unknown, saprobes, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),

Thambugala et al. (2014b; accepted as a genus in *Dothideaceae*), Wijayawardene et al. (2014; outline), sequences are available.

Subbaromyces Hesselt. 1953, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, two species, type: *S. splendens* Hesselt., asexual morph unknown, saprobes, North America, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available, needs generic revision.

Suberoteratosphaeria Quaedvlieg & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *S. suberosa* (Crous, F.A. Ferreira, Alfnas & M.J. Wingf.) Quaedvlieg & Crous asexual morph unknown, pathogens, Australia, Brazil, Uruguay, see Quaedvlieg et al. (2014; morphology, phylogeny), holotype and ex-type culture of type: PREM 51082, CPC 515.

Subglobosporium Doilom & K.D. Hyde 2016, *Pseudocoleodictyosporaceae*, *Pleosporales*, *Dothideomycetes*, type: *S. tectonae* Doilom & K.D. Hyde, saprobes, terrestrial, see Doilom et al. (2016; taxonomy), ex-type strains of type: MFLUCC 12-0393, MKT 066, ICMP 21258; holotype of type: MFLU 15-3560.

Subhysteropycnis Wedin & Hafellner, 1998, *Ascomycota* genera *incertae sedis*, one species, type: *S. maculiformans* Wedin & Hafellner, lichenized, lichenicolous, terrestrial, restricted distribution, see Hyde et al (2011; outline), Kirk et al. (2013; genus accepted), Zhurbenko and Tugi (2013; records), Wijayawardene et al. (2017; outline), sequences are unavailable, needs generic revision.

Submersisphaeria K.D. Hyde 1996, *Annulatascuaceae*, *Annulatascales*, *Sordariomycetes*, five species, type: *S. aquatica* K.D. Hyde, asexual morph unknown, terrestrial, saprobes, aquatic, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: BRIP 22743, one putative strain is available of *S. aquatica*.

Subplenodomus Gruyter, Aveskamp & Verkley 2012, *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *S. violicola* (P. Syd.) Gruyter, Aveskamp & Verkley coelomycetous, saprobes, terrestrial, worldwide, see de Gruyter et al. (2012; morphology; phylogeny), Wijayawardene et al. (2014, 2017; outline), Ariyawansa et al. (2015; phylogeny), cultures and sequences are available.

Subramaniomyces Varghese & V.G. Rao 1980, *Beltraniaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *S. indicus* Varghese & V.G. Rao, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Subramaniula Arx 1985, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, four species, type: *S. thielavioides* (Arx, Mukerji & N. Singh) Arx, asexual morph unknown, saprobes, opportunistic pathogen on human, terrestrial, India, South Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ahmed et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 560.84, CBS 122.78.

Subulispora Tubaki 1971, *Ascomycota* genera *incertae sedis*, eight species, type: *S. procurvata* Tubaki, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Sugiyamaella Kurtzman & Robnett 2007, *Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, 20 species, type: *S. smithiae* (Giménez-Jurado) Kurtzman & Robnett, asexual reproduction is by multilateral budding and through formation of blastoconidia,

saprophytic, insect frass in trees, soil, worldwide, Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

Sugiyamaemyces I.I. Tav. & Balazuc 1989, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *S. oroussetii* I.I. Tav. & Balazuc, asexual morph unknown, biotrophic, only known from *Clidicus formicarius* (Coleoptera: Scydmaenidae), Malaysian Borneo, a second species on *Clidicus laticeps* (from India) is suggested but not formally described because of lack of material, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Suhomyces M. Blackwell & Kurtzman 2016, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, 24 species, type: *S. tanzawaensis* (Nakase & Itoh) M. Blackwell & Kurtzman, asexual reproduction is by multilateral budding, saprophytic, soil, insects, moss, gum exudates of black cherry, maize kernels, rotted mushroom, worldwide, see Kurtzman et al. (2016; taxonomy, phylogeny), sequences are available.

Sulcaria Bystrek 1971, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, five species, four variety, type: *S. sulcata* (Lév.) Bystrek, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; chemistry), Kirk et al. (2013; genus accepted), Myllys et al (2014; taxonomy), Wang et al (2014; taxonomy), Hisayoshi et al. (2015; molecular), Lücking et al. (2016; classification); sequences are available.

Sulcatispora Kaz. Tanaka & K. Hiray. 2015, *Sulcatisporaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *S. acerina* Kaz. Tanaka & K. Hiray., asexual morph coelomycetous, saprobes, terrestrial, Japan, see Tanaka et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), holotype and ex-type strain of the type: HHUF 30449, CBS 139703.

Sulcatistroma A.W. Ramaley 2005, *Calosphaeriaceae*, *Calosphaeriales*, *Sordariomycetes*, one species, type: *Sulcatistroma nolinae* A.W. Ramaley, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Sulcopyrenula H. Harada 1999, *Pyrenulaceae*, *Pyrenulales*, *Eurotiomycetes*, four species, type: *S. staurospora* (Tuck.) H. Harada, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Aptroot (2012; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Sulcosporium Phookamsak & K.D. Hyde 2015, *Halotthiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *S. thailandicum* Phookamsak & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 11-0243, MFLUCC 12-0004.

Sungaiicola Fryar & K.D. Hyde 2004, *Sordariomycetes* genera *incertae sedis*, two species, type: *S. bactrodesmiella* Fryar & K.D. Hyde, asexual morph unknown, saprobes, marine, Brunei, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: HKU (M) 15201, cultures and sequences are unavailable, needs generic revision.

Surculiseries Okane, Nakagiri & Tad. Ito 2001, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *S. rugispora* Okane, Nakagiri & Tad., sexual morph unknown, endophytic on mangroves, saprophytic, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: IFO H-12236, ex-type cultures of type: NBRC 33167.

S. S. Ahmad 1961, *Ascomycota* genera *incertae sedis*, three species, type: *S. gaubae* (Petr.) S. Ahmad, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Suttonina H.C. Evans 1984, *Ascomycota* genera *incertae sedis*, one species, type: *S. guatemaltica* H.C. Evans, coelomycetous, sexual morph unknown, saprobes, terrestrial, Guatemala, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Suttonomyces Wijayaw., Camporesi & K.D. Hyde 2015, *Lentitheciaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *S. clematidis* Wijayaw., Camporesi & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Tanaka et al. (2015; morphology, phylogeny), Wijayawardene et al. (2015, 2016; taxonomy, phylogeny), holotype and ex-type strain of the type: HHUF 28661, JCM 13131.

Swampomyces Kohlm. & Volkm.-Kohlm. 1987, *Etheiophoraceae*, *Torpedosporales*, *Sordariomycetes*, two species, type: *S. armeniacus* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, mangroves, Australia, Belize, Brunei, Egypt, North Sumatra, Papua New Guinea, Philippines, Saudi Arabia, South Africa, Thailand, see Besitulo et al. (2010; diversity), Sakayaroj et al. (2011; diversity), Abdel-Wahab et al. (2014; diversity), Jones et al. (2014, 2015; outline, phylogeny, morphology, re-classification), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Syamithabeeja Subram. & Natarajan 1976, *Ascomycota* genera *incertae sedis*, one species, type: *S. girisa* Subram. & Natarajan, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sydowia Bres., 1895, *Dothideaceae*, *Dothideales*, *Dothideomycetes*, 19 species, type: *S. gregaria* Bres., asexual morph coelomycetous, parasitic or saprobes on conifer plants or branches and wood, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2014b; taxonomy), Wijayawardene et al. (2014; outline), holotype of type: S-F6473, cultures and sequences are available.

Sydowiella Petr. 1923, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *S. fenestrans* (Duby) Petr., asexual morphs unknown, saprobes, terrestrial, Europe, North America, see Marinowitz et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Kruys and Castlebury (2012; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 125530.

Sylviacollaea Cif. 1963, *Ascomycota* genera *incertae sedis*, one species, type: *S. termitaria* Cif., coelomycetous, sexual morph unknown, on termites, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Symbiotaphrina Kühlw. & Jurzitza ex W. Gams & Arx 1980, *Ascomycota* genera *incertae sedis*, two species, type: *S. buchneri* Gräbner ex W. Gams & Arx, coelomycetous, sexual morph unknown, on termites, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Symphaeophyma Speg. 1912, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *S. subtropicale* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Symphaster Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, *incertae sedis*, one species, type: *S. gesneraceae* (Henn.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, South Africa, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Symphyosirinia E.A. Ellis 1956 (= *Symphyosirella* Seifert 2009 *vide* Johnston et al. 2014), *Helotiaceae*, *Helotiales*, *Leotiomyces*, six species, type: *S. galii* E.A. Ellis, asexual morph formerly known in *Symphyosirella*, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Symphysos Bat. & Cavalc. 1967, *Ascomycota* genera *incertae sedis*, one species, type: *S. sapindaceifolii* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Symplectromyces Thaxt. 1908, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *S. vulgaris* (Thaxt.) Thaxt., asexual morph unknown, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Sympodiella W.B. Kendr. 1958, *Ascomycota* genera *incertae sedis*, one species, type: *S. acicola* W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Cuba, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available (unpublished), needs generic revision.

Sympodiocladium Descals 1982, *Ascomycota* genera *incertae sedis*, one species, type: *S. acicola* W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Sympodioclathra Voglmayr 1997, *Ascomycota* genera *incertae sedis*, one species, type: *S. globosa* Voglmayr, hyphomycetous, sexual morph unknown, saprobes, aquatic, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2016; outline), holotype of the type: WU 17019, cultures and sequences are unavailable, needs generic revision.

Sympodioplanus R.C. Sinclair & Boshoff 1997, *Ascomycota* genera *incertae sedis*, one species, type: *S. capensis* R.C. Sinclair & Boshoff, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2016; outline), holotype of the type: PREM 55315, cultures and sequences are unavailable, needs generic revision.

Sympodomycetes R.K. Benj. 1973, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *S. pentacellularis* R.K. Benj., asexual morph unknown, biotrophic on Coleoptera (*Tenebrionoidea*), Papua-New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sympoventuria Crous & Seifert 2007, *Sympoventuriaceae*, *Venturiales*, *Dothideomyces*, one species, type: *S. vulgaris* (Thaxt.) Thaxt., asexual morph unknown, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; phylogeny), Hyde et al. (2013; accepted as a genus in *Sympoventuriaceae*), Wijayawardene et al. (2014; outline), sequences are available.

Synalissa Fr. 1825, *Lichinaceae*, *Lichinales*, *Lichinomyces*, 39 species, type: *S. ramulosa* (Bernh.) Körb., asexual morph unknown, lichenized, terrestrial, see Dietrich et al. (2010; taxonomy). Eichler et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Schultz and Moon (2011; taxonomy), Paukov and Teptina (2012; new record), de la Rosa (2013; ecology), Kirk et al. (2013; genus accepted), Stordeur et al. (2015; new record), Lücking et al. (2016; classification), sequences unavailable.

Synandromyces Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, ten species, type: *S. telephani* Thaxt., no asexual state, biotrophic, hosts are Biphyllidae, Cryptophagidae, Cucujidae, Nitidulidae, and Tenebrionidae (Coleoptera: Cucujiformia), widespread but not in Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Synaptomyces Thaxt. 1912, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *S. argentinus* Thaxt., no asexual state, biotrophic, only known from *Hydrochara* sp. [as *Hydrocharis*] (Coleoptera, Hydrophilidae), Argentina, two more species are suggested but not formally described, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Synaptospora Cain 1957, *Helminthosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, four species, type: *S. petrakii* Cain, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Miller et al. (2014; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), sequences are available but lacks for the type.

Synarthonia Müll. Arg. 1891, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *S. bicolor* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Menezes et al. (2013; new species), Joseph and Sinha (2015; taxonomy), Lücking et al. (2016; classification, treated as *Arthoniales* genera *incertae sedis*), sequences are unavailable.

Synarthothelium Sparrius 2009, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *S. sipmanianum* Sparrius, lichenized, terrestrial, Venezuela, see Sparrius (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), holotype B Sipman 26697, cultures and sequences are unavailable.

Syncarpella Theiss. & Syd. 1915 (= *Syntholus* A.W. Ramaley & M.E. Barr 1997), *Cucurbitariaceae*, *Pleosporales*, *Dothideomycetes*, type: *Syncarpella tumefaciens* (Ellis & Harkn.) Theiss. & Syd., asexual morph coelomycetous, saprobes, terrestrial, cosmopolitn, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Cucurbitariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), in here we propose to consider *Syntholus* as a synonym of *Syncarpella*, ex-holotype type strains of type: NY, 1677.

Syncesia Taylor 1938, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, 27 species, type: *S. albida* Taylor, terrestrial, see Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; phylogeny), Joshi et al. (2011, 2013; new species), Kirk et al. (2013; genus accepted), Joseph et al. (2013; new record), Menezes et al. (2013; new species), Ertz et al. (2015; phylogeny), da Silva Cáceres and Aptroot (2016; inventory), Lücking et al. (2016; classification), sequences are available.

Synchaetomella Decock & Seifert 2005, *Chaetomellaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *S. lunatospora* Decock, G. Delgado & Seifert, hyphomycetous, saprobes, terrestrial, Brazil, Singapore, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2012; taxonomy), Fiuza et al. (2015c; taxonomy), sequences are available for two species, compare with *Chaetomella*, *Sphaerographium*, holotype of type: MUCL 43804.

Synchronoblastia Uecker & F.L. Caruso 1988, *Ascomycota* genera *incertae sedis*, one species, type: *S. crypta* Uecker & F.L. Caruso, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Syncladium Rabenh. 1859, *Ascomycota* genera *incertae sedis*, one species, type: *S. nietneri* Rabenh., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see

Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Synnemacrodictys W.A. Baker & Morgan-Jones 2009, *Ascomycota* genera *incertae sedis*, one species, type: *S. stilboidea* (J. Mena & Mercado) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Synnemadiella Crous & M.J. Wingf. 2016, *Xylariales*, genera *incertae sedis*, *Sordariomycetes*, one species, type: *S. eucalypti* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, with subverticillium-like synasexual morph, saprobes, terrestrial, Malaysia, see Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22886, CPC 27637.

Synnemapestaloides T. Handa & Y. Harada 2004, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *S. rhododendri* T. Handa & Y. Harada, coelomycetes, sexual morph unknown, leaves and twigs of *Rhododendron brachycarpum*, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type culture of the type: HHUF26527, MAFF239201.

Synnemaseimatoides K. Matsush. & Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *S. nipponica* K. Matsush. & Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Synnematomyces Kobayasi 1981, *Ascomycota* genera *incertae sedis*, one species, type: *S. capitatus* Kobayasi, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available (unpublished), needs generic revision.

Synnemellisia N.K. Rao, Manohar. & Goos 1989, *Ascomycota* genera *incertae sedis*, two species, type: *S. hyalospora* N.K. Rao, Manohar. & Goos, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

Synostomina andina Petr. 1949, *Ascomycota* genera *incertae sedis*, one species, type: *S. andina* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Syphosphaera Dumort. 1822, *Ascomycota* genera *incertae sedis*, one species, type: *S. coronata* Dumort., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Syrropeltis Bat., J.L. Bezerra & Matta 1964, *Dothideomycetes* genera *incertae sedis*, one species, type: *S. xylopii* Bat., J.L. Bezerra & Matta, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Sypastospora P.F. Cannon & D. Hawksw. 1982, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *S. parasitica* (Tul.) P.F. Cannon & D. Hawksw., fungicolous, widespread, terrestrial, see Lumbsch and Huhndorf 2010; outline, accepted as a genus in *Hypocreaceae*, Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type: ? PC.

Systemmopsis Petr. 1923, *Ascomycota* genera *incertae sedis*, one species, type: *S. ribesia* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Szczawinskia A. Funk, 1984, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *S. tsugae* A. Funk, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Øvstedal and Gremmen (2010; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Taeniolella S. Hughes 1958, *Kirschsteinioteliaceae*, *Dothideomycetes* family *incertae sedis*, c. 40 species, type: *T. exilis* (P. Karst.) S. Hughes, sexual morph unknown, saprophytic, endophytic, lichenicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Ertz et al. (2016; phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Taeniolina M.B. Ellis 1976, *Ascomycota* genera *incertae sedis*, six species, type: *T. centaurii* (Fuckel) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Prasher and Verma (2014; new species, India), Zhang et al. (2014; new species, China), cultures and sequences are unavailable, needs generic revision.

Tainosphaeria F.A. Fernández & Huhndorf 2005, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *T. crassiparies* F.A. Fernández & Huhndorf, asexual morph unknown, saprobes, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequence available for the type: AF466056 (beta tubulin).

Taiwanascus Sivan. & H.S. Chang 1997, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *T. tetrasporus* Sivan. & H.S. Chang asexual morph unknown, saprobes, lignicolous, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rajeshkumar et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: IMI 364835, cultures and sequences are unavailable.

Takamatsuella U. Braun & A. Shi 2012, *Erysiphaceae*, *Erysiphales*, *Leotiomyces*, one species, type: *U. circinata* Cooke & Peck, asexual morph unknown, biotrophic, obligate plant pathogens, terrestrial, North America, see Braun and Cook (2012; taxonomy), sequences are available, lectotype of type: USA, New York, Watkins, on *Acer spicatum*, Sep., Peck (NYS).

Talaromyces C.R. Benj. 1955 (= *Erythrogymnotheca* Yaguchi & Udagawa; = *Paratalaromyces* Matsush.; = *Penicillium* Link subgenus *Biverticillium* Dierckx; = *Penicillium* Link subgenus *Biverticillata-Symmetrica* Thom; = *Sagenoma* Stolk & G.F. Orr *vide* Samson et al. 2011), *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, c. 114 species, type: *T. flavus* (Klöcker) Stolk & Samson, terrestrial, but sometimes also isolated from aquatic habitats, associated with diverse substrates, including living or decaying plant material, soil, compost, dung, house dust, foodstuffs, leather, arthropods, rodents, air, cosmopolitan, the genus includes some clinically-relevant species, of which the most important is *Talaromyces marneffe* (Segretain, Capponi & Sureau) Samson, Yilmaz, Frisvad & Seifert (= *Penicillium marneffe* Segretain, Capponi & Sureau), a thermally dimorphic fungus which commonly infects immunocompromised patients in southeast Asia, see Proksa (2010; secondary metabolites), Samson et al. (2011; phylogeny, new combinations, epitypification of the type:), Houbraeken and Samson (2011; phylogeny), Guarro et al. (2012; soilborne species), Yilmaz et al. (2012, 2014, 2016a, 2016b; phylogeny, revision, new species), Frisvad et al. (2013; new species), Sang et al. (2013; new species), Visagie et al. (2015; new species), Chen et al. (2016; new species), Luo et al. (2016; new species), Wang et al. (2016; new species), ex-epitype strain of the type: = CBS 310.38.

Talekpea Lunghini & Rambelli 1979, *Ascomycota* genera *incertae sedis*, one species, type: *T. foeticia* Lunghini & Rambelli, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Ivory Coast, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Talpapellis Alstrup & M. Cole 1998, *Ascomycota* genera *incertae sedis*, four species, type: *T. peltigerae* Alstrup & M. Cole, asexual morph hyphomycetous, terrestrial, lichenicolous, Asia, Europe, North America, see Heuchert et al. (2014, emendation of the genus), Zhurbenko et al. (2015, taxonomy, key), cultures and molecular data not available, holotype of type species: Canada, British Columbia, Wells Gray Provincial Park, Clearwater Lake, 52°07'N/120°10'W, 675 m alt., on lobes of *Peltigera venosa*, 25 Aug. 1994, M.S. Cole 1632 (C), isotype: MIN.

Tamaricicola Thambugala, E. Camporesi & K.D. Hyde 2016, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *T. muriformis* Thambugala, Camporesi & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Italy, see Thambugala et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 16–0676, MFLUCC 15–0488.

Tamhinispora Rajeshkumar & Rahul Sharma 2013, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, one species, type: *T. indica* Rajeshkumar & Rahul Sharma, hyphomycetous, sexual morph unknown, saprobes, see Rajeshkumar and Sharma (2013; morphology), Boonmee et al. (2014; placed in *Tubeufiales*, phylogeny, key), holotype and ex-type strain of the type: AMH 9555, NFCCI 2924.

Tamsiniella S.W. Wong, K.D. Hyde, W.H. Ho & S.J. Stanley 1998, *Sordariomycetes* genera *incertae sedis*, two species, type: *T. labiosa* S.W. Wong, K.D. Hyde, W.H. Ho & S.J. Stanley, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: HKU (M) 2276, cultures and sequences are unavailable, needs generic revision.

Tandonea M.D. Mehrotra 1991, *Ascomycota* genera *incertae sedis*, one species, type: *T. dargentiana* M.D. Mehrotra, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 269926, cultures and sequences are unavailable, needs generic revision.

Tangerinosporium L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *T. thalitricola* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, UK, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22472, CBS 317.61.

Tania Egea, Torrente & Sipman 1995, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *T. lanosa* Egea, Torrente & Sipman, lichenized, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification), sequences unavailable.

Tapellaria Müll. Arg. 1898, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, 22 species, type: *T. herpetospora* Müll. Arg., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; new species), Messuti et al. (2011; new species), Kirk et al. (2013; genus accepted), Farkas (2014; taxonomy), Van Den Broeck et al. (2014; taxonomy), Lücking et al. (2016; classification), McCarthy and Elix (2016; new species), van den Boom et al. (2016; new species), sequences are unavailable

Tapellariopsis Lücking 1999, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *T. octomera* Lücking, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Tapesina Lambotte 1887, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *T. griseovitellina* (Fuckel) Höhn., asexual morph hyphomycetous, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Taphridium Lagerh. & Juel 1902, *Protomycetaceae*, *Taphrinales*, *Taphrinomyces*, two species, type: *Taphridium umbelliferarum* (Rostr.) Lagerh. & Juel, asexual morph unknown, ?saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Taphrina Fr. 1815, *Taphrinaceae*, *Taphrinales*, *Taphrinomyces*, two species, type: *T. aurea* (Pers.) Fr., asexual morph unknown, ?saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Taphrophila Scheuer 1988, *Dothideomycetes* genera *incertae sedis*, *incertae sedis*, four species, type: *T. cornu-capreoli* Scheuer, asexual morph unknown, on rotten leaves, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Tarasginia S.Y.Kondr., Kärnefelt, A.Thell, Elix & Hur 2015, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *T. whinrayi* (S.Y. Kondr. & Kärnefelt) S.Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A.S. Kondr. & Hur, lichenized, see Kondratyuk et al. (2015b; taxonomy), Lücking et al. (2016; classification), sequences are available.

Tarbertia Dennis 1974, *Arthoniales* genera *incertae sedis*, one species, type: *T. juncina* Dennis, ?lichenized or saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Tarsodisporus Bat. & A.A. Silva 1965, *Ascomycota* genera *incertae sedis*, one species, type: *T. paraensis* Bat. & A.A. Silva, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tarzetta (Cooke) Lambotte 1887, *Pezizaceae*, *Pezizales*, *Pezizomyces*, nine species, type: *P. tarzetta* Cooke, asexual morph unknown, hypogeous, terrestrial, worldwide, see Hansen et al. (2013; phylogeny), Olariaga et al. (2015; taxonomy), culture and sequences are available but lacks for the type.

Tasmidella Kantvilas, Hafellner & Elix 1999, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *T. variabilis* Kantvilas, Hafellner & Elix, lichenized, see Ekman et al. (2008; taxonomy), Lendemer (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Schnull et al. (2011; phylogeny), Lumbsch et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences unavailable.

Tassiloa S.Y.Kondr., Kärnefelt, A.Thell, Elix & Hur 2015, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *T. digitaurea* (Søgaard, Søchting & Sancho) S.Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A.S. Kondr. & Hur, lichenized, see Kondratyuk et al. 2015e, Lücking et al. (2016; classification), sequences are available.

Tatraea Svrček 1993, ?*Helotiaceae*, *Helotiales*, *Leotiomyces*, two species, type: *T. dumbirensis* (Velen.) Svrček, asexual morph unknown, sabrobe of wood, widespread (temperate), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: PRM 148876 (Svrček 1993), cultures and sequences are unavailable.

Tavaresiella T. Majewski 1980, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, four species, type: *T. hebri* T. Majewski, asexual morph unknown, biotrophic, hosts are Hebridae (Hemiptera: Heteroptera), Africa, Asia, and Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Tayloriellina S.Y.Kondr., Kärnefelt., A.Thell, Elix & Hur 2016, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *T. erythrosticta* (Taylor) S.Y. Kondr., Kärnefelt., A. Thell, Elix, J. Kim, A.S. Kondr. & Hur, lichenized, see Kondratyuk et al. (2015b, 2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Tectacervulus A.W. Ramaley 1992, *Ascomycota* genera *incertae sedis*, one species, type: *T. mahoniae* A.W. Ramaley, coelomycetous, sexual morph unknown, pathogens, on leaf spots, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BPI 1107358, cultures and sequences are unavailable, needs generic revision.

Teichospora Fuckel 1870, *Teichosporaceae*, *Pleosporales*, *Dothideomycetes*, 35 species, type: *T. trubicola* Fuckel, asexual morph coelomycetous, terrestrial, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Teichosporaceae*), Wijayawardene et al. (2014; outline), Crous et al. (2016; new species, phylogeny), Jaklitsch et al. (2016; new species, phylogeny), cultures available for type: C160, C134, C141.

Teichosporella (Sacc.) P. Karst. 1895, *Dothideomycetes* genera *incertae sedis*, 26 species, type: *T. dura* Sacc., asexual morph unknown, saprobes, terrestrial, America, Germania, Germany, Italy, temperate, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Telimena Racib. 1900, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, eleven species, type: *T. erythrinae* Racib., from living leaves, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Telimenella Petr. 1940, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *T. persica* Petr., from living leaves, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Telimenochora Sivan. 1987, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *T. abortiva* (F. Stevens) Sivan., from living leaves, Mexico, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Telioclipeum Viégas 1962, *Ascomycota* genera *incertae sedis*, one species, type: *T. lavrense* Viégas, saprobes, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Telogalla Nik. Hoffm. & Hafellner 2000, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *T. olivieri* (Vouaux) Nik. Hoffm. & Hafellner, asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Van den Broeck et al. (2012; new records), cultures and sequences are unavailable, needs generic revision.

Teloschistes Norman 1853, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 20 species, type: *T. flavicans* (Sw.) Norman, asexual morph unknown, lichenized, terrestrial, worldwide, see Muggia et al. (2008; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012, 2015; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: AFTOL-ID 315.

Teloschistopsis Frödén, Söchting & Arup 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *T. chrysocarpoides* (Vainio) Frödén, Arup & Söchting, asexual morph unknown, lichenized, terrestrial, see Arup et al. (2013; taxonomy), Kondratyuk et al. (2013; new genera, phylogeny), Lücking et al. (2016; classification); sequences are available.

Temerariomyces B. Sutton 1993, *Ascomycota* genera *incertae sedis*, one species, type: *T. acutululus* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malawi, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 347181, cultures and sequences are unavailable, needs generic revision.

Temperantia K. Hansen, Healy & Kovács 2011, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, nine species, type: *T. tiffanyae* (Healy) K. Hansen, Healy & Kovács, asexual morph unknown, hypogeous, terrestrial, USA, see Kovács et al. (2011; taxonomy, phylogeny), holotype of the type: ISC, Healy 231, sequence are available.

Tengiomyces Réblová 1999, *Helminthosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, four species, type: *T. indicus* (Varghese & V.G. Rao) Réblová, asexual morph unknown, saprobes, terrestrial, India, China, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Tenuimurus Senan., Camporesi & K.D. Hyde 2016, *Phomatosporaceae*, *Phomatosporales*, *Sordariomycetes*, one species, type: *T. clematis* Senan., Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, temperate, Italy, see Senanayake et al. (2016; taxonomy, phylogeny), cultures and sequences are available.

Tephromela M. Choisy 1929, *Tephromelataceae*, *Lecanorales*, *Lecanoromycetes*, 30 species, type: *T. atra* (Huds.) Hafellner, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Muggia et al. (2010, 2014; morphology, phylogeny, taxonomy), Pérez-Vargas et al. (2010; new species), Fryday (2011; new species), Spribille et al. (2011; molecular), Elix (2012; new species), Kirk et al. (2013; genus accepted), Wang et al. (2013; taxonomy), Kantvilas (2015; taxonomy), Szczepanska (2015; new records), Cestaro et al. (2016; phylogeny), Lücking et al. (2016; classification), sequences are available.

Teracosphaeria Réblová & Seifert 2007, *Sordariomycetes* genera *incertae sedis*, two species, type: *T. petroica* Réblová & Seifert, asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Annulatascaceae* and *Sordariomycetidae*, genera *incertae sedis*), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: PDD 81436, cultures and sequences are available, needs generic revision.

Teratomyces Thaxt. 1893, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, nine species, type: *T. mirificus* Thaxt., asexual morph unknown, biotrophic, hosts are Staphylininae (Coleoptera: Staphylinidae), widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossi (2010; most recent species description), Haelewaters et al. (2015b; synonymy of *T. brevicaulis* with *T. actobii*), cultures and sequences are unavailable, needs generic revision.

Teratoschaeta Bat. & O.M. Fonseca 1967, *Dothideomycetes* genera *incertae sedis*, two species, type: *T. rondoniensis* Bat. & O.M. Fonseca, asexual morph unknown, lichenicolous, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Teratosperma Syd. & P. Syd. 1909, *Ascomycota* genera *incertae sedis*, one species, type: *T. singulare* Syd. & P. Syd., saprobes, Africa, North America, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Teratosphaeria Syd. & P. Syd. 1912 (= *Colletogloeopsis* Crous & M.J. Wingf. 1997; = *Kirramyces* J. Walker et al. 1992 *vide* Crous et al. 2009; Wijayawardene et al. 2014; Rossman et al. 2015), *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, c. 90 species, type: *T. fibrillosa* Syd. & P. Syd., asexual morph coelomycetous (formerly known in *Colletogloeopsis*, *Kirramyces*), saprobes, pathogens, terrestrial, cosmopolitan, see Crous et al. (2009, 2011;

taxonomy, phylogeny), Andjic et al. (2010, 2016; new species, Australia, cryptic species), Lumbsch and Huhndorf (2010; outline), Yamazaki et al. (2010; acidophilic), Hunter et al. (2011; diseases), Taole et al. (2012; *T. suttonii* complex), Taylor et al. (2012; pathogens), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Quaedvlieg et al. (2014; phylogeny), cultures and sequences are available, needs generic revision.

Teratosphaericola Quaedvlieg & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *T. pseudoafricana* (Crous & T.A. Cout.) Quaedvlieg & Crous, asexual morph unknown, pathogens, Zambia, see Quaedvlieg et al. (2014; morphology, phylogeny), holotype and ex-type culture of type: PREM 54973, CPC 1229.

Teratosphaeriopsis Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *T. pseudoafricana* Quaedvlieg & Crous asexual morph unknown, one species, pathogens, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), holotype and ex-type culture of type: CBS H-21137, CBS 111171.

Terfezia (Tul. & C. Tul.) Tul. & C. Tul. 1851, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, 21 species, type: *T. arenaria* (Moris) Trappe, asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kovács et al. (2011; new species), Bordallo et al. (2012, 2013, 2015; new species), Kirk et al. (2013; genus accepted), Kovács et al. (2011; taxonomy, pylogeny), sequences are available.

Termitaria Thaxt. 1920, *Ascomycota* genera *incertae sedis*, three species, type: *T. snyderi* Thaxt., hyphomycetous, sexual morph unknown, America, Sardinia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Termitariopsis M. Blackw., Samson & Kimbr. 1980, *Ascomycota* genera *incertae sedis*, three species, type: *T. cavernosa* M. Blackw., Samson & Kimbr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North and Central America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Terriera B. Erikss. 1970, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, 26 species, type: *T. cladophila* (Lév.) B. Erikss., asexual morph unknown, saprobes, terrestrial, China, Europe, Thailand, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Chen et al. (2011; new species, China), Kirk et al. (2013; genus accepted), Zhou et al. (2013; new species, China), Wu et al. (2015; new species), Hyde et al. (2016; new species, Thailand), sequences are available.

Testudina Bizz. 1885, *Testudinaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *T. terrestris* Bizz., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Testudinaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Testudomyces Cano, M. Solé & Guarro 2002, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *T. verrucosus* M. Solé, Cano & Guarro, asexual morph unknown, saprobes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences is available for the type (unpublished).

Tetrabrachium Nawawi & Kuthub. 1987, *Ascomycota* genera *incertae sedis*, three species, type: *T. elegans* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tetrabrunneospora Dyko 1978, *Ascomycota* genera *incertae sedis*, two species, type: *T. ellisii* Dyko, hyphomycetous, sexual morph unknown, saprobes, aquatic, USA, see Seifert et

al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tetrachaetum Ingold 1942, *Leotiomyces* genera *incertae sedis*, three species, type: *T. elegans* Ingold, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision.

Tetracladium De Wild. 1893, *Helotiales* genera *incertae sedis*, *Leotiomyces*, eight species, type: *T. marchalianum* De Wild., hyphomycetous, sexual morph unknown, saprobes, aquatic, terrestrial, worldwide, see Sati et al. (2009; new species), Letourneau et al. (2010; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CCM F-11001.

Tetracoccoporium Szabó 1905, *Ascomycota* genera *incertae sedis*, three species, type: *T. paxianum* Szabó, hyphomycetous, sexual morph unknown, on dung and soil, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tetracrium Henn., 1902, *Dothideomycetes* genera *incertae sedis*, nine species, type: *T. aurantii* Henn., hyphomycetous, sexual morph unknown, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Tetramelas Norman 1853, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 16 species, type: need typification, lichenized, see Giralt and Clerc (2011; comb. nov.), Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; taxonomy), sequences are available.

Tetrameronycha Speg. ex W. Rossi & M. Blackw. 1990, *Ascomycota* genera *incertae sedis*, one species, type: *T. bonaerensis* (Speg.) W. Rossi & M. Blackw., hyphomycetous, sexual morph unknown, on insects, terrestrial, Africa, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tetranacriella Kohlm. & Volkm.-Kohlm. 2001, *Ascomycota* genera *incertae sedis*, one species, type: *T. papillata* Kohlm. & Volkm.-Kohlm., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tetranacrium H.J. Huds. & B. Sutton 1964, *Ascomycota* genera *incertae sedis*, one species, type: *T. gramineum* H.J. Huds. & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tetrandromyces Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, six species, type: *T. brachidae* Thaxt., no asexual state, biotrophic, hosts are Anthicidae and Staphylinidae (Coleoptera), widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tetrapisispora Ueda-Nishimura & Mikata emend. Kurtzman 2003, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, seven species, type: *T. phaffii* (van der Walt) Ueda-Nishimura & Mikata, asexual reproduction is by multilateral budding, aaprophytic, in soil, Japanese blueberry, mangrove trees, cockroach, food processing plant, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

Tetraploa Berk. & Broome 1850 (= *Tetraplospheeria* Kaz. Tanaka & K. Hiray *vide* Wijayawardene et al. 2014; Rossmann et al. 2015), *Tetraplospheeriaceae*, *Pleosporales*, *Dothideomycetes*, 16 species, type: *T. aristata* Berk. & Broome asexual morph

coelomycetous, saprobes, terrestrial or aquatic, worldwide, see Tanaka et al. (2009; phylogeny, morphology), Wijayawardene et al. (2014; nomenclature), Rossman et al. (2015; nomenclature), holotype of the type: IMI 17841, cultures and sequences are available.

Tetraposporium S. Hughes 1951, *Ascomycota* genera *incertae sedis*, two species, type: *T. asterinearum* S. Hughes, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tettigomyces Thaxt. 1915, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomyces*, 16 species, type: *T. gryllotalpae* Thaxt., asexual morph unknown, biotrophic, hosts are *Gryllotalpa* species and *Scapteriscus* sp. (*Orthoptera: Gryllotalpidae*), widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Teunomyces Kurtzman & M. Blackwell 2016, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, twelve species, type: *T. kruisii* ((Kocková-Kratochvílová & Ondrušová) Kurtzman & M. Blackwell, asexual reproduction is by multilateral budding, saprophytic, in insects, often the guts of insects, worldwide, see Kurtzman et al. (2016; taxonomy), cultures and sequences are available.

Teuvoa Sohrabi & S.Leavitt 2013, *Megasporaceae*, *Pertusariales*, *Lecanoromycetes*, three species, type: *T. uxoris* (Werner) Sohrabi, V. J. Rico & S. Leavitt, lichenized, see Sohrabi et al. (2013b; taxonomy), Lücking et al. (2016; classification), sequences are available.

Texosporium Nádv. ex Tibell & Hofsten 1968, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, two species, type: *T. sancti-jacobi* (Tuck.) Nádv. ex Tibell & Hofsten, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirby et al. (2011; ecology), Kirk et al. (2013; genus accepted), Root et al. (2011, 2012, 2013; ecology), Rosentreter et al. (2014; ecology), Von Reis (2015; ecology), Lücking et al. (2016; classification), Prieto and Wedin (2016; ecology), sequences are available.

Textotheca Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *T. caffra* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Thailandiomyces Pinruan, Sakay., K.D. Hyde & E.B.G. Jones 2008, *Tirisporellaceae*, *Tirisporellales*, *Sordariomycetes*, one species, type: *T. bisetulosus* Pinruan, Sakay., Hyde & E.B.G. Jones, saprobes, aquatic, see Lumbsch and Huhndorf (2010; outline), Jones et al (2015; classification, phylogeny, marine), Maharachchikumbura et al. (2015, 2016; classification, phylogeny), Suetrong et al. (2015; phylogeny), holotype and cultures available for the type: BBH, Pinruan, Wah 110, BCC18.

Thalassoascus Ollivier 1926, *Dothideomycetes* genera *incertae sedis*, three species, type: *T. tregoubovii* Ollivier, asexual morph unknown, parasites, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Jones et al (2015; classification, marine), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Thalassogena Kohlm. & Volkm.-Kohlm. 1987, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *T. sphaerica* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: J.K. 5044a = 01390521, NYBG.

Thalespora Chatmala & E.B.G. Jones 2006, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *T. appendiculata* Chatmala & E.B.G. Jones, asexual morph unknown, marine, on wood, tropical, see Sakayaroj et al. (2010; taxonomy), Jones et

al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Thallinocarpon Å.E.Dahl 1950, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, two species, type: *T. pulvinatum* Å.E. Dahl, lichenized, see Lücking et al. (2016; classification), sequences are unavailable.

Thalloloma Trevis. 1853, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 19 species, type: *T. anguinum* (Mont.) Trevis., asexual morph unknown, lichenized fungi, terrestrial, tropical, placement in *Graphidaceae* supported by molecular data, see Rivas Plata et al. (2012a; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Thallomyces H.J. Swart 1975, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *T. oritis* (Hansf.) H.J. Swart, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Thamnochrolechia Aptroot & Sipman 1991, *Pertusariaceae*, *Pertusariales*, *Lecanoromycetes*, one species, type: *T. verticillata* Aptroot & Sipman, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available. holotype of the type: B, Aptroot 18622.

Thamnogalla D. Hawksw. 1980, *Cordieritidaceae*, *Leotiomyces* families *incertae sedis*, one species, type: *T. crombiei* (Mudd) D. Hawksw., lichenicolous, Europe and North America, terrestrial, see Kirk et al. (2013; genus accepted), Suija et al. (2015; phylogeny), Jaklitsch et al. (2016; position), cultures and sequences are available, lectotype of type: BM.

Thamnolecania (Vain.) Gyeln., 1933, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, eight species, type: *L. brialmontii* Vain., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Thamnolia Ach. ex Schaer. 1850, *Icmadophilaceae*, *Pertusariales*, *Lecanoromycetes* four species, type: *T. vermicularis* (Sw.) Schaer., asexual morph unknown, lichenized, terrestrial, see Nelsen and Gargas (2009; molecular), Diederich et al. (2010; taxonomy), Manojlović et al. (2010a, b; HPLC analysis, bioactivity), Guo et al. (2011; chemistry), Schmult et al. (2011; molecular), Lumbsch and Huhndorf (2010; outline), Hansen (2013; taxonomy), Kirk et al. (2013; genus accepted), Knight et al. (2013; chemotaxonomy), Árnason (2014; chemistry), Plaza et al. (2014; antioxidant property), Lücking et al. (2016; classification), sequences are available.

Thamnomycetes Ehrenb. 1820, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, five species, type: *T. chamissonis* Ehrenb., asexual morph hyphomycetous, terrestrial, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Stadler et al. (2010; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified species.

Thaptospora B. Sutton & Pascoe 1987, *Ascomycota* genera *incertae sedis*, one species, type: *T. atrobrunnea* B. Sutton & Pascoe, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Thaumasiomyces Thaxt. 1931, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *T. scabellularius* Thaxt., no asexual state, biotrophic, hosts are Hydrophilidae (Coleoptera), Africa and Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Thaxteria Sacc. 1891, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, nine species, type: *T. kunkelii* Giard, asexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Thaxteriella Petr., 1924, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, nine species, type: *T. corticola* Petr., saprobes on decaying wood, Puerto Rico, Thailand, asexual morph hyphomycetous, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; taxonomy), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Thecaria Fée 1824, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *T. quassiicola* Fée, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Thecographa A. Massal. 1860, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *T. ceramia* A. Massal., asexual morph unknown, lichenized fungi, terrestrial, tropical, see Rivas Plata et al. (2012a; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Thecotheus Boud. 1869, *Ascobolaceae*, *Pezizales*, *Pezizomycetes*, 20 species, type: *T. pelletieri* (P. Crouan & H. Crouan) Boud., asexual morph unknown, coprophilous, terrestrial, worldwide, see Doveri and Coué (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kušan et al. (2015; new species), cultures and sequences are available but lacks for the type.

Thedongia B. Sutton 1973, *Helotiales* genera *incertae sedis*, one species, type: *T. ligustrina* (Boerema) B. Sutton, hyphomycetous, sexual morph unknown, terrestrial, plant pathogens, leaf-spotting, Asia, Europe, North America, see Crous et al. (2009, 2012, phylogeny), Seifert et al. (2011), Wijayawardene et al. (2017; outline), ex-type culture: CBS 148.59, holotype of type: the Netherlands, Eefelde, on *Ligustrum ovalifolium*, 23 Mar. 1959, G.H. Boerema (L).

Theissenia Maubl. 1914, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, four species, type: *T. pyrenocrata* (Theiss.) Maubl, asexual morph hyphomycetous, terrestrial, saprobes, pantropical, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Thelebolus Tode 1790, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, one species, type: *T. stercoreus* Tode, asexual morph unknown, saprobes, from soil, on dung, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Mukhopadhyay et al. (2014; extracellular enzymes), Singh et al. (2014; extracellular enzymes), Crous et al. (2015; new species), cultures available for the type: CBS 709.69, CBS 717.69 (unpublished), needs generic revision.

Thelenella Nyl. 1855, *Thelenellaceae*, *Ostropales*, *Lecanoromycetes*, 30 species, type: *T. modesta* (Nyl.) Nyl., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kınalıoğlu and Aptroot (2011; new records of Turkey), Aptroot and Schumm (2012; new species), Kirk et al. (2013; genus accepted), Aptroot et al. (2014; new species), Cáceres and Aptroot (2016; new species), Nelsen et al. 2016, Lücking et al. (2016; classification), sequences are available.

Thelenidia Nyl. 1886, *Ascomycota* genera *incertae sedis*, one species, type: *T. monosporella* Nyl., asexual morph unknown, lichenized, terrestrial, Greenland, Switzerland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*), Lücking et al. (2016; classification), sequences are unavailable.

Thelidiella Fink 1933, *Sordariomycetes* genera *incertae sedis*, two species, type: *T. blastenicola* Fink ex J. Hedrick, asexual morph unknown, lichenicolous, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Thelidiopsis Vain. 1921, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *T. robinsonii* Vain., asexual morph unknown, lichenized, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Thelidium A. Massal. 1855, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, c. 100 species, type: *T. amylaceum* A. Massal., asexual morph unknown, lichenized, terrestrial, fresh water, Europe, Asia, see Holger et al. (2008; fresh water species), Lumbsch and Huhndorf (2010; outline), Pykälä et al. (2012; species in Russia), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Thelignya A. Massal. 1856, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, three species, type: *T. fuliginea* (Ach.) A. Massal., asexual morph unknown, lichenized, terrestrial, see Jørgensen and Palice (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kristinsson et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences unavailable.

Thelliana S.Y.Kondr., Kärnefelt, Elix & Hur 2015, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species; type: *T. pseudokiamae* S.Y. Kondr., Kärnefelt, Elix & Hur; lichenized; see Kondratyuk et al. 2015b, Lücking et al. (2016; classification), sequences are available.

Thelocarpella Nav.-Ros. & Cl. Roux, 1999, *Acarosporaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *T. gordensis* Nav.-Ros. & Cl. Roux, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Tonouchi (2010; characterization), Knudsen et al. (2012; taxonomy), Gueidan et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Gueidan et al. (2014c; taxonomy), Westberg et al. (2015; phylogeny), Knudsen and Lendemer (2015; systematic), Knudsen and Lendemer (2016; taxonomy), Roux et al. (2016; taxonomy), Lücking et al. (2016; classification); sequences are available.

Thelocarpon Nyl. 1853, *Thelocarpaceae*, *Thelocarpales*, *Ascomycota* orders *incertae sedis*, 27 species, type: *T. laureri* (Flot.) Nyl., asexual morph unknown, lichenized or non-lichenized, terrestrial, worldwide, see Moon and Aptroot (2009; new species, South Korea), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Flakus and Kukwa (2014; new species), Cáceres and Aptroot (2016; new species, Brazil), van den Boom et al. (2016; new species), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Thelomma A. Massal. 1860, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, seven species; type: *T. mammosum* (Hepp) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Thelonectria P. Chaverri & C. Salgado 2011, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, 43 species, type: *T. discophora* (Mont.) P. Chaverri & C. Salgado, asexual morph cylindrocarpon-like, saprobes, terrestrial, worldwide, see Chaverri et al. (2011; taxonomy, phylogeny), Salgado-Salazar et al. (2012, 2014, 2016; new species, phylogeny), Zeng and Zhuang (2013; new species, China), Maharachchikumbura et al. (2015, 2016; outline), Lombard et al. (2016; phylogeny), cultures available for the type: CBS 125153.

Thelopsis Nyl. 1855, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, nine species, type: *T. rubella* Nyl., asexual morph unknown, lichenized, terrestrial, see Giordani et al. (2009; new

records), Øvstedal. and Gremmen (2009; new record), Aptroot et al. (2010; biodiversity), Potenza et al. (2010; new records), Lumbsch and Huhndorf (2010; outline), Dymytrova et al. (2013; taxonomy), Gundersen (2013; ecology), Kirk et al. (2013; genus accepted), Aptroot et al. (2014; world key), Mies (2015; new records), Stehn et al. (2015; list), Lücking et al. (2016; classification), sequences unavailable.

Thelotrema Ach. 1803, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 106 species, type: *T. lepadinum* (Ach.) Ach., asexual morph unknown, lichenized fungi, terrestrial, mostly tropical, see Mangold et al. (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2010a, 2012a; key), Sipman et al. (2012; key, Costa Rica), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Themisia Velen. 1939, *Helotiales* genera *incertae sedis*, *Leotiomyces*, eight species, type: *T. nuda* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Thermutis Fr. 1825, *Lichinaceae*, *Lichinales*, *Lichinomyces*, two species, type: *T. velutina* (Ach.) Flot., asexual morph unknown, lichenized, terrestrial, see Schutz (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Urbanavichus and Urbanavichene (2011; new records), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Thermutopsis Henssen 1990, *Lichinaceae*, *Lichinales*, *Lichinomyces*, one species, type: *T. jamesii* Henssen, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); sequences are unavailable.

Therrya Sacc. 1882, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, seven species, type: *T. gallica* Sacc. & Penz., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Solheim et al. (2013; DNA, phylogeny), cultures and sequences are available but lacks for the type.

Thielavia Zopf 1876, *Chaetomiaceae*, *Sordariales*, *Sordariomyces*, 31 species, type: *T. basicola* Zopf, asexual morph unknown, saprobes, saprobes, terrestrial, worldwide, see Kusari et al. (2009; enophytes, secondary metabolites), Lumbsch and Huhndorf (2010; outline), Berka et al. (2011; genomic analysis), Kirk et al. (2013; genus accepted), Van den Brink et al. (2015; DNA, thermophilic properties), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 229.82.

Thielaviopsis Went 1893, *Ceratocystidaceae*, *Microascales*, *Sordariomyces*, six species, type: *T. ethacetica* Went, asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see de Beer et al. (2014; new species), Mbenoun et al. (2014, 2016; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), de Melo et al. (2016; pathogens), cultures available for the type: CMW37775.

Thindia Korf & Waraitch 1971, *Sarcoscyphaceae*, *Pezizales*, *Pezizomyces*, one species, type: *T. cupressi* Korf & Waraitch, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wang et al. (2016; new species), cultures and sequences are unavailable, needs generic revision.

Thindiomyces Arendh. & R. Sharma 1983, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *T. epiphyllus* Arendh. & Sharma, asexual morph unknown, saprobes of leaves, Bhutan, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; outline), holotype of the type: PAN 17589, cultures and sequences are unavailable.

Thirumalacharia Rathaiah 1981, *Ascomycota* genera *incertae sedis*, one species, type: *T. curcumae* Rathaiah, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see

Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tholomyces Matsush. 2003, *Ascomycota* genera *incertae sedis*, one species, type: *T. flagellifer* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Honshu, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tholurna Norman 1861, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *T. dissimilis* Norman, asexual morph unknown, lichenized, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Gaya et al. 2012; molecular), Allen and Lendemer (2013; molecular), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Beese et al. (2015; ecology), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Thoracella Oudem. 1901, *Ascomycota* genera *incertae sedis*, one species, type: *T. ledi* Oudem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Thozetella Kuntze 1891, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, 17 species, type: *T. nivea* (Berk.) Kuntze, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Whitton et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Thrauste Theiss. 1916, *Englerulaceae*, *Dothideomycetes* families *incertae sedis*, three species, type: *T. medinillae* (Racib.) Theiss., sexual morph hyphomycetous, epiphytes, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014, morphology), cultures and sequences are unavailable, needs generic revision.

Thrinacospora Petr. 1948, *Ascomycota* genera *incertae sedis*, one species, type: *T. insignis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Ecuador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Thripomyces Speg. 1915, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *T. italicus* Speg., asexual morph unknown, biotrophic, hosts are *Hydraena* species (Coleoptera: Hydraenidae), Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Thrombium Wallr. 1831, *Thrombiaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *T. epigaeum* (Pers.) Wallr., Russia, America, see Nadyeina (2009; taxonomy), Kukwa (2010; lsit), Lumbsch and Huhndorf (2010; outline), Stepanchikova et al. (2011; new records), Kirk et al. (2013; genus accepted), Resl et al. (2015), Lücking et al. (2016; classification), sequences are available.

Thryptospora Petr. 1947, *Dothideomycetes* genera *incertae sedis*, one species, type: *T. singularis* Petr., asexual morph unknown, saprobes, terrestrial, Syria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Thuemenella Penz. & Sacc. 1898, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *T. javanica* Penz. & Sacc., asexual morph hyphomycetous, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Thyrea A. Massal. 1856, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, 13 species, type: *T. plectospora* A. Massal. asexual morph unknown, lichenized, terrestrial, South Korea, Iran, Turkey, USA, see Björk (2010; new records), Lumbsch and Huhndorf (2010; outline),

Schultz and Moon (2011; taxonomy), Kirk et al. (2013; genus accepted), Candan and Schultz (2015; new records), Ahti et al. (2016; checklist), Lücking et al. (2016; classification); sequences are available.

Thyridaria Sacc. 1875, *Thyridariaceae*, *Pleosporales*, *Dothideomycetes*, 52 species, type: *T. incrustans* Sacc., asexual morph unknown, saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), Hyde et al. (2013; morphology; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Thyridella (Sacc.) Sacc. 1895, *Sordariomycetes* genera *incertae sedis*, three species, type: *T. colliculus* Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Thyrinula Petr. & Syd. 1924, *Ascomycota* genera *incertae sedis*, *incertae sedis*, one species, type: *T. eucalypti* (Cooke & Masee) H.J. Swart, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, Australia, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Thyriodictyella Cif. 1962, *Dothideomycetes* genera *incertae sedis*, one species, type: *T. microsperma* (Syd. & P. Syd.) Cif., asexual morph unknown, saprobes, terrestrial, Dominican Republic, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Thyriopsis Theiss. & Syd. 1915, *Aulographaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *T. halepensis* (Cooke) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014c; taxonomy, accepted as a genus in *Aulographaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Thyriostromella Bat. & C.A.A. Costa 1959, *Ascomycota* genera *incertae sedis*, one species, type: *T. calophylli* (Sacc.) Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Thyrostroma Höhn. 1911, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, c. 45 species, type: *T. compactum* (Sacc.) Höhn., hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Phillips et al. (2008; accepted as genus in *Dothidotthiaceae*), Seifert et al. (2011; morphology), Hyde et al. (2013; accepted as genus in *Dothidotthiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as genus in *Dothidotthiaceae*), Crous et al. (2016; phylogeny), cultures available but lacks for the type.

Thyrostromella Höhn. 1919, *Ascomycota* genera *incertae sedis*, three species, type: *T. myriana* (Desm.) Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Thyrotheca Kirschst. 1944, *Sordariomycetes* genera *incertae sedis*, three species, type: *T. nyssae* (Berk. & M.A. Curtis) Kirschst., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Thyrsidiella Höhn. 1909, *Ascomycota* genera *incertae sedis*, two species, type: *T. lignicola* (Höhn.) Clem. & Shear, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Thyrsidina Höhn. 1905, *Ascomycota* genera *incertae sedis*, one species, type: *T. carneominiata* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Thysanorea Arzanlou, W. Gams & Crous 2007, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *T. papuana* (Aptroot) Arzanlou, W. Gams & Crous, asexual morph unknown, saprobes, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype and cultures available for the type: CBS, Aptroot 36647, CBS 212.96.

Thysanothecium Mont. & Berk. 1846, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *T. hookeri* Mont. & Berk., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Tiarospora Sacc. & Marchal 1885, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *T. westendorpii* Sacc. & Marchal, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeriaceae*), cultures and sequences are unavailable, needs generic revision.

Tiarosporella Höhn. 1919, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, c. five species, type: *Sphaeropsis visci* (Alb. & Schwein.) Sacc., coelomycetous, sexual morph *Phaeobotryosphaeria*, saprobes, endophytes, terrestrial, cosmopolitan, see Phillips et al. (2008, 2013; taxonomy, phylogeny), Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Crous et al. (2015; phylogeny), Wijayawardene et al. (2014, 2017; outline), Dissanayake et al. (2016; taxonomy), cultures and sequences are available.

Tiarosporellivora Punith. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *T. caricina* Punith., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Germany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tibellia Vezda & Hafellner 1992, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *T. dimerelloides* Vezda & Hafellner, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Ticogloea G. Weber, Spaaij & W. Gams 1994, *Ascomycota* genera *incertae sedis*, one species, type: *T. guttulata* G. Weber, Spaaij & W. Gams, hyphomycetous, sexual morph unknown, saprobes, ?endophytes, terrestrial, Europe, Central America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Ticomycetes Toro 1952, *Sordariomycetes* genera *incertae sedis*, one species, type: *T. psychotriae* (F. Stevens) Toro, asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), accepted as a genus in *Meliolaceae*, Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded the genus from *Meliolaceae* and placed in *Sordariomycetes* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Ticonectria Döbbeler 1998, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *T. perianthii* Döbbeler, asexual morph unknown, on liver worts, Costa Rica, see

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Ticosynnema R.F. Castañeda, Granados & Mardones 2013, *Ascomycota* genera *incertae sedis*, one species, type: *T. carranzae* R.F. Castañeda, Granados & Mardones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Costa Rica, see Castañeda-Ruiz et al. (2013; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: HAL 2454F, cultures and sequences are unavailable, needs generic revision.

Tilachlidium Preuss 1851, *Tilachlidiaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *T. pinnatum* Preuss, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Lombard et al. (2015; phylogeny, new family), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Tilakidium Vaidya, C.D. Naik & Rathod 1986, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *T. indicum* Vaidya, C.D. Naik & Rathod, asexual morph unknown, saprobes, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Tilakiella Srinivas. 1973, *Dothideomycetes* genera *incertae sedis*, one species, type: *Tilakiella indica* Srinivas., asexual morph unknown, saprobes, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Timdalia Hafellner 2001, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, one species, type: *T. intricata* (H. Magn.) Hafellner, lichenized, see Lumbsch and Huhndorf (2010; outline), Westberg et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

Tinhaudeus K.L. Pang, S.Y. Guo & E.B.G. Jones 2015, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *T. formosanus* K.L. Pang, S.Y. Guo & E.B.G. Jones, asexual morph unknown, saprobes, marine, Taiwan, see Ariyawansa et al. (2015; morphology, phylogeny), Maharachchikumbura et al. (2016; phylogeny, outline), holotype and ex-type strains of type: F28727, BCRC FU30496.

Tirispora E.B.G. Jones & Vrijmoed, 1994, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *T. unicaudata* E.B.G. Jones & Vrijmoed, asexual morph unknown, two species, marine, on mangrove wood, tropical, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Tirisporella E.B.G. Jones, K.D. Hyde & Alias, 1996, *Tirisporellaceae*, *Tirisporellales*, *Sordariomycetes*, one species, type: *T. beccariana* (Ces.) E.B.G. Jones, K.D. Hyde & Alias asexual morph phialophora-like, on petiols of mangrove palm *Nypa*, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Tirmania Chatin 1892, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, three species, type: *T. nivea* (Desf.) Trappe, asexual morph unknown, hypogeous, terrestrial, worldwide, see Al-Laith et al. (2010; Antioxidant components and antioxidant/antiradical activities), Lumbsch and Huhndorf (2010; outline), Dib-Bellahouel and Fortas (2011; antibacterial activity), Kirk et al. (2013; genus accepted), Osmundson et al. (2013; DNA), sequences are available.

Titaea Sacc., 1876, *Ascomycota* genera *incertae sedis*, 23 species, type: *T. callispora* Sacc., hyphomycetous, see Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Titaopsis B. Sutton & Deighton 1984, *Ascomycota* genera *incertae sedis*, one species, type: *T. ugandae* (Hansf.) B. Sutton & Deighton, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Titaospora Bubák 1916, *Ascomycota* genera *incertae sedis*, two species, type: *T. detospora* (Sacc.) Bubák, coelomycetous, sexual morph unknown, lichenicolous, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Toensbergia Bendiksby & Timdal 2013, *Sporastatiaceae*, *Rhizocarpales*, *Lecanoromycetes*, one species, type: *T. leucococca* (R. Sant.) Bendiksby & Timdal, lichenized, corticolous, temperate northern hemisphere, see Bendiksby and Timdal (2013; phylogenetic placement), Lücking et al. (2016; classification), sequences are available, type specimen UPS- L-86993 (holotype).

Togniniella Réblová, L. Mostert, W. Gams & Crous 2004 (= *Phaeocrella* Réblová et al. 2004 *vide* Réblová et al. 2016), *Calosphaeriaceae*, *Calosphaeriales*, *Sordariomycetes*, twelve species, type: *T. acerosa* Réblová, L. Mostert, W. Gams & Crous, asexual morph formerly known in *Phaeocrella*, from living leaves, terrestrial, New Zealand, see Damm et al. (2008; DNA, morphology of asci), Lumbsch and Huhndorf (2010; outline), Réblová et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2015; nomenclature), cultures available for the type: CBS 113726.

Tolypocladium W. Gams 1971 (= *Elaphocordyceps* G.H. Sung & Spatafora 2007 *vide* Maharachchikumbura et al. 2016), *Ophiocordycipitaceae*, *Hypocreales*, *Sordariomycetes*, c. 15 species, type: *T. inflatum* W. Gams, hyphomycetous, sexual morph formerly known in *Elaphocordyceps*, on soil, rotifers and mosquito larvae, terrestrial, cosmopolitan, see Sato et al. (2010; new species), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Tomasellia A. Massal. 1856, *Naetrocymbaceae*, *Dothideomycetes*, *incertae sedis*, 50 species, type: *T. arthonioides* (A. Massal.) A. Massal., asexual morph unknown, epiphytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Naetrocymbaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tomenticola Deighton 1969, *Ascomycota* genera *incertae sedis*, two species, type: *T. trematis* Deighton, hyphomycetous, sexual morph unknown, on living leaves, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Tomeoa I. Hino 1954, *Dothideomycetes* genera *incertae sedis*, one species, type: *T. viridicolliculosa* I. Hino, asexual morph unknown, saprobes, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Tompetchia Subram. 1985, *Ascomycota* genera *incertae sedis*, one species, type: *T. webberi* (H.S. Fawc.) Subram., hyphomycetous, sexual morph unknown, on insects, terrestrial, Australasia, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Toninia A. Massal. [nom. cons.] 1852, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, species, 85 species, type: *T. squalida* (Ach.) A. Massal., asexual morph unknown, lichenized, terrestrial, worldwide, see Moniri et al. (2009; taxonomy), Lumbsch and Huhndorf (2010;

outline), Farkas et al. (2011; ecology), Schmuil et al. (2011; phylogeny), Urbanavichus et al. (2011; new records), Bendiksby and Timdal (2013; phylogeny), Kirk et al. (2013; genus accepted), Zhurbenko and Zhdanov (2013; taxonomy), Maier et al. (2014; ecology), Joshi et al. (2015; new records), Sezer et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available

Toniniopsis Frey 1926, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *T. obscura* Frey, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Topelia P.M. Jørg. & Vezda, 1984, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, six species, type: *T. rosea* (Servít) P.M. Jørg. & Vezda, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot et al. (2014; checklist), Lücking et al. (2016; classification), sequences are unavailable.

Topeliopsis Kantvilas & Vezda 2000, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 20 species, type: *T. muscicola* Kantvilas & Vezda, asexual morph unknown, lichenized, terrestrial, see Messuti et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Plata et al. (2010; key), Sipman et al. (2012; new combinations), Mangold et al. 2009 (key Australia), Rivas Plata et al. (2010a; key), Rivas Plata et al. (2012a; taxonomy), Plata and Lücking (2013; taxonomy), Aptroot et al. (2014; phylogeny), Lücking et al. (2014; new species), Lumbsch et al. (2014; phylogeny), Weerakoon et al. (2015; new species), Lücking et al. (2016; classification), sequences are available.

Toriella (Kohlm.) Sakay., K.L. Pang & E.B.G. Jones 2011, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *Toriella tubulifera* (Kohlm.) Sakay., K.L. Pang & E.B.G. Jones, asexual morph unknown, saprobes, marine, Canada, Denmark, England, Germany, Iceland, Norway, Sweden, USA, Wales, see Sakayaroj et al. (2011; morphology, phylogeny), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype and ex-type strain of the type: BCC33511, BCC33512, BCC33513.

Tornabea Østh.1980, *Physciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *T. montagnei* Trevis. asexual morph unknown, lichenized, terrestrial, Iran, Pakistan, Kayseri-Adamna, see Lumbsch and Huhndorf (2010; outline), Moniri (2010; taxonomy), Sohrabi et al. (2010; taxonomy), Aptroot and Iqbal (2010; checklist), Gaya et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Parsa et al. (2013; taxonomy), Halici et al. (2014; taxonomy), Nattah et al. (2014, taxonomy, inventory), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Toroa Syd. 1926, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *T. dimerosporioides* (Speg.) Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Torpedospora Meyers 1957 (= *Glomerulispora* Abdel-Wahab & Nagah. *fide* Réblová et al. 2016), *Torpedosporaceae*, *Torpedosporales*, *Sordariomycetes*, five species, type: *Torpedospora radiata* Meyers asexual morph produced helicoid conidia (hyphomycetous), saprobes, marine, worldwide, see Abdel-Wahab et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Réblová et al. (2016; nomenclature), holotype and ex-type strains of the type:

Torrendiella Boud. & Torrend 1911, *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *T. ciliata* Boud., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; taxonomy, phylogeny), cultures available for the type: F132996, needs generic revision.

Torrentispora K.D. Hyde, W.H. Ho, E.B.G. Jones, K.M. Tsui & S.W. Wong 2000, *Annulatascaceae*, *Annulatasciales*, *Sordariomycetes*, one species, type: *T. fibrosa* K.D. Hyde, Wai H. Ho, E.B.G. Jones, K.M. Tsui & S.W. Wong, asexual morph unknown, saprobes, aquatic, Hong Kong, Brunei, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Barbosa et al. (2014; new species, Costa Rica), Maharachchikumbura et al. (2016; outline), holotype of the type: HKU (M) 4519, cultures and sequences are available.

Torrubiella Boud. 1885, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, 71 species, type: *Torrubiella aranicida* Boud., asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Johnson et al. (2009; taxonomy, DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Sato et al. (2010; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Tortispora Lachance & Kurtzman 2013, *Trigonopsidaceae*, *Saccharomycetales*, *Saccharomycetes*, eight species, type: *T. ganteri* Lachance & Kurtzman, asexual growth is by multilateral budding, saprophytic, in rotted cacti, Costa Rica, Hawaii, USA, Argentina, Brazil, Mexico, see Lachance et al. (2013; taxonomy), cultures and sequences are available.

Tortulomyces Lar.N. Vassiljeva, S.L. Stephenson, Chernyshev & K.D. Hyde 2013, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, one species, type: *Tortulomyces thailandicus* Lar.N. Vassiljeva, S.L. Stephenson, A.V. Chernyshev & K.D. Hyde, asexual morphs unknown, saprobes, terrestrial, south-eastern Asia, see Maharachchikumbura et al. (2016; outline), holotype of type: MFLU 11-1163, cultures and sequences are unavailable.

Torula Pers. 1795, *Torulaceae*, *Pleosporales*, *Dothideomycetes*, eleven species, type: *T. herbarum* (Pers.) Link, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015, 2016; typification, new species, phylogeny), neotype and exepitype of the type: CBS H-22275, CPC 24114.

Torulasporea Lindner 1904, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, six species, type: *T. delbrueckii* (Lindner) Lindner, asexual reproduction is by multilateral budding, saprophytic, soil, plant material, Indonesian ragi, grapes, tree bark, mangrove trees, spoiled fruit juice, dough, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Torulopsiella Bender 1932, *Ascomycota* genera *incertae sedis*, one species, type: *T. fumaginea* (Speg.) Bender, hyphomycetous, sexual morph unknown, on leaves (sooty moulds), terrestrial, Australasia, South America, see Seifert et al (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Tothia Bat. 1960, *Venturiaceae*, *Venturiales*, *Dothideomycetes*, two species, type: *T. fuscella* (Sacc.) Bat., asexual morph unknown, saprobes, terrestrial, Austria, Niederösterreich, Hungary and Italy, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; morphology; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline; phylogeny), Liu et al. (2015; morphology; phylogeny), cultures and sequences are available for all species.

Tovariella Syd. 1930, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *T. pittieriana* Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Towyspora Wanasinghe, E.B.G. Jones & K.D. Hyde 2016, *Lentitheciaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *T. aestuari* Wanasinghe, E.B.G. Jones & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, UK, see Li et al. (2016;

taxonomy, phylogeny), holotype and ex-isotype culture of the type: MFLU 15–3543, MFLUCC 15–1274.

Toxicocladosporium Crous & U. Braun 2007, *Cladosporiaceae*, *Capnodiales*, *Dothideomycetes*, 14 species, type: *T. irritans* Crous & U. Braun asexual morphs hyphomycetous, terrestrial, Africa, Asia, Australia, South America, see Seifert et al. (2011; morphology), Hyde et al. (2013; accepted as a genus in *Cladosporiaceae*), Wijayawardene et al. (2012, 2014, 2017; outline), Crous et al. (2016; new species, phylogeny), holotype and ex-type strains of type: CBS-H 19892, CBS 185.58.

Toxosporiella B. Sutton 1986, *Ascomycota* genera *incertae sedis*, one species, type: *T. bactrodesmioides* B. Sutton, coelomycetous, sexual morph unknown, on leaves (sooty moulds), terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Toxosporiopsis B. Sutton & Sellar 1966, *Ascomycota* genera *incertae sedis*, one species, type: *T. capitata* B. Sutton & Sellar, coelomycetous, sexual morph unknown, on leaves (sooty moulds), terrestrial, Australia, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trabutia Sacc. & Roum. 1881, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *T. abortiva* (F. Stevens) Sivan., from living leaves, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; not genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Tracylla (Sacc.) Tassi 1904, *Ascomycota* genera *incertae sedis*, two species, type: *T. spartinae* (Peck) Tassi, coelomycetous, saprobes, terrestrial, Brazil, Dominican Republic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trailia G.K. Sutherl. 1915, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, three species, type: *T. ascophylli* G.K. Sutherl, asexual morph unknown, terrestrial, one marine on brown seaweeds, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Trapelia M. Choisy [nom. cons.] 1929, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, 13 species, type: *T. coarctata* (Turner ex Sm.) M. Choisy, asexual morph unknown, lichenized, terrestrial, Macaronesia, Korea, Australia, Romania, Poland, Italy, Iraq, India, see Czarnota and Kukwa (2009; taxonomy), Baloch et al. (2010; phylogeny), Çobanoğlu et al. (2010; new records), Hodkinson (2010; biodiversity), Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; taxonomy), Tsurukau and Khranchankova (2011; checklist), Aptroot and Schumm (2012; new species and new records), Hernandez et al. (2012; ecology), Łubek (2012; ecology), Rajakaruna et al. (2012; new record), Wiczorek and Łysko (2012; taxonomy), Joshi et al. (2013; new records), Kirk et al. (2013; genus accepted), Vondrák and Liška (2013; checklist), Ertz et al. (2014; new species), Giralt et al. (2014; taxonomy), Ohmura et al. (2014; key), Brodo and Lendemer (2015; new species), Goni and Sharma (2015; new records), Kantvilas et al. (2015; new species), Resl et al. (2015; phylogeny), Telfer et al. (2015; biodiversity inventory, DNA barcoding), Aziz and Qadir (2016; new records), Kondratyuk et al. (2016; new records), Schneider et al. (2016; phylogeny and partial sequence), Lücking et al. (2016; classification), sequences are available.

Trapeliopsis Hertel & Gotth. Schneid. 1980, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, 20 species, type: *T. wallrothii* (Flörke ex Spreng.) Hertel & Gotth. Schneid., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; taxonomy), Aptroot and Schumm (2012; new species), Elix et al. (2013; *Trapeliopsis granulosa* var. *australis*, new species), Kirk et al. (2013; genus

accepted), Sanz- Resl et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available for the type: CP956.

Traponora Aptroot 1997, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *T. asterella* Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see see Aptroot (2009; monograph), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Tremateia Kohlm., Volkm.-Kohlm. & O.E. Erikss. 1995, *Dothideomycetes* genera *incertae sedis*, one species, type: *T. halophila* Kohlm., Volkm.-Kohlm. & O.E. Erikss., asexual morph phoma-like., saprobes, marine, Atlantic Coast, see Suetrong et al. (2009; phylogeny, morphology), Jones et al. (2009, 2015; classification), Azevedo et al. (2013; morphological identification), Wijayawardene et al. (2014; outline), holotype of type: J.K. 5522 (IMS).

Trematophoma Petr. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *T. lignicola* Petr., coelomycetous, saprobes, terrestrial, Brazil, Dominican Republic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Trematosphaeria Fuckel 1870, *Trematosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, c. 20 species, type: *T. pertusa* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Pleosporales*, genera *incertae sedis*), Suetrong et al. (2011; phylogeny, new family), Hyde et al. (2013; accepted as a genus in *Trematosphaeriaceae*, phylogeny), Kirk et al. (2013; genus accepted), Zhang et al. (2012; phylogeny), Ahmed et al. (2014; new species), Wijayawardene et al. (2014; outline), Tanaka et al. (2015; phylogeny), cultures and sequences are available, needs generic revision.

Trematovalsa Jacobesco 1906, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *T. matruchoii* Iacobescu, asexual morph unknown, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Tremellidium Petr. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *T. piskorzii* Petr., coelomycetous, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tremolecia M. Choisy 1953, *Hymeneliaceae*, *Lecanorales*, *Lecanoromycetes*, six species, type: *T. dicksonii* (Ach.) M. Choisy, asexual morph unknown, lichenized, terrestrial, Australia, Asia, North America, see Hansen (2009, 2014, 2015; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot and Iqbal (2014; checklist), Kantvilas (2014; taxonomy, new species), McCune and Rosentreter (2014; new records), Miądlkowska et al. (2014; molecular), Lücking et al. (2016; classification); sequences are available

Trenomyces Chatton & F. Picard 1909, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, eleven species, type: *T. histophorus* Chatton & F. Picard, asexual morph unknown, biotrophic, dioecious, hosts are Mallophaga (Arthropoda: Phthiraptera), widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence are unavailable.

Tretocephala Subram. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *T. decidua* Subram., hyphomycetous, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tretolylea Cantillo, R.F. Castañeda & Gusmão 2015, *Ascomycota* genera *incertae sedis*, one species, type: *T. pleiomorpha* T. Cantillo, R.F. Castañeda & . Gusmão, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Souza Armando et al. (2015;

taxonomy), Cantillo-Pérez et al. (2015; morphology), holotype of the type: HUEFS 211337, cultures and sequences are unavailable, compare with *Capnophialophora*, *Capnosporium*, *Heteroconium*, *Lylea*, *Taeniolella* and *Taeniolina*.

Tretospeira Piroz. 1972, *Ascomycota* genera *incertae sedis*, one species, type: *T. ugandensis* (Hansf.) Piroz., hyphomycetous, saprobes, terrestrial, Africa, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tretovularia Deighton 1984, *Ascomycota* genera *incertae sedis*, one species, type: *T. villiana* (Magnus) Deighton, hyphomycetous, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Treubiomyces Höhn. 1909, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, seven species, type: *T. pulcherrimus* Höhn., asexual morph unknown, epiphytes, sooty moulds, terrestrial, America, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Triacutus G.L. Barron & Tzean 1981, ?*Sordariomycetes*, *incertae sedis*, *incertae sedis*, 18 species, type: *Triacutus subcuticularis* G.L. Barron & Tzean, hyphomycetous, saprobes, from soil, on immunocompromised patients, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Edathodu et al. (2013; human pathogens *Triadelphia pulvinata*, DNA, treated as *Hypocreomycetidae incertae sedis*), Kirk et al. (2013; genus accepted), Crous et al. (2015; new species, immunocompromised patients, treated as *Microascales*, genera *incertae sedis*), cultures and sequences are unavailable for the type, genus could be polyphyletic, needs generic revision.

Triadelphia Shearer & J.L. Crane 1971, *Microascales* genera *incertae sedis*, *Sordariomycetes*, 18 species, type: *T. heterospora* Shearer & J.L. Crane, hyphomycetous, sexual morph unknown, saprobes, human pathogen, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Triainomyces W. Rossi & A. Weir 1998, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, *T. hollowayanus* W. Rossi & A. Weir, asexual morph unknown, biotrophic, known from *Procyliosoma tuberculatum* (Diplopoda: Chilognatha: Oniscomorpha: Sphaerotheriidae), New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, needs revision.

Triangularia Boedijn 1934, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, six species, type: *T. bambusae* (J.F.H. Beyma) Boedijn, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Triblidium Rebert. 1805, *Triblidiaceae*, *Triblidiales*, *Ascomycota* orders *incertae sedis*, one or six species, type: *T. caliciforme* Rebert., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tribolospora D. A. Reid 1966, *Ascomycota* genera *incertae sedis*, one species, type: *T. sycopsisidis* D.A. Reid, coelomycetous, sexual morph unknown, saprobes, on leaves of *Sycopsis dunnii*, New Guinea, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tribulatia Joanne E. Taylor, K.D. Hyde & E.B.G. Jones 2003, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *T. appendicospora* Joanne E. Taylor, K.D. Hyde & E.B.G. Jones, saprobes, Queensland, see Lumbsch and Huhndorf (2010;

outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Tricellula Beverw. 1954, *Ascomycota* genera *incertae sedis*, one species, type: *T. inaequalis* Beverw., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology, accepted as a genus in *Orbiliaceae*), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Triceromyces T. Majewski 1980, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, eight species, type: *T. balazucii* T. Majewski, no asexual state, biotrophic, monoecious, dioecious, and trioecious, hosts are Hebridae, Hydrometridae, and Veliidae (Hemiptera: Heteroptera), worldwide, see Santamaria (2008; morphology, review), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Trichangium Kirschst. 1935, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *T. vinosum* Kirschst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tricharia Fée 1825 *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, 30 species, type: *T. gilva* (Boud.) Boud., asexual morph unknown, lichenized, terrestrial, India, Brazil, Colombia, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; new species), Messuti et al. (2011; new species), Mateus et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Rashmi and Rajkumar (2015; taxonomy, new record), Sanders and Lücking (2015; new species), Sanders and de los Rios (2016; morphotaxonomy), Gupta and Sinha (2016; new report), Lücking et al. (2016; classification), van den Boom and Sipman (2016; new records), sequences are available.

Tricharina Eckblad 1968, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 15 species, type: *T. gilva* (Boud. ex Cooke) Eckblad, asexual morph unknown, hypogeous, terrestrial, temperate, see Benkert (2010; new species), Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Stielow et al. (2013; phylogeny), Kušan et al. (2015; new species), Lindemann and Böhning (2016; new species), sequences are available for voucher DED 7356 (SFSU) of the type: (fide Hansen et al. 2013).

Trichasterina G. Arnaud 1918, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, nine species, type: *T. styracis* (Theiss.) G. Arnaud, asexual morph unknown, foliar epiphytes, terrestrial, tropical, three species, cultures and sequences are unavailable, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; taxonomy, accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichobolbus Bat. 1964, *Ascomycota* genera *incertae sedis*, one species, type: *T. palmae* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, on leaves of *Palmae*, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichobolus (Sacc.) Kimbr. & Cain 1967, *Thelebolaceae*, *Thelebolales*, *Leotiomyces*, one species, type: *T. zukalii* (Heimerl) Kimbr., asexual morph unknown, saprobes, from soil, on dung, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Doveri (2012; new species, coprophilous, Italy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichobotrys Penz. & Sacc. 1902, *Ascomycota* genera *incertae sedis*, four species, type: *T. pannosa* Penz. & Sacc., hyphomycetous, saprobes, from soil, terrestrial, Africa, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichocladium Harz 1871, *Ascomycota* genera *incertae sedis*, 31 species, type: *T. asperum* Harz, hyphomycetous, sexual morph unknown, terrestrial, aquatic, saprobes, worldwide, see Abdel-Wahab (2011; phylogeny), Seifert et al. (2011; morphology), Abdel-Wahab and Bahkali (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), polyphyletic, needs generic revision.

Trichocoma Jungh. 1838, *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, two species, type: *T. paradoxa* Jungh., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Houbraken and Samson (2011; phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 247.57, CBS 788.83 (fide Houbraken and Samson 2011).

Trichoconis Clem. 1909, *Ascomycota* genera *incertae sedis*, 20 species, type: *T. caudata* (Appel & Strunk) Clem., hyphomycetous, saprobes, terrestrial, pantropic, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Brackel (2014; new species), Silvansilva et al. (2016; new species, Brazil), cultures and sequences are available but lacks for the type, needs generic revision.

Trichodelitschia Munk 1953, *Phaeotrichaceae*, *Phaeotrichales*, *Dothideomycetes*, four species, type: *T. bisporula* (P. Crouan & H. Crouan) Munk, asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures available for the type: CBS 262.69.

Trichoderma Pers. 1794 (= *Hypocrea* Fr. 1825 fide Rossman et al. 2013), *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, c. 100 species, type: *T. viride* Pers., hyphomycetous, sexual morph *Hypocrea*, in soil, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2013; nomenclature), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Trichodiscula Vouaux 1910, *Ascomycota* genera *incertae sedis*, one species, type: *T. lesdainii* Vouaux, coelomycetous, saprobes, terrestrial, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichodochium Syd. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *T. disseminatum* Syd., hyphomycetous, saprobes, terrestrial, Asia, Central and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichodothella Petr. 1946, *Dothideomycetes* genera *incertae sedis*, one species, type: *T. blumeri* Petr. ex S. Blumer, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Zhang et al. (2011; morphology, accepted as a genus in *Venturiaceae*), Hyde et al. (2013) did not accept as a genus in *Venturiaceae*, Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichodothis Theiss. & Syd. 1914, *Dothideomycetes* genera *incertae sedis*, three species, type: *T. comata* (Berk. & Ravenel) Theiss. & Syd., asexual morph unknown, saprobes, North America, Africa, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Zhang et al. (2012; provisionally included in *Venturiaceae*), Hyde et al. (2013) did not accept as a genus in *Venturiaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichoglossum Boud. 1885, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, 20 species, type: *T. hirsutum* (Pers.) Boud., asexual morph unknown, on soil, saprobes, terrestrial, temperate, see Schoch et al. (2009; phylogeny, accepted as a genus in *Rutstroemiaceae*), Kučera et al. (2010; new records in Slovakia), Lumbsch and Huhndorf (2010; outline), Akata

and Kaya (2013; new records in Turkey), Hustad et al. (2013; DNA, phylogeny), sequences are available for the type.

Trichohelotium Killerm. 1935, *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, need typification, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichomariss Hibbits, G.C. Hughes & Sparks 1981, *Halosphaeriaceae*, *Microascales*, *Sordariomyces*, one species, type: *T. invadens* Hibbits, G.C. Hughes & Sparks, on tanner crab, marine, Alaska, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Trichomatoclava G.F. Sepúlveda, Pereira-Carv. & Dianese 2009, *Ascomycota* genera *incertae sedis*, one species, type: *T. cerradensis* G.F. Sepúlveda, Pereira-Carv. & Dianese, hyphomycetous, saprobes, terrestrial, South America, see Pereira-Carvalho et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of type: UB (Mycol. Col.) 19442, cultures and sequences are unavailable, needs generic revision.

Trichomatomyces Dorn.-Silva & Dianese 2004, *Ascomycota* genera *incertae sedis*, one species, type: *T. byrsonimae* (Bat. & Peres) Dorn.-Silva & Dianese, hyphomycetous, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Trichomatosphaera Pereira-Carv., G.F. Sepúlveda & Dianese 2009, *Ascomycota* genera *incertae sedis*, one species, type: *T. cerradensis* Pereira-Carv., G.F. Sepúlveda & Dianese, hyphomycetous, saprobes, terrestrial, South America, see Pereira-Carvalho et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: UB (Mycol. Col.) 19597, cultures and sequences are unavailable, needs generic revision.

Trichomerium Speg. 1918, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomyces*, 32 species, type: *T. coffeicola* (Puttemans) Speg., asexual morph hyphomycetous, possibly *Tripospermum* Speg., epiphytes or saprobes, sooty moulds, terrestrial, Australia, Brazil, Thailand, see Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2012; morphology; phylogeny), Liu et al. (2015; morphology, phylogeny), Hyde et al. (2016; morphology, phylogeny), cultures and sequences are available but lacks for type, needs generic revision.

Trichometasphaeria Munk 1953, *Dothideomyces* genera *incertae sedis*, eight species, type: *T. dianthi* (Rostr.) Munk, asexual morph coelomycetous, saprobes, North America, see Chlebicki (2009; new species), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichonectria Kirschst. 1907, *Bionectriaceae*, *Hypocreales*, *Sordariomyces*, 19 species, type: *T. aculeata* Kirschst., asexual morph unknown, saprobes, lichenicolous, terrestrial, Austria, see Etayo and Sancho (2008; new species), Lumbsch and Huhndorf (2010; outline), Gardiennet and Lechat (2011; new species), Brackel (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), Farkas and Flakus (2016; new species), cultures and sequences are available but lacks for the type.

Trichopeltella Höhn. 1910, *Trichopeltinaceae*, *Dothideomyces* families *incertae sedis*, one species, type: *T. montana* (Racib.) Höhn., asexual morph unknown, epiphytes, Java, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Trichopeltinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichopeltheca Bat., C.A.A. Costa & Cif. 1958, *Trichopeltinaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *T. montana* (Racib.) Höhn., asexual morph unknown, epiphytes, Asia, Pacific, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Trichopeltinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichopeltina Theiss. 1914, *Trichopeltinaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *T. labecula* (Mont.) Theiss., asexual morph unknown, epiphytes, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Trichopeltinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichopeltospora Bat. & Cif. 1958, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, two species, type: *T. pipericola* Bat., Cif. & C.A.A. Costa, asexual morph unknown. Epiphytes, terrestrial, worldwide, no molecular data, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Hongsanan et al. (2014; keys), Wijayawardene et al. (2014; outline), holotype of type: URM 2492, cultures and sequences are unavailable.

Trichopeltulum Speg. 1889, *Ascomycota* genera *incertae sedis*, one species, type: *T. pulchellum* Speg., coelomycetes, sexual morph unknown, saprobes, terrestrial, Hawaii, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichopeltum Bat., Cif. & C.A.A. Costa (1958) [1957], ?*Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, type: *T. hawaiiense* Bat. & C.A.A. Costa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wu et al. (2011; did not accept the placement), needs generic revision.

Trichopeziza Fuckel 1870, *Lachnaceae*, *Helotiales*, *Leotiomyces*, 30 species, type: *T. sulphurea* (Pers.) Fuckel, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures available for the type: KUS-F52218, needs generic revision.

Trichophaea Boud. 1885 (= *Dichobotrys* Hennebert 1973 *vide* Healy et al. 2016), *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 32 species, type: *T. woolhopeia* (Cooke & W. Phillips) Boud., asexual morph unknown, hypogeous, saprobes, terrestrial, worldwide, see Benkert (2010; new species), Lumbsch and Huhndorf (2010; outline), Rubini et al. (2011; DNA, phylogeny), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Stielow et al. (2013; phylogeny), Perić et al. (2014; new species), sequences are available.

Trichophaeopsis Korf & Erb 1972, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *T. bicuspis* (Boud.) Korf & Erb, asexual morph unknown, hypogeous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Trichophyma Rehm 1904, *Arthoniales* genera *incertae sedis*, two species, type: *T. bunchosiae* Rehm, asexual morph unknown, lichenicolous, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: E. Ule 1120 (S), cultures and sequences are unavailable.

Trichophyton Malmsten 1848, *Arthrodermataceae*, *Onygenales*, *Eurotiomyces*, 32 species, type: *T. tonsurans* Malmsten, hyphomycetous, sexual morph unknown, on humans and other animal, saprobes, on soil, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hubka et al. (2014; new species), Lorch et al. (2014; new species), Hiruma et al. (2016; DNA, mating types), culture and sequences are available for the type.

Trichoseptoria Cavara 1892, *Ascomycota* genera *incertae sedis*, two species, type: *T. alpei* Cavara, coelomycetes, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichospermella Speg. 1912, *Sordariomycetes* genera *incertae sedis*, one species, type: *T. pulchella* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Trichosphaerella E. Bommer, M. Rousseau & Sacc. 1891, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *T. decipiens* E. Bommer, M. Rousseau & Sacc., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Whiton et al. (2012; morphology), Kirk et al. (2013; genus accepted), Döbbeler et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), Lendemmer et al. (2016; new species), cultures and sequences are unavailable for type, needs generic revision.

Trichosphaeria Fuckel 1870, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, c. 20 new species, type: *T. pilosa* (Pers.) Fuckel, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type: 089319.

Trichosphaeropsis Bat. & Nascim. 1960, *Sordariomycetes* genera *incertae sedis*, one species, type: *T. crescentiae* Bat. & Nascim., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Trichosporiella Kamyschko 1960, *Ascomycota* genera *incertae sedis*, two species, type: *T. hyalina* Kamyschko, hyphomycetous, sexual morph unknown, saprobes, oh human, on soil, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology, accepted as a genus in *Sordariales*), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence available for unidentified species, needs generic revision.

Trichosporodochium Dorn.-Silva & Dianese 2004, *Ascomycota* genera *incertae sedis*, two species, type: *T. cerradensis* Dorn.-Silva & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichothallus F. Stevens 1925 (= *Plokamidomyces* Bat. et al. 1958; *Trichopeltheca* Bat. et al. 1958 *fide* Rossmann et al. 2016), *Euantennariaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *T. hawaiiensis* F. Stevens, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, Oceania, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Rossmann et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Trichothecium Link 1809, *Hypocreales* genera *incertae sedis*, nine species, type: *T. roseum* (Pers.) Link, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Summerbell et al. (2011; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Trichothelium Müll. Arg. 1885, *Porinaceae*, *Ostropales*, *Lecanoromycetes*, 40 species, type: *T. epiphyllum* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Trichothyriella Theiss. 1914, *Dothideomycetes* genera *incertae sedis*, one species, type: *T. quercigena* (Berk. ex Cooke) Theiss., asexual morph unknown, terrestrial, South East Asia,

see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Wu et al. (2011; treated as a doubtful genus), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichothyrynula Petr. 1950, *Trichopeltinaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *T. labecula* (Mont.) Theiss., asexual morph unknown, epiphytes, Ecuador, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Trichopeltinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichothyrium Speg. 1889, *Trichothyriaceae*, *Dothideomycetes* families *incertae sedis*, twelve species, type: *T. sarciniferum* Speg., asexual morph unknown, saprobes, terrestrial, subtropical, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Trichothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Tricladiella K. Ando & Tubaki 1984, *Ascomycota* genera *incertae sedis*, one species, type: *T. pluvialis* K. Ando & Tubaki, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tricladopsis Descals 1982, *Ascomycota* genera *incertae sedis*, two species, type: *T. foliosa* Descals, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Europe, Central and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tricladiospora Nawawi & Kuthub. 1988, *Ascomycota* genera *incertae sedis*, three species, type: *T. stricta* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tricladium Ingold 1942, *Helotiaceae*, *Helotiales*, *Leotiomyces*, 25 species, type: *T. splendens* Ingold, hyphomycetous, saprobes, aquatic, worldwide, see Campbell et al. (2009; Evolutionary relationships), Seifert et al. (2011, polyphyletic), Gulis et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Baschien et al. (2013; molecular phylogeny), sequences are available for 15 species, compare with *Varicosporium*, holotype of type: CBS 234.46, MUCL 28105, needs generic revision.

Trifurcospora K. Ando & Tubaki 1988, *Ascomycota* genera *incertae sedis*, two species, type: *T. irregularis* (Matsush.) K. Ando & Tubaki, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trigonopsis Schachner emend. Kurtzman & Robnett 2007, *Trigonopsidaceae*, *Saccharomycetales*, *Saccharomycetes*, four species, type: *T. variabilis* Schachner, asexual reproduction is by multilateral budding, saprophytic, grape must, wine, beer, worldwide, cultures and sequences are available.

Trigonosporium Tassi 1900, *Ascomycota* genera *incertae sedis*, two species, type: *T. australiense* Tassi, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trimmatostroma Corda 1837, *Dermateaceae*, *Helotiales*, *Leotiomyces*, c. 30 species type: *T. salicis* Corda, sexual morph unknown, saprobes, terrestrial, aquatic, halophilic, worldwide,

see Vaupotič et al. (2008; physiology), Bartosik et al. (2010; biodeterioration), Diederich et al. (2010; new species), El-Said et al. (2010; Egypt), Mansour (2010; Lybia), Sepcic et al. (2010; metabolite profiling), Shenoy et al. (2010; phylogeny), Mohammadi (2011; spectrofluorometry), Ruiz-González et al. (2013; isolation protocol), Sarma and Raghukumar (2013; India), Gessler et al. (2014; review), Gunde-Cimerman and Zalar (2014; solar salterns), Heuchert and Braun (2014; new species), cultures and sequences are available.

Trimmatothele Norman ex Zahlbr. 1903, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, three species, type: *T. perquisita* (Norman) Norman ex Zahlbr., lichenized, see Lücking et al. (2016; classification), sequences are available.

Trimmatothelopsis Zschacke 1934, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, one species, type: *T. versipellis* (Nyl.) Zschacke, lichenized, see Gueidan et al. (2014c; taxonomy), Knudsen and Lendemer (2016; taxonomy), Roux et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Trinacrium Riess 1852, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, ten species, type: *T. subtile* Riess, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trinathotrema Lücking, Rivas Plata & Mangold 2011, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *T. stictideum* (Nyl.) Lücking, R.Miranda & Kalb, asexual morph unknown, lichenized, terrestrial, Bolivia, Canary Iceland, see Lücking et al. 2011b, Boom and Ertz (2012; new species, new records), Flakus et al. (2013; taxonomy), Lücking et al. (2016; classification); sequences are available.

Triplosphaeria Kaz. Tanaka & K. Hiray. 2009, *Tetraplosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *T. maxima* Kaz. Tanaka & K. Hirayama, asexual morph hyphomycetous, saprobes, terrestrial, Japan, see Tanaka et al. (2009; morphology, phylogeny), Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), holotype and ex-type strain of the type: HHUF29330, JCM 13172.

Tripoconidium Subram. 1978, *Ascomycota* genera *incertae sedis*, one species, type: *T. aphanophagum* (Drechsler) Subram., hyphomycetous, sexual morph unknown, on nematodes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tripospermum Speng. 1918, *Neodevriesiaceae*, *Capnodiales*, *Dothideomycetes*, 27 species, type: *M. caespitosa* Petr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Rocha et al. (2010; new species), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Triposporina Höhn. 1912, *Ascomycota* genera *incertae sedis*, two species, type: *T. uredinicola* Höhn., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Triposporium Corda 1837, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, 41 species, type: *T. elegans* Corda, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014; outline), accepted as a genus in *Asterinaceae*, Kirk et al. (2013; genus accepted), Crous et al. (2014; new species, phylogeny, accepted as a *Helotiales*), Wijayawardene et al. (2017; outline), cultures and sequences are available but lacks for the type, taxonomic placement is based on sequence of non-type, needs generic revision.

Tripterosporella Subram. & Lodha 1968, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, six species, type: *T. coprophila* Subram. & Lodha, asexual morph unknown, saprobes, coprophilous, terrestrial, Asia, Africa, see Doveri (2010; new species and two varieties), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Triramulispora Matsush. 1975, *Ascomycota* genera *incertae sedis*, three species, type: *T. gracilis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Triscelophorus Ingold 1943, *Ascomycota* genera *incertae sedis*, eight species, type: *T. monosporus* Ingold, hyphomycetous, saprobes, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Duarte et al. (2014; phylogeny), Fiuza et al. (2015a; morphology), cultures and sequences are available, needs generic revision.

Triscelosporium Nawawi & Kuthub. 1987, *Ascomycota* genera *incertae sedis*, one species, type: *T. verrucosum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 313480, cultures and sequences are unavailable, needs generic revision.

Tristratiperidium Daranagama, Camporesi & K.D. Hyde 2015, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *Tristratiperidium microsporum* Daranag., Camporesi & K.D. Hyde, asexual morph hyphomycetous, saprobes, terrestrial, Italy, Europe, one species, see Daranagama et al. (2016; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), ex-type strains of type: MFLUCC 15-0413; holotype MFLU 15-0656.

Trisulcosporium H.J. Huds. & B. Sutton 1964, *Ascomycota* genera *incertae sedis*, one species, type: *T. acerinum* H.J. Huds. & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, aquatic, Africa, Asia, Europe, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trizodia Laukka 2010, *Ascomycota* genera *incertae sedis*, one species, type: *T. acrobia* Laukka, lichenized, terrestrial, Finland, see Stenroos et al. (2010; taxonomy), Lücking et al. (2016; classification), sequences are available.

Trochila Fr. 1849, *Cenangiaceae*, *Helotiales*, *Leotiomycetes*, 15 species, type: *T. craterium* (DC.) Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dermateaceae*), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny, accepted as a genus in *Cenangiaceae*), cultures available for the type: KL333.

Trochoideomyces Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, *T. gracilicaulis* Thaxt., asexual morph unknown, biotrophic, only known from *Trochoideus desjardinsii* (Coleoptera: Endomychidae), Malaysian Borneo, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Trochophora R.T. Moore 1955, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *T. simplex* (Petch) R.T. Moore, coelomycetous, sexual morph unknown, plant pathogens on *Daphniphyllum* shrubs and trees in Asia, terrestrial, see Crous et al. (2009; morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype NY00945981, for epitype see Videira et al. (2017).

Troglomyces S. Colla 1932, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, six species, type: *T. manfredii* S. Colla, asexual morph unknown, biotrophic on millipedes

(Blaniulidae & Julidae), mostly Europe, Madeira, Tenerife, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Santamaría et al. (2014 morphology), Enghoff and Santamaría (2015, morphology, taxonomy, key, specificity and transmission), cultures and sequences are unavailable, needs generic revision.

Tromeropsis Sherwood 1981, *Ascomycota* genera *incertae sedis*, one species, type: *T. microtheca* (P. Karst.) Sherwood, asexual morph unknown, saprobes, terrestrial, Finland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Troposporella P. Karst. 1892, *Dothideomycetes* genera *incertae sedis*, four species, type: *T. fumosa* P. Karst., hyphomycetous, sexual morph unknown, saprobes, aquatic, Australasia, Europe, North and South America, see Tsui and Berbee (2010; new species, DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: MUCL 15695.

Troposporium Harkn. 1884, *Ascomycota* genera *incertae sedis*, one species, type: *T. album* Harkn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Troposporopsis Whitton, McKenzie & K.D. Hyde 1999, *Ascomycota* genera *incertae sedis*, two species, type: *T. atroapicis* Whitton, McKenzie & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trullula Ces. 1852, *Leotiomyces* genera *incertae sedis*, 15 species, type: *T. oreoselini* Ces., coelomycetous, sexual morph unknown, saprobes, terrestrial, North temperate, see Wijayawardene et al. (2012, 2016; outline, taxonomy, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, taxonomic placement is based on sequences of non-type:, needs generic revision.

Truncatella Steyaert 1949, *Bartaliniaceae*, *Amphisphaeriales*, *Sordariomycetes*, eleven species, type: *T. truncata* (Lév.) Steyaert, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, morphology), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; new species, phylogeny), cultures and sequences are available, needs generic revision.

Tryblidiopsis P. Karst. 1871, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, three species, type: *T. pinastri* (Pers.) P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010) did not list, Kirk et al. (2013; genus accepted), Wang et al. (2014; DNA, phylogeny), cultures and sequences are available for the type: AFTOL-ID 1319.

Tryblidiopycnis Höhn. 1918, *Ascomycota* genera *incertae sedis*, one species, type: *T. pinastri* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tryblis Clem. 1931, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *T. arnoldii* (Rehm) Clem., asexual morph unknown, ?saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable

Trypetheliopsis Asah. 1937, *Monoblastiaceae*, *Monoblastiales*, *Dothideomycetes*, six species, type: *T. boninensis* Asah., asexual morph unknown, lichenized, terrestrial, tropical, new synonym *Musaespora* Aptroot & Sipman, see Kashiwadani et al. (2009; taxonomy), Nelsen et al. (2009, 2011' phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Trypethelium Spreng. [nom. cons.] 1804, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, 16 species, type: *T. eluteriae* Spreng., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot and Lücking (2016; taxonomy, monograph), Lücking et al. (2016; classification); sequences are available.

Tryssglobulus B. Sutton & Pascoe 1987, *Ascomycota* genera *incertae sedis*, one species, type: *T. aspergilloides* B. Sutton & Pascoe, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tubakia B. Sutton 1973, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, eight species, type: *T. japonica* (Sacc.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; treated as coelomycetous), Yun and Rossman (2011; new species), Harrington et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Braun et al. (2014; new species), cultures and sequences are available but lacks for the type, needs generic revision.

Tubakiella (Tubaki) Sakay., K.L. Pang & E.B.G. Jones 2011, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *T. galerita* (Tubaki) Sakay., K.L. Pang & E.B.G. Jones, asexual morph unknown, saprobes, marine, France, Denmark, Germany, Japan, Taiwan, USA, Yugoslavia, see Sakayaroj et al. (2011; morphology, phylogeny), Jones et al. (2015; outline), Maharachchikumbura et al. (2015; outline, phylogeny), holotype and ex-type strain of the type: BCC33500, PP5577.

Tuber P. Micheli ex F.H. Wigg. 1780, *Tuberaceae*, *Pezizales*, *Pezizomycetes*, 135 species, type: *T. aestivum* Vittad., asexual morph unknown, saprobes, hypogeous, terrestrial, worldwide, see Bonito et al. (2010; new species), Culleré et al. (2010; aromatic compounds), Lumbsch and Huhndorf (2010; outline), Benucci et al. (2011; ectomycorrhizal), Fan et al. (2013; new species), Guevara et al. (2013; new species), Kirk et al. (2013; genus accepted), Li et al. (2014; new species, China), Su et al. (2014; new species), Guevara-Guerrero et al. (2015; new species), Qing et al. (2015; new species), cultures and sequences are available.

Tuberculispora Deighton & Piroz. 1972, *Ascomycota* genera *incertae sedis*, one species, type: *T. jamaicensis* Deighton & Piroz., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tubeufia Penz. & Sacc., 1898, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, 29 species, type: *T. javanica* Penz. & Sacc., saprobes on decaying wood or sheaths of bamboo, widespread, asexual morph hyphomycetous, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014, 2017; outline), cultures and sequences are available, ex-type strains of type: MFLUCC12-0545; epitype of type: MFLU13-0371.

Tubolachnum Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, two species, type: need typification, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tuckermanella Essl. 2003, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, six species, type: *T. weberi* (Essl.) Essl., asexual morph unknown, lichenized, terrestrial, Mexico, Colorado, Wisconsin, North Carolina, Colorado, see Shrestha and St. Clair (2009; new records), Lumbsch and Huhndorf (2010; outline), Harris and Rogers (2011; sequencing), Nelsen et al. (2011, 2013; molecular), Weber (2011; catalog), Perlmutter (2016; inventory), Saag et al. (2013;

list), Bartkowiak and Bennett (2016; taxonomy), Herrera Campos et al. (2016; taxonomy), Lücking et al. (2016; classification); sequences are available.

Tuckermanopsis Gyeln. 1933, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, nine species, type: *T. ciliaris* (Ach.) Gyeln., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Büdel (2011; taxonomy), Kelly et al. (2011; molecular), Grochowski (2012; ecology), Kirk et al. (2013; genus accepted), McMullin et al. (2013; conservation), Lücking et al. (2016; classification), Mark et al. (2016; molecular), sequences are available.

Tulipispora Révay & J. Gönczöl 2009, *Ascomycota* genera *incertae sedis*, one species, type: *T. ingoldii* Révay & J. Gönczöl, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: BP 99766, cultures and sequences are unavailable, needs generic revision.

Tumidispora Hongsanan & K.D. Hyde 2015, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *T. shoreae* Hongsanan & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-1391, MFLUCC 12-0409.

Tumularia Descals & Marvanová 1987, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *T. tuberculata* (J. Gönczöl) Descals & Marvanová, hyphomycetous, sexual morph unknown, saprobes, aquatic, Europe, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2016; morphology, phylogeny), Hyde et al. (2013; accepted as a genus in *Lophiostomataceae*), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Tunicago B. Sutton & Pollack 1977, *Ascomycota* genera *incertae sedis*, two species, type: *T. uniolae* B. Sutton & Pollack, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, Australia, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tunicatispora K.D. Hyde 1990, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *T. australiensis* K.D. Hyde, saprobes, marine, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Tunstallia Agnihotr. 1961, *Sordariomycetes* genera *incertae sedis*, one species, type: *T. aculeata* (Petch) Agnihotr., asexual morph unknown, saprobes, pathogens, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Turgidosculum Kohlm. & E. Kohlm. 1972, *Ascomycota* genera *incertae sedis*, two species, type: *T. ulvae* (M. Reed) Kohlm. & E. Kohlm., asexual morph unknown, symbiotic, marine, worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Turturconchata J.L. Chen, T.L. Huang & Tzean 1999, *Ascomycota* genera *incertae sedis*, two species, type: *T. reticulata* J.L. Chen, T.L. Huang & Tzean, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tylophorella Vain. 1890, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *T. polyspora* Vain., lichenized, terrestrial, Bolivia, New Guinea, see Lumbsch et al. (2009; molecular), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),

McCarthy (2014; new record), Ertz et al (2015; new record), Lücking et al. (2016; classification), sequences are unavailable.

Tylophoron Nyl. ex Stizenb. 1862, *Arthoniaceae*, *Arthoniales*, *Lecanoromycetes*, eight species, type: *T. protrudens* Nyl., lichenized, terrestrial, mainly tropical, see Lumbsch et al. (2009; molecular), Lumbsch and Huhndorf (2010; outline), Aptroot et al. (2010; biodiversity), Ertz et al. (2011; molecular), Reddy et al. (2011; new record), Diederich et al. (2012; new records), Sethy et al. (2012; new record), Kirk et al. (2013; genus accepted), Lendemer et al. (2013; new species), Lendemer and Harris (2014; taxonomy), Gupta and Sinha (2015; new records), Pérez-Pérez et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

Tylophoropsis Sambo 1938, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *T. nyeriana* Sambo, lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Physciaceae*), Gaya et al. (2012; taxonomy), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are unavailable.

Tylothallia P. James & H. Kiliyas 1981, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *T. biformigera* (Leight.) P. James & H. Kiliyas, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Elix and Kantvilas (2013; new records), Kirk et al. (2013; genus accepted), Øvstedal and Gremmen (2014; new combination), Lücking et al. (2016; classification), sequences are available.

Tympanis Tode 1790 (= *Sirodothis* Clem. 1909; *Pleurophomella* Höhn 1914 *fide* Johnston et al. 2014), *Tympanidaceae*, *Phacidiales*, *Leotiomyces*, 27 species, type: *T. saligna* Tode, asexual morphs formerly known in *Sirodothis* and *Pleurophomella*, weak parasite of gymno- and angiosperms trees commonly associated with cankers, worldwide, common in temperate areas, Kirk et al. (2013; genus accepted), Quijada et al. (2015; phylogeny), Kowalski et al. (2016; distribution), cultures and sequences are available but lacks for the type, needs typification and generic revision.

Tympanosporium W. Gams 1974, *Ascomycota* genera *incertae sedis*, one species, type: *T. parasiticum* W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tyrannicordyceps Kepler & Spatafora 2012, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *T. fratricida* (Tanda & Kobayasi) Kepler & Spatafora, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Kepler et al. (2012; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Tyrannosorus Unter. & Malloch 1995, *Venturiaceae*, *Venturiales*, *Dothideomycetes*, one species, type: *T. pinicola* (Petrini & P.J. Fisher) Unter. & Malloch, asexual morph unknown, saprobes, terrestrial, Canada, Pakistan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes* genera *incertae sedis*), Zhang et al. (2011; accepted as in *Venturiaceae*), Hyde et al. (2013; accepted as in *Venturiaceae*, phylogeny), Wijayawardene et al. (2014; outline), cultures available for the type: AFTOL-ID 1235.

Uberispora Piroz. & Hodges 1973, *Ascomycota* genera *incertae sedis*, four species, type: *U. simplex* (Ichinoe) Piroz. & Hodges, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Asia, Caribbean, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Ma et al. (2014; new species, China), cultures and sequences are unavailable, needs generic revision.

Ubrizsya Negru 1965, *Ascomycota* genera *incertae sedis*, one species, type: *U. oxycocci* Negru & R. Sandor, coelomycetous, sexual morph unknown, saprobes, terrestrial, Rumania, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Uleodothis Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, four species, type: *U. balansiana* (Sacc., Roum. & Berl.) Theiss. & Syd., saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Uleomyces Henn. 1895, *Cookellaceae*, *Dothideomycetes* family *incertae sedis*, four species, type: *U. parasiticus* Henn., asexual morph unknown, on rusts and ascomycetes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Cookellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Uleoporthe Petr. 1941, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *U. orbiculata* (Syd. & P. Syd.) Petr., asexual morphs unknown, saprobes, terrestrial, America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Uleothyrium Petr. 1929, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, two species, type: *U. amazonicum* Petr., asexual morph coelomycetous (= Septothyrella-like, *fide* Hofmann 2009), epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Hongsanan et al. (2014; keys), Wijayawardene et al. (2014; outline), placement in *Asterinaceae* supported by morphology, cultures and sequences are unavailable, holotype of type: W 10746.

Ulocoryphus Michaelides, L. Hunter & W.B. Kendr. 1982, *Ascomycota* genera *incertae sedis*, one species, type: *U. mastigophorus* Michaelides, L. Hunter & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ulospora D. Hawksw., Malloch & Sivan. 1979, *Tesudinaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *U. bilgramii* (D. Hawksw., C. Booth & Morgan-Jones) D. Hawksw., Malloch & Sivan., marine sediments and plant material, Asia, terrestrial and marine, see Zhang et al. (2008; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), cultures available, sequences xxxxxxxx, holotype of type: K(M)-IMI 12081.

Ulurua Trappe, Claridge & Kovács 2010, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *U. nonparaphysata* Trappe & Claridge, asexual morph unknown, hypogeous, terrestrial, Northern Territory, see Trappe et al. (2010; taxonomy, phylogeny), isotype of the type: OSC 131126, sequences are available.

Umbellidion B. Sutton & Hodges 1975, *Ascomycota* genera *incertae sedis*, one species, type: *U. radulans* B. Sutton & Hodges, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Umbilicaria Hoffm [nom.cons.] 1789, *Umbilicariaceae*, *Umbilicariales*, *Lecanoromycetes*, 70 species, type: *U. exasperata* Hoffm., asexual morph unknown, lichenized, terrestrial, worldwide, see Hájek et al. (2009; physiological exp.), Hestmark (2009; taxonomy, new records), Krzewicka (2009; molecular), Krzewicka and Wilk (2009; new species), Lee, et al. (2009; bioactivity study), Luo et al. (2009; antioxidant study), Ranković et al. (2009; bioactivity study), Seo et al. (2009; bioactivity study), Hestmark (2010; taxonomy), Hestmark et al. (2010; molecular), Kim et al. (2010; bioactivity study), Krzewicka (2010; combination), Lumbsch and Huhndorf (2010; outline), Manojlovic et al. (2011; antimicrobial study), Harańczyk et al. (2012; experimental study), Jupa et al. (2012; physiology), Kosanić et al.

(2012; bioactivity study), McCune and Curtis (2012; taxonomy), Bendiksby & Timdal 2013, Buçukoglu et al. (2013; antioxidant study), Singh and Ravindra (2013; environmental study), Kirk et al. (2013; genus accepted), Park et al. (2013; mutagenic study), Hestmark (2014; taxonomy), McCune et al. (2014; new species), Tibell (2014; taxonomy), Wang et al. (2014; antithrombotic study), Cao et al. (2015; molecular), Du et al. (2015; bioactivity study), Bogdanović et al. (2016; floristic), Davydov, and Ohmura (2016; taxonomy), Hestmark (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Umbilithecium Etayo 2002, *Lecanoromycetes* genera *incertae sedis*, one species, type: *U. pseudocyphellariae* Etayo., asexual morph unknown, parasymbiont on macrolichens of *Pseudocyphellaria*, terrestrial, South America, see Etayo and Sancho (2008; morphology, distinction of similar lichenicolous genera), needs revision, holotype of the type: MAF Etayo 23090, cultures and sequences are unavailable.

Umthunziomyces Crous & M.J. Wingf. 2016, *Planistromellaceae*, *Botryosphaeriales*, *Dothideomycetes*, one species, type: *U. hagahagensis* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22873, CPC 29917.

Umushamyces Etayo 2002, *Scoliciosporaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *U. kuturnum* Etayo., asexual morph unknown, parasymbiont on *Coccotrema*, terrestrial, South America, see Etayo and Sancho (2008; morphology, distinction of similar lichenicolous genera), need revision, holotype of the type: MAF Etayo 22460, cultures and sequences are unavailable.

Uncinocarpus Sigler & G.F. Orr 1976, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, three species, type: *U. reesii* Sigler & G.F. Orr, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available for the type (unpublished).

Uncispora R.C. Sinclair & Morgan-Jones 1979, *Chaetothyriales* genera *incertae sedis*, *Eurotiomycetes*, three species, type: *U. harroldiae* R.C. Sinclair & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, China, North America, see Seifert et al. (2011; morphology), Yang et al. (2011; new species, China, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Li et al. (2015; new species; DNA), cultures and sequences are available but lacks for the type:, generic placement is based on no-type:, needs generic revision.

Underwoodia Peck 1890, *Helvellaceae*, *Pezizales*, *Pezizomycetes*, three species, type: *U. columnaris* Peck., asexual morph unknown, saprobes, from soil, terrestrial, worldwide, see Bonito et al. (2013; DNA, phylogeny, stated that the genus is polyphyletic), Kirk et al. (2013; genus accepted), sequences are available for the type: U42658 (SSU).

Unguicularia Höhn. 1905, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *U. unguiculata* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision.

Unguiculariella K.S. Thind & R. Sharma 1990, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *U. bhutanica* K.S. Thind & R. Sharma, asexual morph unknown, saprobes, terrestrial, Bhutan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Unguiculariopsis Rehm 1909 (= *Deltosperma* W.Y. Zhuang 1988 *fide* Johnston et al. 2014), *Cordieritidaceae*, *Helotiales*, *Leotiomycetes*, 25 species, type: *U. ilicincola* (Berk. & Broome) Rehm, asexual morph formerly known in *Deltosperma*, fungicolous and lichenicolous, terrestrial, worldwide, see Etayo and Sancho (2008; new species), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Helotiaceae*), Brackel (2011; new species), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Pärtel et al. 2016; DNA,

phylogeny), Wijayawardene et al. (2017; outline, taxonomy), cultures and sequences are available but lacks for the type.

Unguiculella Höhn. 1906, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, 17 species, type: *U. falcipila* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Uniseta Ciccar. 1948, *Ascomycota* genera *incertae sedis*, one species, type: *U. flagellifera* (Ellis & Everh.) Ciccar., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Unisetosphaeria Pinnoi, E.B.G. Jones, McKenzie & K.D. Hyde 2003, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, one species, type: *S. styracum* Speg., asexual morph unknown, saprobes, terrestrial, Thailand, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Urceolella Boud. 1885, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, 24 species, type: *U. crispula* (P. Karst.) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Baral et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), sequences are available for voucher TNS-F18014 of the type, needs generic revision.

Uredinophila Rossman 1987, *Dothideomycetes* genera *incertae sedis*, two species, type: *U. tropicalis* (Speg.) Rossman, asexual morph unknown, parasitic on *Pucciniales* on leaves of *Dryopteris tetragona*, Venezuela, see Boonmee et al. (2014), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Urnula Fr. 1849, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, ten species, type: *U. craterium* (Schwein.) Fr., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Pfister et al. (2008; phylogeny), Lumbsch and Huhndorf (2010; outline), Carbone et al. (2013; new species, DNA, phylogeny), Kirk et al. (2013; genus accepted), Wang and Huang (2015; new species, DNA, phylogeny), sequences are available for voucher DHP 04-511 (FH) of the type.

Urohendersonia Speg. 1902, *Ascomycota* genera *incertae sedis*, five species, type: *U. platensis* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, South America, India, see Wijayawardene et al. (2012, 2014, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Urohendersoniella Petr. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *U. mastigospora* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2014, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Uropolystigma Maubl. 1920, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *U. atrotestaceum* Maubl., in living leaves, Brazil, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Urosporella G.F. Atk. 1897, *Clypeosphaeriaceae*, *Amphisphaeriales*, *Sordariomycetes*, two species, type: *U. americana* G.F. Atk., cosmopolitan, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Urosporellopsis W.H. Hsieh, Chi Y. Chen & Sivan. 1994, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *U. taiwanensis* W.H. Hsieh, Chi Y. Chen & Sivan., asexual morph unknown, saprobes, Taiwan, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype IMI 354629, cultures and sequences are unavailable.

Ursicollum Gryzenh. & M.J. Wingf. 2006, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *U. fallax* Gryzenh. & M.J. Wingf., coelomycetous, sexual morph unknown, pathogens, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type cultures of type: PREM 58840, CMW 18119 = CBS 118663.

Urupe Viégas 1944, *Sordariomycetes* genera *incertae sedis*, one species, type: *U. guadaua* Viégas, asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae* and placed in *Sordariomycetes* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Usnea Dill. ex Adans., 1763, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, c. 350 species, type: *U. florida* (L.) Weber ex Wigg., asexual morph unknown, lichenized, terrestrial, world wide, see Duman et al. (2008; usnic acid content), Hauck and Jürgens (2008; acidity tolerance), Hong et al. (2008; Anti-tuberculosis compound), Malhotra et al. (2008; traditional medicine), Schmeda-Hirschmann et al. (2008; antifungal and antiprotozoal depside), Verma et al. (2008; antioxidant and hepatoprotective activity), Wirtz et al. (2008; ecology, cohesion approach), Behera et al. (2009; culture optimization and antioxidant), Biazrov (2009; red-list), Kolanko and Matwiejuk (2009; new to Białowieża Primeval Forest), Randle et al. (2009; Key), Lumbsch and Huhndorf (2010; outline), Öztürk and Güvenç (2010; records from Black Sea region of Turkey), Pérez-Vargas et al. (2010; new species), Suetina and Glotov (2010; Ontogeny and morphogenesis), Clerc (2011, Notes), Çobanoğlu (2011, new records), Gumboski and Eliasaro (2011; checklist of Santa Catarina, Brazil), Kelly et al. (2011; DNA barcoding), Lauri et al. (2011; phylogenetic relations), Li et al. (2011; biomass, diversity), Verma et al. (2011; cytochrome study), Ohmura (2012; synopsis of *Usnea*), Schiefelbein et al. (2012; floristic), Thippeswamy et al. (2012; antimicrobial activity), Türkez et al. (2012; cytogenetic and biochemical study), Verma et al. (2012; glucosidase inhibitory and radical scavenging properties), Wirtz (2012; phylogeny), Kirk et al. (2013; accepted as a valid genus), Truong et al. (2013; molecular, species delimitation), Ohmura (2014; New to Asia), Shukla et al. (2014; taxonomy, India), Tõrra (2014; marker characterization), Kosanić and Ranković (2015; antibiotic agents), Sivas (2015; antigenotoxic effect), Çobanoğlu et al. (2016; antimicrobial activity), Lücking et al. (2016; classification), Mark et al. (2016; circumscribed species, phylogeny), Truong and Clerc (2016; new species and new records, South America), Yang et al. (2016; anticancer activity), sequences are available.

Usnocetraria M.J. Lai & J.C. Wei 2007, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *U. oakesiana* (Tuck.) M.J. Lai & J.C. Wei, lichenized, see Thell et al. (2009, 2012; taxonomy), Lücking et al. (2016; classification), sequences are available.

Usnochroma Søchting, Arup & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *U. carphineum* (Fr.) Søchting, Arup & Frödén, asexual morph unknown, lichenized, terrestrial, France, South Africa, see Arup et al. (2013; taxonomy, phylogeny), Gaya et al. (2015; DNA), Lücking et al. (2016; classification); sequences are available. cultures available for the type: Ccar201 (fide Gaya et al. 2015).

Ustilaginoidea Bref. 1895 (= *Villosiclava* E. Tanaka & C. Tanaka 2009 fide Rossman et al. 2016), *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, six species, type: *U. oryzae* (Pat.) Bref., hyphomycetous, sexual morph unknown, saprobes, terrestrial, subtropical, see Seifert et al. (2011; morphology), Kepler et al. (2012; DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures and sequences are available.

Utriascus Réblová 2003, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *U. gabretae* Réblová, asexual morph unknown, lichenicolous, terrestrial, Czech

Republic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Uvarispora Goos & Piroz. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *U. lignicola* Goos & Piroz., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Uwemyces Hern. -Restr., G.A. Sarria & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *U. elaeidis* (Steyaert) Hern.-Restr., G.A. Sarria & Crous, hyphomycetous, sexual morph unknown, plant pathogenic on *Elaeis guineensis*, *Arecaceae*, terrestrial, see Braun et al. (2014; morphology), Crous et al. (2016, morphology, phylogeny), representative culture CPUwZC-01.

Uwemyces Hern. -Restr., G.A. Sarria & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *U. elaeidis* Hern. -Restr., G.A. Sarria & Crous, hyphomycetous, associated with leaf spots, terrestrial, Australia, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), culture and sequences are available.

Vagicola K.W.T. Chethana & K.D. Hyde 2015, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *V. vagans* (Niessl) O. Eriksson, asexual morph unknown, saprobes, terrestrial, worldwide, see Ariyawansa et al. (2015; taxonomy), holotype of type species UPS:BOT:F-169873, cultures and sequences are available for the type species.

Vaginatispora K.D. Hyde 1995, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *V. aquatica* K.D. Hyde, asexual morph unknown, saprobic, fresh water or terrestrial, Hong Kong, Japan, Thailand, all species have sequence data, see Kirk et al. (2013; genus accepted), Thambugala et al. (2015b; morphology, phylogeny, accepted as a genus in *Lophiostomataceae*), Wanasinghe et al. (2016; morphology, phylogeny), ex-type strains of type: MFLUCC 11-0083 = IFRDCC 2462; holotype MFLU 11-1115.

Vagnia D. Hawksw. & Miadl. 1997, *Ascomycota* genera *incertae sedis*, one species, type: *V. cirriformia* D. Hawksw. & Miadl., lichenicolous, Europe, terrestrial, see Kirk et al. (2013; genus accepted), culture and sequences are unavailable, holotype of type: K(M)-IMI 371358.

Vahliella P.M. Jørg. 2008, *Vahliellaceae*, *Peltigerales*, *Lecanoromycetes*, eight species, type: *V. leucophaea* (Vahl) P.M. Jørg., asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Wedin and Jørgensen (2011; new species), Wedin et al. (2011; phylogeny), Perez-Vargas et al. (2014; new species), Lücking et al. (2016; classification), cultures and sequences are available, sequences are available.

Vainionora Kalb 1991, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, nine species, type: *V. pallidostraminea* (Vain.) Kalb, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Papong and Lumbsch (2011; taxonomy), Menezes et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Papong et al. (2013; molecular), Lücking et al. (2016; classification), sequences are unavailable.

Valdensia Peyronel 1923 (= *Valdensinia* Peyronel 1953 *fide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *V. heterodoxa* Peyronel, asexual morph formerly known in *Valdensinia*, saprobes, terrestrial, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Nekoduka et al. (2012; pathogens, Japan), Kirk et al. (2013; genus accepted), cultures available for the type: HBI0401 (*fide* Nekoduka et al. 2012), needs generic revision.

Valetoniella Höhn. 1909, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *V. crucipila* Höhn., asexual morph unknown, saprobes, or fungicolous, terrestrial, tropics, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline),

Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Valetiellopsis Samuels & M.E. Barr 1998, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *V. laxa* Samuels & M.E. Barr, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 191.97.

Valsalnicola D.M. Walker & Rossman 2012, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *V. oxystoma* (Rehm) D. Walker & Rossman, asexual morph dimorphic, pathogens, saprobes, terrestrial, Europe, America, see Crous et al. (2012; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), lectotype of the type: BPI 884138, cultures available for the type: AR4833.

Valsaria Ces. & De Not., Comm. 2015, *Valsariaceae*, *Valsariales*, *Dothideomycetes*, 140 epithets, type: *V. insitiva* (Tode) Ces. & De Not. 1863, asexual morph coelomycetous, saprobes, terrestrial, widely distributed, see Glawe (1985; sexual and asexual morphs, morphology), Ju et al. (1996), Lumbsch and Huhndorf (2010; outline), Jaklitsch et al. (2015; sexual and asexual morphs, morphology, phylogeny).

Vamsapriya Gawas & Bhat 2006, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, four species, type: *V. indica* Gawas & Bhat 2006, hyphomycetous, saprobes, terrestrial, India, Thailand, see Gawas and Bhat (2005, morphology), Pratibha and Bhat (2008, morphology), Dai et al. (2014b, asexual morph, morphology, phylogeny, 2016; sexual morph, morphology, phylogeny), ex-epitype culture of type: MFLUCC 12–0544 = ICMP 20734.

Vanakripa Bhat, W.B. Kendr. & Nag Raj 1993, *Ascomycota* genera *incertae sedis*, nine species, type: *V. gigaspora* Bhat, W.B. Kendr. & Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Brazil, see Arias Mota et al. (2008; new species), Hu et al. (2010; new species, China), Mel'nik et al. (2011; new species, Vietnam), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Leão-Ferreira et al. (2013; new species; Brazil), cultures and sequences are unavailable, needs generic revision.

Vanbeverwijkia Agnihotr. 1961, *Ascomycota* genera *incertae sedis*, one species, type: *V. spirospora* Agnihotr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Assam, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Vanderwaltozyma Kurtzman 2003, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, two species, type: *V. polyspora* (van der Walt) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, soil, cactus fruit, tanning fluids, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

Vanderystiella Henn. 1908, *Ascomycota* genera *incertae sedis*, one species, type: *V. leopoldvilleana* Henn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Vanterpoolia A. Funk 1982, *Ascomycota* genera *incertae sedis*, one species, type: *V. tsugae* A. Funk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Varicellaria Nyl. 1858, *Ochrolechiaceae*, *Pertusariales*, *Lecanoromycetes*, seven species, type: *V. microsticta* Nyl., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Schmitt et al. (2012; circumscription), Kirk et al. (2013; genus accepted), Ren and Li (2013; new record), Miadlikowska et al. (2014; molecular), Lücking et al. (2016; classification), cultures and sequences are unavailable for type.

Varicosporium W. Kegel 1906, *Helotiales* genera *incertae sedis*, *Leotiomyces*, eleven species, type: *V. elodeae* W. Kegel, hyphomycetous, sexual morph unknown, in soil, saprobes, terrestrial, aquatic, worldwide, see Campbell et al. (2009; phylogeny, polyphyletic), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Baschien et al. (2016; DNA, phylogeny), cultures available for the type: CBS 541.92, needs generic revision.

Variocladium Descals & Marvanová 1998, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *V. rangiferinum* (Descals) Descals & Marvanová, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, temperate, see Campbell et al. (2009; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 508.71 (unpublished), needs generic revision.

Variospora Arup, Søchting & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, twelve species, type: *V. velana* (A. Massal.) Arup, Søchting & Frödén, asexual morph unknown, lichenized, terrestrial, Europe, North Africa, see Arup et al. (2013; taxonomy, phylogeny), Kondratyuk et al. (2014; DNA), Gaya et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification); cultures available for the type: Cavel192, sequences are available.

Vasudevella Chona, Munjal & Bajaj 1957, *Ascomycota* genera *incertae sedis*, one species, type: *V. sporoboli* Chona, Munjal & Bajaj, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Velloziomyces Armando, Z.M. Chaves & Dianese 2015, *Ascomycota* genera *incertae sedis*, one species, type: *V. ramosiconidialis* Armando, Z.M. Chaves & Dianese, hyphomycetous, sexual morph unknown, on living leaves, terrestrial, Brazil, see Armando et al. (2015; morphology), holotype of the type: UBMC 8849, cultures and sequences are unavailable, compare with *Dictyodochium*, *Minimidochium* and *Iyengarina*.

Velutaria Fuckel 1870, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *V. griseovitellina* (Fuckel) Fuckel, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Velutarina Korf 1971, *Helotiaceae*, *Helotiales*, *Leotiomyces*, three species, type: *V. rufolivacea* (Alb. & Schwein.) Korf, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Perić et al. (2015; new species), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

Velutipila D. Hawksw. 1987, *Ascomycota* genera *incertae sedis*, one species, type: *V. poeltii* D. Hawksw., algicolous, terrestrial, Europe, hyphomycetous, sexual morph unknown, see Seifert et al. (2011; genus accepted), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of type: K(M)-IMI 309488.

Ventrographium H.P. Upadhyay, Cavalc. & A.A. Silva 1986, *Ascomycota* genera *incertae sedis*, one species, type: *V. nervicola* H.P. Upadhyay, Cavalc. & A.A. Silva, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Venturia Sacc. 1882 (= *Fusicladium* Bonord. 1851; = *Pollaccia* E. Bald. & Cif. 1937 *vide* Rossman et al. 2015), *Venturiaceae*, *Venturiales*, *Dothideomycetes*, c. 60 species, type: *V. inaequalis* (Cooke) G. Winter, asexual morph hyphomycetous, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; phylogeny),

Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures and sequences are available.

Venturiocistella Raitv. 1979, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *V. venturioides* (Sacc. & Roum.) Raitv., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hosoya et al. (2011; taxonomy, DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Venustocephala Matsush. 1995, *Ascomycota* genera *incertae sedis*, two species, type: *V. aequatorialis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Venustosynnema R.F. Castañeda & W.B. Kendr. 1990, *Ascomycota* genera *incertae sedis*, three species, type: *V. ciliatum* (R.F. Castañeda, G.R.W. Arnold & A.G. Guerra) R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, Taiwan, see Castaneda Ruiz et al. (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Kirschner and Liu (2014; new species, Taiwan), cultures and sequences are unavailable, needs generic revision.

Veracruzomyces Mercado, Guarro, Heredia & J. Mena 2002, *Ascomycota* genera *incertae sedis*, one species, type: *V. obclavatus* Mercado, Guarro, Heredia & J. Mena, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Veramyrella G. Delgado 2009, *Ascomycota* genera *incertae sedis*, one species, type: *V. bispora* G. Delgado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Veramyces Matsush. 1993, *Ascomycota* genera *incertae sedis*, one species, type: *V. manuensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Verdipulvinus A.W. Ramaley 1999, *Ascomycota* genera *incertae sedis*, one species, type: *V. nolinae* A.W. Ramaley, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Vermiconia Egidi & Onofri 2014, *Extremaceae*, *Capnodiales*, *Dothideomycetes* genera *incertae saedis*, four species, type: *V. foris* D. Isola & L. Selbmann, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Isola et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 136106 = CCFEE 5459.

Vermiculariopsiella Bender 1932, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, 19 species, type: *V. immersa* (Desm.) Bender, hyphomycetous, sexual morph unknown, saprobes, worldwide, see Dhargalkar and Bhat (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Hernández-Restrepo et al. (2012; new species), Kirk et al. (2013; genus accepted), Dubey and Moonambeth (2014; new species), Crous et al. (2016; new species, phylogeny), cultures and sequence available but lack for the type, generic placement is based on non-type, needs generic revision.

Vermispora Deighton & Piroz. 1972, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, seven species, type: *V. grandispora* Deighton & Piroz., hyphomycetous, sexual morph unknown, fungicolous, nematode cysts, in soil, terrestrial, Africa, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Veronaea Cif. & Montemart. 1957, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, 21 species, type: *V. botryosa* Cif. & Montemart., asexual morph unknown, saprobes, fungicolous, on dung, on soil, worldwide, see Soares, and Barreto (2008; new species), Chlebicki (2009; new species), Pan et al. (2009; new species, China), de Hoog et al. (2011; DNA), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 254.57.

Veronaella Subram. & K.R.C. Reddy 1975, *Ascomycota* genera *incertae sedis*, one species, type: *V. indica* Subram. & K.R.C. Reddy, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Veronaeopsis Arzanlou & Crous 2007, *Sympoventuriaceae*, *Venturiales*, *Dothideomycetes*, one species, type: *V. simplex* (Papendorf) Arzanlou & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Zhang et al. (2011; accepted as a genus in *Sympoventuriaceae*), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Sympoventuriaceae*), Samerpitak et al. (2014; phylogeny), holotype and ex-type culture of the type: CBS H-7810, CBS 588.66 = IMI 203547.

Veronaia Benedek 1961, *Eurotiomycetidae* genera *incertae sedis*, *Eurotiomycetes*, two species, type: *V. castellanii* Benedek, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Veronidia Negru 1964, *Ascomycota* genera *incertae sedis*, one species, type: *V. oxycocci* Negru, coelomycetous, sexual morph unknown, saprobes, terrestrial, Rumania, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Verpa Sw. 1815, *Morchellaceae*, *Pezizales*, *Pezizomycetes*, five species, type: *V. conica* (O.F. Müll.) Sw., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Osmundson et al. (2013; DNA), cultures available for type: AFTOL-ID 74 (unpublished).

Verrucaria Schrad. [nom. cons.] 1794, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 300 species, type: *V. rupestris* Schrad., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

Verrucariella S. Ahmad 1967, *Ascomycota* genera *incertae sedis*, one species, type: *V. capparicola* S. Ahmad, coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Verrucocladosporium K. Schub., Crous & Aptroot 2007, *Cladosporiaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *V. dirinae* K. Schub., Crous & Aptroot, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, temperate, see Braun et al. (2009; new species), Seifert et al. (2011; outline), Wijayawardene et al. (2012, 2014, 2017; outline), holotype and available cultures of the type: CBS H-19883, CBS 112794.

Verrucoconiothyrium Crous 2015, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *V. nitidae* (Crous & Denman) Crous, coelomycetous, sexual morph

unknown, saprobes, Germany, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016, 2017; outline, phylogeny), holotype of the type species PREM 55346.

Verruconis Samerp., H.J. Choi, Van den Ende, Horré & de Hoog 2013, *Sympoventuriaceae*, *Venturiales*, *Dothideomycetes*, one species, type: *V. gallopava* (W.B. Cooke) Samerpitak & de Hoog, hyphomycetous, sexual morph unknown, saprobes, human pathogen, terrestrial, South Africa, see Giraldo et al. (2014; phylogeny), Samerpitak et al. (2014, 2016; phylogeny, barcoding), Seyedmousavi et al. (2014; antifungal susceptibility), Wijayawardene et al. (2014, 2017; outline), Geltner et al. (2015; Necrotizing mycosis), ex-type cultures of the type: CBS 437.64= MUCL 6683=IFM 52605.

Verrucophragmia Crous, M.J. Wingf. & W.B. Kendr. 1994, *Ascomycota genera incertae sedis*, one species, type: *V. splendens* Crous, M.J. Wingf. & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: PREM 51441, cultures and sequences are unavailable, needs generic revision.

Verrucoplaca S.Y. Kondr., Kärnefelt, Elix, A. Thell & J.S. Hur 2014, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *V. verruculifera* (Vain.) S.Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.N. Yu, A.S. Kondratiuk & J.S. Hur, asexual morph unknown, lichenized, terrestrial, Europe, see Kondratyuk et al. (2014; taxonomy, DNA), Gaya et al. (2015; DNA, phylogeny), cultures and sequences are unavailable, needs generic revision.

Verrucostoma Hirooka, Tak. Kobay. & P. Chaverri 2010, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *V. freycinetiae* Hirooka, Tak. Kobay. & P. Chaverri, asexual morph acremonium-like, saprobes, terrestrial, tropical, see Hirooka et al. (2010; taxonomy), Crous et al. (2015; new specie), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BPI 878948, cultures and sequences are available.

Verruculina Kohlm. & Volkm.-Kohlm. 1990, *Testudinaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *V. enalia* (Kohlm.) Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, Liberia, see Suetrong et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Didymosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Testudinaceae*), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), cultures available for the type: BCC 18402.

Verruculopsis Gueidan, Nav.-Ros. & Cl. Roux 2007, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, six species, type: *V. poeltiana* (Clauzade & Cl. Roux) Gueidan, Nav.-Ros. & Cl. Roux, asexual morph unknown, lichenized, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Krzewicka (2012; new species, Poland), Kukwa and Pérez-Ortega (2012; phylogeny), Lücking et al. (2016; classification); sequences are available, cultures available for the type: AFTOL-ID 2298, needs generic revision.

Vertxicola K.D. Hyde, Ranghoo & S.W. Wong 2000, *Annulatasceae*, *Annulatascales*, *Sordariomycetidae*, two species, type: *V. caudatus* K.D. Hyde, S.W. Wong & Ranghoo, asexual morph unknown, saprobes, fresh water, terrestrial, Philippines, Hong Kong, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Barbosa et al. (2013; new species, Costa Rica), Maharachchikumbura et al. (2016; outline), holotype of the type: HKU (M) 3108, cultures and sequences are available but lacks for the type, needs generic revision.

Verticicladus Matsush. 1993, *Ascomycota genera incertae sedis*, three species, type: *V. amazonensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, Africa, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Guo et al. (2015; new species), cultures and sequences are unavailable, needs generic revision.

Verticillium Nees 1816, *Plectosphaerellaceae*, *Glomerellales*, *Sordariomycetes*, c. 20 species (in strict sense), type: *V. dahliae* Kleb., hyphomycetous, Hyde et al. (2011; outline), Seifert et

al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type species ATCC 16535.

Verticimonosporium Matsush. 1971, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *V. diffractum* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, North and South America, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures available for the type: NRRL 26545, needs generic revision.

Vesicladiella Crous & M.J. Wingf. 1994, *Ascomycota* genera *incertae sedis*, two species, type: *V. capitata* (B. Sutton) Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, Australia, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), holotype of type: IMI163277a.

Vesiculohyphomyces Armando, Pereira-Carv. & Dianese 2009, *Ascomycota* genera *incertae sedis*, one species, type: *V. cerradensis* Armando, Pereira-Carv. & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Pereira-Carvalho et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: UB (Mycol. Col.) 14595, cultures and sequences are unavailable, needs generic revision.

Vestergrenia Rehm 1901, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, 13 species, type: *V. nervisequia* Rehm, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Vestergrenopsis Gyeln. 1940, *Koerberiaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *V. elaeina* (Wahlenb. ex Ach.) Gyeln., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Spribille and Muggia (2013; new species, DNA, phylogeny), sequences are available for voucher Spribille 24525 (KLGO) of the type, Lücking et al. (2016; classification), sequences are available.

Vestigium Piroz. & Shoemaker 1972, *Ascomycota* genera *incertae sedis*, two species, type: *V. felicis* Piroz. & Shoemaker, coelomycetous, sexual morph unknown, saprobes, aquatic, cosmopolitan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Shoemaker et al. (2013; new species), cultures and sequences are available, needs generic revision.

Vezenia Tscherm.-Woess & Poelt 1976, *Vezeniaeaceae*, *Vezeniales*, *Sordariomycetes*, twelve species, type: *V. aestivalis* (Ohlert) Tscherm.-Woess & Poelt, asexual morph unknown, lichenized, saprobes, Europe, see Czarnota and Kukwa (2009; Poland), Lumbsch et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification) cultures and sequences are available, needs generic revision.

Vialaea Sacc. 1896, *Vialaeaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *V. insculpta* (Fr.) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for the type: AFTOL-ID:1302.

Vibrissea Fr. 1822 (= *Anavirga* B. Sutton 1975 *vide* Johnston et al. 2014), *Vibrisseaceae*, *Helotiales*, *Leotiomycetes*, 34 species, type: *V. truncorum* (Alb. & Schwein.) Fr., asexual morph formerly known in *Anavirga*, saprobes, aquatic or semiaquatic, worldwide, see Grünig et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Hustad and Miller (2011; DNA, phylogeny), Raja et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures available for the type: CBS 143.92.

Viegasella Inácio & P.F. Cannon 2003, *Parmulariaceae*, *Dothideomycetes* genera *incertae sedis*, one species, type: *V. pulchella* (Speg.) Inácio & P.F. Cannon, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, listed as *Viegasiella*), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), holotype of type: LPS, cultures and sequences are unavailable, needs generic revision.

Vigneronia Ertz 2015, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *V. spieri* (Aptroot & Sparrius) Ertz & Bungartz, sexual morph with lirelliform ascomata, lichenized, terrestrial, neotropical, see Ertz et al. (2015; morphology, phylogeny); Lücking et al. (2016; classification); sequences are available, holotype and ex-type strain of the type: Aptroot 65014 (CDS31595).

Villophora Søchting, Arup & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *V. isidioclada* (Zahlbr.) Søchting, Frödén & Arup, asexual morph unknown, lichenized, saxicolous or epiphytic, terrestrial, southern hemisphere, see Arup et al. (2013; taxonomy, phylogeny), Kondratyuk et al. (2015; new species, DNA, phylogeny), Lücking et al. (2016; classification); sequence available for the type: KC179325 (ITS) (fide Arup et al. 2013).

Violella T.Sprib. 2011, *Tephromelataceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *V. fucata* (Stirt.) T. Sprib., lichenized, see Spribille et al. (2011; taxonomy), Lücking et al. (2016; classification), sequences are available.

Virgaria Nees 1816, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, 16 species, type: *V. nigra* (Link) Nees, asexual morph unknown, saprobes, terrestrial, Africa, Australia, Europe, Japan, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Nonaka et al. (2013; new species, Japan, DNA), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: NBRC 9453.

Virgariella S. Hughes 1953, *Ascomycota* genera *incertae sedis*, eleven species, type: *V. globigera* (Sacc. & Ellis) S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Virgatospora Finley 1967, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *V. echinofibrosa* Finley, hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Lombard et al. (2016; phylogeny), Wijayawardene et al. (2017; outline), culture available for the type: CBS.

Virgella Darker 1967, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *V. robusta* (Tubef) Darker, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Viridiannula Etayo 2002, *Ascomycota* genera *incertae sedis*, one species, type: *V. pertusariae* Etayo, coelomycetous, sexual morph unknown, parasymbiont, terrestrial, Spain, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs revision, holotype of the type: hb. Etayo, Etayo 14496.

Viridothelium Lücking, M.P. Nelsen & Aptroot 2016, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, ten species, type: *V. virens* (Tuck. ex Michener) Lücking, M.P. Nelsen & Aptroot, asexual morph unknown, lichenized fungi, terrestrial, tropical, placement in *Trypetheliaceae* supported by molecular data, Aptroot and Lücking (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Vishnumyces Hosag. 2010, *Dothideomycetes* genera *incertae sedis*, one species, type: *V. otonephelii* Hosag. & Harish, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hosagoudar and Harish (2010;

taxonomy, accepted as a genus in *Asterinaceae*), Hyde et al. (2013) and Hongsanan et al. (2014c) did not treat as a genus in *Asterinaceae*, Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Vismaya V.V. Sarma & K.D. Hyde 2001, *Diaporthales* genera *incertae sedis*, one species, type: *V. chaturbeeja* V.V. Sarma & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Hong Kong, see Lumbsch and Huhndorf (2010; outline, listed as *Vismya*), Maharachchikumbura et al. (2015, 2017; outline), lectotype of the type: HKU (M) 12457, cultures and sequences are unavailable, needs generic revision.

Vitreostroma P.F. Cannon 1991, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *V. desmodii* (Henn.) P.F. Cannon, in living leaves, montane paleotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Vittalia Gawas & Bhat 2007, *Ascomycota* genera *incertae sedis*, one species, type: *V. indica* Gawas & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Vittatispora P. Chaudhary, J. Campb., D. Hawksw. & K.N. Sastry 2006, *Ceratostomataceae*, *Melanosporales*, *Sordariomycetes*, one species, type: *V. coorgii* P. Chaudhary, J. Campb., D. Hawksw. & K.N. Sastry, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for the type: BICC 7817.

Vivantia J.D. Rogers, Y.M. Ju & Cand. 1996, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *V. guadalupensis* J.D. Rogers, Y.M. Ju & Cand., asexual morph hyphomycetous, terrestrial, saprobes, Guadeloupe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Vizella Sacc. 1883, *Vizellaceae*, *Dothideomycetes* genera *incertae sedis*, eleven species, type: *V. conferta* (Cooke) Sacc., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Vizellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Vizellopsis Bat., J.L. Bezerra & T.T. Barros 1969, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, one species, type: *V. grevilleae* Bat., J.L. Bezerra & T.T. Barros, asexual morph unknown, foliar epiphytes, terrestrial, New Caledonia, see Lumbsch and Huhndorf (2010; outline, accepted as *Dothideomycetes* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Dai et al. (2014; accepted as a genus in *Asterinaceae* based on morphology), Hongsanan et al. (2014; taxonomy, accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; 2017; outline), cultures and sequences are unavailable, needs generic revision.

Vladracula P.F. Cannon, Minter & Kamal 1986, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, two species, type: *V. annuliformis* (Syd., P. Syd. & E.J. Butler) P.F. Cannon, Minter & Kamal, asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Vleugelia J. Reid & C. Booth 1969, *Sordariomycetes* genera *incertae sedis*, one species, type: *V. betulina* (Bubák & Vleugel) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Volkartia Maire 1907, *Protomycetaceae*, *Taphrinales*, *Taphrinomycetes*, one species, type: *V. rhaetica* (Volkart) Maire, asexual reproduction is unknown, plant parasite, parasitic on species of *Asteraceae*, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Volutella Fr. 1832 (= *Volutellonectria* J. Luo & W.Y. Zhuang *vide* Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, c. 25 species, type: *V. ciliata* (Alb. & Schwein.) Fr., hyphomycetous, sexual morph formerly known in *Volutellonectria* (see Luo and Zhuang 2012), saprobe, terrestrial, widespread, see Kirk et al. 2008, Seifert et al. (2011; outline), Gräfenhan et al. (2011, morphology, phylogeny), Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), Rossman et al. (2016; nomenclature), cultures available for type: WBS025, YIMPH30011, GJS 85.205, DAOM:226718, CBS 483.61.

Vonarxella Bat., J.L. Bezerra & Peres 1965, *Saccardiaceae*, *Ascomycota* families *incertae sedis*, one species, type: *V. dipterygis* Bat., J.L. Bezerra & Peres, asexual morph unknown, saprobes, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Vonarxia Bat. 1960, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *V. anacardii* Bat. & J.L. Bezerra, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Crous et al. (2009; DNA, phylogeny, treated as hyphomycetous-i.e. with sporodochial conidioma), Seifert et al. (2011; treated as coelomycetous), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Vouauxiella Petr. & Syd. 1927, *Ascomycota* genera *incertae sedis*, five species, type: *V. verrucosa* (Vouaux) Petr. & Syd., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Europe, South America, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Vrystaatia Quaedvli., W.J. Swart, Verkley & Crous 2013, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *V. aloeicola* Quaedvlieg, Verkley, W.J. Swart & Crous coelomycetous, sexual morph unknown, pathogenic, terrestrial, South Africa, , see Quaedvlieg et al. (2013; morphology, phylogeny), ex-type strains of type: CBS 135107, holotype of type: CBS H-21313.

Vulpicida J.-E. Mattsson & M.J. Lai 1993, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, six species, type: *V. juniperinus* (L.) J.-E. Mattsson & M.J. Lai, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kowalski, et al. (2011; bioactivity study), Kristiina et al. (2012; molecular), Mark et al. (2012; molecular), Kirk et al. (2013; genus accepted), Kubiak and Guzow (2014; taxonomy), Saag et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Wadeana Coppins & P. James 1978, *Ascomycota* genera *incertae sedis*, two species, type: *W. dendrographa* (Nyl.) Coppins & P. James, asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); sequences unavailable.

Wahlenbergiella Gueidan & Thüs 2009, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, three species, type: *W. mucosa* (Wahlenb.) Gueidan & Thüs, asexual morph unknown, lichenized, terrestrial, Europe, see Gueidan et al. (2009, 2011; taxonomy), Lumbsch and Huhndorf (2010; outline), Shivarov et al. (2013; new records, Bulgaria), Higgins et al. (2015; factors in distributing), Lücking et al. (2016; classification); sequences are available, cultures available for the type: AFTOL-ID 2264.

Waihonghopes Yanna & K.D. Hyde 2002, *Ascomycota* genera *incertae sedis*, one species, type: *W. australiensis* Yanna & K.D. Hyde, hyphomycetous, sexual morph unknown,

saprobies, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Wallrothiella Sacc. 1882, *Amplistromataceae*, *Amplistromatales*, *Sordariomycetes*, ten species, type: *W. congregata* (Wallr.) Sacc., asexual morph unknown, saprobies, terrestrial, worldwide, see Huhndorf et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: ANM81, needs generic revision.

Waltonia Saho 1970, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *W. pinicola* Saho, asexual morph unknown, saprobies, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Warcupia Paden & J.V. Cameron 1972, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *W. terrestris* Paden & J.V. Cameron, asexual morph unknown, hypogeous, saprobies, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Barua et al. (2012; environmental adaptations), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 891.69.

Warcupiella Subram. 1972, *Aspergillaceae*, *Eurotiales*, *Eurotiomyces*, three species, type: *W. spinulosa* (Warcup) Subram., asexual morph unknown, saprobies, terrestrial, worldwide, see Houbraken and Samson (2011; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), culture available for type: CBS 430.64.

Wardinella Bat. & Peres 1960, *Ascomycota* genera *incertae sedis*, one species, type: *W. jaboatonensis* Bat. & Peres, coelomycetous, sexual morph unknown, saprobies, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Wardomyces F.T. Brooks & Hansf. 1923, *Microascaceae*, *Microascales*, *Sordariomycetes*, ten species, type: *W. anomalus* F.T. Brooks & Hansf., hyphomycetous, saprobies, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), Sandoval-Denis et al. (2016; new species, phylogeny), cultures and sequences are available.

Wardomyopsis Udagawa & Furuya 1978, *Microascaceae*, *Microascales*, *Sordariomycetes*, four species, type: *W. inopinata* Udagawa & Furuya, hyphomycetous, saprobies, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), Sandoval-Denis et al. (2016; new species, phylogeny), cultures and sequences are available.

Wawea Henssen & Kantvilas 1985, *Arctomiaceae*, *Arctomiales*, *Lecanoromycetes*, one species, type: *W. fruticulosa* Henssen & Kantvilas, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Wawelia Namysl. 1908, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *W. regia* Namysl., asexual morph unknown, terrestrial, coprophilous, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Waydora B. Sutton 1976, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *W. typica* (Rodway) B. Sutton, coelomycetous, sexual morph unknown, saprobies, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for voucher PDD 103894 of the type: (unpublished), needs generic revision.

Waynea Moberg 1990, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, seven species; type: *W. californica* Moberg; lichenized; see Lücking et al. (2016; classification); sequences are available.

Websteromyces W.A. Baker & Partr. 2000, *Ascomycota* genera *incertae sedis*, one species, type: *W. verruculosus* W.A. Baker & Partr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: AUA, Webster, 11 Jul. 1991, cultures and sequences are unavailable, needs generic revision.

Weddellomyces D. Hawksw. 1986, *Dacampiaceae*, *Dothideomycetes* familie *incertae sedis* 14 species, type: *W. epicallopisma* (Weddell) D. Hawksw. (syn. *Verrucaria epicallopisma* Weddell), see Lumbsch & Huhndorf (2010; outline), Kirk et al. (2013; accepted), Jaklitsch et al. 2016; position), sequences are unavailable, isotype of type: H-Nyl 391.

Wegea Aptroot & Tibell 1997, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *W. tylophorelloides* Aptroot & Tibell, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted), sequences are unavailable.

Wehmeyera J. Reid & C. Booth 1989, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *W. acerina* (Wehm.) J. Reid & C. Booth, asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Weinmannioscyphus Svrček 1977, *Helotiaceae*, *Helotiales*, *Leotiomyces*, one species, type: *W. messerschmidii* (Weinm.) Svrček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Wentiomycetes Koord. 1907, *Dothideomycetes* genera *incertae sedis*, c. 50 species, type: *W. javanicus* Koord., Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Wenyngia Zheng Wang & Pfister 2001, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *W. sichuanensis* Zheng Wang & Pfister, asexual morph unknown, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Westea H.J. Swart 1988, *Dothideomycetes* genera *incertae sedis*, one species, type: *W. banksiae* H.J. Swart, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Westerdykella Stolk 1955, *Sporormiaceae*, *Pleosporales*, *Dothideomycetes*, 49 species, type: *W. ornata* Stolk, asexual morph unknown, saprobes, terrestrial, worldwide, see Kruys and Wedin (2009; new species), Schoch et al. (2009; phylogeny), Asgari and Zare (2010; new species), Lumbsch and Huhndorf (2010; outline), Ebead et al. (2012; new species), Armentano et al. (2013; pathogens of dogs), de Gruyter et al. (2013; new species, phylogeny), Hyde et al. (2013; accepted as a genus in *Sporormiaceae*, phylogeny), Wijayawardene et al. (2014; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 379.55 (fide Kruys and Wedin 2009).

Wetmoreana Arup, Söchting & Frödén 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species; type: *W. texana* (Wetmore & Kärnefelt) Arup, Söchting & Frödén, lichenized, see Arup et al. (2013; taxonomy) Kondratyuk et al. (2013; phylogeny), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification), sequences are available.

Wettsteinina Höhn. 1907, *Dothideomycetes* genera *incertae sedis*, 29 species, type: *W. gigantospora* (Rehm) Höhn., saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Weufia Bhat & B. Sutton 1985, *Ascomycota* genera *incertae sedis*, one species, type: *W. tewoldei* Bhat & B. Sutton, hyphomycetous, sexual morph unknown, Africa, Caibbe, see

Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Whalleya J.D. Rogers, Y.M. Ju & F. San Martín 1997, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *W. microplaca* (Berk. & M.A. Curtis) J.D. Rogers, Y.M. Ju & F. San Martín, asexual morph unknown, terrestrial, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Wickerhamia Soneda 1960, *Metschnikowiaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *W. fluorescens* (Soneda) Soneda, saprophytic, Japan, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Wickerhamiella van der Walt 1973, *Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, 25 species, type: *W. domercqiae* van der Walt & Liebenberg, asexual reproduction is by multilateral budding on either a narrow or a broad base, saprophytic, on nitidulid beetles, flowers of morning glory (*Hibiscus* spp.) and cacti, wine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Wickerhamomyces Kurtzman, Robnett & Basehoar-Powers 2008, *Phaffomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, 20 species, type: *W. canadensis* (Wickerham) Kurtzman, Robnett & Basehoar-Powers, asexual reproduction is by multilateral budding, saprophytic, but several species are infrequent clinical isolates, in tree sap fluxes, insect tunnels in trees, leaf litter, berries, soil, tanned leather, soy sauce, blood, lung, eye, worldwide, see de García et al. (2010; new species, DNA), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

Wicklowia Raja, A. Ferrer & Shearer 2010, *Wicklowiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *W. aquatica* Raja, A. Ferrer & Shearer, asexual morph unknown, saprobes, aquatic, USA, see Raja et al. (2010; taxonomy, phylogeny), Ariyawansa et al. (2015; phylogeny), holotype of the type: ILL 40790.

Wiesneriomyces Koord. 1907, *Wiesneriomycetaceae*, *Tubeufiales*, *Dothideomycetes*, two species, type species *W. javanicus* Koord., hyphomycetous, saprobe, terrestrial, widespread, see Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), Suetrong et al. (2014; morphology, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Wilcoxina Chin S. Yang & Korf 1985, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *W. mikolae* (Chin S. Yang & H.E. Wilcox) Chin S. Yang & Korf, asexual morph unknown, hypogeous, saprobes, terrestrial, Europe, North America, see Siemens et al. (2008; mycorrhizal with *Hebeloma crustuliniforme*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures are available for the type: but unpublished, sequence available for the type: DQ220468 (LSU) (fide Perry et al. 2007).

Willeya Müll. Arg. 1883, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, eleven species; type: *W. diffractella* (Nyl.) Müll. Arg., lichenized, see Gueidan et al. (2014a; taxonomy), Gueidan and Lendemer (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

Wirthiotrema Rivas Plata, Kalb, Frisch & Lumbsch 2010, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, seven species, type: *W. glaucopallens* (Nyl.) Rivas Plata & Kalb, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Rivas Plata et al. (2010), Sipman et al. (2012; key), Lücking et al. (2016; classification), sequences are available.

Wojnowiciella Crous, M. Hern.-Restr. & M.J. Wingf. 2015, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, seven species, type: *W. eucalypti* Crous, M. Hern.-Restr. & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see

Crous et al. (2015, 2016; new species, phylogeny), Hernandez-Restrepo et al. (2016; new species, new species, phylogeny), Wijayawardene et al. (2016, 2017; taxonomy, outline, phylogeny), cultures are available.

Wolfina Seaver ex Eckblad 1968, *Chorioactidaceae*, *Pezizales*, *Pezizomycetes*, three species, type: *W. aurantiopsis* (Ellis) Seaver, asexual morph unknown, saprobes, terrestrial, USA, China, see Lumbsch and Huhndorf (2010; outline), Hustad and Miller (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available.

Wolkia Ramsb. 1915, *Ascomycota* genera *incertae sedis*, one species, type: *W. decolorans* (Wolk) Ramsb., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Woodiella Sacc. & P. Syd. 1899, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, three species, type: *W. natalensis* Sacc. & P. Syd., asexual morph unknown, saprobes, terrestrial, South Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Woswasia Jaklitsch, Réblová & Voglmayr 2012, *Sordariomycetidae* genera *incertae sedis*, *Sordariomycetes*, one species, type: *W. atropurpurea* Jaklitsch, Réblová & Voglmayr, asexual morph formed in culture only (penicilliate heads with terminally arranged, sympodially proliferating conidiogenous cells producing simple ellipsoid to obovoid, hyaline, nonseptate conidia holoblastically), myotrophic saprobes, terrestrial, Italy, see Jaklitsch et al. (2013; original description, phylogeny), Réblová et al. (2014; close relationship with *Xylochrysis*), Maharachchikumbura et al. (2015, 2016; outline), sequence are available, holotype and ex-type of type: WU 32007, CBS 133167.

Wuestneia Auersw. ex Fuckel 1864, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, 20 species, type: *W. aurea* (Fuckel) Auersw., forms pycnidial asexual morphs harknessia-like, saprobes, terrestrial, worldwide, see Crous et al. (2012; placement in new family *Harknessiaceae*), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Wynnea Berk. & M.A. Curtis 1867, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, seven species and two variants, type: *W. gigantea* Berk. & M.A. Curtis, saprobes, terrestrial, Asia, North and Central America, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), sequences are available

Wynnella Boud. 1885, *Helvellaceae*, *Pezizales*, *Pezizomycetes*, three species, type: *W. auricula* (Schaeff.) Boud., saprobes, terrestrial, Europe, Asia, North America, see Parslow and Spooner (2009, new species), Kirk et al. (2013; genus accepted), Landeros et al. (2015; phylogeny), Zhao et al. (2016; new species, phylogeny), sequences are available.

Xalocoa Kraichak, Lücking & Lumbsch 2013, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *X. ocellata* (Fr.) Kraichak, Lücking & Lumbsch, asexual morph unknown, lichenized fungi, terrestrial, temperate, see Kraichak et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Xanthocarpia A.Massal. & De Not. 1853, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 13 species, type: *X. ochracea* (Schaer.) A. Massal. & De Not., lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Xanthodactylon P.A. Duvign 1941, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, seven species, type: *X. perforatum* P.A. Duvign, asexual morph unknown, lichenized, terrestrial, see Fedorenko et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zedda and Rambold (2011; environmental study), Kirk et al. (2013; genus accepted), Nyati et al. (2013; phylogeny), sequences are unavailable for type species.

Xanthomendoza S.Y. Kondr. & Kärnefelt 1997, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, 20 species, type: *X. mendozae* (Räsänen) S.Y. Kondr. & Kärnefelt, asexual

morph unknown, lichenized, terrestrial, see Fedorenko et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Lamit et al. (2011; ecology), Messuti et al. (2011; new species), Moniri, et al. (2011; new record), Riddell et al. (2011; air pollution), Bomble (2012; taxonomy), Arup et al. (2013; taxonomy), Hauck et al. (2013; new records), Kirk et al. (2013; genus accepted), Leavitt et al. (2013; taxonomy), Lindblom and Söchting (2013; genetic diversity of photobiont), Nyati et al. (2013; phylogeny), Diederich et al. (2014; new combination), Kondratyuk et al. (2014; phylogeny), Lindblom (2014; taxonomy), Palmer (2014; ecology), Valadbeigi (2014; floristic), Crittenden et al. (2015; ecology), Gaya et al. (2012, 2015; molecular), Holt et al. (2015; ecology), McMullin et al. (2015; new records), Miralles et al. (2015; biostrategy), Suija et al. (2015; new record), Tripp (2015; inventory), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification), sequences are available.

Xanthoparmelia (Vain.) Hale 1974, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 820 species, type: *X. conspersa* (Ehrh. ex Ach.) Hale, asexual morph unknown, lichenized, terrestrial, worldwide, see Elix and Kantvilas (2009; new species), Tuzen et al. (2009; biosorptive study), Dailey et al. (2010; chemical study), Lumbsch and Huhndorf (2010; outline), Pérez-Vargas et al. (2010; new species), Yazici et al. (2010; new records), Hawksworth et al. (2011; checklist), Hodgkinson and Lendemer (2011; molecular), Leavitt and Clair (2011; ecology), Leavitt et al. (2011a, b; taxonomy and molecular), Biazrov (2012; physiology), de Paz et al. (2012; molecular taxonomy), Favero-Longo and Piervittori (2012; transplant expt.), Molnár et al. (2012; molecular), Kirk et al. (2013; genus accepted), Rizzi and Giordani (2013; ecology), Goni et al. (2014; checklist), Jayalal et al. (2014; new species, taxonomy), Laska et al. (2015; chemopreventive activity), Cao et al. (2015; molecular), Diaz (2016; diversity), Lücking et al. (2016; classification), Kanigowski et al. (2016; taxonomy), sequences are available.

Xanthopeltis R.Sant. 1949, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *X. rupicola* R. Sant., lichenized, see Lumbsch and Huhndorf (2010; outline), Arup et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Xanthopsorella Kalb & Hafellner 1984, *Catillariaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *X. texana* (W.A. Weber) Kalb & Hafellner, asexual morph unknown, lichenized, Mexico, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); COLO 448, COLO (holotype), cultures and sequences are unavailable, need generic revision.

Xanthopsoroma Elvebakk & S.G. Hong 2010, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two, species, type: *X. contextum* Elvebakk & S.G. Hong, asexual morph unknown, lichenized, terrestrial, see Elvebakk et al. (2010; molecular), sequences are available for type.

Xanthoria (Fr.) Th. Fr. 1861, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, ten species, type: *X. parietina* (L.) Beltr., asexual morph unknown, lichenized, terrestrial, see Aptroot et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Sari and Tuzen (2010; biosorption), Karagöz et al. (2011; new species), Pisani et al. (2011; physiology), Aptroot and Aslan (2012; new records), Beck and Mayr (2012; physiology), Demiray et al. (2012; biomonitoring), Arup et al. 2013, Kirk et al. (2013; genus accepted), Kondratyuk et al. (2013; new species), Nyati et al. (2013; phylogeny), Motiejunaite and Grochowski (2014; new records), Joshi et al. (2015; checklist), Kaya et al. (2015; natural product), Anar et al. (2016; antigenotoxic and Antioxidant study), Lücking et al. (2016; classification), sequences are available.

Xanthoriicola D. Hawksw. 1973, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *X. physciae* (Kalchbr.) D. Hawksw., sexual morph unknown, lichenicolous, mainly in Europe, Kirk et al. (2013; genus accepted), Seifert et al. (2011), Ruibal et al. (2011;

sequences), Ertz et al. (2013; phylogeny), Pérez-Ortega et al. (2015; position), sequences are available, isotype of type: S.

Xanthothecium Arx & Samson 1973, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *X. peruvianum* (Cain) Arx & Samson, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence available for the type: AB053453 (*fide* Sugiyama and Mikawa 2001).

Xenidiocercus Nag Raj 1993, *Ascomycota* genera *incertae sedis*, one species, type: *X. macarangae* (T.S. Ramakr.) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, West Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xenoacremonium L. Lombard & Crous 2015, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *X. recifei* (Leão & Lôbo) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, Brazil, New Zealand, see Lombard et al. (2015; morphology, phylogeny), Wijayawardene et al. (2017; outline), ex-type of type: CBS 137.3.

Xenocamarosporium Crous & M.J. Wingf. 2015, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *X. acaciae* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, Malaysia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016, 2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22224, CPC 24755.

Xenochalara M.J. Wingf. & Crous 2000, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *X. juniperi* M.J. Wingf. & Crous, hyphomycetous, sexual morph unknown, saprobes, The Netherlands, see Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), holotype and ex-type of type: PREM 26210, CBS 670.75.

Xenochora Petr. 1948, *Ascomycota* genera *incertae sedis*, one species, type: *X. sydowii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Ecuador, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, need generic revision.

Xenoconiothyrium Crous & Marinc. 2011, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *X. catenatum* Crous & Marinc. coelomycetous, saprobes, South Africa, see Crous et al. (2011; morphology, phylogeny), Wijayawardene et al. (2017; morphology, phylogeny, outline), holotype and ex-type culture of type: PREM 59486, CMW 22113.

Xenocylindrosporium Crous & Verkley 2009, *Phaeomoniellaceae*, *Phaeomoniellales*, *Eurotiomycetes*, one species, type: *X. kirstenboschense* Crous & Verkley, hyphomycetous, pathogens, South Africa, see Crous et al. (2009; morphology, phylogeny), Wijayawardene et al. (2016; outline), holotype and ex-type culture of type: CBS H-20346, CPC 16311.

Xenodidymella Q. Chen & L. Cai 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *X. applanata* (Niessl) Q. Chen & L. Cai, coelomycetous, saprobes, ?pathogens, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype and ex-epitype culture of the type: HMAS 246688, CBS 195.36.

Xenodomus Petr. 1922, *Ascomycota* genera *incertae sedis*, one species, type: *X. sydowii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenogliocladiopsis Crous & W.B. Kendr. 1994, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *X. eucalyptorum* Crous & W.B. Kendr., hyphomycetous, saprobes, Australia, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2015; morphology, phylogeny), epitype and ex-epitype of type: CBS H-21952, CBS 138758.

Xenoheteroconium Bhat, W.B. Kendr. & Nag Raj 1993, *Ascomycota* genera *incertae sedis*, one species, type: *X. bicolor* Bhat, W.B. Kendr. & Nag Raj, hyphomycetous, sexual morph unknown, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenolecia Hertel 1984, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *X. spadicomma* (Nyl.) Hertel, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmuell et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Xenoleptographium Marinc., T.A. Duong, Z.W. de Beer & M.J. Wingf. 2015, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *X. phialoconidium* Marinc., T.A. Duong, Z.W. de Beer & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, Indonesia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: PREM 61244, CBS 134694.

Xenomeris Syd. 1924, *Dothideomycetes* genera *incertae sedis*, eleven species, type: *X. pruni* Syd., asexual morph hormonema-like, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, need generic revision.

Xenomycosphaerella Quaedvl. & Crous 2014, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *X. elongata* (Crous & M.J. Wingf.) Quaedvl. & Crous asexual morph unknown, pathogens, Brazil, Venezuela, see Quaedvlieg et al. (2014; morphology, phylogeny), Guatimosim et al. (2016; morphology, phylogeny), holotype and ex-type culture of type: CBS-H 19824, CPC 13378.

Xenomyxa Syd. 1939, *Ascomycota* genera *incertae sedis*, one species, type: *X. disseminata* Syd., asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenonectriella Weese 1919, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, twelve species, type: *X. lutescens* (Arnold) Weese, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Etayo and van den Boom (2013; new species, Dominican Republic), Kirk et al. (2013; genus accepted), Brackel et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Xenopeltis Syd. & P. Syd. 1919, *Ascomycota* genera *incertae sedis*, one species, type: *X. philippinensis* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenopenidiella Quaedvlieg & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *X. rigidophora* (Crous, R.F. Castañeda & U. Braun) Quaedvlieg & Crous hyphomycetous, saprobes, Cuba, see Quaedvlieg et al. (2014; morphology, phylogeny), holotype and ex-type culture of type: CBS H-19938, CBS 314.95.

Xenophacidiella Crous 2011, *Dothideomycetes* genera *incertae sedis*, one species, type: *X. pseudocatenata* Crous, hyphomycetous, sexual morph unknown, saprobes, South Africa, terrestrial, see Crous and Groenewald (2011; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of type: CBS H-20536, CPC 18472.

Xenophaeosphaeria Crous & M.J. Wingf. 2014, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *X. grewiae* Crous & M.J. Wingf., asexual morph unknown, Tanzania, terrestrial, see Crous et al. (2014; morphology, phylogeny), holotype and ex-type culture of type: CBS H-21999, CPC 24398.

Xenoplaca Petr. 1949, *Ascomycota* genera *incertae sedis*, one species, type: *X. aequatoriensis* Petr., hyphomycetous, sexual morph unknown, South America, see Seifert et al. (2011;

morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenopolyscytalum Crous 2010, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *X. pinea* Crous, hyphomycetous, sexual morph unknown, The Netherlands, terrestrial, see Crous et al. (2010; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of type: CBS-H 20488, CPC 14225.

Xenopyricularia Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomyces*, one species, type: *X. zizaniicola* (Hashioka) Klaubauf, Lebrun & Crous, hyphomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Klaubauf et al. (2014; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), neotype and ex-neotype cultures for the type: CBS H-21846, CBS133593 = MAFF 240219.

Xenoramularia Videira, H.D. Shin & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomyces*, three species, type: *X. polygonicola* Videira, H.D. Shin & Crous hyphomycetous, sexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype KUS-F19688, isotype CBS H-22541, culture ex-type CBS 141102 = CPC 10852.

Xenoseptoria Quaedvli., H.D. Shin, Verkley & Crous 2013, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomyces*, one species, type: *X. neosaccardoi* W. Quaedvlieg, H.D. Shin, G.J.M. Verkley & Crous, coelomycetous, sexual morph unknown, pathogenic, terrestrial, South Korea, see Quaedvlieg et al. (2013; morphology, phylogeny), ex-type strains of type: CBS 128665, holotype of type: CBS H-21312.

Xenosonderhenia Crous 2012, *Capnodiales* genera *incertae sedis*, *Dothideomyces*, two species, type: *X. syzygii* Crous, coelomycetous, saprobes, terrestrial, worldwide, see de Gruyter et al. (2012, 2014; morphology; phylogeny), Wijayawardene et al. (2017; outline), holotype of the type: CBS H-20968, ex-type strain of type: CPC 19790.

Xenosporium Penz. & Sacc. 1902, *Dothideomyces* genera *incertae sedis*, 18 species, type: *X. mirabile* Penz. & Sacc., hyphomycetous, sexual morph unknown, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Xenostigme Syd. 1930, *Sordariomyces* genera *incertae sedis*, one species, type: *X. trichophila* Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae* and placed in *Sordariomyces* genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

Xenostigmina Crous 1998, *Melanommataceae*, *Pleosporales*, *Dothideomyces*, two species, type: *X. zilleri* (A. Funk) Crous, hyphomycetous, saprobes, terrestrial, Canada, British Columbia, see Crous et al. (2009; morphology, phylogeny), Wijayawardene et al. (2012, 2014, 2017; outline; phylogeny), Kirk et al. (2013; genus accepted), Tian et al. (2015; morphology, nomenclature, phylogeny), cultures and sequences are available, ex-type strains of type: CBS 115685 = CPC 4010; holotype of type: DAVFP 23272.

Xenostomella Syd. 1930, *Dothideomyces* genera *incertae sedis*, two species, type: *X. towarensis* Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wu et al. (2011) and Hyde et al. (2013) did not accept as *Microthyriaceae*, Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Xenostroma Höhn. 1915, *Ascomycota* genera *incertae sedis*, one species, type: *X. caespitosum* (Fuckel) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial,

Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenoteratosphaeria Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *X. jonkershoekensis* (P.S. van Wyk, Marasas & Knox-Dav.) Quaedvlieg & Crous, asexual morph unknown, pathogens, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), epitype and ex-epitype culture of type: CBS H-20095, CBS 122897.

Xenothecium Höhn. 1919, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *X. jodophilum* Höhn., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BRIP 22762, cultures and sequences are unavailable, needs generic revision.

Xenotypha Petr. 1955, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *X. aterrima* (Fr.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Xenus Kohlm. & Volkm.-Kohlm., 1992, *Pyrenulales* genera *incertae sedis*, *Eurotiomycetes*, one species, type: *X. lithophylli* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, lichenized, marine on coral, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Xepicula Nag Raj 1993, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, four species, type: *X. leucotricha* (Peck) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Lombard et al. (2016; new species, phylogeny), Wijayawardene et al. (2016, 2017; outline, taxonomy), ex-type culture of the type: CBS 256.57 = MUCL 9860, need generic revision.

Xepiculopsis Nag Raj 1993, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *X. perpulchra* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Lombard et al. (2016; taxonomic notes), cultures are unavailable, needs generic revision.

Xerochrysum Pitt 2013, *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, two species, type: *X. dermatitidis* (A. Agostini) Pitt, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Australia, see Pitt et al. (2013; taxonomy, phylogeny), lectotype and ex-lectotype of the type: CBS 132.31, IMI 96729=UAMH 802.

Xeroconium D. Hawksw. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *X. borealis* (P. Karst.) D. Hawksw., on wood, Europe, terrestrial, sexual morph unknown, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: H-Karst 1493.

Xerombrophila Baral 2013, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *X. crystallifera* Baral, G. Marson & Unter., asexual morph hyphomycetous, saprobes, terrestrial, Europe, see Baral et al. (2013; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), ex-type cultures of the type: CBS 128289.

Xeromedulla Korf & W.Y. Zhuang 1987, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *X. leptospora* W.Y. Zhuang & Korf, asexual morph hyphomycetous, saprobes, terrestrial, China, Phillipines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xeromyces L.R. Fraser 1954 (= *Fraseriella* Cif. & A.M. Corte *vide* Rossman et al. 2016), *Aspergillaceae*, *Eurotiales*, *Eurotiomycetes*, one species: *X. bisporus* L.R. Fraser, type:

Xeromyces bisporus L.R. Fraser asexual morph hyphomycetous (*Fraseriella bispora* Cif. & A.M. Corte fide Petterson et al. 2011 and Seifert et al. 2011), terrestrial, strongly xerophilic, isolated from dry, sugar-rich foodstuffs, cosmopolitan, see Fraser (1954; morphology), Seifert et al. (2011; morphology), Pettersson et al. (2011; phylogeny, morphology), Houbraeken et al. (2011; phylogeny). Under unitary nomenclature (Hawksworth et al. 2011), the names *Xeromyces* and *Fraseriella* compete for use. Since the former genus name is more widely used and older than the latter, we consider *Fraseriella* to represent a synonym of *Xeromyces*. The synonymy is formally proposed herein as follows:

***Xeromyces bisporus* L.R. Fraser Proc. Linn. Soc. N.S.W. 78:245. 1954.**

≡ *Monascus bisporus* (L.R. Fraser) Arx, Gen. Fungi Spor. Pure Cult.: 84. 1970.

= *Fraseriella bispora* Cif. & A.M. Corte, in Corte Atti Ist. Bot. Univ. Lab. crittog. Pavia Ser. 4 14:109. 1957.

Xerotrema Sherwood & Coppins 1980, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *X. megalospora* Sherwood & Coppins, asexual morph unknown, ?saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Purvis (2012; floristic), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Xiambola Minter & Hol.-Jech. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *X. mirabilis* Minter & Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xiphomyces Syd. & P. Syd. 1916, *Ascomycota* genera *incertae sedis*, two species, type: *X. sacchari* Syd. & P. Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xiuguozhangia K. Zhang, R.F. Castañeda, Jian Ma & L.G. Ma 2014, *Ascomycota* genera *incertae sedis*, five species, type: *X. rosae* (K. Zhang & X.G. Zhang) K. Zhang & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Zhang et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Xylaria Hill ex Schrank 1789, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, c. 350 species, type: *X. hypoxylon* (L.) Grev., asexual morph geniculosporium-like, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Fournier et al. (2011; new species), Rogers and Ju (2012; new species), Ma et al. (2012, 2013; new species), Kirk et al. (2013; genus accepted), Gu et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Senanayake et al. (2015; outline, phylogeny), Réblová et al. (2016; new species; nomenclature), cultures and sequences are available.

Xyleborus R.C. Harris & Ladd 2007, *Stereocaulaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *X. sporodochifer* R.C. Harris & Ladd., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Lendemer et al. (2013; list), Lendemer and Harris (2015; new species), Lücking et al. (2016; classification), sequences unavailable.

Xylobotryum Pat. 1895, *Ascomycota* genera *incertae sedis*, two species, type: *X. andinum* Pat., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xylochia B. Sutton 1983, *Ascomycota* genera *incertae sedis*, one species, type: *X. stegonsporioides* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xylochora Arx & E. Müll. 1954, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *X. craticola* (H. Wegelin) Arx & E. Müll., asexual morph unknown, saprobes, Sweden, Switzerland and India, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Xyloglyphis Clem. 1909, *Ascomycota* genera *incertae sedis*, one species, type: *X. striola* (Fr.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xylogramma Wallr. 1833, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, 18 species, type: *X. sticticum* (Fr.) Wallr., asexual morph unknown, saprobes, terrestrial, China, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xylographa (Fr.) Fr., 1836, *Xylographaceae*, *Trapeliales*, *Lecanoromycetes*, 20 species, type: need typification, see Heininger and Spribille (2009; new species), Wetmore (2009; floristic study), Zhdanov (2009; new record), Agnello et al. (2010; ecology), Bilovitz et al. (2010; biodiversity), Brodo (2010; new record), Lumbsch and Huhndorf (2010; outline), Hansen (2012; new record), Mayrhofer et al. (2012; new records), Bennett (2013; review), Hauck et al. (2013; new record), Kirk et al. (2013; genus accepted), Mayrhofer et al. (2013; new record), Svensson (2013; biodiversity), Svensson et al. (2013, 2016; ecology, biodiversity), Tønsberg (2013; new species), Urbanavichene et al. (2013, new record), Abbas et al. (2014; new records), Goni et al. (2014; new record), Spribille et al. (2014; systematic, new species), Hämäläinen et al. (2015; biodiversity), Malíček et al. (2015; new record), Resl et al. (2015; phylogeny), Tarasova et al. (2015; new record), Węgrzyn et al. (2015; new record), Himelbrant et al. (2016; new record), Kharpukhaeva and Mukhortova (2016; ecology), Motiejūnaitė et al. (2016; new record), Tarasova et al. (2016; new record), Lücking et al. (2016; classification), sequences are available.

Xylohypha (Fr.) E.W. Mason 1960, *Ascomycota* genera *incertae sedis*, six species, type: *X. nigrescens* (Pers.) E.W. Mason, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xylohyphopsis W.A. Baker & Partr. 2000, *Ascomycota* genera *incertae sedis*, two species, type: *X. curta* (Corda) W.A. Baker & Partr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Xylomelasma Réblová 2006, *Sordariomycetidae* genera *incertae sedis*, *Sordariomycetes*, three species, type: *X. sordida* Réblová, asexual morph hyphomycetous, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Vasilyeva and Stephenson (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Réblová et al. (2015; DNA, phylogeny), cultures are available for the type: CBS 131683.

Xylomyces Goos, R.D. Brooks & Lamore, 1977, *Aliquandostipitaceae*, *Jahnulales*, *Dothideomycetes*, ten species, type: *X. chlamydosporus* Goos, R.D. Brooks & Lamore, hyphomycetous, sexual morph unknown, aquatic (freshwater/marine), see Shearer et al. (2009; phylogeny), Sivichai and Boonyuen (2010; association with *Jahula*), Seifert et al. (2011; morphology), Hose et al. (2010; chemistry), Hu et al. (2010; diversity), Barbosa and Gusmão (2011; diversity), Suetrong et al. (2011; phylogeny), Sivichai et al. (2011; taxonomy), Zhang et al. (2011; checklist), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in

Aliquandostipitaceae), Borse et al. (2014; diversity), da Silva et al. (2015; diversity), Jones et al. (2015; marine genera), Oliveira et al. (2015; diversity), cultures available for the type: SS2917.

Xylona Gazis & P. Chaverri 2012, *Xylonaceae*, *Xylonales*, *Xylonomycetes*, one species, type: *X. heveae* Gazis & P. Chaverri 2012, coelomycetous, sexual morph unknown, saprobes, terrestrial, Perú, see Gazis et al. (2012, 2016; taxonomy, phylogeny, genome studies), Wijayawardene et al. (2017; outline), holotype and ex-type cultures of the type: BPI 884084, TC161 = CBS132557.

Xyloschistes Vain. ex Zahlbr. 1903, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *X. platytropa* (Nyl.) Vain. ex Zahlbr., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miądlukowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Xyloschizon Syd. 1922, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, two species, type: *X. weirianum* Syd., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Xylopsora Bendiksby & Timdal 2013, *Umbilicariaceae*, *Umbilicariales*, *Lecanoromycetes*, two species, type: *X. friesii* (Ach.) Bendiksby & Timdal, lichenized, lignicolous, corticolous, often on charred substrata, temperate northern hemisphere, Australia, see Bendiksby and Timdal (2013; phylogenetic placement), Lücking et al. (2016; classification), type specimen H-ACH-436A sequences are available.

Xylotumulus J.D. Rogers, Y.M. Ju & Hemmes 2006, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *X. gibbisporus* J.D. Rogers, Y.M. Ju & Hemmes, asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline), Rogers et al. (2012; Hawaii fungi), Chang et al. (2014; secondary compounds), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BISH, Rogers, 2 Aug. 2005, cultures available for the type: NBRC 9453, ATCC MYA-4109.

Yalomyces Nag Raj 1993, *Ascomycota* genera *incertae sedis*, six species, type: *Y. pulcher* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Yamadazyma Billon-Grand 1989, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, 20 species, type: *Y. philogaea* (van der Walt & Johannsen) Billon-Grand, asexual reproduction is by multilateral budding, saprophytic, in tree exudates and insect frass, insect guts, soil, cactus rots, seawater, soy sauce, infrequent clinical isolates, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), many species in this genus represent asexual taxa originally classified in the genus *Candida*, thus they will be transferred to *Yamadazyma* as new combinations, cultures and sequences are available.

Yarrowia van der Walt & von Arx 1980, *Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, 13 species, type: *Y. lipolytica* (Wickerham, Kurtzman & Herman) van der Walt & von Arx, asexual reproduction is by multilateral budding, saprophytic, but clinical isolates are not uncommon, on wet milled maize, refrigerated meats, soil, clinical, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), some species in this genus represent asexual taxa originally classified in the genus *Candida* thus they will be transferred to *Yarrowia* as new combinations, cultures and sequences are available.

Yarrumia D.J. Galloway 2015, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: ; lichenized, see Galloway (2015; taxonomy), Lücking et al. (2016; classification); sequences are available.

Yatesula Syd. & P. Syd. 1917, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, two species, type: *Y. calami* Syd. & P. Syd., asexual morph unknown, epiphytic, sooty moulds,

terrestrial, America, Philippines, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Yinmingella Goh, K.M. Tsui & K.D. Hyde 1999, *Ascomycota* genera *incertae sedis*, six species, type: *Y. mitriformis* Goh, K.M. Tsui & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Yoshimuria S.Y.Kondr., Kärnefelt, Elix, A.Thell & Hur 2014, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *Y. spodoplaca* (Nyl.) S.Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A.S. Kondr. & Hur, lichenized, see Kondratyuk et al. (2014a; taxonomy), Lücking et al. (2016; classification), cultures available for the type: SK725, SK724.

Yoshimuriella Moncada & Lücking 2013, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, eight species, type: *Y. fendleri* (Tuck. & Mont.) Moncada & Lücking, lichenized, see Moncada et al. (2013a; taxonomy), Lücking et al. (2016; classification), sequences are available but lacks for the type species.

Yoshinagaia Henn. 1904 (= *Japonia* Höhn. 1909; = *Yoshinagamyces* Hara 1912; *Monoloculia* Hara 1927 *vide* Rossmann et al. 2016), *Dothideomycetes* genera *incertae sedis*, two species, type: *Y. quercus* Henn., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Rossmann et al. (2016; nomenclature), cultures and sequences are unavailable.

Yoshinagella Höhn. 1913, *Dothideomycetes* genera *incertae sedis*, four species, type: *Y. japonica* Höhn, asexual morph unknown, saprobes and parasitic, reported from Japan and Hawaii, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Dai et al. (2014; phylogeny, *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.

Ypsilina J. Webster, Descals & Marvanová 1999, *Ascomycota* genera *incertae sedis*, one species, type: *Y. graminea* (Ingold, P.J. McDougall & Dann) Descals, J. Webster & Marvanová 1999, hyphomycetous, sexual morph unknown, aquatic, see Seena et al. (2010; DNA barcoding of fungi), Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available:

Ypsilomyces D.A.C. Almeida & Gusmão 2014, *Ascomycota* genera *incertae sedis*, one species, type: *Y. elegans* D.A.C. Almeida & Gusmão, hyphomycetous, sexual morph unknown, one species, saprobes, terrestrial, Brazil, see Almeida and Gusmão (2014; morphology), holotype of the type: HUEFS 155081, cultures and sequences are unavailable, compare with *Biflagellospora*, *Diademospora*, *Diplocladiella*, *Iyengarina*, *Vanterpoolia*, *Weufia* and *Ypsilina*.

Ypsilomyces D.A.C. Almeida & Gusmão 2014, *Ascomycota* genera *incertae sedis*, one species, type species *Y. elegans* D.A.C. Almeida & Gusmão, hyphomycetous, sexual morph unknown, saprobes, reported from Brazilian semi arid region, see Almeida and Gusmão (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Ypsilonia Lév. 1846, *Sordariales* genera *incertae sedis*, five species, type: *Y. cuspidata* Lév., coelomycetous, sexual morph of unknown, saprobes, aquatic, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Yuccamyces Gour, Dyko & B. Sutton 1979, *Ascomycota* genera *incertae sedis*, seven species, type: *Y. purpureus* Gour, Dyko & B. Sutton, hyphomycetous, sexual morph unknown,

saprobies, Canada and Cuba, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Yuea O.E. Erikss. 2003, *Xylariales genera incertae sedis*, *Sordariomycetes*, one species, type: *Y. chusqueicola* O.E. Erikss., asexual morph unknown, terrestrial, saprobies, Chile, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable.

Yueomyces Q.M. Wang, L. Wang, M. Groenewald & T. Boekhout 2015, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *Y. sinensis* (J.Z. Yue) Q.M. Wang, L. Wang, M. Groenewald & T. Boekhout, asexual reproduction is by bipolar budding, saprophytic, Soil, China, see Wang et al. (2015; taxonomy), cultures and sequences are available.

Zahlbrucknerella Herre 1912, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, eight species, type: *Z. calcarea* (Herre) Herre, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zakatoshia B. Sutton 1973, *Ascomycota genera incertae sedis*, two species, type: *Z. hirschiopori* B. Sutton, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zalerion R.T. Moore & Meyers 1962, *Sordariomycetes genera incertae sedis*, six species, type: *Z. nepura* R.T. Moore & Meyers, hyphomycetous, sexual morph unknown, saprobies, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Zanclospora S. Hughes & W.B. Kendr. 1965, *Ascomycota genera incertae sedis*, nine species, type: *Z. novae-zelandiae* S. Hughes & W. B. Kendr., hyphomycetous, sexual morph unknown, saprobies, tropical and subtropical distribution with only two records in temperate region, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Almeida et al. (2013; new species), Kirk et al. (2013; genus accepted), needs generic revision.

Zasmidium Fr. 1849, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, c. 70 species names, type: *Z. cellare* (Pers.) Fr., sexual morph mycosphaerella-like, five species confirmed based on DNA, plant pathogens, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Braun et al. (2013; morphology), Videira et al. (2017; morphology, phylogeny), cultures and sequences are available.

Zebrospora McKenzie 1991, *Ascomycota genera incertae sedis*, two species, type: *Z. bicolor* McKenzie, hyphomycetous, sexual morph unknown, saprobies, terrestrial, Australasia, Pacific Islands, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zelandiocoela Nag Raj 1993, *Ascomycota genera incertae sedis*, one species, type: *Z. ambigua* (Nag Raj & W.B. Kendr.) Nag Raj, coelomycetous, sexual morph unknown, saprobies, terrestrial, New Zealand, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zeloasperisporium R.F. Castañeda 1996, *Zeloasperisporiaceae*, *Zeloasperisporiales*, *Dothideomycetes*, seven species, type: *Z. hyphopodioides* R.F. Castañeda, hyphomycetous, sexual morph unknown, in air, saprobies, Asia, Australasia, Caribbean, see Cheewangkoon et al. (2009; new species, phylogeny), Seifert et al. (2011; morphology), Crous et al. (2015; new

species, phylogeny), Hongsanan et al. (2015; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Zelodactylaria A.C. Cruz, Gusmão & R.F. Castañeda 2012, *Ascomycota* genera *incertae sedis*, one species, type: *Z. verticillata* A.C. Cruz, Gusmão & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Cruz et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Zelopelta B. Sutton & R.D. Gaur 1984, *Ascomycota* genera *incertae sedis*, one species, type: *Z. thrinacospora* B. Sutton & R.D. Gaur, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zelosatchmopsis Nag Raj 1991, *Ascomycota* genera *incertae sedis*, one species, type: *Z. sacciformis* (R.F. Castañeda) Nag Raj & R.F. Castañeda, coelomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zernya Petr. 1947, *Ascomycota* genera *incertae sedis*, one species, type: *Z. clypeata* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zeroviella S.Y.Kondr. & J.-S.Hur 2015, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, eight species, type: *Z. papillifera* (Vain.) S.Y. Kondr. & Hur, lichenized, see Kondratyuk et al. (2015f; taxonomy), Lücking et al. (2016; classification), sequences are available.

Zetesimomyces Nag Raj 1988, *Ascomycota* genera *incertae sedis*, one species, type: *Z. setibicolor* (R.F. Castañeda) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zetiasplozna Nag Raj 1993, *Bartaliniaceae*, *Xylariales*, *Sordariomycetes*, six species, type: *Z. caffra* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Nicoletti et al. (2010; endophytes), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Senanayake et al. (2015; outline), Jaklitsch et al. (2016; phylogeny, accepted as a genus in *Sporocadaceae*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Zeugandromyces Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, four species, type: *Z. australis* Thaxt., asexual morph unknown, biotrophic on Coleoptera (Staphylinidae, Paederini), America, Phillipines, Sumatra, Sri Lanka, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zeus Minter & Diam. 1987, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, two species, type: *Z. olympius* Minter & Diam., asexual morph unknown, saprobes, terrestrial, Greece, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Zevadia J.C. David & D. Hawksw. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *Z. peroccidentalis* J.C. David & D. Hawksw., lichenicolous, Europe, sexual morph unknown, see Seifert et al. (2011; genus accepted), Kirk et al. (2013; genus accepted), no cultures or sequences are available, holotype of type: K(M)-IMI 401823.

Zilingia Petr. 1934, *Ascomycota* genera *incertae sedis*, one species, type: *Z. sibirica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Siberia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zimmermanniella Henn. 1902, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *Z. trispora* Henn., from living leaves, South East Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Zinzipegasa Nag Raj 1993, *Ascomycota* genera *incertae sedis*, one species, type: *Z. argentinensis* (Speg.) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zodiomyces Thaxt. 1891, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, four species, type: *Z. vorticellarius* Thaxt., asexual morph unknown, biotrophic on aquatic Coleoptera (Hydrophilidae), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossi et al. (2016; most recent species description), ribosomal sequence are available.

Zoggium Lar.N. Vassiljeva 2001, *Mytiliniaceae*, *Mytiliniales*, *Dothideomycetes*, one species, type: *Z. mayorii* (H. Zogg) Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, north temperate, Boehm et al. (2009, 2015; accepted as in *Mytiliniaceae*), Hyde et al. (2013; accepted as in *Mytiliniaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Zopfia Rabenh. 1874, *Zopfiaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *Z. rhizophila* Rabenh., asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Zopfiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Zopfiella G. Winter 1884, *Lasio-sphaeriaceae*, *Sordariales*, *Sordariomycetes*, 30 species, type: *Z. tabulata* (Zopf) G. Winter, asexual morph unknown, coprophilous, saprobes, terrestrial, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kruys et al. (2014; phylogeny), cultures and sequences are available.

Zopfiofoveola D. Hawksw. 1979, *Zopfiaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *Z. punctata* (D.Hawksw. & C. Booth) D. Hawksw., on earthworm excrements, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), cultures and sequences are unavailable, holotype of type: (microscope slide) UPS.

Zopheromyces B. Sutton & Hodges 1977, *Ascomycota* genera *incertae sedis*, one species, type: *Z. fasciatus* B. Sutton & Hodges, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zugazaea Korf, Iturr. & Lizoñ 1998, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *Z. agyrioides* Korf, Iturr. & Lizoñ, asexual morph unknown, saprobes, Canary Islands, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: CUP-MM 2844, cultures and sequences are unavailable

Zukaliopsis Henn. 1904, *Myriangiaceae*, *Myriangiales*, *Dothideomycetes*, one species, type: *Z. amazonica* Henn., asexual morph unknown, parasitic, terrestrial, Peru, isotype of the type: S, F5604, see Dissanayake et al. (2014; morphology), Wijayawardene et al. (2014; outline), needs generic revision.

Zunura Nag Raj 1993, *Ascomycota* genera *incertae sedis*, one species, type: *Z. appendiculata* (B. Sutton) Nag Raj, coelmycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zwackhia Körb. 1855, *Lecanographaceae*, *Arthoniales*, *Arthoniomycetes*, six species, type: *Z. viridis* (Ach.) Poetsch & Schied., lichenized, see Ertz and Tehler (2011; taxonomy) Diederich et al. (2012; taxonomy), Lücking et al. (2016; classification); sequences are available.

Zwackhiomacromyces Etayo & van den Boom 2014, ?*Xanthopyrenaceae*, *Collemopsidiales*, *Dothideomycetes*, one species, type: *Z. constrictocarpus* Etayo & Van den Boom asexual morph unknown, parasymbiont on *Megalospora*, terrestrial, Mediterranean Europe, see van den Boom and Etayo (2014; morphology, distinction of similar lichenicolous genera), holotype of the type: P. & B. van den Boom 27046 (BCN), cultures and sequences are unavailable.

Zwackhiomyces Grube & Hafellner 1990, *Xanthopyreniaceae*, *Collemopsidiales*, *Dothideomycetes*, 35 species, type: *Z. coepulonus* (Norman) Grube & R. Sant., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Brackel (2008; new species), Diederich and Schultz (2009; new species), Halici and Candan (2009; new species), Roux (2009; new species), Boom (2010; new species), Lumbsch and Huhndorf (2010; outline, family placed as *Ascomycota* families *incertae sedis*), Kocakaya et al. (2011; new species), Pérez-Ortega et al. (2011, 2016; new species, phylogeny), Kirk et al. (2013; genus accepted), Boom and Etayo (2014; new species), holotype of type: O-F72536, cultures available for the type: RO31.

Zygoascus M.Th. Smith 1986, ?*Trichomonascaceae*, *Saccharomycetales*, *Saccharomycetes*, six species, type: *Z. hellenicus* M.T. Smith, asexual reproduction is by multilateral budding, saprophytic, but there are some clinical isolates, in soft drinks, fruit juices, insect tunnels, cactus fruits, soil, tanning fluids, clinical isolates, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Zygopleurage *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, type: *Z. zygospora* (Speg.) Boedijn, saprobes, coprophilous, asexual morph phialophora-like, terrestrial, worldwide, see Richardson (2008, taxonomy), Chang et al. (2010, phylogeny), Mungai et al. (2011, 2012, taxonomy), Kruys et al. (2015, phylogeny).

Zygosaccharomyces B.T.P. Barker 1901, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, eleven species, type: *Z. rouxii* (Boutroux) Yarrow, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Zygospermella Cain 1935, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, six species, type: *Z. setosa* (Cain) Cain, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kruys et al. (2015; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Zygosporium Mont. 1842, *Ascomycota* genera *incertae sedis*, 16 species, type species *Z. oscheoides* Mont., hyphomycetous, saprobe, terrestrial, widespread, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable for type species, needs generic revision.

Zygotorulaspora Kurtzman 2003, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, two species, type: *Z. mrakii* (Capriotti) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, fruit drinks, fruit flies, grape must, silage, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

Zymoseptoria Quaedvl. & Crous 2011, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, seven species, type: *Z. tritici* (Desm.) Quaedvlieg & Crous, sexual morph mycosphaerella-like, plant pathogens on Poaceae, worldwide, see Quaedvlieg et al. (2011, 2014; morphology, phylogeny), epitype and ex-epitype culture of type: CBS H-20545, IPO 323 = CBS 115943.

Zythia Fr. 1849, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, type: *Z. resinae* (Ehrenb.) P. Karst. 1890, coelomycetous, sexual morph unknown, endophytic, saprobes, widespread, see Ding et al. (2010; antimicrobial activity), Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Zyxiophora B. Sutton 1981, *Ascomycota* genera *incertae sedis*, one species, type: *Z. appendiculata* (B. Sutton) Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

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References

- Abbas A, Mamut R, Abudoula A, Ababakri G (2014) A newly recorded lichen genus *Xylographa* (Fr.) Fr. from China. *Plant Diversity and Resources* 36:578–580.
- Abbas SQ, Sutton BC (1988b) *Myrotheciastrum* gen. nov., an addition to the Coelomycetes. *Trans Br Mycol Soc* 91(2):352–357
- Abbas SQ, Sutton BC, Ghaffar A (2000) Additions to Coelomycetes from Pakistan - *Camarosporiopsis* Abbas, Sutton & Ghaffar gen. nov., and *C. capparidis* (Ahmad) Abbas, Sutton & Ghaffar comb. nov. *Pakistan Journal of Botany* 32(2):239–246
- Abbas SQ, Sutton BC, Ghaffar A, Abbas A (2003) *Alpakesiopsis* gen. nov., and addition to Coelomycetes from Pakistan. *Pakistan Journal of Botany*. 35(2):249–255.
- Abbas SQ, Sutton BC, Ghaffar A (2001). *Cystotrichiopsis* Abbas, Sutton & Ghaffar gen. nov., an addition to Coelomycetes from Pakistan. *Pakistan Journal of Botany*. 33(4):365–368

- Abdel-Aziz FA (2016) The genus *Lolia* from freshwater habitats in Egypt with one new species. *Phytotaxa* 267:279–288
- Abdel-Aziz FA, Abdel-Wahab MA (2010) *Lolia aquatica* gen. et sp. nov. (Lindgomycetaceae, Pleosporales), a new coelomycete from freshwater habitats in Egypt. *Mycotaxon* 114:33–42
- Abdel-Wahab MA (2011) Lignicolous marine fungi from Yokosuka, Japan. *Botanica Marina* 54:209–221
- Abdel-Wahab MA (2011) Marine fungi from Sarushima Island, Japan, with a phylogenetic evaluation of the genus *Naufragella*. *Mycotaxon* 115:443–456
- Abdel-Wahab MA, Bahkali AH (2012) Taxonomy of filamentous anamorphic marine fungi: morphology and molecular evidence. In: Jones EBG, Pang KL (Eds.) *Marine fungi and fungal-like organisms Labyrinthulomycetes and oomycetes*. De Gruyter Series: Marine and Freshwater Botany, Walter De Gruyter GMBH, Germany, pp 59–82
- Abdel-Wahab MA, Bahkali AH, Jones EBG, Elgorban AM, Abdel-Aziz FA, Hodhod MS, Al-Hebshi MO (2016) Two new species of *Kallichroma* (Bionectriaceae, Hypocreales) from Saudi Arabian mangroves. *Phytotaxa* 260:66–74
- Abdel-Wahab MA, El-Sharouny HM, Jones EBG (2001) Two new intertidal lignicolous *Swampomyces* species from Red Sea mangroves in Egypt. *Fungal Diver* 8:35–40.
- Abdel-Wahab MA, Hodhod MS, Bahkali AHA, Jones EBG (2014) Marine fungi of Saudi Arabia. *Bot Mar* 57:323–335
- Abdel-Wahab MA, Jones EBG (2000) Three new marine Ascomycetes from driftwood in Australia sand dunes. *Mycoscience* 41(4):379–388
- Abdel-Wahab MA, Jones EBG, Vrijmoed LLP (1999) *Halosarpheia kandeliae* sp. nov. on intertidal bark of the mangrove tree *Kandelia candel* in Hong Kong. *Mycol Res* 103:1500–1504
- Abdel-Wahab MA, Nagahama T (2011) *Gesasha* (Halosphaeriaceae, Ascomycota), a new genus from the Gesashi mangroves in Japan. *Nova Hed* 92:497–512
- Abdel-Wahab MA, Nagahama T, Abdel-Aziz FA (2009). Two new *Corollospora* species and one anamorph based on morphological and molecular data. *Mycoscience* 50:147–155
- Abdel-Wahab MA, Pang KL, Nagahama T, Abdel-Aziz FA, Jones EBG. (2010) Phylogenetic evaluation of anamorphic species of *Cirrenalia* and *Cumulospora* with the description of eight new genera and four new species. *Mycol Prog* 9: 537–558
- Abdollahzadeh J, Javadi A, Zare R, Phillips AJ (2014) A phylogenetic study of *Dothiorella* and *Spencermartinsia* species associated with woody plants in Iran, New Zealand, Portugal and Spain. *Persoonia: Molecular Phylogeny and Evolution of Fungi* 32:1
- Abdullah SK, Descals E, Webster J (1981) Teleomorphs of three aquatic hyphomycetes. *Trans. Br. Mycol. Soc.* 77:475–483
- Abdullah SK, Webster J (1981) *Lambertella tubulosa* sp. nov., teleomorph of *Helicodendron tubulosum*. *Transactions of the British Mycological Society* 76:261–263
- Abdullah SK, Asensio L, Monfort E, Gomez-Vidal S, Palma-Guerrero J, et al. (2015) Occurrence in Elx, SE Spain of Inflorescence Rot Disease of Date Palms Caused by *Mauginiella scaettae*. *J. Phytopathol* 153(7–8):417–422
- Abe N, Hamada N (2011). Molecular characterization and surfactant utilization of *Scolecobasidium* isolates from detergent-rich indoor environments. *Biocontrol science* 16(4), pp.139–147
- Acharius E (1815) Afhandling om de cryptogamiske vexter, som komma under namn af Calicioidea. *Kongl Vetensk Acad Handl*, ed. 3, 3:246–275

- Acharya K, Dutta AK, Pradhan P (2011). *Bipolaris sorokiniana* (Sacc.) Shoem.: The most destructive wheat fungal pathogen in the warmer areas. *Australian journal of crop science* 5(9):1064
- Adamčík S, Cai L, Chakraborty D, Chen XH, Cotter HVT et al. (2015) Fungal Biodiversity Profiles 1–10. *Cryptogamie Mycologie* 36:121–166
- Aggarwal R, Das S, Jahani M, Singh D (2008) Histopathology of spot blotch disease of wheat caused by *Bipolaris sorokiniana* (Teleomorph: *Cochliobolus sativus*). *Acta Phytopathologica et Entomologica Hungarica* 43(1):23–30
- Aggarwal R, Gupta S, Banerjee S, Singh, VB (2011) Development of a SCAR marker for detection of *Bipolaris sorokiniana* causing spot blotch of wheat. *Canadian journal of microbiology* 57(11):934–942
- Aggarwal R, Purwar S, Kharbikar L, Gupta S (2011) Induction of a wheat β -1, 3-glucanase gene during the defense response to *Bipolaris sorokiniana*. *Acta Phytopathologica et Entomologica Hungarica* 46(1):39–47
- Aggarwal R, Singh VB, Gurjar MS, Gupta S, Srinivas P (2009). Intraspecific variations in Indian isolates of *Bipolaris sorokiniana* infecting wheat based on morphological, pathogenic and molecular characters. *Indian Phytopathology* 62(4):449–460
- Aggarwal R, Singh VB, Shukla R, Gurjar MS, Gupta S, Sharma TR (2010) URP-based DNA Fingerprinting of *Bipolaris sorokiniana* Isolates Causing Spot Blotch of Wheat. *Journal of phytopathology* 158(4), pp.210–216
- Agnello G, Catinon M, Ayrault S, Asta J, Tissut M, Ravanel P (2010). A comparative study of atmospheric deposits and lichen populations in a protected alpine area in the Grenoble region (France). *International Journal of Environment and Health* 4(2-3):235–249
- Agnihotrudu V (1962) Notes on fungi from North East India X. *Chaetospermum camelliae* sp. nov. on tea (*Camellia sinensis* (L.) O. Kuntze). *Mycopathologia et Mycologia Applicata* 16:113–116
- Agnihotrudu V (1974) *Journal of Coffee Research* 4: 3
- Ahmadpour A, Donyadoost-Chelan M, Heidarian Z, Javan-Nikkhah M (2011) New species of *Bipolaris* and *Curvularia* on grass species in Iran. *Rostaniha* 12(1):pp 39–49
- Ahmadpour A, Heidarian Z, Donyadoost-Chelan M, Javan-Nikkhah, M, Tsukiboshi T (2012) A new species of *Bipolaris* from Iran. *Mycotaxon* 120(1):301–307
- Ahmed SA, de Sande WWJV, Stevens DA, Fahal A, van Diepeningen AD, Menken SBJ, de Hoog GS (2014) Revision of agents of black-grain eumycetoma in the order Pleosporales. *Persoonia* 33:141–154
- Ahmed SA, Desbois N, Quist D, Miossec C, Atoche C, Bonifaz A, de Hoog S (2015) Phaeohyphomycosis Caused by a Novel Species: *Pseudochaetosphaeronema martinelli*. *J. Clin. Microbiol* 53:2927–2934
- Ahmed SA, Khan Z, Wang XW, Moussa TA, Al-Zahrani HS, Almaghrabi OA, Sutton DA, Ahmad S, Groenewald JZ, Alastruey-Izquierdo A, van Diepeningen A (2016) Chaetomium-like fungi causing opportunistic infections in humans: a possible role for extremotolerance. *Fungal Diversity* 76(1):11–26
- Ahmed SA, Stevens DA, van de Sande WWJ, Meis JF, de Hoog GS (2014) *Roussoella percutanea*, a novel opportunistic pathogen causing subcutaneous mycoses. *Medical Mycology*. 52(7):689–698

- Ahmed SA, van de Sande WWJ, Stevens DA, Fahal A, van Diepeningen AD, Menken SBJ, de Hoog SG (2014) Revision of agents of black-grain eumycetoma in the order Pleosporales. *Persoonia* 33:141–154
- Ahmed SI, Cain RF (1972) Revision of the genera *Sporormia* and *Sporormiella*. *Canadian Journal of Botany*, 50(3):pp 419–477 (doi: 10.1139/b72-061)
- Ahti T (2000) Cladoniaceae. *Fl Neotrop* 78:1–362
- Ahti T, Mayrhofer H, Schultz M, Tehler A, Fryday AM (2016) First supplement to the lichen checklist of South Africa: original research. *Bothalia-African Biodiversity & Conservation*, 46(1):1–8
- Ahti T, Stenroos S (2013) *Cladonia*. In Ahti T, Stenroos S, Moberg R (eds) *Nordic Lichen Flora* 5:8–87
- Akata I, Kaya A (2013) Two earth-tongue genera new for Turkey. *Mycotaxon* 125(1):87–90.
- Alamouti SM, Tsui CK, Breuil C (2009) Multigene phylogeny of filamentous ambrosia fungi associated with ambrosia and bark beetles. *Mycological Research* 113:822–835.
- Alcorn JL (1996) *Paliphora intermedia* sp. nov. from Australia. *Mycotaxon* 59:145–148.
- Aleksić M, Stepanović M, Duduk B, Rekanović E (2011) *Septocyta ruborum*: occurrence and possibility of disease control in Serbia. In X International Rubus and Ribes Symposium 946:277–281
- Alexandrova AV, Braun U, Mel'nik VA (2013) *Pyricularia contorta* sp. nov. – a new species from Vietnam. *Schlechtendalia*. 25:73–76
- Ali H, Ahmad W, Haq T (2009) Decolorization and degradation of malachite green by *Aspergillus flavus* and *Alternaria solani*. *African Journal of Biotechnology* 8(8)
- Alias AS, Jones EBG (2009) Marine fungi from mangrove of Malaysia: IOES Monograph Series No. 8. Institute of Ocean and Earth Sciences, University of Malaya, Malaysia
- Alias AS, Zainuddin N, Jones, EBG (2010) Biodiversity of marine fungi in Malaysian mangroves. *Bot Mar.* 53:545–554
- Alias SA, Jones EBG, Torres J (1999) Intertidal fungi from the Philippines, with a description *Acrocordiopsis sphaerica* sp. nov. (Ascomycota). *Fungal Diversity* 2:35–41
- Al-Laith AA (2010) Antioxidant components and antioxidant/antiradical activities of desert truffle (*Tirmania nivea*) from various Middle Eastern origins. *Journal of Food Composition and Analysis* 23(1):15–22
- Allen JL, Lendemer JC (2013) Uncovering chemical variability: molecular data reveal the identity of a sterile crustose lichen from the Yukon and affirm an expanded circumscription for *Buellia griseovirens*. *North American Fungi*, 8:1–14
- Almaguer M, Rojas TI, Dobal V, Batista A, Aira MJ (2013) Effect of temperature on growth and germination of conidia in *Curvularia* and *Bipolaris* species isolated from the air. *Aerobiologia* 29(1):13–20
- Almeida DAC, Cruz ACR, Marques MFO, Gusmão LFP (2013) Conidial fungi from the semi-arid Caatinga biome of Brazil. New and interesting *Zancluspora* species. *Mycosphere* 4:684–692
- Almeida DAC, Gusmão LFP (2014) *Ypsilomyces*, a new thallic genus of conidial fungi from the semi-arid Caatinga biome of Brazil. *Mycotaxon* 129:181–186
- Almeida DAC, Gusmão LFP, Miller AN (2014) A new genus and three new species of hysteriaceous ascomycetes from the semiarid region of Brazil. *Phytotaxa* 176(1):298–308
- Almeida DAC, Gusmão LFP, Miller AN (2016) Taxonomy and molecular phylogeny of Diatrypaceae (Ascomycota, Xylariales) species from the Brazilian semi-arid region, including four new species. *Mycological Progress* 15(6/53):1–27

- Almeida DAC, Miller AN, Gusmão LFP (2014) New species and combinations of conidial fungi from the semi-arid Caatinga biome of Brazil. *Nova Hedwigia*. 98:431–447
- Almeida DACD, Gusmao DLFP, Miller AN (2014) A new genus and three new species of hysteriaceous ascomycetes from the semiarid region of Brazil. *Phytotaxa* 176:298–308
- Al-Nasrawi HG, Hughes AR (2012) Fungal diversity associated with salt marsh plants *Spartina alterniflora* and *Juncus roemerianus* in Florida. *Jordan Journal of Biological Sciences* 5:247–254
- Al-Sadi AM, Deadman ML (2010) Influence of Seed-borne *Cochliobolus sativus* (Anamorph *Bipolaris sorokiniana*) on Crown Rot and Root Rot of Barley and Wheat. *Journal of phytopathology*, 158(10), pp.683–690
- Alsheikh-Hussain A, Altenaiji E, Yousef LF (2014) Fungal cellulases from mangroves forests- a short review. *J Biochem Tech* 5:765–774
- Alstrup V, Kocourkova J, Kukwa M, Motiejunaite J, Brackel W, von Suija A (2009). The lichens and lichenicolous fungi of south Greenland. *Folia cryptog. Estonica* 46:1–24
- Aluoch AM, Obonyo MA, Okun DO, Akinyi A, Otiende YM, Mungai PG (2015). Morphological Diversity of *Ascobolus* and *Pilobolus* Fungi from Wild Herbivore Dung in Nairobi National Park, Kenya. *Journal of Microbiology Research* 5(4):134–141
- Alvarado P, Cabero J, Moreno G, Bratek Z, Van Vooren N, Kaounas V, Konstantinidis G, Agnello C, Merényi Z, Smith ME (2014) Species diversity of *Genea* (Ascomycota, Pezizales) in Europe. *Ascomycete*. 6(3):41–51
- Alvarado P, Moreno G, Manjon JL, Gelpi C, Kaounas V, Konstantinidis G, Barseghyan G, Venturella G (2011) First molecular data on *Delastria rosea*, *Fischerula macrospora* and *Hydnocystis piligera*. *Bol Soc Micol Madr* 35:75–81
- Alvarado P, Moreno G, Manjón JL, Gelpi C, Kaounas V, Konstantinidis G, Barseghyan G, Venturella G (2011) First molecular data on *Delastria rosea*, *Fischerula macrospora* and *Hydnocystis piligera*. *Boletín de la Sociedad Micológica de Madrid* 35:75–81
- Alvarado P, Moreno G, Manjón JL, Sanz MA (2011) *Eremiomyces magnisporus* (Pezizales), a new species from central Spain. *Mycotaxon* 118:103–111
- Álvarez G, Fernández M, Díez JJ, (2015) Ophiostomatoid fungi associated with declined *Pinus pinaster* stands in Spain. *Forest Systems*, 24(1):006
- Alves A, Linaldeddu BT, Deidda A, Scanu B, Phillips AJL (2014) The complex of *Diplodia* species associated with *Fraxinus* and some other woody hosts in Italy and Portugal. *Fungal Diversity* 67:143–156
- Alves JL, Barreto RW, Pereira OL, Soares DJ (2010) Additions to the mycobiota of the invasive weed *Miconia calvescens* (Melastomataceae). *Mycologia* 102(1):69–82
- Alves JL, Woudenberg JHC, Duarte LL, Crous PW, Barreto RW (2013) Reappraisal of the genus *Alternariaster* (Dothideomycetes). *Persoonia* 31:77–85
- Aly AH, Edrada-Ebel R, Indriani ID, Wray V, Müller WE, Totzke F, Zirrgiebel U, Schächtele C, Kubbutat MH, Lin WH, Proksch P, (2008) Cytotoxic metabolites from the fungal endophyte *Alternaria* sp. and their subsequent detection in its host plant *Polygonum senegalense*. *Journal of natural products*, 71(6):972–980
- Amako Pauline N'douba, Amina Ouazzani Touhami, Rachid Benkirane, Lahcen Zidane and Allal Douira. (2011). Study of Some Coprophilous Ascomycetes, Including Two New Species for Morocco: *Saccobolus glaber* and *Podospora dagobertii*. **Rev. Ivoir. Sci. Technol** 79–88 ISSN 1813-3290.79

- Amaradasa BS, Amundsen K (2014) First report of *Curvularia inaequalis* and *Bipolaris spicifera* causing leaf blight of buffalograss in Nebraska. *The American Phytopathological Society*, 98 (2):279
- Amaral Zettler LA, Gomez F, Zettler E, Keenan BG, Amils R, Sogin ML (2002) Eukaryotic diversity in Spain's river of fire. *Nature* 417:137
- Ammarellou A, Smith ME, Tajick MA, Trappe JM. (2011) The phylogenetic placement of *Picoa*, with a first report on *Picoa lefebvrei* (Pat.) Maire (= *Phaeangium lefebvrei*) from Iran. *International Journal of Environmental Research* 5(2):509–14
- Amo de Paz G, Cubas P, Divakar PK, Lumbsch HT, Crespo A (2011) Origin and Diversification of major clades in parmelioid lichens (*Parmeliaceae*, Ascomycota) during the Paleogene inferred by Bayesian analysis. *PLoS One* 6(12): e28161
- Rossmann AY, Schoch CL, Farr DF, Nishijima K, Keith L, Goenaga R (2010) *Dolabra nepheliae* on rambutan and lychee represents a novel lineage of phytopathogenic Eurotiomycetes. *Mycoscience* 51(4):300–309
- An KD, Degawa Y, Fujihara E, Mikawa T, Ohkuma M, Okada G (2012) Molecular phylogenetic analyses based on the nuclear rRNA genes and the intron–exon structures of the nuSSU rRNA gene in *Dictyocatenuclata alba* (anamorphic Ascomycota). *Fungal Biology* 116:1134–1145
- Anand T, Bhaskaran R, Raguchander T, Samiyappan R, Prakasam V, Gopalakrishnan C, (2009) Defence responses of chilli fruits to *Colletotrichum capsici* and *Alternaria alternata*. *Biologia plantarum*, 53(3):553–559
- Anar M, Aslan A, Agar G, Ozgencli I (2016) Antigenotoxic and Antioxidant Activity of Lichens *Anaptychia ciliaris*, *Bryoria fuscescens*, *Parmotrema chinensa* and *Xanthoria candelaria*: An in vitro Study. *Med Aromat Plants*, 5(233):2167–0412.
- Anastasiou CJ (1963) The genus *Zalerion* Moore et Meyers. *Can J Bot* 41:1135–1139
- Andersen B, Dongo A, Pryor BM (2008) Secondary metabolite profiling of *Alternaria dauci*, *A. porri*, *A. solani*, and *A. tomatophila*. *Mycological Research* 112(2):241–250
- Andersen B, Sørensen JL, Nielsen KF, van den Ende BG, de Hoog S (2009) A polyphasic approach to the taxonomy of the *Alternaria* infectoria species–group. *Fungal Genetics and Biology* 46(9):642–656
- Anderson F, Neily TH (2012) New and noteworthy macrolichen records for Nova Scotia. *Evansia* 29(1):1–3
- Andjic V, Maxwell A, Hardy GE, Burgess TI (2016) New cryptic species of *Teratosphaeria* on Eucalyptus in Australia. *IMA fungus* 7(2):253–63
- Andjic V, Whyte G, Hardy G, Burgess T (2010) New *Teratosphaeria* species occurring on eucalypts in Australia. *Fungal Diversity* 43(1):27–38
- Ando K, Tubaki K (1985) Three new Hyphomycetes from Japan: *Anthopsis microspora*, *Scutisporus brunneus* and *Titaella capnophila*. *Trans. Mycol. Soc. Japan* 26:151–160
- Andreev M (2010) *Halecania santessonii*, a new lichenicolous lichen from Russia. *Lichenologist* 42(3):249–252
- Andrew M, Barua R, Short SM, Kohn LM (2012) Evidence for a common toolbox based on necrotrophy in a fungal lineage spanning necrotrophs, biotrophs, endophytes, host generalists and specialists. *PLoS One* 7(1):e29943
- Andrew M, Peever TL, Pryor BM (2009) An expanded multilocus phylogeny does not resolve morphological species within the small-spored *Alternaria* species complex. *Mycologia* 101(1):95–109
- Antoniazzi N, Deschamps C, Bach EE (2008) Effect of xanthan gum and allicin as elicitors against *Bipolaris sorokiniana* on barley in field experiments. *Journal of Plant Diseases and Protection*, 115(3):104–107

- Aoki N, Moriyama H, Kodama M, Arie T, Teraoka T, Fukuhara T (2009) A novel mycovirus associated with four double-stranded RNAs affects host fungal growth in *Alternaria alternata*. *Virus research* 140(1):179–187
- Aptroot A (2008) Lichens of St Helena and Ascension Island. *Bot J Linn Soc* 158:147–171
- Aptroot A, FERRARO LI, da Silva Cáceres ME (2014) New pyrenocarpous lichens from NE Argentina. *The Lichenologist* 46(1):95
- Aptroot A, Moon KH (2014) 114 New Reports of Microlichens from Korea, Including the Description of Five New Species, Show that the Microlichen Flora is Predominantly Eurasian. *Herzogia* 27:347–365
- Aptroot A, Moon KH (2015) New lichen records from Korea, with the description of the lichenicolous *Halecania parasitica*. *Herzogia* 28:193–203
- Aptroot A, Parmen S, Lücking R, Baloch E, Jungbluth P, Cáceres MES, Lumbsch HT (2015) Molecular phylogeny resolves taxonomic misunderstanding and places *Geisleria* close to *Absoconditella* s. str. (Ostropales: Stictidaceae). *Lichenologist* 46(1):115–128
- Aptroot A, Saipunkaew W, Sipman HJM, Sparrius LB, Wolseley PA (2007) New lichens from Thailand, mainly microlichens from Chiang Mai. *Fungal Diversity* 24:75–134
- Aptroot A, Schumm F (2012) A new terricolous *Trapelia* and a new *Trapeliopsis* (Trapeliaceae, Baeromycetales) from Macaronesia. *The Lichenologist* 44(04):449–56
- Aptroot A, Sipman HJ (2011) *Sporodochiolichen*, a new genus of tropical hyphomycetous lichens. *The Lichenologist* 43(04):357–62
- Aptroot A, Cáceres MES (2014) A refined species concept in the tropical lichen genus *Polymeridium* (Trypetheliaceae) doubles the number of known species, with a worldwide key to the species. *Nova Hedwigia* 98:1–29
- Aptroot A, Lücking R (2016) A revisionary synopsis of the Trypetheliaceae. (Ascomycota: Trypetheliales). *Lichenologist* 48:763–982
- Aptroot A (2014) Two new genera of Arthoniales from New Caledonia and the Solomon Islands, with the description of eight further species. *The Bryologist* 117:282–289
- Aptroot A (2012) A world key to the species of *Anthracotheicum* and *Pyrenula*. *The Lichenologist*. 44(01):5–3
- Aptroot A (2004) Two new ascomycetes with long gelatinous appendages collected from monocots in the tropics. *Stud Mycol* 307–12
- Aptroot A, Sparrius LB, LaGreca S, Bungartz F (2008) *Angiactis*, a new crustose lichen genus in the family Roccellaceae with species from Bermuda, the Galapagos islands, and Australia. *The Bryologist* 111:510–516
- Aptroot A, Nelsen MP, Parmen S (2013) *Marcelaria*, a new genus for the *Laurera purpurina* group in the Trypetheliaceae (Ascomycota: Dothideomycetes). *Glacia* 5(2):1–15
- Aptroot A (2012) A world key to the species of *Anthracotheicum* and *Pyrenula*. *Lichenologist* 44:2–53
- Aptroot A, Sipman HJM, Cáceres MES (2013) Twenty-one new species of *Pyrenula* from South America, with notes on overmature ascospores. *Lichenologist* 45:169–198
- Aptroot A, Ertz D, Lima EL, de Jesus KA, Maia LC, Cáceres MES (2013) Two new species of Roccellaceae (Ascomycota: Arthoniales) from Brazil, with the description of the new genus *Sergipea*. *Lichenologist* 45:627–634
- Aptroot A, Aslan A (2011) *Lecanora wrightiana* and *Rhizocarpon inimicum*, rare lichens new to Turkey and the Middle East. *Mycotaxon* 117(1):145–148
- Aptroot A, Aslan A (2012) *Candelariella*, *Ochrolechia*, *Physcia*, and *Xanthoria* species new to Turkey. *Mycotaxon* 119(1):149–156

- Aptroot, A, da Silva, Caceres ME (2014) A key to the corticolous microfoliose, foliose and related crustose lichens from Rondônia, Brazil, with the description of four new species. *The Lichenologist* 46(06):783–799
- Aptroot A, Iqbal SH (2014) Annotated checklist of the lichens of Pakistan, with reports of new records
- Aptroot A, John V (2015) An historical lichen collection from New Caledonia. *Herzogia* 28(2):307–321
- Aptroot A, Moon KH (2014) 114 New reports of microlichens from Korea, including the description of five new species, show that the microlichen flora is predominantly Eurasian. *Herzogia* 27(2):347–365.
- Aptroot A, Schumm F (2010) Chimeras occur on the pantropical Lichinomycete *Phyllopetula corticola*. *The Lichenologist*, 42(03):307–310
- Aptroot A, Schumm F (2011) Fruticose Roccellaceae: An Anatomical-microscopical Atlas and Guide with a Worldwide Key and Further Notes on Some Crustose Roccellaceae Or Similar Lichens. BoD–Books on Demand
- Aptroot A, Schumm F (2012) A new terricolous *Trapelia* and a new *Trapeliopsis* (Trapeliaceae, Baeomycetales) from Macaronesia. *The Lichenologist* 44(04):449–456
- Aptroot A Yazici K (2012) A new *Placopyrenium* (Verrucariaceae) from Turkey. *The Lichenologist* 44(06):739–741
- Aptroot A (2012) A world key to the species of *Anthracothecium* and *Pyrenula*. *The Lichenologist* 44(01):5–53
- Aptroot A (2016) Nine new lichen species and 64 new records from Sri Lanka.
- Aptroot A (2016) Preliminary checklist of the lichens of Madagascar, with two new thelotremoid *Graphidaceae* and 131 new records. *Willdenowia*, 46(3):349–365
- Aptroot A, de Oliveira MC, Ferraro LI, da Silva Caceres ME (2014) A world key to species of the genera *Topelia* and *Thelopsis* (Stictidaceae), with the description of three new species from Brazil and Argentina. *The Lichenologist*, 46(06):801–807
- Aptroot A, Jungbluth P, Caceres ME (2014a) A world key to the species of *Pyxine* with lichexanthone, with a new species from Brazil. *The Lichenologist*, 46(05):669–672
- Aptroot A, Parmen S, Luecking R, Baloch E, Jungbluth P, Caceres ME, Lumbsch HT, (2014) Molecular phylogeny resolves a taxonomic misunderstanding and places *Geisleria* close to *Absconditella* s. str. (Ostropales: Stictidaceae). *The Lichenologist* 46(01):115–128
- Aptroot A, Saipunkaew W, Sipman HJM, Sparrius LB, Wolseley PA (2007) New lichens from Thailand, mainly microlichens from Chiang Mai. *Fungal diversity*, 24, pp.75–134
- Aptroot A, Schumm F, Gabriel R (2009) Lichens new to the Azores collected on Terceira. *Herzogia* 22:147–152
- Aptroot A, Seaward MR, Sparrius LB (2010) Biodiversity and ecology of lichens. *Acta Botanica Hungarica* 52:1–2
- Aptroot A, Sobreira P, Da Silva, Caceres ME (2015) A remarkable new *Ramonia* (Gyalectaceae) from Brazil, with a key to the species. *The Lichenologist* 47(01):21–29
- Aptroot A, Yazici K, Košuthová A (2015) Three Placynthiaceae reported new to Asia from limestone in Turkey, with the description of the apothecia of *Placynthium posterulum*. *Herzogia* 28(1):288–292
- Aptroot A, Diederich P; Sérusiaux E, Sipman HJM (1997) Lichens and lichenicolous fungi from New Guinea. *Bibliotheca Lichenologica* 64:1–220
- Aptroot A, Nelsen MP, Parmen S (2013) *Marcelaria*, a new genus for the *Laurera purpurina* group in the Trypetheliaceae (Ascomycota: Dothideomycetes).

- Aptroot A, Schiefelbein U (2003) Additional species of *Cheiromycina* (lichenized hyphomycetes), with a key to the known species. *Mycological Research*. 107(1):104–107
- Aptroot A, Schumm F (2012) The genus *Melanophloea*, an example of convergent evolution towards polyspory. *The Lichenologist*. 44:501–509
- Aptroot A, Cáceres MESC (2013) Pyrenocarpous lichens (except Trypetheliaceae) in Rondônia. *The Lichenologist* 45(6):763–785
- Aptroot A, Andrade DS, Mendonça C, Lima, E.L.de; Cáceres, M.E.S. 2014. Ten new species of corticolous pyrenocarpous lichens from NE Brazil. *Phytotaxa*. 197(3):197–206
- Aptroot A, Ertz D, Silva JR, Grube M, Cáceres MES (2015) The phylogenetic position of *Coniarthonia*, with a key to the species and new information about the polyphyly of *Cryptothecia* and *Stirtonia* and the transfer of *Cryptothecia miniata* to *Myriostigma* (Arthoniaceae, lichenized ascomycetes). *Phytotaxa*. 218:128–136
- Araújo JP, Evans HC, Geiser DM, Mackay WP, Hughes DP. Unravelling the diversity behind the *Ophiocordyceps unilateralis* (Ophiocordycipitaceae) complex: Three new species of zombie-ant fungi from the Brazilian Amazon. *Phytotaxa*. 2015 Jul 24;220(3):224–38
- Arauzo S, Iglesias P (2014) La familia Geoglossaceae en la península Ibérica y la Macaronesia. *Errotari*. 11:166–259
- Archer AW (2009) Graphidaceae. *Fl. Austr* 57:84–194.
- Archer AW (2004) The lichen genera *Cyclographina*, *Diplogramma*, *Glyphis*, *Gymnographa*, *Medusulina*, *Sarcographa* and *Sarcographina* (Graphidaceae) in Australia. *Telopea* 10(2):2004
- Mota RMA, Abarca GH, Ruíz RFC, Hernández CIB (2008) Two new species of *Polyschema* and *Vanakripa* and other microfungi recorded from mangrove in Veracruz, Mexico. *Mycotaxon* 106: 29–40
- Arias MS, Suárez J, Cazapal-Monteiro CF, Francisco I, López-Arellano ME, Piñeiro P, Suárez JL, Sánchez-Andrade R, de Gives PM, Paz-Silva A (2013) Trematodes enhance the development of the nematode-trapping fungus *Arthrobotrys* (*Duddingtonia*) *flagrans*. *Fungal biology* 117(7):540–544
- Ariyawansa HA, Camporesi E, Thambugala KM, Mapook A, Kang JC, Alias SA, Chukeatirote E, Thines M, McKenzie EHC, Hyde KD (2014b) Confusion surrounding *Didymosphaeria* phylogenetic and morphological evidence suggest *Didymosphaeriaceae* is not a distinct family. *Phytotaxa* 176(1):102–119
- Ariyawansa HA, Hyde KD, Jayasiri SC, Buyck B, Chethana KWT et al. (2015) Fungal diversity notes 111–252 taxonomic and phylogenetic contributions to fungal taxa. *Fungal Divers* 75:27–274
- Ariyawansa HA, Jones, EBG, Suetrong S, Alias AS, Kang JC, Hyde KD (2013) *Halojulellaceae* a new family of the order Pleosporales. *Phytotaxa* 130:14–24
- Ariyawansa HA, Kang J, Kang, Alias SA, Chukeatirote E, Hyde KD 2014c *Pyrenophora*. *Mycosphere* 5 (2):351–362
- Ariyawansa HA, Phookamsak R, Tibpromma S, Kang JC, Hyde KD (2014a) A Molecular and Morphological Reassessment of *Diademaceae*. *The Scientific World Journal* Article ID 675348:1–11
- Ariyawansa HA, Tanaka K, Thambugala KM, Phookamsak R, Tian Q, Camporesi E, Hongsanan S, Monkai J, Wanasinghe DN, Chukeatirote E, Kang JC, Xu JC, McKenzie EHC, Jones EBG, Hyde KD (2014) A molecular phylogenetic reappraisal of the *Didymosphaeriaceae* (Montagnulaceae). *Fungal Diversity* 68(1):69–104

- Ariyawansa HA, Thambugala KM, Kang JC, Alias SA, Chukeatirote E, Hyde KD (2014d) Towards a natural classification of Dothideomycetes 2: The genera Cucurbitothrix, Heterosphaeriopsis, Hyalosphaera, Navicella and Pleiostomellina (Dothideomycetes incertae sedis). *Phytotaxa* 176(1):7–17
- Ariyawansa HA, Kang JC, Alias SA, Chukeatirote E, Hyde KD (2013) Towards a natural classification of Dothideomycetes: The genera Dermatodothella, Dothideopsella, Grandigallia, Hysteropeltella and Gloeodiscus (Dothideomycetes incertae sedis). *Phytotaxa* 147(2):35–47
- Armentano RA, Cooke KL, Wickes BL. Disseminated mycotic infection caused by *Westerdykella* species in a German Shepherd Dog. *Journal of the American Veterinary Medical Association* 242(3):381–7
- Árnason H (2014) Isolation and structure determination of a heteroglycan from whiteworm lichen (*Thamnolia subuliformis*).
- Thell A, Crespo A, Pradeep K, Divakar, Ingvar Kärnefelt, Steven D. Leavitt, H. Thorsten Lumbsch, Mark R. D. Seaward 2012. A review of the lichen family Parmeliaceae—history, phylogeny and current taxonomy. *Nordic Journal of Botany* 30,(6):641–664
- Arnold GRW, Castañeda RF (1986) Neue Hyphomyzeten-Arten aus Kuba. *Feddes Repertorium Specierum Novarum Regni Vegetabilis*. 97(1–2):79–88
- Arslan B, Öztürk Ş, Oran S (2011) *Lecanora*, *Phaeophyscia* and *Rinodina* species new to Turkey. *Mycotaxon* 116(1):49–52
- Article in *Mycoscience* 37(3):237-241 · September 1996
- Articus K (2004) *Neuropogon* and the phylogeny of *Usnea* s.l. (Parmeliaceae, lichenized Ascomycetes). *Taxon* 53:925–934.
- Arunpanichlert J, Rukachaisirikul V, Tadpetch K, Phongpaichit S, Hutadilok-Towatana N, Supaphon O, Sakayaroj J (2012) A dimeric chromanone and a phthalide: Metabolites from the seagrass-derived fungus *Bipolaris* sp. PSU-ES64. *Phytochemistry Letters* 5(3):604–608
- Arup U, Sjøchting U, Frödén P (2013) A new taxonomy of the family Teloschistaceae. *Nordic J Bot* 31:16–83.
- Arup U, Ekman S, Grube M, Mattsson J-E, Wedin M (2007) The sister group relation of *Parmeliaceae* (Lecanorales, Ascomycota). *Mycologia* 99:42–49
- Arvidsson L (1982) A monograph of the lichen genus *Coccocarpia*. *Opera Bot* 67:1–96
- Arvidsson L, Galloway DJ (1981) *Degelia*, a new lichen genus in the Pannariaceae. *Lichenologist* 13:27–50.
- Arx JA von, Müller E (1954) Die Gattungen der amerosporen Pyrenomyceten. *Beiträge zur Kryptogamenflora der Schweiz*. 11 (1):1–434
- Arzanlou M, Groenewald JZ, Gams W, Braun U, Crous PW (2007). Phylogenetic and morphotaxonomic revision of *Ramichloridium* and allied genera. *Studies in Mycology* 58: 57–93.
- Arzanlou M, Samadi R, Frisvad JC, Houbraken J, Ghosta Y (2016) Two novel *Aspergillus* species from hypersaline soils of the National Park of Lake Urmia, Iran. *Mycological Progress* 15:1081–1092
- Arzanlou M, Bakhshi M (2011) *Microcyclospora rumicis*, a new species on *Rumex crispus* from Iran. *Mycotaxon*. 118:181–186
- Asad S, Iftikhar S, Munir A, Ahmad I (2009) Characterization of *Bipolaris sorokiniana* isolated from different agro-ecological zones of wheat production in Pakistan. *Pak. J. Bot* 41(1):301–308

- Asam S, Lichtenegger M, Liu Y, Rychlik M (2012) Content of the *Alternaria* mycotoxin tenuazonic acid in food commodities determined by a stable isotope dilution assay. *Mycotoxin research* 28(1):9–15
- Asgari B, Zare R, Zamanizadeh HR, Rezaee S (2014) *Aspergillus osmophilus* sp. nov. and a new teleomorph for *A. proliferans*. *Mycoscience* 55:53–62
- Asgari B, Zare (2010) Two new species of *Preussia* from Iran. *Nova Hedwigia* 90(3-4): 533–548
- Asgari B, Zare R (2011) A contribution to the taxonomy of the genus *Coniocessia* (Xylariales). *Mycological Progress* 10(2):189–206
- Ashraf T, Hanif M, Khalid AN. *Peziza michelii* and its ectomycorrhizae with *Alnus nitida* (Betulaceae) from Pakistan. *Mycotaxon*. 2012 Sep 28;120(1):181–8
- Aslan, A., 2013. New *Lecanora*, *Lecidea*, *Melaspilea*, *Placynthium*, and *Verrucaria* records for Turkey and Asia. *Mycotaxon* 123(1):321–326
- Atienza V, Pérez-Ortega S, Etayo J (2009) Two new conidial lichenicolous fungi from Spain indicate the distinction of *Lichenodiplis* and *Minutoexcipula*. *Lichenologist* 41:223–229
- Atkinson GF (1897) Some fungi from Alabama: collected chiefly during the years 1889 – 1892. *Bulletin of the Cornell University (Science)* 3(1):38
- Augustin JO, Elliot SL, Nascimento RJ, Mizubuti ESG, Barreto RW, Evans HC (2012) Novelties in the Taxonomy and Ecology of Mycoparasites Associated With Nests of *Acromyrmex* Leaf-Cutting Ants. *PloS ONE* 8:1–17
- Avenot H, Morgan, DP, Michailides TJ (2008) Resistance to pyraclostrobin, boscalid and multiple resistance to Pristine®(pyraclostrobin+ boscalid) fungicide in *Alternaria alternata* causing *Alternaria* late blight of pistachios in California. *Plant pathology* 57(1):135–140
- Avenot H, Sellam A, Michailides T (2009) Characterization of mutations in the membrane-anchored subunits AaSDHC and AaSDHD of succinate dehydrogenase from *Alternaria alternata* isolates conferring field resistance to the fungicide boscalid. *Plant pathology* 58(6):1134–1143
- Awaluddin HH, Nor NAM, Nor HM, Sharuddin SS, Pang K-, Mohamad-Fauzi N, Rizman-Idid M, Alias SA (2015) Biodiversity of marine lignicolous fungi from mangroves of sulu sea. *Malays J Sci* 34(1):43–57
- Aylward J, Dreyer LL, Steenkamp ET, Wingfield MJ, Roets F (2015) *Knoxdaviesia proteae* is not the only *Knoxdaviesia*-symbiont of *Protea repens*. *IMA Fungus* 6 (2):471–476
- Aylward J, Dreyer LL, Steenkamp ET, Wingfield MJ, Roets F (2014) Development of polymorphic microsatellite markers for the genetic characterisation of *Knoxdaviesia proteae* (Ascomycota: Microascales) using ISSR-PCR and pyrosequencing. *Mycol. Prog* 13(2):439–444
- Azcarate MP, Patriarca A, Terminiello L, Pinto VF (2008) *Alternaria* toxins in wheat during the 2004 to 2005 Argentinean harvest. *Journal of Food Protection®*, 71(6):1262–1265
- Azeem M, Terenius O, Rajarao GK, Nagahama K, Nordenhem H, Nordlander G, Borg-Karlson AK (2015) Chemodiversity and biodiversity of fungi associated with the pine weevil *Hylobius abietis*. *Fungal Biol* 119(8):738–746
- Azevedo E, Caeiro MF, Barata M (2013) Portuguese marine fungi and the contribution of differential interference contrast (DIC) microscopy for their morphological identification. *Microscopy and Microanalysis* 19:17–18
- Azevedo MM, Cássio F (2010) Effects of metals on growth and sporulation of aquatic fungi. *Drug and Chemical Toxicology* 33:269–278
- Aziz FH, Qadir SB (2016) Common And New Records Of Lichens From Iraqi Kurdistan Region, Iraq. *Bull. Iraq nat. Hist. Mus* 14(1):51–68

- Bach EB, Marcondes MCL, Patricio GF, Esquerdo KF, Cardoso V, Wadt NSY (2012) Aqueous extract of leaves from *Bauhinia variegata* used in barley plants to protect against *Bipolaris sorokiniana*. *Agricu Res Rev* 1:71–79
- Badali H, Carvalho VO, Vicente V, Attili-Angelis D, Kwiatkowski LB, Gerrits van den Ende AHG, de Hoog GS 2009. *Cladophialophora saturnica* sp. nov., a new opportunistic species of Chaetothyriales revealed using molecular data. *Medical Mycology* 47:55–66.
- Badali H, Gueidan C, Najafzadeh MJ, Bonifaz A, Gerrits van den Ende AHG, de Hoog GS (2008) Biodiversity of the genus *Cladophialophora*. *Studies in Mycology* 61:175–191
- Badali H, Prenafeta-Boldú FX, Guarro J, Klaassen CH, Meis JF, de Hoog GS (2011) *Cladophialophora psammophila*, a novel species of Chaetothyriales with a potential use in the bioremediation of volatile aromatic hydrocarbons. *Fungal Biology* 115:1019–1029
- Badali H, De Hoog GS, Curfs-Breuker I, Andersen B, Meis JF (2009) *In vitro* activities of eight antifungal drugs against 70 clinical and environmental isolates of *Alternaria* species. *Journal of antimicrobial chemotherapy* 63(6):1295–1297
- Bagyanarayana G, Rao NK, Kunwar IK (2009) *Manoharachariella*, a new dematiaceous hyphomycetous genus from India. *Mycotaxon* 109(1):301–305
- Bai QR, Han S, Xie YY, Dong R, Gao J, Li Y (2012) First report of daylily leaf streak caused by *Kabatiella microsticta* in China. *Plant Disease* (10):1579–
- Bajpai R, Upreti DK (2012) Accumulation and toxic effect of arsenic and other heavy metals in a contaminated area of West Bengal, India, in the lichen *Pyxine cocoes* (Sw.) Nyl. *Ecotoxicology and environmental safety* 83:63–70
- Bajpai R, Shukla V, Singh N, Rana TS, Upreti DK (2015) Physiological and genetic effects of chromium (+ VI) on toxitolerant lichen species, *Pyxine cocoes*. *Environmental Science and Pollution Research* 22(5):3727–3738
- Bajpai R, Upreti DK, Nayaka S (2010) Accumulation of arsenic and fluoride in lichen *Pyxine cocoes* (sw.) nyl., growing in the vicinity of coal-based thermal power plant at Raebareli, India. *Journal of Experimental Sciences* 1(4)
- Bajpai, R., Upreti, D.K., Dwivedi, S.K. and Nayaka, S., 2009b. Lichen as quantitative biomonitors of atmospheric heavy metals deposition in Central India. *Journal of atmospheric chemistry*, 63(3), pp.235-246.
- Baker WA, Morgan-Jones G (2003) Notes on hyphomycetes. XCI. *Pseudoacrodictys*, a novel genus for seven taxa formerly placed in *Acrodictys*. *Mycotaxon* 85:371–391
- Bakhshi M, Arzanlou M, Babai-Ahari A, Groenewald JG, Crous PW (2015) Is morphology in *Cercospora* a reliable reflection of generic affinity? *Phytotaxa* 213:22–34
- Bakhshi M, Arzanlou M, Babai-Ahari A, Groenewald JZ, Braun U, Crous PW (2015) Application of the consolidated species concept to *Cercospora* spp. from Iran. *Persoonia: Molecular Phylogeny and Evolution of Fungi* 34:65
- Baloch E, Gilenstam G, Wedin M (2009) Phylogeny and classification of *Cryptodiscus*, with taxonomic synopsis of the Swedish species. *Fungal Divers.* 38:51–68
- Baloch E, Gilenstam G, Wedin M (2013) The relationships of *Odontotrema* (*Odontotremataceae*) and the resurrected *Sphaeropezia* (*Stictidaceae*) – new combinations and three new *Sphaeropezia* species. *Mycologia* 105:384–397
- Baloch E, Lücking R, Lumbsch HT, Wedin M (2010) Major clades and phylogenetic relationships between lichenized and non-lichenized lineages in *Ostropales* (Ascomycota: Lecanoromycetes). *Taxon* 59(5): 1483–1494

- Ban S, Sakane T, Nakagiri A (2015) Three new species of *Ophiocordyceps* and overview of anamorph types in the genus and the family Ophiocordycepsaceae. *Mycological progress* 14(1):1017.
- Bandoni RJ, Tubaki K (1985) *Cladoconidium*: a new hyphomycete anamorph-genus. *Transactions of the Mycological Society of Japan* 26(4):425–431
- Bansal H, Srivastava S, Chaurasia A, Jabalia NA (2014) Comparative Study of Antifreeze Proteins from *Antarctomyces psychrotrophicus* and *Typhula ishikariensis* using Computational Tools and Servers. *VIVECHAN International Journal of Research* 5(1):21–8
- Baral HO, Rämä T (2015) Morphological update on *Calycina marina* (Pezizellaceae, Helotiales, Leotiomyces), a new combination for *Laetinaevia marina*. *Botanica Marina* 58(6):523–534
- Baral HO (2015) Nomenclatural novelties. *Index Fungorum* no. 255:1–3
- Baral HO (2016) In: JAKLITSCH W., BARAL H.O., LÜCKING R. & LUMBSCH H.T. (2016) *Ascomycota*. In: W. Frey (ed.), *Engler's syllabus of plant families*, 13th ed., Part 1/2. Borntraeger, Stuttgart.
- Baral HO, Galan R, Platas G, Tena R (2013) *Phaeohelotium undulatum* comb. Nov. and *Phaeoh. succineoguttulatum* sp. nov., two segregates of the *Discinella terrestris* aggregate found under *Eucalyptus* in Spain: taxonomy, molecular biology, ecology and distribution. *Mycosystema* 32(3):386–428
- Baral HO, Haelewaters D, Pärtel K (2015) A new attempt to classify the families of the Helotiales. *The Second International Workshop on Ascomycete Systematics. CBS Symposium. 22–24 April. Amsterdam.*
- Baral HO, Garcia G, Bogale M, O'Hara MJ, Untereiner WA (2012) *Colipila*, a new genus in the Helotiales. *Mycological progress* 11(1):201–14
- Baral HO, Kutorga E (2010) *Helicogonium fusisporum* sp. nov., an intrahymenial parasite in *Orbilbia eucalypti*. *Mycotaxon* 113:331–336
- Baral HO, Marson G, Bogale M, Untereiner WA (2013) *Xerombrophila crystallifera*, a new genus and species in the Helotiales. *Mycological progress* 1,12(3):475–88
- Baral HO, Queloz VK, Hosoya TS (2014) *Hymenoscyphus fraxineus*, the correct scientific name for the fungus causing ash dieback in Europe. *IMA fungus*. 1,5(1):79–80
- Baral HO, Galán R, Platas G, Tena R (2013) *Phaeohelotium undulatum* comb. nov. and *Phaeoh. succineoguttulatum* sp. nov., two segregates of the *Discinella terrestris* aggregate found under *Eucalyptus* in Spain: taxonomy, molecular biology, ecology and distribution. *Mycosystema* 32(3):386–428
- Baral H-O, De Sloover JR; Huhtinen S, Laukka T, Stenroos S (2009) An emendation of the genus *Hyaloscypha* to include *Fuscocypha* (*Hyaloscyphaceae*, Helotiales, Ascomycotina). *Karstenia* 49(1):1–17
- Baral H-O, Marson G (2012). *Deltopyxis triangulispora* gen. et sp. nov., a polysporous Tromeropsis-like discomycete of unclear relationships. *Andrias* 19:176
- Baral H-O, Haelewaters D (2015) *Rommelaarsia flavovirens* gen. et sp. nov. (Helotiales), a new discomycete on *Equisetum* with a peculiar asexual state. *Ascomycete org* 7 (6):321–330
- Baral H-O, Rama T (2015) Morphological update on *Calycina marina* (Pezizellaceae, Helotiales, Leotiomyces), a new combination for *Laetinaevia marina*. *Botanica Marina* 58(6):523–534
- Barbeito I, Brücker RL, Rixen C, Bebi P (2013) Snow fungi—induced mortality of *Pinus cembra* at the alpine treeline: evidence from plantations. *Arctic, Antarctic, and Alpine Research* 45(4):455–470

- Barber PA, Crous PW, Groenewald JZ, Pascoe IG, Keane P (2011) Reassessing *Vermisporium* (Amphisphaeriaceae), a genus of foliar pathogens of Eucalypts. *Persoonia* 27:90–118.
- Barbetti MJ, Riley IT (2006) Field application of *Dilophospora alopecuri*
- Barbosa FR, Gusmão LF, Raja HA, Shearer CA (2013) New species and new records of freshwater ascomycetes from Brazil and Costa Rica. *Mycologia* 105(2):335–43
- Barbosa FR, Gusmão LFP (2011) Conidial fungi from semi-arid Caatinga Biome of Brazil. Rare freshwater hyphomycetes and other new records. *Mycosphere* 2(4), 475–485
- Barbosa MA, Costa PM, Malosso E, Castañeda-Ruiz RF (2016) *Codinaea leomaiae* sp. nov. from the Brazilian Atlantic Forest. *Mycotaxon*. Aug 10;131(2):423–8
- Barbosa FR, Raja HA, Shearer CA, Gusmão LFP (2013) Some Freshwater Fungi from the Brazilian Semi-Arid Region, Including Two New Species of Hyphomycetes. *Cryptogamie, Mycologie* 34:243–258
- Barcenas Peña, A./ Lücking, R./ Miranda-González, R./ Herrera-Campos, M.A. 2014: Three new species of *Graphis* (Ascomycota: Ostropales: Graphidaceae) from Mexico, with updates to taxonomic key entries for 41 species described between 2009 and 2013. - *The Lichenologist* 46(1):69–82
- Barchien C, Tsui CK, Gulis V, Szewzyk U, Marvanová L (2013) The molecular phylogeny of aquatic hyphomycetes with affinity to the leotiomycetes. *Fungal Biology* 117:660–672
- Barghoorn ES, Linder DH (1944) Marine fungi: Their taxonomy and biology. *Farlowia* 1: 395–467
- Barnes I, Van der Nest A, Mullett MS, Crous PW, Drenkhan R, Musolin DL, Wingfield MJ (2016) Neotypification of *Dothistroma septosporum* and epitypification of *D. pini*, causal agents of *Dothistroma* needle blight of pine. *For. Pathol.* DOI: 10.1111/efp.12304
- Barr M (1989) The genus *Chaetomastia* (Dacampiaceae) in North America. *Mycotaxon* 34:507–515
- Barr ME (1970) Some asexual ascomycetes on Ericaceae and Empetraceae. *Mycologia* 377-394.
- Barr ME (2002) Teichosporaceae, another family in the Pleosporales. *Mycotaxon* 82:373-389.
- Barreto RW, Johnston PR, Crous PW, Evans HC (2012) A new species of the lenticel fungal genus *Claviradulomyces* (Ostropales) from the Brazilian Atlantic forest tree *Xylopia sericea* (Annonaceae). *IMA Fungus* 3:135–141.
- Barseghyan GS, Solomon P. The genus *Peziza* Dill. ex Fr.(Pezizales, Ascomycota) in Israel. *Ascomycete Org.* 2011 Feb;2(4):39–50.
- Bartkowiak ME, Bennett JP (2016) Floristic study of lichens in Portage County, Wisconsin.**
- Bartosik M, Żakowska Z, Cedzińska K, Roźniakowski K (2010) Biodeterioration of Optical Glass Induced by Lubricants Used in Optical Instruments Technology. *Polskie Towarzystwo Mikrobiologów Polish Society of Microbiologists* 59(4):295–300
- Bartra J, Belmonte J, Torres-Rodriguez JM, Cistero-Bahima A (2008) Sensitization to *Alternaria* in patients with respiratory allergy. *Frontiers in bioscience (Landmark edition)*, 14:3372–3379
- Barua BS, Suzuki A, Pham HN, Inatomi S (2012) Adaptation of ammonia fungi to urea enrichment environment. *Journal of Agricultural Technology* 8(1):173–89
- Baschien C, Marvanová L, Szewzyk U (2006) Phylogeny of selected aquatic hyphomycetes based on morphological and molecular data. *Nova Hedwigia* 83: 311–353. doi:10.1127/0029-5035/2006/0083-0311

- Baschien C, Tsui CKM, Gulis V, Szewzyk U, Marvanová L (2013) The molecular phylogeny of aquatic hyphomycetes with affinity to the Leotiomycetes. *Fungal Biology* 117:660–672. doi: 10.1016/j.funbio.2013.07.004
- Bashir G, Hussain W, Rizvi A (2009) *Bipolaris hawaiiensis* keratomycosis and endophthalmitis. *Mycopathologia* 167(1):51–53
- Bashyal B, Chand R, Prasad L, Joshi A (2011) Partial resistance components for the management of spot blotch pathogen *Bipolaris sorokiniana* of barley (*Hordeum vulgare* L.). *Acta Phytopathologica et Entomologica Hungarica*, 46(1):49–57
- Bashyal BM, Chand R, Kushwaha C, Sen D, Prasad LC, Joshi AK (2010) Association of melanin content with conidiogenesis in *Bipolaris sorokiniana* of barley (*Hordeum vulgare* L.). *World Journal of Microbiology and Biotechnology*, 26(2):309–316
- Bastida F, Jehmlich N, Ondoño S, von Bergen M, García C, Moreno JL (2014) Characterization of the microbial community in biological soil crusts dominated by *Fulgensia desertorum* (Tomin) Poelt and *Squamarina cartilaginea* (With.) P. James and in the underlying soil. *Soil Biology and Biochemistry* 76:70–79
- Bates ST, Bungartz F, Lücking R, Herrera-Campos MA, Zambrano A (2011) Biomonitoring, Ecology and Systematics of Lichens. *Acta Botanica Hungarica*, 53(3–4):442–443
- Batista, Bezerra JL (1960) *Revta Biol., Lisb.* 2:132
- Baturo-Ciesniewska A (2011) Genetic variability and pathogenicity among polish isolates of *Bipolaris sorokiniana* from spring barley. *Journal of Plant Pathology*, 291–302
- Bautista-Rosales PU, Calderon-Santoyo M, Servín-Villegas R, Ochoa-Álvarez NA, Ragazzo-Sánchez JA (2013) Action mechanisms of the yeast *Meyerozyma caribbica* for the control of the phytopathogen *Colletotrichum gloeosporioides* in mangoes. *Biological control* 65(3):293–301
- Beaulieu WT, Panaccione DG, Ryan KL, Kaonongbua W, Clay K (2015) Phylogenetic and chemotypic diversity of *Periglandula* species in eight new morning glory hosts (Convolvulaceae). *Mycologia* 107(4):667–78
- Beck A, Mayr C (2012) Nitrogen and carbon isotope variability in the green-algal lichen *Xanthoria parietina* and their implications on mycobiont–photobiont interactions. *Ecology and evolution* 2(12):3132–3144
- Beer ZW DE, Seifert KA, Wingfield MJ (2013) A nomenclator for ophiostomatoid genera and species in the Ophiostomatales and Microascales.
- Beese WJ, Sandford J, Symon M, Major S (2015) Distribution and abundance of *Pseudocyphellaria rainierensis* (old-growth specklebelly lichen) on Vancouver Island and a portion of the Central Mainland Coast of British Columbia. *Evansia*, 32(3):136–153
- Begoude ADB, Gryzenhout M, Wingfield MJ, Roux, J (2010) *Aurifilum*, a new fungal genus in the Cryphonectriaceae from *Terminalia* species in Cameroon. *Antonie van Leeuwenhoek* 98(3):263–278
- Begum A, HariKrishna S (2010) Monitoring Air pollution using lichens species in South Bangalore, Karnataka. *International Journal of ChemTech Research*, 2(1):255–260
- Bell A (2010) *Echinosphaeria cincinnat*, a new species from Rimutaka Forest park near Wellington New Zealanda. *Australasian Mycologist*. 29:24–26
- Bell A, Mahoney DP (2008) *Echinosphaeria medusa*, a new species from New Zealand, with notes on related species. *Australasian Mycologist*. 27(3):141–148
- Bell A, Mahoney DP (2016) Field studies in the Lasiosphaeriaceae and Helminthosphaeriaceae sensu lato. *CBS Biodiversity Series* 15:3–124

- Belliveau MJR, Baerlocher F (2005) Molecular evidence confirms multiple origins of aquatic hyphomycetes. *Mycol. Res.* 109(12):1407–1417, doi:10.1017/S0953756205004119
- Benatti MN (2014) An update on the genus *Parmelinella* Elix & Hale (Parmeliaceae, lichenized ascomycetes). *Mycosphere* 5(6):770–789, Doi 10.5943/mycosphere,5,6,8
- Bencsik O, Papp T, Berta M, Zana A, Forgó P, Dombi G, Andersson MA, Salkinoja-Salonen M, Vágvölgyi C, Szekeres A (2014) Ophiobolin A from *Bipolaris oryzae* perturbs motility and membrane integrities of porcine sperm and induces cell death on mammalian somatic cell lines. *Toxins* 6(9):2857–2871
- Bendiksby M, Timdal E (2013) Molecular phylogenetics and taxonomy of *Hypocenomyce sensu lato* (Ascomycota: Lecanoromycetes): extreme polyphyly and morphological/ecological convergence. *Taxon* 62(5):940–956
- Bendiksby M, Haugan R, Spribille T, Timdal E (2015) Molecular phylogenetics and taxonomy of the *Calvitimela aglaea* complex (Tephromelataceae, Lecanorales). *Mycologia* 107:1172–1183
- Bendiksby M, Mazzoni S, Jørgensen MH, Halvorsen R, Holien H (2014) Combining genetic analyses of archived specimens with distribution modelling to explain the anomalous distribution of the rare lichen *Staurolemma omphalarioides*: long-distance dispersal or vicariance?. *Journal of Biogeography*, 41(11):2020–2031
- Benesperi R, Lastrucci L, Nascimbene J (2013) Human Disturbance Threats the Red-Listed Macrolichen *Seirophora villosa* (Ach.) Frödén in Coastal Juniperus Habitats: Evidence From Western Peninsular Italy. *Environmental management*, 52(4):939–945
- Stielow B, Hensel G, Strobel D, Makonde HM, Rohde M, Dijksterhuis J, Klenk H-P, Göker M (2013) Hoffmannoscypha, a novel genus of brightly coloured, cupulate Pyronemataceae closely related to *Tricharina* and *Geopora*. *Mycol Progress* 12:675–686
- Benkert D (2008). [Emendation of the genus *Kotlabaea* (Ascomycota, Pezizales)]. *Öst. Z. Pilzk* 17:173–193
- Benkert D (2010). Seltene und kritische Pezizales-Funde (Ascomycota) aus der Bundesrepublik Deutschland. *Z. Mykol* 76(1):27–58
- Bennett JP (2013) The Lichens and Allied Fungi of Great Smoky Mountains National Park. *The Bryologist* 116(2):218–220
- Benucci GM, Raggi L, Albertini E, Grebenc T, Bencivenga M, Falcinelli M, Di Massimo G (2011) Ectomycorrhizal communities in a productive *Tuber aestivum* Vittad. orchard: composition, host influence and species replacement. *FEMS microbiology ecology* 76(1):170–84
- Benucci GMN, Lefevre C, Bonit G (2016). Characterizing root-associated fungal communities and soils of Douglas-fir (*Pseudotsuga menziesii*) stands that naturally produce Oregon white truffles (*Tuber oregonense* and *Tuber gibbosum*). *Mycorrhiza* 26:367–376
- Ben-Ze'ev IS, Assouline I, Levy E, Elkind G (2011) First report of *Bipolaris cactivora* causing fruit blotch and stem rot of dragon fruit (pitaya) in Israel. *Phytoparasitica* 39(2):195–197
- Berger F, Braun U, Heuchert B. *Gonatophragmium lichenophilum* sp. nov.—a new lichenicolous hyphomycete from Austria. *Mycobiota*. 2015;5:7-13.
- Berger F, LaGreca S (2014) Contributions to the lichen flora of Bermuda--Part 1. *Evansia* 31(2):41–68
- Berka RM, Grigoriev IV, Otiillar R, Salamov A, Grimwood J, Reid I, Ishmael N, John T, Darmond C, Moisan MC, Henrissat B (2011) Comparative genomic analysis of the

- thermophilic biomass-degrading fungi *Myceliophthora thermophila* and *Thielavia terrestris*. *Nature biotechnology* 10:922–7
- Berkeley MJ (1876) Notices of North American Fungi. *Grevillea* 4 (32): 141–162.
- Besitulo A, Moslem MA, Hyde KD (2010) Occurrence and distribution of fungi in a mangrove forest on Siargao Island, Philippines. *Bot Mar* 53:535–543
- Bevan J, Alexander R, Lázaro-Suau R (2012) Transplant experiments to examine the habitat exclusivity of lichen dominated soil crust communities in the El Cautivo badlands, SE Spain. In EGU General Assembly Conference Abstracts 14:11040
- Bhat DJ, Kendrick WB (1993) Twenty-five new conidial fungi from the Western Ghats and the Andaman Islands (India). *Mycotaxon* 49:19–90
- Bhattacharai HD, Kim T, Oh H, Yim JH (2013) A new pseudodepsidone from the Antarctic lichen *Stereocaulon alpinum* and its antioxidant, antibacterial activity. *Journal of Antibiotics* 66(9):559
- Bhise MR, Patil CR, Salunkhe CB (2014) Three new black mildew fungi from Mahabaleshwar, Maharashtra, India. *Int. J. of Life Sciences* 2(4):304–310
- Biazrov LG (2012) Stable nitrogen isotopes ($\delta^{15}\text{N}$) in thalli of arid vagrant lichen *Xanthoparmelia camtschadalis* across an altitudinal gradient of the Khangai Plateau of Mongolia. *Contemporary Problems of Ecology* 5(2):200–207
- Bills GF, Platas G, Peelaez F, Masarekar P (1999) Reclassification of a pneumocandin producing anamorph, *Glarea lozoyensis* gen. et sp. nov., previously identified as *Zalerion arboricola*. *Mycol Res* 103:179–192
- Bills GF, Menéndez VG, Platas G (2012) *Kabatiella bupleuri* sp. nov. (Dothideales), a pleomorphic epiphyte and endophyte of the Mediterranean plant *Bupleurum gibraltarium* (Apiaceae). *Mycologia* 104(4):962–973
- Bilovitz PO, Mayrhofer H (2014) Lichenized and lichenicolous fungi from the valley ‘Ochsental’ (Eastern Alps, Vorarlberg, Austria). *Fritschiana: Veröffentlichungen aus dem Herbarium des Instituts für Botanik der Karl-Franzens-Universität Graz (GZU)* 78:47
- Bilovitz PO (2014) The importance of old deciduous trees and wooden fences for lichen diversity—an example from the Teichalm area (Eastern Alps). *Herzogia* 27(1):199
- Bilovitz PO, Stešević D, Mayrhofer H (2010) Epiphytic lichens and lichenicolous fungi from the northern part of Montenegro. *Herzogia* 23(2):249
- Binder M, Hibbett DS (2001) Higher level phylogenetic relationships of homobasidiomycetes (mushroom-forming fungi) inferred from four rDNA regions. *Molecular Phylogeny and Evolution* 22:76–90
- Björk CR (2010) Additions to the Lichen Flora of Washington State, United States. I. *Evansia* 27(1):18–20
- Boehm E, Marson G, Mathiassen GH, Schoch CL (2015) An overview of the genus *Glyphium* and its phylogenetic placement in *Patellariales*. *Mycologia* 107:607–618
- Boehm EWA, Mugambi GK, Miller AN, et al. (2009) A molecular phylogenetic reappraisal of the *Hysteriaceae*, *Mytiliniaceae* and *Gloniaceae* (Pleosporomycetidae, Dothideomycetes) with keys to world species. *Studies in Mycology* 64:49–83
- Boehm EWA, Schoch CL, Spatafora JW (2009b) – On the evolution of the Hysteriaceae and Mytiliniaceae (Pleosporomycetidae, Dothideomycetes, Ascomycota) using fore nuclear genes. *Mycological Research* 113:461–479
- Bogdanović G, Trajković S, Micić T (2016) Flora lichen western mountains Vranje place. *Journal of Process Management. New Technologies* 4(3):69
- Boitano S, Flynn AN, Sherwood CL, Schulz SM, Hoffman J, Gruzina I, Daines MO (2011) *Alternaria alternata* serine proteases induce lung inflammation and airway epithelial

- cell activation via PAR2. *American Journal of Physiology-Lung Cellular and Molecular Physiology* 300(4):605–L614
- Boluda CG, Hawksworth DL, Divakar PK, Crespo A, Rico VJ (2016) Microchemical and molecular investigations reveal *Pseudophebe* species as cryptic with an environmentally modified morphology. *The Lichenologist* 48(5):527–43.
- Bomble FW (2012) *Candelaria pacifica* and *Xanthomendoza borealis* in the region of Aachen, North Rhine-Westphalia—new to Germany.
- Bonito G, Smith ME, Nowak M, Healy RA, Guevara G, Cázares E, Kinoshita A, Nouhra ER, Domínguez LS, Tedersoo L, Murat C (2013) Historical biogeography and diversification of truffles in the Tuberales and their newly identified southern hemisphere sister lineage. *PLoS One* 8(1):e52765
- Bonito GM, Gryganskyi AP, Trappe JM, Vilgalys RA (2010) global meta-analysis of *Tuber* ITS rDNA sequences: species diversity, host associations and long-distance dispersal. *Molecular Ecology*. 19(22):4994–5008
- Bonito G, Trappe JM, Rawlinson P, Vilgalys R (2010). Improved resolution of major clades within *Tuber* and taxonomy of species within the *Tuber gibbosum* complex. *Mycologia* 102(5):1042–1057
- Boom PPG. van den (2010). New or interesting lichens and lichenicolous fungi of Gran Canaria (Canary Islands, Spain). *Willdenowia* 40(2):359–367
- Boom PVD, Ertz D (2012) Lichens and lichenicolous fungi from El Hierro (Canary Islands), a survey, including five new species. *Cryptogamie, Mycologie* 33(1):59–97
- Boonmee S, D'souza MJ, Luo Z, Pinruan U, Tanaka K, Su H, Bhat DJ, McKenzie EHC, Jones EBG, Taylor JE, Phillips AJL, Hirayama K, Eungwanichayapant PD, Hyde KD (2016) *Dictyosporiaceae* fam. nov. *Fungal Divers* @: @ - @
- Boonmee S, Ko Ko TW, Chukeatirote E, Hyde KD, Chen H, Cai L, McKenzie EHC, Jones EBG, Kodsueb R, Hassan BA (2012) Two new *Kirschsteiniothelia* species with *Dendryphiopsis* anamorphs cluster in *Kirschsteiniotheliaceae* fam. nov. *Mycologia* 104(3):698–714
- Boonmee S, Ko Ko TW, Chukeatirote E, Hyde KD, Chen H, Cai L, McKenzie EHC, Jones EBG, Kodsueb R, Hassan BA (2012) Two new *Kirschsteiniothelia* species with *Dendryphiopsis* anamorphs cluster in *Kirschsteiniotheliaceae* fam. nov. *Mycologia* 104:698–714
- Boonmee S, Rossman AY, Liu JK, Li WJ, Dai DQ, Bhat DJ, Jones EBG, McKenzie EHC, Xu JC, Hyde KD. (2014) *Tubeufiales*, ord. nov., integrating sexual and asexual generic names. *Fungal Diversity* 68:239–298
- Boonmee S, Zhang Y, Chomnunti P, Chukeatirote E, Tsui CKM, Bahkali AH, Hyde KD. 2011 –Revision of lignicolous *Tubeufiaceae* based on morphological reexamination and phylogenetic analysis. *Fungal Diversity* 51:63–102
- Boonyuen N, Chuaseeharonnachai C, Suetrong S, Veera VS, Sivichai S, Jones EBG, Pang K-. *Savoryellales* (hypocreomycetidae, sordariomycetes): A novel lineage of aquatic ascomycetes inferred from multiple-gene phylogenies of the genera *ascotaiwania*, *ascothailandia*, and *savoryella*. *Mycologia*. 2011;103(6):1351–71
- Boonyuen N, Sri-Indrasutdhi V, Suetrong S, Sivichai S, Jones EG (2012) *Annulatascus aquatorba* sp. nov., a lignicolous freshwater ascomycete from Sirindhorn Peat Swamp Forest, Narathiwat, Thailand. *Mycologia* 104 (3):746–757
- Bordallo JJ, Rodríguez A, Kounas V, Camello F, Honrubia M, Morte A (2015) Two new *Terfezia* species from Southern Europe. *Phytotaxa* 230(3):239–49
- Bordallo JJ, Rodríguez A, Muñoz-Mohedano JM, Suz LM, Honrubia M, Morte A (2013) Five new *Terfezia* species from the Iberian Peninsula. *Mycotaxon* 124(1):189–208

- Bordallo JJ, Rodriguez AN, Honrubia MA, Morte AS (2012) *Terfezia canariensis* sp. nov. una nueva especie de trufa encontrada en las Islas Canarias. *Cantarela* 56:1–8
- Borse BD, Borse KN, Pawar NS, Tuwar AR (2013) Marine fungi from India-XII. A revised checklist. *Indian Journal of Geo-Marine Sciences* 42:110–119
- Borse BD, Jagdale PE, Patil SY (2014) Fresh water higher fungi from Pune district (MS, India) I: the mitosporic genus *Xylomyces*. *BIOINFOLET-A Quarterly Journal of Life Sciences* 11(3a):730–4
- Bose T, Reynolds DR, Berbee ML (2014) Common, unsightly and until now undescribed: *Fumiglobus pieridicola* sp. nov., a sooty mold infesting *Pieris japonica* from western North America. *Mycologia* 106(4):746–56
- Boutabia L, Telailia S, de Belair G (2015) Corticolous lichen flora on *Quercus suber* L. in the wetlands of El Kala national park (North-Eastern Algeria). *Advances in Environmental Biology* 360–373
- Boyce RD, Deziel PJ, Otley CC, Wilhelm MP, Eid AJ, Wengenack NL, Razonable RR (2010) Phaeohyphomycosis due to *Alternaria* species in transplant recipients. *Transplant Infectious Disease* 12(3):242–250
- Brackel WV, Zimmermann DG (2012) A new species of *Nectriopsis* on *Cladonia* from Nordrhein-Westfalen (Germany). *Herzogia* 25(2):231–4
- Brackel WV (2011) Lichenicolous fungi and lichens from Puglia and Basilicata (southern Italy). *Herzogia* 24(1):65–101
- Brackel, WV (2010) *Dacampia cyrtellae*, a new name for *Dacampia lecaniae* Brackel. *Herzogia* 23:315–316
- Brackel WV (2011) *Lichenopeltella rangiferinae* sp. nov. and some other lichenicolous fungi from Iceland. *Acta Botanica Islandica* 15:51–60
- Brackel, WV (2008). *Zwackhiomyces echinulatus* sp. nov. and other lichenicolous fungi from Sicily, Italy. *Herzogia* 21: 181-198.
- Brackel WV (2010). Some lichenicolous fungi and lichens from Iceland, including *Lichenopeltella uncialicola* sp. nov.. *Herzogia* 23(1):93–109
- Brackel, W. von; Berger, F. (2010). Gall-inducing species of *Polycoccum* (Ascomycota) on the lichen genus *Placopsis*. *Herzogia* 23(2):195–204
- Brackel WV (2014) Kommentierter Katalog der flechtenbewohnenden Pilze Bayerns. *Bibliotheca Lichenologica*. 109:1–476
- Brackel WV (2013) Miscellaneous records of lichenicolous fungi from the Italian Alps. *Herzogia* 26(1);141–157
- Bradwell T (2010) Studies on the growth of *Rhizocarpon geographicum* in NW Scotland, and some implications for lichenometry. *Geografiska Annaler: Series A, Physical Geography* 92(1):41–52
- Braga FR, Carvalho RO, Araujo JM, Silva AR, Araújo JV, Lima WS, Tavela AO, Ferreira, S.R., 2009. Predatory activity of the fungi *Duddingtonia flagrans*, *Monacrosporium thaumasium*, *Monacrosporium sinense* and *Arthrobotrys robusta* on *Angiostrongylus vasorum* first-stage larvae. *Journal of helminthology*, 83(04), pp.303-308.
- Braga, F.R., Carvalho, R.O., Silva, A.R., Araújo, J.V., Frassy, L.N., Lafisca, A. and Soares FE (2014) Predatory capability of the nematophagous fungus *Arthrobotrys robusta* preserved in silica gel on infecting larvae of *Haemonchus contortus*. *Tropical animal health and production* 46(3):571–574
- Braga FR, Silva AR, Carvalho RO, Araújo JV, Guimarães PHG, Fujiwara RT, Frassy LN (2010) In vitro predatory activity of the fungi *Duddingtonia flagrans*, *Monacrosporium thaumasium*, *Monacrosporium sinense* and *Arthrobotrys robusta* on *Ancylostoma ceylanicum* third-stage larvae. *Veterinary microbiology* 146(1):183–186

- Braganca H, Rigling D, Diogo, E, Capelo J, Phillips A, Tenreiro R (2011) *Cryphonectria naterciae*: a new species in the *Cryphonectria-Endothia* complex and diagnostic molecular markers based on microsatellite-primed PCR. *Fungal Biology* 115(9):852–861
- Braun U (1995) A monograph of *Cercospora*, *Ramularia* and allied genera (phytopathogenic hyphomycetes). Vol. 1. IHW-Verlag Eching (333 pp.).
- Braun U (1998) A monograph of *Cercospora*, *Ramularia* and allied genera (phytopathogenic hyphomycetes). Vol. 2. IHW-Verlag Eching (493 pp.).
- Braun U (2016). *Rhynchosporium graminicola* revisited and reinstated. *Schlechtendalia* 30:39–40.
- Braun U, Crous PW, Groenewald JZ, Scheuer C (2011) *Pseudovirgaria*, a fungicolous hyphomycete genus. *IMA Fungus* 2:65–69
- Braun U, Crous PW, Nakashima C (2014) Cercosporoid fungi (Mycosphaerellaceae) 2. Species on monocots (Acoraceae to Xyridaceae, excluding Poaceae). *IMA Fungus* 5: 203–390
- Braun U, Crous PW, Schubert K (2008). Taxonomic revision of the genus *Cladosporium* s. lat.8. Reintroduction of *Graphiopsis* (=Dichocladosporium) with further reassessments of cladosporioid hyphomycetes. *Mycotaxon* 103:207–216
- Braun U, Nakashima C, Crous PW (2013). Cercosporoid fungi (Mycosphaerellaceae) 1. Species on other fungi, Pteridophyta and Gymnospermae. *IMA Fungus* 4:265–345
- Braun U, Cook RTA (2012). Taxonomic Manual of the Erysiphales (Powdery Mildews). CBS Biodiversity Series No. 11:1–707
- Braun, U (2009) New species, combinations and records of hyphomycetes. *Schlechtendalia* 19:63–71
- Braun, U (2013) (2210–2232) Proposals to conserve the teleomorph-typified name *Blumeria* against the anamorph-typified name *Oidium* and twenty-two teleomorph-typified powdery mildew species names against competing anamorph-typified names (Ascomycota: Erysiphaceae). *Taxon* 62(6):1262–1331
- Braun U (1988) Studies on *Ramularia* and allied genera (I). *International Journal of Mycology and Lichenology* 3(2–3):271–285
- Braun U, Crous P (2016) (2415) Proposal to conserve the name *Cercospora* (Ascomycota: Mycosphaerellaceae) with a conserved type. *Taxon* 65(1):185–185
- Braun U, Urtiaga R (2013) New species and new records of cercosporoid hyphomycetes from Cuba and Venezuela (Part 2). *Mycosphere* 4(2):176–216
- Braun, U., 2013. A monograph of *Cercospora*, *Ramularia* and allied genera (phytopathogenic hyphomycetes) Additions to host range and distribution. *Schlechtendalia*, 1, pp.41-43.
- Braun U, Cook RTA, Inman AJ, Shin H-D (2002) The taxonomy of the powdery mildew fungi (pp. 13–54). In Bélanger R, Dik AJ, Bushnell WR (Eds.): *The powdery mildews: a comprehensive treatise*. APS Press, USA.
- Braun U, Crous PW, Nakashima C (2015) cercosporoid fungi (Mycosphaerellaceae) 4. Species on dicots (Acanthaceae to Amaranthaceae). *IMA fungus*, 6(2):373–469
- Braun U, Nakashima C, Crous PW (2013) Cercosporoid fungi (Mycosphaerellaceae) 1. Species on other fungi, Pteridophyta and Gymnospermae. *IMA Fungus* 4: 265–345
- Braun U, Takamatsu S (2000) Phylogeny of *Erysiphe*, *Microsphaera*, *Uncinula* (Erysiphaceae) and *Cystotheca*, *Podosphaera*, *Sphaerotheca* (Cystothecaceae) inferred from rDNA ITS sequences – some taxonomic consequences. *Schlechtendalia* 4: 1–33

- Braun U, Crous PW, Nakashima C (2014) Cercosporoid fungi (Mycosphaerellaceae) 2. Species on monocots (Acoraceae to Xyridaceae, excluding Poaceae). *IMA Fungus* 5:203–390
- Braun U, Heuchert B (2010) *Sporidesmiella lichenophila* sp. nov. a new lichenicolous hyphomycete. *Herzogia* 23(1):69–74
- Braun U, Heuchert B, Diederich P (2009) Two new and another interesting lichenicolous hyphomycete. *Herzogia* 22:165–171
- Braun U, Hill F, Schubert K (2006) New species and new records of biotrophic micromycetes from Australia, Fiji, New Zealand and Thailand. *Fungal Diversity*. 22:13–35
- Braun U, Bien S, Hantsch L, Heuchert B (2014) *Tubakia chinensis* sp. nov. and a key to the species of the genus *Tubakia*. *Schlechtendalia* 28:23–28
- Breuss O (2009) A synopsis of the lichen genus *Placopyrenium* (Verrucariaceae), with descriptions of new taxa and a key to all species. *Biblioth. Lichenol* 99:93–112
- Breuss O (2011) Notable records of pyrenocarpous lichens (Verrucariaceae) from Spain. *Herzogia* 24(2):375–378
- Brock PM, Döring H, Bidartondo MI (2009) How to know the unknown fungi: the role of a herbarium. *New Phytol* 181:719–724
- Brodo IM (2007) Notes on the lichen genus *Haematomma* from Sabah, Malaysia. - In: Kärnefelt I, Thell A: *Lichenological Contributions in Honour of David Galloway*. *Biblioth. Lichenol.* 95: 147–153
- Brodo IM, Culberson WL, Culberson CF (2008) *Haematomma* (Lecanoraceae) in North and Central America, including the West Indies. *The Bryologist* 111(3): 363–423
- Brodo, I.M. and Lendemer, J.C., 2015. A revision of the saxicolous, esorediate species of *Ainoa* and *Trapelia* (Baeomycetaceae and Trapeliaceae, lichenized Ascomycota) in North America, with the description of two new species. *The Bryologist*, 118(4), pp.385-399.
- Brodo IM (2010) The lichens and lichenicolous fungi of Haida Gwaii (Queen Charlotte Islands), British Columbia, Canada. 5. A new species of *Lecanora* from shoreline rocks This paper is one of a selection of papers published as part of the special Schofield Gedenkschrift. *Botany* 88(4):352–358
- Brown EM, McTaggart LR, Zhang SX, Low DE, Stevens DA, Richardson SE (2013) Phylogenetic analysis reveals a cryptic species *Blastomyces gilchristii*, sp. nov. within the human pathogenic species *Blastomyces dermatitidis*. *PLoS ONE* 8:e59237.
- Brusse FA (1986) *Dermaticum fallax* (Physciaceae), a new lichen from southern Africa. *Mycotaxon* 25:161–164
- Brusse FA (1987) *Echidnocymbium* (Biatoraceae), a new lichen genus from southern Africa. *Mycotaxon* 29:173–176
- Bruzone MC, Fehrer J, Fontenla SB (2016) Vohník M. First record of *Rhizoscyphus ericae* in Southern Hemisphere's Ericaceae. *Mycorrhiza* 25:1–7
- Buchan A, Newell SY, Moreta JI, Moran MA (2002) Analysis of internal transcribed spacer (ITS) regions of rRNA genes in fungal communities in a southeastern U.S. salt marsh. **Microb. Ecol.** 43(3):329–340
- Buçukoglu TZ, Albayrak S, Halici MG, Tay T (2013) Antimicrobial and antioxidant activities of extracts and lichen acids obtained from some Umbilicaria species from Central Anatolia, Turkey. *Journal of Food Processing and Preservation*, 37(6):1103–1110
- Büdel B (2011) Lichens of the Namib Desert-A Guide to Their Identification. *Herzogia*, 24(1):167–167

- Bungartz F, Elix JA, Kalb K, Giralt M (2016) New and overlooked species from the Galapagos Islands: the generic concept of *Diploicia* reassessed. *Lichenologist* 48:489–515
- Bungartz F, Dután-Patiño VL, Elix JA (2013) The lichen genera *Cryptothecia*, *Herpothallon* and *Helminthocarpon* (Arthoniales) in the Galapagos Islands, Ecuador. *The Lichenologist* 45(6):739–762
- Bungartz F, Hillmann G, Kalb K, Elix JA (2013) Leprose and leproid lichens of the Galapagos, with a particular focus on *Lepraria* (Stereocaulaceae) and *Septotrapelia* (Pilocarpaceae). *Phytotaxa* 150:1–28
- Bungartz F, Nordin A, Grube M (2007) *Buellia*. In: Nash TH III, Gries C, Bungartz F: *Lichen Flora of the Greater Sonoran Desert Region*. Volume 3. Lichens Unlimited, Arizona State University, Tempe, 113-179
- Burgos MRG, Katimbang MLB, Paz MD, Beligan GA, Goodwin PH, Ona IP, Mauleon RP, Ardales EY, Cruz CV (2013) Genotypic variability and aggressiveness of *Bipolaris oryzae* in the Philippines. *European journal of plant pathology* 137(2):415–429
- Burneviča N, Jansons Ā, Zaļuma A, Kļaviņa D, Jansons J, Gaitnieks T. (2016) Fungi Inhabiting Bark Stripping Wounds Made by Large Game on Stems of *Picea abies* (L.) Karst. in Latvia. *Baltic Forestry* 22(1):2–7
- Buschbom J, Mueller G (2004) Resolving evolutionary relationships in the lichen-forming genus *Porpidia* and related allies (Porpidiaceae, Ascomycota). *Mol Phyl Evol* 32: 66-82.
- Bussaban B, Lumyong S, Lumyong P, Hyde KD, McKenzie EHC (2001) Two new species of endophytes (ascomycetes) from Zingiberaceae sporulating in culture. *Nova Hedwigia* 73:487–493
- Butin H, Holdenrieder O, Sieber TN (2013) The complete life cycle of *Petrakia echinata*. *Mycological progress* 12(2):427–35
- Buyck B, Hosaka K, Masi S, Hofstetter V. 2016. Molecular analyses of first collections of *Elaphomyces* Nees (Elaphomycetaceae, Eurotiales, Ascomycota) from Africa and Madagascar indicate that the current concept of *Elaphomyces* is polyphyletic. *Cryptogam Mycol* 37:3–14
- Gueidan C, Aptroot A, Cáceres MES (2016) Molecular phylogeny of the tropical family Pyrenulaceae: contribution from dried specimens and FTA card samples. *Mycological progress* 15(7):1–21
- Cabanela MV, Jeewon R, Hyde KD (2007) Morphotaxonomy and phylogeny of *Paoayensis lignicola* gen. et sp. nov.(ascomycetes) from submerged wood in Paoay Lake, Ilocos Norte, the Philippines. *Cryptogamie. Mycologie*28(4):301–10
- Cabral A, Groenewald JZ, Rego C, Oliveira H, Crous PW (2012) *Cylindrocarpon* root rot: multi-gene analysis reveals novel species within the *Ilyonectria radicola* species complex. *Mycological Progress*, 11(3):655–688
- Cáceres MES, Aptroot A, Parnmen S, Lücking R (2014) Remarkable diversity of the lichen family Graphidaceae in the Amazon rain forest of Rondônia, Brazil. *Phytotaxa*. 189:87–136
- Cáceres MES, Santos Viera T, Santos De Jesus L, Lücking R (2012) New and interesting lichens from the Caxiuanã National Forest in the Brazilian Amazon. *Lichenologist* 44:807–812
- Cáceres ME, da Silva, Plata ER, Lücking R (2012) *Malmographina*, a new genus for *Graphina malmei* (Ascomycota: Ostropales: Graphidaceae). *The Lichenologist*. 44(1):115–120
- Cáceres MES, Aptroot A (2016) First inventory of lichens from the Brazilian Amazon in Amapá State. *The Bryologist*. 119(3):250–265

- Cáceres MESC, Aptroot A, Ertz D (2014) Species of Arthoniales from the Amazon, Rondônia, Brazil. *The Lichenologist* 46:573–588
- Cáceres MESC, Aptroot A, Ertz D (2014) Species of Arthoniales from the Amazon, Rondônia, Brazil. *The Lichenologist* 46:573–588
- Cai L, Hu D-M, Liu F, Hyde KD, Gareth-Jones E (2014) The molecular phylogeny of freshwater Sordariomycetes and discomycetes. *Freshwater Fungi and Fungal-like Organisms De Gruyter, Berlin* 47–72
- Cai L, Jeewon R, Hyde KD (2006) Phylogenetic investigations of Sordariaceae based on multiple gene sequences and morphology. *Mycological research* 110(2):137–50
- Cai L, Jeewon R, Hyde KD (2006). Molecular Systematics of Zopfiella and allied genera: evidence from multi-gene sequence analyses. *Mycological Research* 110(4):359–368
- Cai L, Guo XY, Hyde KD (2008) Morphological and molecular characterisation of a new anamorphic genus *Cheirosporium*, from freshwater in China. *Persoonia*. 20:53–58
- Cai, L.; Hyde, K.D. 2007. New species of Clohiesia and Paraniesslia collected from freshwater habitats in China. *Mycoscience*. 48(3):182-186.
- Calado ML, Carvalho L, Pang KL, Barata M (2015) Diversity and Ecological Characterization of Sporulating Higher Filamentous Marine Fungi Associated with *Spartina maritima* (Curtis) Fernald in Two Portuguese Salt Marshes. *Microb Ecol*. 70:612–33
- Calatayud, V, Etayo J (1999) Codonmyces and Lichenostella, two new genera of lichenicolous conidial fungi. *Lichenologist* 31(6): 593–601
- Calatayud V, Etayo J. (1999) Fenestroconidia caloplacae, a new sporodochial lichenicolous fungus with catenate conidiogenous cells. *Lichenologist* 31(6):587–592
- Calatayud V, Etayo J (2001) Five new species of lichenicolous conidial fungi from Spain. *Can. J. Bot.* 79(2):223–230
- Calatayud V, Etayo J, Diederich P (2001) *Paraethariicola aspicilliae* (Ostropales, Odontotremataceae), a new genus and species of lichenicolous fungi. *Lichenologist* 33(6):477–482
- Calduch M, Gené J, Guarro J, Mercado-Sierra A, Castañeda-Ruiz RF (2002) Hyphomycetes from Nigerian rain forests. *Mycologia* 94:127–135
- Calvelo S, Fryday AM (2006) New reports of lichens from Argentine Tierra del Fuego and the Falkland Islands. *The Bryologist* 109(3):372–380
- Cameron, R.P. and Bondrup-Nielsen, S., 2012. Coral Lichen (*Sphaerophorus globosus* (Huds.) Vain) as an Indicator of Coniferous Old-Growth Forest in Nova Scotia. *Northeastern Naturalist* 19(4):535–540
- Campbell J, Anderson JL, Shearer CA (2003) Systematics of *Halosarpheia* based on morphological and molecular data. *Mycologia* 95:530–552
- Campbell J, Ferrer A, Raja HA, Sivichai S, Shearer CA (2006) Phylogenetic relationships among taxa in the Jahnulales inferred from 18S and 28S nuclear ribosomal DNA sequences, *Can J Bot* 85:873–882
- Campbell J, Inderbitzin P, Kohlmeyer J, Volkmann-Kohlmeyer B (2009) Koralionastetales, a new order of marine Ascomycota in the Sordariomycetes. *Mycol Res* 113:373–380
- Campbell J, Marvanová L, Gulis V (2009) Evolutionary relationships between aquatic anamorphs and teleomorphs: *Tricladium* and *Varicosporium*. *Mycological research*. 113(11):1322–34
- Campbell J, Shearer CA, Mitchell JI, Eaton RA (2002) *Corollospora* revisited: a molecular approach. In: Hyde KD (ed) *Fungi in marine environments*. Hong Kong University Press, Hong Kong, pp 15–33

- Campbell J, Volkmann-Kohlmeyer B, Gräfenhan T, Spataofora JW, Kohlmeyer J (2005) A reevaluation of Lulworthiales: relationships based on 18S and 28S rDNA. *Mycol Res* 109:556–568
- Campbell, J.; Shearer, C.A. 2004. *Annulusmagnus* and *Ascitendus*, two new genera in the *Annulatascaceae*. *Mycologia*. 96(4):822-833.
- Campbell, R.; Sutton, B.C. 1977. Conidial ontogeny in *Echinocatena arthrinoioides* gen. et sp. nov. (Deuteromycotina: Hyphomycetes). *Transactions of the British Mycological Society*. 69(1):125-131.
- Candan M, Schultz M (2015) New and additional records of cyanolichens from Turkey. *Herzogia*, 28(2):359–369
- Cannon PF, Alcorn JL (1994) *Omnidemptus affinis* gen. et sp. nov., teleomorph of *Mycocleptodiscus*. *Mycotaxon*. 51:483–487
- Cano J, Ulfig K, Guillamon, JM, Vidal P, Guarro J (1997) Studies on keratinophilic fungi. IX: *Neoarachnotheca* gen. nov. and a new species of *Nannizziopsis*. *Antonie van Leeuwenhoek* 72(2):149–158
- Cansaran-Duman D, Halici MG (2012) *Squamarina lentigera* türlerinde usnik asit konsantrasyonunun antimikrobiyal aktivitesi. *Türk Hijyen ve Deneysel Biyoloji Dergisi*
- Cant (1948) In *Bulletin trimestriel de la Société mycologique de France* 64(3-4):178.
- Cantrell SA, Hanlin RT (1997) Phylogenetic relationships in the family *Hyaloscyphaceae* inferred from sequences of ITS regions, 5.8 S ribosomal DNA and morphological characters. *Mycologia* 1:745–55
- Cao S, Zhang F, Liu C, Hao Z, Tian Y, Zhu L, Zhou Q (2015) Distribution patterns of haplotypes for symbionts from *Umbilicaria esculenta* and *U. muehlenbergii* reflect the importance of reproductive strategy in shaping population genetic structure. *BMC microbiology* 15(1):212
- Cao S, Wei X, Zhou Q, Wei J (2013) *Phyllobaeis crustacea* sp. nov. from China. *Mycotaxon* 126,31–36
- Capdet M, Romero AI (2010) Fungi from palms in Argentina. 1. *Mycotaxon* 112:339–355
- Carbone M, Agnello C, Alvarado P (2013) Phylogenetic studies in the family *Sarcosomataceae* (Ascomycota, Pezizales). *Ascomycete* 5(1):1–2
- Carbone M. (2013) A type study of *Pseudoplectania stygia* (Pezizales). *Ascomycete* 5(1):33–8
- Carbone M, Van Vooren N (2010) *Otidea fuckelii*, una nuova specie pubblicata per chiarire le differenti interpretazioni di *Otidea leporina*. *Rivista di Micologia*. 52(4):313–330
- Carbone M, Agnello C, Alvarado P, Krom I (2014) *Donadinia sibirica* (Ascomycota, Pezizales) a new species from Russia. *Mycologia Montenegrina* 17:53–64
- Carissimi M, Giraud MS, Germani JC, Van Der Sand ST (2010) Antifungal activity of *Bacillus* sp. E164 against *Bipolaris sorokiniana*. *Biociências (On-line)* 17(1)
- Carlucci A, Raimondo M, Santos J, Phillips AJL (2012) *Plectosphaerella* species associated with root and collar rots of horticultural crops in southern Italy. *Persoonia* 28:34–48
- Carmarán CC, Pildain MB, Vassiljeva LN (2009) The family *Diatrypaceae* (Ascomycota) in Argentina: new species and new records. *Nova Hedwigia* 88(3–4):521–530
- Carmo LT, Monteiro JS, Gusmão LF, Sotão HM, Gutiérrez AH, Castañeda-Ruiz RF. (2014) *Anabahusakala*, a new genus from the Brazilian Amazon rainforest. *Mycotaxon*. 127(1):11–5
- Carneiro de Almeida DA, Miller AN, Pascholati Gusmão LF. (2014) New species and combinations of conidial fungi from the semi-arid Caatinga biome of Brazil. *Nova Hedwigia*. 98(3–4):431–47

- Young CA, Charlton ND, Takach JE, Swoboda GA, Trammell MA, Huhman DV, Hopkins AA (2014) Characterization of *Epichloë coenophiala* within the US: are all tall fescue endophytes created equal? *Front Chem* 2:95
- Carris LM, Peever T, McCotter SW (2016) Mitosporic stages of *Disciotis*, *Gyromitra* and *Morchella* in the inland Pacific Northwest USA. *Mycologia*
- Carter HE, Cools HJ, West JS, Shaw MW, Fraaije BA (2013) Detection and molecular characterisation of *Pyrenopeziza brassicae* isolates resistant to methyl benzimidazole carbamates. *Pest management science* 69(9):1040–8
- Carvalho RO, Braga FR, Araújo JV (2011) Viability and nematophagous activity of the freeze-dried fungus *Arthrobotrys robusta* against *Ancylostoma* spp. infective larvae in dogs. *Veterinary parasitology* 176(2):236–239
- Casaregola S, Jacques N, Louis-Mondesir C, Coton M, Coton E (2013) *Citeromyces nyonsensis* sp. nov., a novel yeast species isolated from black olive brine. *International Journal of Systematic and Evolutionary Microbiology* 63:3086–3090
- Castaneda Ruiz RF, Gusmao LFP, Moraes Junior, VO de; Leao-Ferreira, S.M.; Saikawa M, Minter DW, Stadler, M (2009) Two setose anamorphic fungi: *Ampullicephala* gen. nov. and *Venustosynnema grandiae*. *Mycotaxon* 109: 275-288.
- Castañeda Ruiz, R.F., Guerrero, B., Adamo, G.M., Morillo, O., Minter, D.W., Stadler, M., Gené, J. & Guarro, J. 2009. A new species of *Selenosporella* and two microfungi recorded from a cloud forest in Mérida, Venezuela. *Mycotaxon* 109: 63-74. <http://dx.doi.org/10.5248/109.63>
- Castañeda Ruiz, R.F., Silvera-Simón, C., Gené, J., Guarro, J., Minter, D.W., Stadler, M. and Saikawa, M., 2010. A new species of *Corynesporopsis* from Portugal. *Mycotaxon*, 114(1), pp.407-415.
- Castañeda Ruiz, R.F.; Iturriaga, T.; Minter, D.W.; Heredia Abarca G.; Stadler, M.; Saikawa, M.; Fernández, R. 2009. Two new anamorphic fungi and some microfungi recorded from 'El Ávila', Venezuela. *Mycotaxon*. 107:225-237
- Castañeda, R.F. 1987. *Fungi Cubenses II*. :1-22.
- Castañeda-Ruiz RF, Granados MM, Mardones M, Stadler M, Minter DW, Hernández-Restrepo M, Gené J, Guarro J. A microfungus from Costa Rica: *Ticosynnema* gen. nov. *Mycotaxon*. 2013 Mar 4;122(1):255-9.
- Castañeda-Ruiz RF, Heredia G, Arias RM, McKenzie EH, Hyde KD, Stadler M, Saikawa M, Gené J, Guarro J, Iturriaga T, Minter DW. A new species and re-disposed taxa in *Repetophragma*. *Mycosphere*. 2011 Jan 1;2(3):273-89.
- Castañeda-Ruiz RF, Hernández-Restrepo M, Gené J, Guarro J, Minter DW, Saikawa M. Two new microfungi from Portugal: *Magnohelicospora iberica* gen. & sp. nov. and *Phaeodactylium stadleri* sp. nov. *Mycotaxon*. 2013 Jan 9;121(1):171-9.
- Castañeda-Ruiz, R.F. & Kendrick, W.B. 1991. Ninety-nine conidial fungi from Cuba and three from Canada. *University of Waterloo Biology Series* 35: 1-132.
- Castañeda-Ruiz, R.F., Guarro, J., Figueras, M.J., Gene, J. & Cano, J. 1997. More conidial fungi from La Gomera, Canary Islands, Spain. *Mycotaxon* 65: 121-131.
- Castaneda-Ruiz, R.F., Ma, Y.R., Xia, J.W. & Zhang, X.G. 2016. Two new species of *Pseudoacrodictys* from Hainan, China. *Nova Hedwigia* 102(1-2): 69-75
- Castañeda-Ruiz, R.F.; Hernández-Restrepo, M.; Gené, J.; Guarro, J.; Minter, D.W.; Saikawa, M. 2012. Two new microfungi from Portugal: *Magnohelicospora iberica* gen. & sp. nov. and *Phaeodactylium stadleri* sp. nov.. *Mycotaxon*. 121:171-179
- Castellano MA, Beever RE, Trappe JM (2012a) Sequestrate fungi of New Zealand: *Elaphomyces* (Ascomycota, Eurotiales, Elaphomycetaceae). *N Z J Bot* 50:423–433.

- Castellano MA, Dentinger BTM, Séné O, Elliott TF, Truong C, Henkel TW. 2016. New species of *Elaphomyces* (Elaphomycetaceae, Eurotiales, Ascomycota) from tropical rainforests of Cameroon and Guyana. *IMA Fungus* 7:59–73.
- Castellano MA, Guevara Guerrero G, García Jiménez J, Trappe JM. 2012b. *Elaphomyces appalachiensis* and *E. verruculosus* sp. nov. (Ascomycota, Eurotiales, Elaphomycetaceae) from Eastern North America. *Rev Mex Micol* 35:17–22.
- Castellano MA, Trappe JM, Vernes K. 2011. Australian species of *Elaphomyces* (Elaphomycetaceae, Eurotiales, Ascomycota). *Aust Syst Bot* 24:32–57.
- Castillo, J. D., K. S. Lawrence, J. W. Kloepper, and E. van Santen. 2010. Evaluación de *Drechlerella dactyloides*, *Drechlerella brochopaga*, y *Paecilomyces lilacinus* para el biocontrol de *Rotylenchulus reniformis* bajo
- Castlebury L. A., A. Y. Rossman A.Y., Jaklitsch W., Vasilyeva L.N. 2002. A preliminary overview of the Diaporthales based on large subunit nuclear ribosomal DNA // *Mycologia* 94: 1017-1031.
- Castroagudín VL, Moreira SI, Pereira DAS, Moreira SS, Brunner PC, Maciel JLN, Crous PW, McDonald BA, Alves E, Ceresini PC (2016) *Pyricularia graminis-tritici*, a new *Pyricularia* species causing wheat blast. *Persoonia* 37:199–216
- Catal M, Jordan SA, Butterworth SC, Schilder AM (2007) Detection of *Eutypa lata* and *Eutypella vitis* in Grapevine by Nested Multiplex Polymerase Chain Reaction. *Phytopathology* 97(6):737–47
- Catania, Romero AI (2012) *Mycosphere* 3(1)38
- del Valle CM, Romero AI, Huhndorf SM, Miller AN (2011). A new species and new records of *Cercophora* from Argentina. *Mycologia* 103(6):1372–13.
- Cavalcante JG (2012) fatores associados à estrutura da comunidade de líquens corticícolas crostosos em duas áreas de caatinga no estado de alagoas.
- Cavaliere AR, Johnson TW Jr (1965) A new marine Ascomycete from Australia. *Mycologia* 57:927–932
- Centeno DC, Hell AF, Braga MR, del Campo EM, Casano LM (2016) Contrasting strategies used by lichen microalgae to cope with desiccation-rehydration stress revealed by metabolite profiling and cell wall analysis. *Environmental microbiology*.
- Cestaro L, Tønsgberg T, Muggia L (2016) Phylogenetic Data and Chemical Traits Characterize a New Species in the Lichen Genus *Tephromela*. *Herzogia*, 29(2):383–402.
- Chacón S, Dörge D, Weisenborn J, Piepenbring M (2013) A new species and a new record of *Diatrypaceae* from Panama. *Mycologia* 105(3):681–688
- Chacón S, Tapia F, Esqueda M. New records of dothideomycetes from Mexico. *Mycotaxon*. 2014;128:145–57.
- Chakraborty S, Basak B, Dutta S, Bhunia B, Dey A (2013) Decolorization and biodegradation of Congo red dye by a novel white rot fungus *Alternaria alternata* CMERI F6. *Bioresource technology*, 147:662–666
- Chamizo S, Rodríguez-Caballero E, Roncero B, Román JR, Cantón Y (2016) April. Factors controlling spatial distribution patterns of biocrusts in a heterogeneous and topographically complex semiarid area. In EGU General Assembly Conference Abstracts 18:7937
- Chand, R., Kumar, M., Kushwaha, C., Shah, K. and Joshi, A.K., 2014. Role of melanin in release of extracellular enzymes and selection of aggressive isolates of *Bipolaris sorokiniana* in barley. *Current microbiology*, 69(2), pp.202-211.

- Chand R, Sen D, Prasad KD, Singh AK, Bashyal BM, Prasad LC, Joshi AK (2008) Screening for disease resistance in barley cultivars against *Bipolaris sorokiniana* using callus culture method. *Indian journal of experimental biology* 46(4):249
- Chang J-H, Kao H-W, Wang Y-Z (2009) Six new records of ascomycetes from Taiwan. *Fung. Sci* 24:29–37
- Chang J-H, Kao H-W, Wang Y-Z (2010) Molecular phylogeny of *Cercophora*, *Podospora*, *Schizothecium* (Lasiosphaeriaceae, Pyrenomycetes). *Taiwania* 55:110–116
- Chang YC, Lu CK, Chiang YR, Wang GJ, Ju YM, Kuo YH, Lee TH (2014) Diterpene glycosides and polyketides from *Xylotumulus gibbisporus*. *Journal of natural products* 77(4):751–7
- Chang JH, Wang YZ (2009) The genera *Sporormia* and *Preussia* (Sporormiaceae, Pleosporales) in Taiwan. *Nova Hedwigia* 88(1-2):245–254
- Charuwan Chuaseeharonnachai, Kaoru Yamaguchi, Veera Sri-Indrasutdhia, Sayanh Somrithipol, Izumi Okanec, Akira Nakagiri & Nattawut Boonyuen 2013 Diversity of Aero-Aquatic Hyphomycetes from Six Streams in Doi Inthanon and Khao Yai Tropical Forests, Thailand. *Cryptogamie, Mycologie* 34(2):183–197
- Chatmala I, Sakayaroj J, Somrithipol S, Phongpaichit S (2004) Marine hyphomycetes of Thailand and *Cumulospora varia* sp. nov. *Fung Diver* 17:1–9
- Chatmala I, Valyasevi R, Tanticharoen M (2002) Anamorph/teleomorph connections of marine Ascomycota. In: *Fungi in Marine Environments* (ed. K.D. Hyde). *Fungal Diversity Research Series* 7:59–68
- Chaverri P, Gazis RO (2011) Linking ex planta fungi with their endophytic stages: Perisporiopsis, a common leaf litter and soil fungus, is a frequent endophyte of *Hevea* spp. and other plants. *Fungal Ecology* 4(1):94–102.
- Chaverri P, Liu M, Hodge KT (2008) A monograph of the entomopathogenic genera *Hypocrella*, *Moelleriella*, and *Samuelsiagen*. nov. (Ascomycota, Hypocreales, Clavicipitaceae), and their aschersonia-like anamorphs in the Neotropics. *Stud Mycol* 60:1–66.
- Chaverri P, Salgado C, Hirooka Y, Rossman AY, Samuels GJ (2011) Delimitation of *Neonectria* and *Cylindrocarpon* (Nectriaceae, Hypocreales, Ascomycota) and related genera with *Cylindrocarpon*-like anamorphs. *Studies in Mycology* 68: 57–78.
- Chaverri P, Gazis RO (2010) *Perisporiopsis lateritia*, a new species on decaying leaves of *Hevea* spp. from the Amazon basin in Peru. *Mycotaxon* 113:163–169
- Chaverri P, Samuels GJ, Hodge KT (2005) The genus *Podocrella* and its nematode-killing anamorph *Harposporium*. *Mycologia* 97(2):433–443
- Checa J, Arenal F, Blanco N, Rogers JD (2008) *Coniolarielliella hispanica* sp. nov. and other additions to *Coniolarielliella*. *Mycological Research*. 112(7):795–801
- Checa J, Blanco M.N, Moreno G (2013) Contributions to the family Thyridiaceae. New data on *Sphaeria mutabilis*
- Cheewangkoon R, Groenewald JZ, Verkley HJM et al. (2010) Re-evaluation of *Cryptosporiopsis eucalypti* and *Cryptosporiopsis*-like species occurring on *Eucalyptus* leaves. *Fungal Diversity* 44:89–105
- Cheewangkoon R, Groenewald JZ, Hyde KD, To-anun C, Crous PW (2010) Chocolate Spot disease of *Eucalyptus*. *Mycological Progress*. 11:61–69
- Cheewangkoon R, Groenewald JZ, Summerell BA, Hyde KD, To-anun C; Crous PW (2009) Myrtaceae, a cache of fungal biodiversity. *Persoonia* 23:55–85
- Chen AJ, Sun BD, Houbraken J, Frisvad JC, Yilmaz N, Zhou YG, Samson RA. 2016. New *Talaromyces* species from indoor environments in China. *Stud Mycol* 84:119–144

- Chen H, Jiang XJ, Yu Z, Duns GJ, Sgao R, Xu W, Chen J (2014) A novel mitovirus isolated from *Buergenerula spartinae*. *Virilogica Sinica* 29:257–260
- Chen J, Lin W (2000) New records from Taiwan of three interesting dematiaceous hyphomycetes. *Bot. Bull. Acad. Sin.* 41:251–255
- Chen JL (2000) Taxonomic Study of the Genus *Clavatospora* (Hyphomycetes), with a new record species of the genus to Taiwan. *Fungal Science* 15:47–55
- Chen JL, Lin YR, Hou CL, Wang SJ (2012) Species of Rhytismataceae on *Camellia* spp. from the Chinese mainland. *Mycotaxon* 118(1):219–30
- Chen Q, Jiang JR, Zhang GZ, Cai L, Crous PW (2015) Resolving the *Phoma* enigma. *Studies in mycology* 82:137–217.
- Chen S, Gryzenhout M, Roux J, Xie Y, Wingfield MJ, Zhou X (2011) Novel species of *Celoporthe* from *Eucalyptus* and *Syzygium* trees in China and Indonesia. *Mycologia* 103(6):1384–410
- Chen S, Van Wyk M, Roux J, Wingfield MJ, Xie Y, Zhou X (2013) Taxonomy and pathogenicity of *Ceratocystis* species on *Eucalyptus* trees in South China, including *C. chinaeucensis* sp. nov. *Fungal Diversity* 58(1):267–79
- Chen SF, Wingfield MJ, Roux J (2013a) *Diversimorbus metrosiderotis* gen. et sp. nov. and three new species of *Holocryphia* (Cryphonectriaceae) associated with cankers on native *Metrosideros angustifoliat* trees in South Africa. *Fungal Biol* 117(5):289–310
- Chen W, Shearer CA, Crane JL (1999) Phylogeny of *Ophioceras* spp. based on morphological and molecular data. *Mycologia* 91:84–94
- Chen C, Verkley GJM, Sun G, Groenewald JZ, Crous PW 2015 Redefining common endophytes and plant pathogens in *Neofabraea*, *Pezicula*, and related genera. *Fungal Biology* 120(11):1291–1322
- Chen, Juan; Meng, Zhi-Xia, Chen Xiao-Mei; Lv, Ya-Li; Zhang, Fu-Sheng; Li, Xiang-Dong; Guo, Shun-Xing (2009) *Leohumicola*, a genus new to China. *Mycotaxon* 108:337–340
- Chen YL, Gao Y, Zhang KQ, Zou CG (2013) Autophagy is required for trap formation in the nematode-trapping fungus *Arthrobotrys oligospora*. *Environmental microbiology reports* 5(4):511–517
- Chen L, Yue Q, Zhang X, Xiang M, Wang C, Li S, Che Y, Ortiz-Lopez FJ, Bills GF, Liu X, An Z (2013) Genomics-driven discovery of the pneumocandin biosynthetic gene cluster in the fungus *Glarea lozoyensis*. *BMC Genomics* 14:339
- Chen SF, Wingfield MJ, Roets F, Roux J (2013) A serious canker disease caused by *Immersioporthe knoxdaviesiana* gen. et sp. nov. (Cryphonectriaceae) on native *Rapanea melanophloeos* in South Africa. *Plant Pathology* 62:667–678
- Cheng X, Li W, Cai L (2015) Molecular phylogeny of *Ascotricha*, including two new marine algae-associated species. *Mycologia* 27:14–210
- Cheng XL, Li W, Zhang TY (2014) A new species of *Phaeoisaria* from intertidal marine sediment collected in Weihai, China. *Mycotaxon* 127(1):17–24
- Cheplick, G.P. and Faeth, S., 2009. Ecology and evolution of the grass-endophyte symbiosis. Oxford university press.
- Chhikara S, Chaudhury D, Dhankher OP, Jaiwal PK (2012) Combined expression of a barley class II chitinase and type I ribosome inactivating protein in transgenic *Brassica juncea* provides protection against *Alternaria brassicae*. *Plant Cell, Tissue and Organ Culture (PCTOC)* 108(1):83–89
- Chigoziri E, Ekefan EJ (2013) Seed-borne fungi of Chilli pepper (*Capsicum frutescens*) from pepper producing areas of Benue state, Nigeria. *Agriculture and Biology Journal of America* 4:370–374

- Kuo C-C, Chen P, Chen C-Y (2008) Harposporium from Taiwan. *Fung. Sci* 23:35–41
- Chlebicka M, Konvalinkova T (2010) *Pirottaea lychnidis* comb. nov. from the Bohemian Switzerland National Park, Czech Republic. *Czech Mycol* 62(1):19–32
- Chlebicki A (2009) Some endophytes of *Juncus trifidus* from Tatra Mts. in Poland. *Acta Mycologica* 44 (1):11–17
- CHLEBICKI A (2010) Fungi on higher plants of the upper limit of alpine zone in Tian Shan. *Mycotaxon* 110:451–454
- Chlebicki A (2009) Fungi on higher plants of the upper limit of the alpine zone: new species from Tian Shan. *Mycotaxon* 110:443–450
- Cho Y, Kim KH, La Rota M, Scott D, Santopietro G, Callihan M, Mitchell TK, Lawrence CB (2009) Identification of novel virulence factors associated with signal transduction pathways in *Alternaria brassicicola*. *Molecular microbiology*, 72(6):1316–1333
- Cho Y, Srivastava A, Ohm RA, Lawrence CB, Wang KH, Grigoriev IV, Marahatta SP, (2012) Transcription factor Amr1 induces melanin biosynthesis and suppresses virulence in *Alternaria brassicicola*. *PLoS Pathog* 8(10):1002974
- Choi IY, Kim BS, Park JH, Cho SE, Shin HD (2014) First report of black stem caused by *Botryosporium longibrachiatum* on statice in Korea. *Plant Disease* 98(10):1431–
- Choi YJ, Shin HD, Han JG, Pfister DH. *Scutellinia* (Pezizales) in Korea, with a new species and eight new records. *Nova Hedwigia*. 2013 Nov 1;97(3–4):457–76
- Choi J, Park SY, Kim BR, Roh JH, Oh IS, Han SS, Lee YH (2013) Comparative analysis of pathogenicity and phylogenetic relationship in *Magnaporthe grisea* species complex. *PloS one* 8(2):57196
- Choi JS, Graser Y, Walther G, Peano A, Symoens F, Hoog, S. De (2012) *Microsporum mirabile* and its teleomorph *Arthroderma mirabile*, a new dermatophyte species in the *M. cookei* clade
- Chokpaiboon S, Choodej S, Boonyuen N, Teerawatananond T, Pudhom K (2016) Highly oxygenated chromones from mangrove-derived endophytic fungus *rhytidhysteron rufulum*. *Phytochemistry [Internet]* 122:172–7
- Chowdhary A, Randhawa HS, Singh V, Khan ZU, Ahmad S, Kathuria S, Roy P, Khanna, G, Chandra J (2011) *Bipolaris hawaiiensis* as etiologic agent of allergic bronchopulmonary mycosis: first case in a paediatric patient. *Medical mycology*, 49(7):760–765
- Chruszcz M, Chapman MD, Osinski T, Solberg R, Demas M, Porebski PJ, Majorek K.A., Pomés A, Minor W (2012) *Alternaria alternata* allergen Alt a 1: a unique β -barrel protein dimer found exclusively in fungi. *Journal of Allergy and Clinical Immunology* 130(1):241–247
- Chu Y, Alias SA, Idid R, Guo SY, Pang KL (2015) A molecular reappraisal of *Nimboospora* (Halosphaeriaceae, Microascales) and a new genus *Ebullia* for *N. octonae*. *Mycoscience* 56:34–41
- Chuaseharonnachai C, Somrithipol S, Boonyuen N (2014) A new species of *Fusticeps* from Thailand. *Mycosphere* 5(2):313–317
- Chungu D, Gryzenhout M, Muimba-Kankolongo A, Wingfield MJ, Roux J (2010) Taxonomy and pathogenicity of two novel *Chrysosporthe* species from *Eucalyptus grandis* and *Syzygium guineense* in Zambia.. *Mycol. Progr* 9(3):379–393
- Clements FE (1909) *The genera of fungi*. Minneapolis USA 227
- Clowez P (2012) *Les morilles, une nouvelle approche mondiale du genre Morchella*.
- Çobanoğlu G, Yavuz M, Costache I, Radu I, 2010 Additional and new lichen records from Cozia National Park, Romania. *Mycotaxon* 114(1):193–196

- Coda R, Rizzello CG, Di Cagno R, Trani A, Cardinali G, Gobetti M (2013) Antifungal activity of *Meyerozyma guilliermondii*: identification of active compounds synthesized during dough fermentation and their effect on long-term storage of wheat bread. *Food microbiology* 33(2):243–51
- Coetsee C, Wingfield MJ, Crous PW, Wingfield BD (2000) *Xenochalara*, a new genus of dematiaceous hyphomycetes for chalara-like fungi with apical wall building conidial development. *South African Journal of Botany* 66(2):99–103
- Collado J, Gonzalez A, Platas G, Stchigel AM, Guarro J, Pelaez F (2002) *Monosporascus ibericus* sp. nov., an endophytic ascomycete from plants on saline soils, with observations on the position of the genus based on sequence analysis of the 18S rDNA. *Mycol. Res* 106(1):118–127
- Collado J, Platas G, Bills GF, Basilio A, Vicente F, Tormo JR, Hernandez P, Diez MT, Pelaez F (2006) Studies on *Morinia*: recognition of *Morinia longiappendiculata* sp. nov. as a new endophytic fungus, and a new circumscription of *Morinia pestalozzioides*. *Mycologia* 98(4):616–627
- Collado J, Platas G, Paulus B, Bills GF (2007) High-throughput culturing of fungi from plant litter by a dilution-to-extinction technique. *FEMS Microbiol. Ecol* 60(3):521–533
- Consolo VF, Cordo CA, Salerno GL (2008) DNA fingerprint and pathotype diversity of *Pyricularia oryzae* populations from Argentina. *Australasian Plant Pathology*, 37(4):357–364
- Constantinescu O, Santesson R (1987) *Choreospora* gen. nov., a new lichenicolous hyphomycete from Australia. *The Lichenologist* 19(2):177–181
- Cooper JA (2005) New Zealand hyphomycete fungi: additional records, new species, and notes on interesting collections. *New Zealand Journal of Botany* 43:323–349
- Coppins BJ (2012) New taxa, reports, and names of lichenized and lichenicolous fungi, mainly from the Scottish Highlands. *The Lichenologist* 44(06):723–737
- Cort C (2012) A Phylogenetic Analysis of *Heterocephalum*: Using Molecular Tools to Reassess the Taxonomic Placement of an Unusual and Infrequently Collected Fungus. Honors Theses. Paper 7
- Coste C, Dufrière P (2009) Reasoned Inventory of the Lichens and Lichenicolous Fungi of the Cascades of Mortain (department of Manche, 50). *Société Tarnaise de Sciences Naturelles* 57–80
- Cota BB, Rosa LH, Caligiorne RB, Rabello ALT, Alves TMA, Ros CA, Zani CL (2008) Altenusin, a biphenyl isolated from the endophytic fungus *Alternaria* sp., inhibits trypanothione reductase from *Trypanosoma cruzi*. *FEMS Microbiology letters*, 285(2):177–182
- Crane C, Burgess TI (2013) *Luteocirrhus sheari* gen. sp. nov. (Diaporthales, Cryphonectriaceae) pathogenic to Proteaceae in the south Western Australian Floristic Region. *IMA Fungus* 4(1):111–122
- Craven KD, Véléz H, Cho Y, Lawrence CB, Mitchell TK (2008) Anastomosis is required for virulence of the fungal necrotroph *Alternaria brassicicola*. *Eukaryotic cell*, 7(4):675–683
- Crespo A, Blanco O, Llimona X, Ferencová Z, Hawksworth DL (2004) *Coscinocladium*, an overlooked endemic and monotypic Mediterranean lichen genus of Physciaceae, reinstated by molecular phylogenetic analysis. *Taxon* 53:405–414
- Crespo A, Ferencova Z, Pérez-Ortega S, Elix JA, Divakar PK (2010b) *Austroparmelina*, a new Australian lineage in parmelioid lichens (Parmeliaceae, Ascomycota). *Syst Biodivers* 8: 209–221

- Crespo A, Kauff F, Divakar PK, del Prado R, Pérez-Ortega S, et al. (2010a) Phylogenetic generic classification of parmelioid lichens (Parmeliaceae, Ascomycota) based on molecular, morphological and chemical evidence. *Taxon* 59:1735–1753
- Crespo A, Lumbsch HT, Mattsson J-E, Blanco O, Divakar PK, Articus K, Wiklund E, Bawingan PA, Wedin M (2007) Testing morphology-based hypotheses of phylogenetic relationships in Parmeliaceae (Ascomycota) using three ribosomal markers and the nuclear RPB1 gene. *Mol Phylogenet Evol* 44:812–824
- Crespo A, Divakar PK, Hawksworth DL (2011) Generic concepts in parmelioid lichens, and the phylogenetic value of characters used in their circumscription. *The Lichenologist* 43(06):511–535
- Crespo A, Ferencov Z, Perez-Ortega S, Elix JA, Divakar P.K (2010b) Austroparmelina, a new Australasian lineage in parmelioid lichens (Parmeliaceae, Ascomycota). *Systematics and Biodiversity* 8:209–221
- Crespo A, Kauff F, Divakar PK, del Prado R, Pérez-Ortega S, et al. (2010) Phylogenetic generic classification of parmelioid lichens (Parmeliaceae, Ascomycota) based on molecular, morphological and chemical evidence. *Taxon* 59(6):1735–1753
- Crisan F, Ardelean I (2010) The analysis of ecological behaviour of the macrolichens from Rosia Montana (Romania). *Studia Universitatis Vasile Goldis Seria Stiintele Vietii (Life Sciences Series)* 20(4)
- Crittenden PD, Scrimgeour CM, Minnullina G, Sutton MA, Tang YS, Theobald MR, (2015) Lichen response to ammonia deposition defines the footprint of a penguin rookery. *Biogeochemistry* 122(2–3):295–311
- Crous P, Wingfield M, Le Roux J, Richardson D, Strasberg D, Shivas R, Alvarado P, Edwards J, Moreno G, Sharma R (2015) Fungal Planet description sheets: 371–399. *Persoonia: Molecular Phylogeny and Evolution of Fungi* 35:264–327
- Crous PC, Shivas RG, Wingfield MJ, Summerell BA, Rossman AY, et al. (2012) Fungal Planet description sheets 128–153
- Crous PW, Summerell BA, Shivas RG, et al. (2012) A re-appraisal of *Harknessia* (Diaporthales), and the introduction of *Harknessiaceae* fam. nov. *Persoonia* 28: 59–65
- Crous PW, Schumacher RK, Wingfield MJ, Lombard L, Giraldo A, Christensen M, Gardiennet A, Nakashima C, Pereira O, Smith AJ, Groenewald JZ (2015) Fungal Systematics and Evolution: FUSE 1. *Sydowia*. 67:81–118
- Crous PW, Braun U, Schubert K, Groenewald JZ (2007) Delimiting *Cladosporium* from morphologically similar genera. *Studies in Mycology* 58:33–56
- Crous PW, Braun U, Wingfield MJ, Wood AR, Shin HD, Summerell BA, Alfenas AC, Cumagun JCR, Groenewald JZ. 2009. Phylogeny and taxonomy of obscure genera of microfungi. *Persoonia* 22: 139–161.
- Crous PW, Carris LM, Giraldo A, Groenewald JZ, Hawksworth DL, et al. (****) The Genera of Fungi: fixing the application of the type species of generic names – G 2: *Allantophomopsis*, *Latorua*, *Macrodiplodiopsis*, *Macrohilum*, *Milospium*, *Protostegia*, *Pyricularia*, *Robillarda*, *Rotula*, *Septoriella*, *Torula*, and *Wojnowicia*. *IMA Fungus* 6:155–190
- Crous PW, Carris LM, Giraldo A, Groenewald JZ, Hawksworth DL, Hernández-Restrepo M, Jaklitsch WM, Lebrun MH, Schumacher RK, Stielow JB, van der Linde EJ, Vilcāne J, Voglmayr H, Wood AR (2015) The Genera of Fungi: fixing the application of type species of generic names. *IMA Fungus* 6:163–98
- Crous PW, Denman S, Taylor JE, Swart L, Bezuidenhout CM, Hoffman L, Palm ME, Groenewald JZ (2013a) Cultivation and Diseases of Proteaceae: *Leucadendron*, *Leucospermum* and *Protea*. *CBS Biodiversity Series* 13, Utrecht

- Crous PW, Giraldo A, Hawksworth DL, Robert V, Kirk PM, Guarro J, Robbertse B, Schoch CL, Damm U, Trakunyingcharoen T, Groenewald JZ (2014) The Genera of Fungi: fixing the application of type species of generic names. *IMA Fungus* 5 (1), 141–160
- Crous PW, Groenewald JZ, Risède J-M, Simoneau P, Kevin D. Hyde KD (2006) *Calonectria* species and their *Cylindrocladium* anamorphs: species with clavate vesicles. *Studies in Mycology* 55:213–226
- Crous PW, Groenewald JZ, Shivas RG (2010) *Persoonia* Reflections – Fungal Planet 60. *Persoonia* 25:140–141
- Crous PW, Groenewald JZ, Shivas RG, Edwards J, Seifert KA, Alfenas AC, Alfenas RF, Burgess TI, Carnegie AJ, Hardy GS, Hiscock N. Fungal Planet description sheets: 69–91. *Persoonia-Molecular Phylogeny and Evolution of Fungi*. 2011 Jun 30;26(1):108–56.
- Crous PW, Groenewald JZ, Shivas RG (2010) *Pseudophloeospora eucalypti*. *Fungal Planet* 60. *Persoonia* 25:140–1
- Crous PW, Groenewald JZ, Summerell BA, Wingfield BD, Wingfield MJ (2009a) Co-occurring species of *Teratosphaeria* on *Eucalyptus*. *Persoonia* 22:38–48
- Crous PW, Minnis AM, Pereira OL, Alfenas AC, Alfenas RF, Rossman AY, Groenewald JZ (2011) What is *Scirrhia*?. *IMA fungus* 2(2):127–33
- Crous PW, Müller MM, Sánchez RM, Giordano L, Bianchinotti MV, et al. 2015a – Resolving *Tiarospora* spp. allied to *Botryosphaeriaceae* and *Phacidiaceae*. *Phytotaxa* 202:073–093
- Crous PW, Schoch CL, Hyde KD, Wood AR, Gueidan C, De Hoog GS, Groenewald JZ. Phylogenetic lineages in the Capnodiales. *Studies in mycology*. 2009 Dec 31;64:17–47.
- Crous PW, Schubert K, Braun U, de Hoog GS, Hocking AD, Shin HD, Groenewald JZ (2007). Opportunistic human-pathogenic species in the *Herpotrichiellaceae* are phenotypically similar to saprobic or phytopathogenic species in the *Venturiaceae*. *Studies in Mycology* 58:185–217.
- Crous PW, Schumacher RK, Wingfield MJ, et al (2015b) *Fungal Systematics and Evolution: FUSE 1*. *Sydowia* 67:81–118.
- Crous PW, Shivas RG, Quaedvlieg W, van Der Bank M, Zhang Y, Summerell EA et al. (2014) *Fungal Planet* description sheets: 214–280. *Persoonia* 32:184–306
- Crous PW, Slippers B, Wingfield MJ, Rheeder J, Marasas WFO, et al. (2006) Phylogenetic lineages in the *Botryosphaeriaceae*. *Studies in Mycology* 55,235–253.
- Crous PW, Summerell BA, Alfenas AC, Edwards J, Pascoe IG, Porter IJ, Groenewald JZ (2012) Genera of diaporthalean coelomycetes associated with leaf spots of tree hosts. *Persoonia-Molecular Phylogeny and Evolution of Fungi* 28(1):66–75
- Crous PW, Summerell BA, Carnegie AJ, Mohammed C, Himaman W, Groenewald JZ. (2007c) Foliicolous *Mycosphaerella* spp. and their anamorphs on *Corymbia* and *Eucalyptus*. *Fungal Diversity* 26:143–185
- Crous PW, Summerell BA, Carnegie AJ, Wingfield MJ, Groenewald JZ (2009) Novel species of *Mycosphaerellaceae* and *Teratosphaeriaceae*. *Persoonia-Molecular Phylogeny and Evolution of Fungi* 23(1):119–46
- Crous PW, Summerell BA, Carnegie AJ, Wingfield MJ, Hunter GC, Burgess TI, Andijc V, Barber PA, Groenewald JZ (2009b) Unravelling *Mycosphaerella*: do you believe in genera? *Persoonia* 23:99–118
- Crous PW, Summerell BA, Shivas RG, Romberg M, Mel'nik VA, Verkley GJM, Groenewald JZ (2011) *Fungal Planet* description sheets: 92–106. *Persoonia* 27:130–162

- Crous PW, Summerell BA, Swart L, Denman S, Taylor JE, Bezuidenhout CM, Palm ME, Marincowitz S, Groenewald JZ (2011) Fungal pathogens of Proteaceae. *Persoonia* 27:20–45
- Crous PW, Tanaka K, Summerell BA, Groenewald JZ (2011) Additions to the *Mycosphaerella* complex. *IMA fungus* 2(1):49–64
- Crous PW, Verkley GJM, Christensen M, Groenewald JZ (2012) How important are conidial appendages? *Persoonia* 28:126–137
- Crous PW, Verkley GJM, Groenewald JZ (2006b) *Eucalyptus* microfungi known from culture. 1. *Cladriella* and *Fulvoflammagenera* nova, with notes on some other poorly known taxa. *Stud Mycol* 55:53–64
- Crous PW, Wingfield MJ, Burgess TI, Hardy GS, Crane C, Barrett S, Cano-Lira JF, Leroux JJ, Thangavel R, Guarro J, Stchigel AM. Fungal Planet description sheets: 469–557. *Persoonia-Molecular Phylogeny and Evolution of Fungi*. 2016 Dec 28;37(1):218–403
- Crous PW, Wingfield MJ, Guarro J, Cheewangkoon R, van der Bank M, et al. (2013b) Fungal Planet description sheets: 154–213. *Persoonia* 31:188–296.
- Crous PW, Wingfield MJ, Le Roux JJ, Richardson DM, Strasberg D, et al. (2015a) Fungal planet description sheets: 371–399. *Persoonia* 35:264–327
- Crous PW, Wingfield MJ, Richardson DM, Leroux JJ, Strasberg D, et al. (2016). Fungal Planet description sheets: 400–468. *Persoonia* 36:316–458
- Crous PW, Groenewald JZ, Roets F. 2010a. *Toxicocladosporium protearum*. *Fungal Planet* 57. *Persoonia* 25: 134–135.
- Crous PW, Groenewald JZ, Shivas RG, McTaggart AR (2010b) *Toxicocladosporium banksiae*. *Fungal Planet* 63. *Persoonia* 25:146–147
- Crous PW (1998) *Mycosphaerella* spp. and Their Anamorphs Associated with Leaf Spot Diseases of *Eucalyptus*. *Mycol. Mem.* 21: 170 pp.: APS Press for Mycological Society of America.
- Crous PW (2007) *Hoornsmania pyrina*. *Fungal Planet*. no. 11.
- Crous PW, Braun U, Hunter GC, Wingfield MJ, Verkley GJM, Shin H-D, Nakashima C, Groenewald JZ (2012) Phylogenetic lineages in *Pseudocercospora*. *Studies in Mycology* 75:37–114
- Crous PW, Carris LM, Giraldo A, Groenewald JZ, Hawksworth DL, Hernández-Restrepo M, et al. (2015) The genera of fungi-fixing the application of the type species of generic names—G 2: *Allantophomopsis*, *Latorua*, *Macrodiplodiopsis*, *Macrohylum*, *Milospium*, *Protostegia*, *Pyricularia*, *Robillarda*, *Rotula*, *Septoriella*, *Torula*, and *Wojnowicia*. *IMA fungus* 6(1):163–198
- Crous PW, Giraldo A, Hawksworth DL, Robert V, Kirk PM, et al. (2014) The Genera of Fungi: fixing the application of type species of generic names. *IMA fungus*, 5(1):141–160
- Crous PW, Groenewald JZ, Wingfield MJ, Haryadi D (2015). Fungal Planet description sheets. *Fungal Planet* 346 – 10 June 2015: *Melanconium elaeidicola* Crous & M.J. Wingf., sp. nov. *Persoonia* 34:216–217
- Crous PW, Muller MM, Sánchez RM, Giordano L, Bianchinotti M, Anderson FE, Groenewald JZ (2015b) Resolving *Tiarosporella* spp. allied to *Botryosphaeriaceae* and *Phacidiaceae*.
- Crous PW, Quaedvlieg W, Hansen K, Hawksworth DL, Groenewald JZ (2014) *Phacidium* and *Ceuthospora* (*Phacidiaceae*) are congeneric: taxonomic and nomenclatural implications. *IMA fungus* 5(2):173–193
- Crous PW, Shivas RG, Quaedvlieg W, Van der Bank M, Zhang, Y, et al. (2014) Fungal Planet description sheets: 214–280. *Persoonia-Molecular Phylogeny and Evolution of Fungi*, 32(1):184–306

- Crous PW, Wingfield MJ, Guarro J, Hernandez-Restrepo M, Sutton DA, Acharya, et al. (2015a) Fungal Planet description sheets: 320–370. *Persoonia: Molecular Phylogeny and Evolution of Fungi* 34:167
- Crous PW, Braun U (1994) *Cercospora* species and similar fungi occurring in South Africa. *Sydowia* 46(2):204–224
- Crous PW, Braun, U, Schubert K, Groenewald JZ (2007) Delimiting *Cladosporium* from morphologically similar genera. *Studies in Mycology* 58:33–56
- Crous P.W, Braun U, Wingfield MJ, Wood AR, Shin HD, Summerell BA, Alfenas AC, Cumagun CJR, Groenewald JZ (2009) Phylogeny and taxonomy of obscure genera of microfungi. *Persoonia* 22:139–161
- Crous PW, Denman S, Taylor JE, Swart L, Palm ME (2004) Cultivation and diseases of Proteaceae: *Leucadendron*, *Leucospermum* and *Protea* 1–227
- Crous PW, Gams W (2000) *Phaeomoniella chlamydospora* gen. et comb. nov., a causal organism of Petri grapevine decline and esca. *Phytopathologia Mediterranea*. 39:112–118
- Crous PW, Groenewald JZ (2011) Why everlastings dont last. *Persoonia* 26:70–84
- Crous PW, Groenewald JZ, Himaman W (2007) *Falcocladium thailandicum*. *Fungal Planet*. no. 18
- Crous PW, Groenewald JZ, Lee SS (2009) Fungal planet 41. *Nawawia malaysiana*. *Persoonia* 23:194–195
- Crous PW, Groenewald, JZ, Shin HD (2010) Fungal planet 56. *Strelitziana albiziae* sp. nov.. *Persoonia* 25:132–133
- Crous PW, Groenewald JZ, Shivas RG, Edwards J, Seifert KA, et al. (2011) *Fungal Planet Description Sheets*: 69-91. *Persoonia* 26:108–156
- Crous PW, Kendrick, WB (1994) *Arnaudiella eucalyptorum* sp. nov. (Dothideales, Ascomycetes) and its hyphomycetous anamorph *Xenogliocladiopsis* gen. nov., from Eucalyptus litter in South Africa. *Canadian Journal of Botany* 72(1):59–64
- Crous PW, Mohammed C, Glen M, Verkley GJM, Groenewald JZ (2007) Eucalyptus microfungi known from culture. 3. *Eucasphaeria* and *Sympoventuria* genera nova, and new species of *Furcaspora*, *Harknessia*, *Heteroconium* and *Phacididiella*. *Fungal Diversity* 25:19–36
- Crous PW, Summerell BA, Alfenas AC, Edwards J, Pascoe IG, Porter IJ, Groenewald JZ (2012) Genera of diarthalean coelomycetes associated with leaf spots of tree hosts. *Persoonia* 28:66–75
- Crous PW, Summerell BA, Shivas RG, Burgess, TI, Decock CA, et al. (2012) *Fungal Planet Description Sheets*: 107–127. *Persoonia*. 28:138–182.
- Crous PW, Verkley GJM (2009) *Xenocylindrosporium*. *Fungal Planet*. 44
- Crous PW, Wingfield MJ, Alfenas AC, Silveira, SF (1994) *Cylindrocladium naviculatum* sp.nov., and two new vesiculate hyphomycete genera, *Falcocladium* and *Vesicliadiella*. *Mycotaxon* 50: 441–458.
- Crous, P.W.; Wingfield, M.J.; Groenewald, J.Z. 2009. Niche sharing reflects a poorly understood biodiversity phenomenon. *Persoonia*. 22:83–94
- Crous PW, Wingfield MJ, Guarro J, Hernández-Restrepo M, Sutton DA, et al. (2015) *Fungal Planet description sheets*: 320-370. *Persoonia* 34:167–266
- Crous PW, Wingfield MJ, Kendrick WB (1994) *Kionochaeta pini* sp. nov. and *Verrucophragmia splendens* gen. nov. from leaf litter in South Africa. *Mycologia*. 86(3):447–450
- Cruywagen EM, de Beer ZW, Roux J, Wingfield MJ (2010) Three new *Graphium* species from baobab trees in South Africa and Madagascar. *Persoonia* 25:61–71

- Cruz AC, Gusmão LF, Castañeda-Ruiz RF, Stadler M, Minter DW (2012) *Zelodactylaria*, an interesting new genus from semi-arid northeast Brazil. *Mycotaxon* 119(1):241–8
- Cruz ACR; Santa Izabel, T. dos Santos; Leão-Ferreira, S.M.; Gusmão, L.F.P. 2009. Conidial fungi from the semi-arid Caatinga biome of Brazil. New species and new records of *Helicosporium*. *Mycotaxon*. 110:53-64
- Cui, Y., Jia, H., He, D., Yu, H., Gao, S., Yokoyama, K., Li, J., Wang, L. 2013 Characterization of *Edenia gomezpompae* isolated from a patient with keratitis. *Mycopathologia* 176 (1-2), 75-81.
- Culleré L, Ferreira V, Chevret B, Venturini ME, Sánchez-Gimeno AC, Blanco D. Characterisation of aroma active compounds in black truffles (*Tuber melanosporum*) and summer truffles (*Tuber aestivum*) by gas chromatography–olfactometry. *Food Chemistry*. 2010 Sep 1;122(1):300-6.
- Cunnington JH, Lawrie AC, Pascoe IG 2010. Genetic characterization of the *Golovinomyces cichoracearum* complex in Australia. *Plant Pathology* 59: 158–164.
- Currey, F. 1859. On the existence of amorphous starch in a new tuberaceous fungus. *Proceedings of the Royal Society of London*. 9:119-123
- Currie, C.R., Wong, B., Stuart, A.E., Schultz, T.R., Rehner, S.A., Mueller, U.G., Sung, G.H., Spatafora, J.W. and Straus, N.A., 2003. Ancient tripartite coevolution in the attine ant-microbe symbiosis. *Science*, 299(5605), pp.386-388.
- Czarnota P, Guzow-Krzeminska B (2012) ITS rDNA data confirm a delimitation of *Bacidina arnoldiana* and *B. sulphurella* and support a description of a new species within the genus *Bacidina*. *Lichenologist* 44:743–755
- Czarnota P, Kukwa M. Contribution to the knowledge of some poorly known lichens in Poland. III. *Trapelia corticola* and the genus *Vezdaea*. *Folia Cryptog Estonica*. 2009;46:25-31.
- Czarnota, P. and Hernik, E., 2013. *Mniaecia jungermanniae* and *Puttea margaritella* (lichenized Ascomycota) found in Poland. *Acta Societatis Botanicorum Poloniae*, 82(2).
- Czarnota, P. and Hernik, E., 2014. Some peltigericolous microlichens from southern Poland. *Acta Botanica Croatica*, 73(1), pp.159-170.
- Czarnota, P. and Kukwa, M., 2009. Contribution to the knowledge of some poorly known lichens in Poland. III. *Trapelia corticola* and the genus *Vezdaea*. *Folia Cryptog Estonica*, 46, pp.25-31.
- Czarnota, P., Guzow-Krzeminska, B. and Bielczyk, U. 2011. A new *Psoroglaena* from a metal-enriched industrial area. *Lichenologist*
- D. Ertz & P. Diederich. 2015. Dismantling *Melaspileaceae*: a first phylogenetic study of *Buelliella*, *Hemigrapha*, *Karschia*, *Labrocarpon* and *Melaspilea*. *Fungal Diversity*. 71:141-164.
- D'Souza, M.A. and Bhat, D.J., 2013. Occurrence of microfungi as litter colonizers and endophytes in varied plant species from the Western Ghats forests, Goa, India. *Mycosphere*, 4, p.56.
- da Cruz ACR, Gusmão LFP. Conidial fungi from caatinga: Lignicolous species. *Acta Bot Bras*. 2009;23(4):1133-44.
- Da Cunha, K.C., Sutton, D.A., Fothergill, A.W., Cano, J., Gené, J., Madrid, H., De Hoog, S., Crous, P.W. and Guarro, J., 2012. Diversity of *Bipolaris* species in clinical samples in the United States and their antifungal susceptibility profiles. *Journal of clinical microbiology*, 50(12), pp.4061-4066.
- da Silva Cáceres, M.E. and Aptroot, A., 2016. First inventory of lichens from the Brazilian Amazon in Amapá State. *The Bryologist*, 119(3), pp.250-265.

- da Silva Caceres, M.E., Aptroot, A. and Damien, E, 2014. New species and interesting records of Arthoniales from the Amazon, Rondônia, Brazil. *The Lichenologist*, 46(04), pp.573-588.
- da Silva M, Pinho DB, Pereira OL, Fernandes FM, Barreto RW. Naming potentially endangered parasites: foliicolous mycobiota of *Dimorphandra wilsonii*, a highly threatened Brazilian tree species. *PloS one*. 2016 Feb 24;11(2):e0147895.
- da Silva SS, Gusmão LF. Some facultative-aquatic conidial fungi from the Caatinga biome II: new records for Brazil and Americas. *Brazilian Journal of Botany*. 2015 Jun 1;38(2):323-31.
- da Silva SS, Gusmão LFP, Castañeda-Ruiz RF (2015) *Cryptocoryneum parvulum*, a new species on *Araucaria angustigolia* (Brazilian pine). *Mycotaxon* 130:465–469
- Dai D, Bhat DJ, Liu J, Chukeatirote E, Zhao R, Hyde KD (2012) *Bambusicola*, a new genus from bamboo with asexual and sexual morphs. *Cryptogamie Mycologie* 33:363–379
- Dai DQ, Bahkali AH, Ariyawansa HA, Li WJ, Bhat DJ, Hyde KD (2015) *Neokalmusia didymospora* (*Didymosphaeriaceae*), a new species from bamboo. *Sydowia* 68: 17–25.
- Dai D-Q, Bahkali AH, Bhat DJ, Xiao Y-P, Chukeatirote E, Zhao R-L, McKenzie EHC, Xu J-C, Hyde KD (2014) Towards a natural classification of Dothideomycetes 3: The genera *Muellerites*, *Trematosphaeriopsis*, *Vizellopsis* and *Yoshinagella* (*Dothideomycetes incertae sedis*). *Phytotaxa* 176:18–27
- Dai DQ, Phookamsak R, Wijayawardene NN, Li WJ, Bhat DJ, Xu JC, Taylor JE, Hyde KD, Chukeatirote E. 2016 *Bambusicolous* fungi. *Fungal Diversity*. 82, Issue 1, pp 1–105.
- Dai, D.Q., Boonmee, S., Tian, Q., Xiao, Y.P., Bhat, D.J., Chukeatirote, E., Alias, S.A., Zhao, R.L., Wang, Y. and Hyde, K.D., 2014. *Englerulaceae* (*Dothideomycetes*). *Phytotaxa*, 176(1), pp.139-155.
- Dailey, R., Siemion, R., Raisbeck, M. and Jesse, C., 2010. Analysis of salazinic, norstictic, and usnic acids in *Xanthoparmelia chlorochroa* by ultra-performance liquid chromatography/tandem mass spectrometry. *Journal of AOAC International*, 93(4), pp.1137-1142.
- Dallagnol, L.J., Rodrigues, F.A., Chaves, A.R.M., Vale, F.X.R. and DaMatta, F.M., 2013. Photosynthesis and sugar concentration are impaired by the defective active silicon uptake in rice plants infected with *Bipolaris oryzae*. *Plant pathology*, 62(1), pp.120-129.
- Dallagnol, L.J., Rodrigues, F.A., DaMatta, F.M., Mielli, M.V. and Pereira, S.C., 2011. Deficiency in silicon uptake affects cytological, physiological, and biochemical events in the rice-*Bipolaris oryzae* interaction. *Phytopathology*, 101(1), pp.92-104.
- Dallagnol, L.J., Rodrigues, F.A., Martins, S.C., Cavatte, P.C. and DaMatta, F.M., 2011. Alterations on rice leaf physiology during infection by *Bipolaris oryzae*. *Australasian Plant Pathology*, 40(4), pp.360-365.
- Ertz D, Tehler A. 2011 The phylogeny of Arthoniales (*Pezizomycotina*) inferred from nuLSU and RPB2 sequences. *Fungal Diversity*. Jul 1;49(1):47-71.
- Ertz D, Bungartz, F, Diederich, P. and Tibell, L., 2011. Molecular and morphological data place *Blarneya* in *Tylophoron* (*Arthoniaceae*). *The Lichenologist*, 43(04), pp.345-356.
- Ertz D, Killmann D, Razafindrahaja T, Sérusiaux E, Fischer E 2010. Two new species of *Synnesia* (*Arthoniales*, *Roccellaceae*) from Africa. *The Lichenologist*, 42(01), pp.43-49.
- Ertz D, Tehler, A., Fischer, E., Killmann, D., Razafindrahaja, T. and Sérusiaux, E., 2014. *Isalonactis*, a new genus of *Roccellaceae* (*Arthoniales*), from southern Madagascar. *The Lichenologist*, 46(02), pp.159-167.

- Damm U, Crous PW, Fourie PH. A fissitunicate ascus mechanism in the Calosphaeriaceae, and novel species of Jattaea and Calosphaeria on Prunus wood. *Persoonia-Molecular Phylogeny and Evolution of Fungi*. 2008 Jun 6;20(1):39-52.
- Damm U, Fourie PH, Crous PW (2010) *Coniochaeta* (Lecythophora), *Collophora* gen. nov. and *Phaeomoniella* species associated with wood necroses of Prunus trees. *Persoonia-Molecular Phylogeny and Evolution of Fungi* 24:60-80.
- Damm, U.; Fourie, P.H.; Crous, P.W. 2010. *Coniochaeta* (Lecythophora), *Collophora* gen. nov. and *Phaeomoniella* species associated with wood necroses of Prunus trees. *Persoonia*. 24:60-80.
- Damm,U., Crous,P.W. and Fourie,P.H. 2008 A fissitunicate ascus mechanism in the Calosphaeriaceae, and novel species of Jattaea and Calosphaeria on Prunus wood. *Persoonia* 20, 39-52
- Danesh, N., Puttaiah, E.T. and Basavarajappa, B.E., 2013. Studies on diversity of lichen, *Pyxine* cocoas to air pollution in Bhadravathi town, Karnataka, India. *Journal of Environmental Biology*, 34(3), p.579.
- Danilo B. Pinho, Jaime Honorato Junior, André L. Firmino, Braz T. Hora Junior, Eduardo S. G. Mizubuti & Olinto L. Pereira 2014 Reappraisal of the black mildews (Meliolales) on *Hevea brasiliensis* *Tropical Plant Pathology* vol. 39(1):089-094
- DARANAGAMA D. A, Thambugala K.M, Jayasiri S.C., LIU X. Z.,STADLER M. & HYDE K. D., 2017. Towards a natural classification and backbone tree for *Amplistromataceae*, *Lopadostomataceae* and *Xylariaceae*. *Fungal Diversity* (In Prep).
- Daranagama DA, Jones EBG, Liu XZ, To-anun C, Stadler M, Hyde KD. 2016 – *Mycosphere Essays* 13 – Do xylariaceous macromycetes make up most of the *Xylariomycetidae*? *Mycosphere* 7 (5), 582–601.
- Darangagamanda DA, Liu X-Z, Chamyuang S, Stadler M, Bahkali AH, Hyde KD (2015) *Rhopalostroma brevistipitatum* sp. nov. from Thailand with an extended generic description for *Rhopalostroma*. *Phytotaxa* 227: 229–242
- Darangagamanda DA, Liu X-Z, Chamyuang S, Stadler M, Hyde KD (2014) A multiple gene genealogy reveals phylogenetic placement of *Rhopalostroma lekae*. *Phytotaxa* 186: 177–187.
- Davison, E.M.; Davison, P.J.N.; Tan, Y.P.; Shivas, R.G. (2009). *Fungal Planet* 31. *Oedocephalum adhaerens*. *Persoonia* 22: 166-167
- Davydov, E.A. and Ohmura, Y., 2016. Lectotypification of the name *Umbilicaria esculenta*. *Mycotaxon*, 131(2), pp.407-412.
- Davydov, E.A. and Printzen, C., 2012. Rare and noteworthy boreal lichens from the Altai Mountains (South Siberia, Russia). *The Bryologist*, 115(1), pp.61-73.
- Davydov, E.A. and Wei, J.C., 2009. *Boreoplaca ultrafrigida* (Umbilicariales), the correct name for *Rhizoplacopsis weichingii*. *Mycotaxon*, 108(1), pp.301-305.
- Day MJ, Hall JC, Currah RS. Phialide arrangement and character evolution in the helotialean anamorph genera *Cadophora* and *Phialocephala*. *Mycologia*. 2012 Mar 1;104(2):371-81.
- de Azevedo CMPS, Gomes RR, Vicente VA, Santos DWCL, Marques SG, do Nascimento MMF, Andrade CEW, Silva RR, Queiroz-Telles F, de Hoog GS. 2015. *Fonsecaea pugnacius*, a novel agent of disseminated chromoblastomycosis. *Journal of Clinical Microbiology* 53:2674–2685.
- De Beer ZW, Duong TA, Barnes I, Wingfield BD, Wingfield MJ. Redefining *Ceratocystis* and allied genera. *Studies in Mycology*. 2014 Sep 30;79:187-219.
- De Beer ZW, Seifert KA, Wingfield MJ. A nomenclator for ophiostomatoid genera and species in the Ophiostomatales and Microascales. *The ophiostomatoid fungi: expanding frontiers*. 2013;12:245-322.

- de García V, Brizzio S, Libkind D, Rosa CA, van Broock M. *Wickerhamomyces patagonicus* sp. nov., an ascomycetous yeast species from Patagonia, Argentina. *International journal of systematic and evolutionary microbiology*. 2010 Jul 1;60(7):1693-6.
- De Gruyter, J., Aveskamp, M.M., Woudenberg, J.H., Verkley, G.J., Groenewald, J.Z. and Crous, P.W., 2009. Molecular phylogeny of *Phoma* and allied anamorph genera: towards a reclassification of the *Phoma* complex. *Mycological research*, 113(4), pp.508-519.
- de Hoog GS, Dukik K, Monod M, Packeu A, Stubbe D, Hendrickx M, Kupsch C, Stielow JB, Freeke J, Göker M, Rezaei-Matehkolaei A, Mirhendi H, Gräser Y. Toward a novel multilocus phylogenetic taxonomy for the dermatophytes. *Mycopathologia* (in press)
- de Hoog GS, Redhead SA, Feng P, Jiang Y, Dukik K, Sigler L. 2016. (2465–2466) Proposals to conserve *Blastomyces* Gilchrist & W.R. Stokes against *Blastomyces* Costantin & Rolland and *Ajellomycetaceae* against *Paracoccidioidaceae* (Ascomycota: Onygenales). *Taxon* 65:1167–1169.
- De Hoog GS, Vicente VA, Najafzadeh MJ, Harrak MJ, Badali H, Seyedmousavi S. Waterborne *Exophiala* species causing disease in cold-blooded animals. *Persoonia-Molecular Phylogeny and Evolution of Fungi*. 2011 Dec 31;27(1):46-72.
- de Hoog, G.S., Ahmed, S.A., Najafzadeh, M.J., Sutton, D.A., Keisari, M.S., Fahal, A.H., Eberhardt, U., Verkleij, G.J., Xin, L., Stielow, B. and van de Sande, W.W. 2013. Phylogenetic findings suggest possible new habitat and routes of infection of human eumycetoma. *PLoS Negl Trop Dis* 7 (5), E2229.
- de Hoog, G.S.; van Diepeningen, A.D.; Mahgoub, E-S.; van de Sande, W.W.J. 2012. New species of *Madurella*, causative agents of black-grain mycetoma. *Journal of Clinical Microbiology*. 50(3):988-994
- de Jong, S.N., Levesque, C.A., Verkley, G.J.M., Abeln, E.C.A., Rahe, J.E. and Braun, P.G. 2015. Phylogenetic relationships among *Neofabraea* species causing tree cankers and bull's-eye rot of apple based on DNA sequencing of ITS nuclear rDNA, mitochondrial rDNA, and the beta-tubulin gene. *Mycol. Res.* 105 (6), 658-669
- de la Rosa, J.P.M., Porcel, M.C. and Warke, P.A., 2013. Mapping stone surface temperature fluctuations: Implications for lichen distribution and biomodification on historic stone surfaces. *Journal of Cultural Heritage*, 14(4), pp.346-353.
- De Lange, P.J. and Blanchon, D., 2014. The hunt for *Ramalodium dumosum* (Pannariaceae, lichenised ascomycetes)-an enigmatic lichen endemic to the southern Waitakere Ranges.
- de Lange, P.J., 2014. The Flora of Egeria Rock, Northern Kermadec Island Group. *Wellington Botanical Society Bulletin*, 55, pp.41-49.
- De Lange, P.J., Galloway, D.J., Blanchon, D.J., Knight, A., Rolfe, J.R., Crowcroft, G.M. and Hitchmough, R., 2012. Conservation status of New Zealand lichens. *New Zealand Journal of Botany*, 50(3), pp.303-363.
- de los Ríos, A., Raggio, J., Pérez-Ortega, S., Vivas, M., Pintado, A., Green, T.A., Ascaso, C. and Sancho, L.G., 2011. Anatomical, morphological and ecophysiological strategies in *Placopsis pycnotheca* (lichenized fungi, Ascomycota) allowing rapid colonization of recently deglaciated soils. *Flora-Morphology, Distribution, Functional Ecology of Plants*, 206(10), pp.857-864.
- de Melo MP, da Silva Matos K, Júnior JE, Moreira SI, Silva FF, de Alcântara Neto F, Alves E, Pereira OL. *Thielaviopsis musarum* causes postharvest crown and fruit rot of banana in Northeastern Brazil. *Tropical Plant Pathology*. 2016 Aug 1;41(4):258-63.

- de Melo Teixeira M, Theodoro RC, de Oliveira FF, Machado GC, Hahn RC, Bagagli E, San-Blas G, Felipe MS. *Paracoccidioides lutzii* sp. nov.: biological and clinical implications. *Medical mycology*. 2014 Jan 1;52(1):19-28.
- de Moura Nascimento, E.J. and Van Der Sand, S.T., 2008. Restriction analysis of the amplified ribosomal DNA spacers ITS1 and ITS2 of *Bipolaris sorokiniana* isolates. *World Journal of Microbiology and Biotechnology*, 24(5), pp.647-652.
- de Paz, G.A., Cubas, P., Crespo, A., Elix, J.A. and Lumbsch, H.T., 2012. Transoceanic dispersal and subsequent diversification on separate continents shaped diversity of the *Xanthoparmelia pulla* group (Ascomycota). *Plos One*, 7(6), p.e39683.
- De Paz, G.A., Cubas, P., Divakar, P.K., Lumbsch, H.T. and Crespo, A., 2011. Origin and diversification of major clades in parmelioid lichens (Parmeliaceae, Ascomycota) during the Paleogene inferred by Bayesian analysis. *PLoS One*, 6(12), p.e28161.
- De Silva H, Castlebury LA, Green S, Stone JK. Characterisation and phylogenetic relationships of *Anisogramma virgultorum* and *A. anomala* in the Diaporthales (Ascomycota). *mycological research*. 2009 Jan 31;113(1):73-81.
- de Souza Armando EA, Chaves ZM, Dianese JC. *Phaeostilbelloides* and *Velloziomyces*—new dematiaceous genera from the Brazilian Cerrado. *Mycotaxon*. 2015 Jul 1;130(3):757-67.
- Debona, D., Rodrigues, F.Á., Rios, J.A. and Nascimento, K.J.T., 2012. Biochemical changes in the leaves of wheat plants infected by *Pyricularia oryzae*. *Phytopathology*, 102(12), pp.1121-1129.
- Declercq, B. 2009. *Omtrent Lasiosphaeria* s.l. *Sterbeekia*. 28:35-41
- Decock C, Delgado RG & Seifert K. 2005. Taxonomy and phylogeny of *Synchaetomella lunatospora*, a new genus and species of synnematosous fungi from Southeast Asia. *Antonie van Leeuwenhoek* 88: 231–240. doi:10.1007/s10482-005-7210-7
- Degelius G (1937) Lichens from Southern Alaska and the Aleutian islands collected by Dr. E. Hultén. *Acta Horti Gothob.* 12: 105-144.
- Deighton, F.C.; Pirozynski, K.A. 1972. Microfungi V. More hyperparasitic hyphomycetes. *Mycological Papers*. 128:1-110.
- Delgado Baquerizo, M., Gallardo, A., Covelo, F., Prado Comesaña, A., Ochoa, V. and Maestre, F.T., 2015. Differences in thallus chemistry are related to species-specific effects of biocrust forming lichens on soil nutrients and microbial communities. *Functional Ecology*, 29(8), pp.1087-1098.
- Delgado, G. (2008). South Florida microfungi: a new species of *Stanjehughesia* (hyphomycetes) from Sabal palm.. *Mycotaxon* 103: 229-234.
- Delgado, G. 2014. South Florida microfungi: *Linkosia longirostrata*, a new hyphomycete on paurotis palm. *Mycotaxon*. 129(1):41-46.
- Delgado, G., 2013. South Florida microfungi: a new species of *Ellisembia* (hyphomycetes) with new records from the USA. *Mycotaxon*, 123(1), pp.445–450.
- Delgado, G.; Mena-Portales, J.; Gené, J.; Guarro, J. 2005. New species of *Cryptophialoidea* and *Hughesinia* (hyphomycetes, anamorphic fungi) from Cuba. *Fungal Diversity*. 20:31-38,
- Dellavalle, P.D., Cabrera, A., Alem, D., Larrañaga, P., Ferreira, F. and Dalla Rizza, M., 2011. Antifungal activity of medicinal plant extracts against phytopathogenic fungus *Alternaria* spp. *Chilean Journal of Agricultural Research*, 71(2), p.231.
- Del-Prado, R., Blanco, O., Lumbsch, H.T., Divakar, P.K., Elix, J.A., Molina, M.C. and Crespo, A. 2013. Molecular phylogeny and historical biogeography of the lichen-forming fungal genus *Flavoparmelia* (Ascomycota:Parmeliaceae) *Taxon* 62 (5), 928-939.

- Del-Prado, R., P. K. Divakar, A. Crespo 2011: Using genetic distances in addition to ITS molecular phylogeny to identify potential species in the *Parmotrema reticulatum* complex: a case study. *The Lichenologist* 43(6): 569-583.
- Demiray, A.D., Yolcubal, I., Akyol, N.H. and Çobanoğlu, G., 2012. Biomonitoring of airborne metals using the Lichen *Xanthoria parietina* in Kocaeli Province, Turkey. *Ecological Indicators*, 18, pp.632-643.
- Descals E, Marvanová L, Webster J (1999) New taxa and combinations of aquatic hyphomycetes. *Canadian Journal of Botany* 76:1647–1659
- Descals E. & Webster J. 1983. Four new staurosporous Hyphomycetes from mountain streams. *Trans. Br. Mycol. Soc.* 80(1):67-75.
- Descals E. 2005. Diagnostic characters of propagules of Ingoldian fungi. *Mycol Res* 109:545-555. doi:10.1017/s0953756205002728
- Deshpande, K.B.; Deshpande, K.S. 1966. *Chlamydorubra*, a new genus of Dematiaceae from India. *Mycopathologia et Mycologia Applicata*. 29(3-4):270-272
- Desoubeaux G, García D, Bailly E, Augereau O, Bacle G, De Muret A, Bernard L, Cano-Lira JF, Garcia-Hermoso D, Chandener J. Subcutaneous phaeohyphomycosis due to *Phialemoniopsis ocularis* successfully treated by voriconazole. *Medical mycology case reports*. 2014 Sep 30;5:4-8.
- Dethoup T, Manoch L. Diversity of marine fungi in eastern thailand. *Kasetsart J Nat Sci.* 2009;43(5 SUPPL.):100-6.
- Dey, P., Banerjee, J. and Maiti, M.K., 2011. Comparative lipid profiling of two endophytic fungal isolates—*Colletotrichum* sp. and *Alternaria* sp. having potential utilities as biodiesel feedstock. *Bioresource technology*, 102(10), pp.5815-5823.
- Dhargalkar, S.; Bhat, D.J. 2009. *Echinospaeria pteridis* sp. nov. and its *Vermiculariopsiella* anamorph. *Mycotaxon*. 108:115-122
- Díaz GA, Zoffoli JP, Lolas M, Blanco A, Latorre BA, Ferrada EE, Elfar K, Naranjo P. Occurrence of *Phacidiopycnis washingtonensis* Causing Speck Rot on Stored Pink Lady Apple Fruit in Chile. *Plant Disease*. 2015 Nov 25.
- Diaz, V.M., 2016. The *Xanthoparmelia* of Colorado: Diversity and Distributions (Doctoral dissertation, UNIVERSITY OF COLORADO AT BOULDER).
- Dib-Bellahouel S, Fortas Z. Antibacterial activity of various fractions of ethyl acetate extract from the desert truffle, *Tirmania pinoyi*, preliminarily analyzed by gas chromatography-mass spectrometry (GC-MS). *African Journal of Biotechnology*. 2011 Aug 24;10(47):9694-9.
- Diederich P (2003) Neue Arten und neue Funde von amerikanischen lichenicolen Pilzen. *Herzogia* 16:41–90
- Diederich P, Ertz D, Lawrey JD, Sikaroodi M, Untereiner WA (2013) Molecular data place the hyphomycetous lichenicolous genus *Sclerococcum* close to *Dactylospora* (Eurotiomycetes) and *S. parmeliae* in *Cladophialophora* (Chaetothyriales). *Fungal Divers* 58:61–72
- Diederich P, Ertz D, Van den Broeck D, van den Boom P, Brand M, Sérusiaux E. New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. XII. *Bulletin de la Société des naturalistes luxembourgeois*. 2009;110:75-92.
- Diederich P. A redescription of *Sporodochiolichen flavus* (lichenized sporodochial Ascomycetes). *Bull. Soc. Nat. luxemb.* 2013;114:55.
- Diederich, P. (1994). New or interesting lichenicolous fungi. 4. *Clauzadeomyces verrucosus* gen. et sp. nov. (Deuteromycotina). *Bull. Soc. linn. Provence* 45: 417-420.
- Diederich, P. 2002. *Kalchbrenneriella*, a new genus to accommodate the lichenicolous hyphomycete *Torula cyanescens*. *The Bryologist*. 105(3):411-414

- Diederich, P., Braun, U., Heuchert, B. and Ertz, D., 2010. Four new lichen-associated *Trimmatostroma* species (hyphomycetes). *Bulletin de la Société des naturalistes luxembourgeois*, 111, pp.47-55.
- Diederich, P., Damien, E.R.T.Z. and Etayo, J., 2010. An enlarged concept of *Llimoniella* (lichenicolous Helotiales), with a revised key to the species and notes on related genera. *The Lichenologist*, 42(03), pp.253-269.
- Diederich, P., Ertz, D., Eichler, M., Cezanne, R., van den Boom, P., Fischer, E., Killmann, D., Van den Broeck, D. and Sérusiaux, E., 2012. New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. XIV. *Bulletin de la Société des naturalistes luxembourgeois*, 113, pp.95-115.
- Diederich, P., Ertz, D., Van den Broeck, D., van den Boom, P., Brand, M. and Sérusiaux, E., 2009. New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. XII. *Bulletin de la Société des naturalistes luxembourgeois*, 110, pp.75-92.
- Diederich, P.; Boom, P.P.G. van den; Aptroot, A. 2001. *Cladoniicola staurospora* gen. et sp. nov., a new lichenicolous coelomycete from Western Europe. *Belgian Journal of Botany*. 134(2):127-130.
- Diederich, P.; Ertz, D.; Etayo, J. (2010). An enlarged concept of *Llimoniella* (lichenicolous Helotiales), with a revised key to the species and notes on related genera. *Lichenologist* 42(3): 253-269
- Diederich, P.; Lawrey, J.D.; Sikaroodi, M.; van den Boom, P.; Ertz, D. 2012. *Briancoppinsia*, a new coelomycetous genus of Arthoniaceae (Arthoniales) for the lichenicolous *Phoma cytospora*, with a key to this and similar taxa. *Fungal Diversity*. 52(1):1-12.
- Diederich, P.; Scheidegger, C. (1996). *Reichlingia leopoldii* gen. et sp. nov., a new lichenicolous hyphomycete from central Europe. *Bull. Soc. Nat. luxemb.* 97: 3-8.
- Diederich, P.; Schultz, M. (2009). *Zwackhiomyces namibiensis*, a new lichenicolous ascomycete (Xanthopyreniaceae) on *Psorotichia* from Namibia. *Herzogia* 22: 173-176.
- Diene, O; Wang, W; Narisawa K. 2013. *Pseudosigmoidea ibarakiensis* sp. nov., a dark septate endophytic fungus from a cedar forest in Ibaraki, Japan. *Microbes and Environments*. 28(3):381-387
- Dietrich, M. and Buergi-Meyer, K., 2010. Interesting saxicolous lichens at Tossen near Schimbrigbad in the UNESCO Biosphere Entlebuch (Canton of Lucerne, Central Switzerland). *Herzogia*, 23, pp.75-84.
- Diez, J., Manjon, J.L. and Martin, F. 2002 Molecular phylogeny of the mycorrhizal desert truffles (*Terfezia* and *Tirmania*), host specificity and edaphic tolerance. *Mycologia* 94 (2), 247-259
- Dillenius, J.J. (1742 [1741]). *Historia Muscorum*. Oxford: Sheldonian Theatre.
- Dillman, K.L., Ahti, T., Björk, C.R., Clerc, P., Ekman, S., Goward, T., Hafellner, J., Pérez-Ortega, S., Printzen, C., Savić, S. and Schultz, M., 2014. New records, range extensions and nomenclatural innovations for lichens and lichenicolous fungi from Alaska, USA.
- Din, L.B., Zakaria, Z., Samsudin, M.W. and Elix, J.A., 2010. Chemical profile of compounds from lichens of Bukit Larut, Peninsular Malaysia. *Sains Malaysiana*, 39(6), pp.901-908.
- Ding T, Jiang T, Zhou J, Xu L, Gao ZM (2010) Evaluation of antimicrobial activity of endophytic fungi from *Camptotheca acuminata* (Nyssaceae). *Genetics and Molecular Research* 9:2104–2112
- Dissanayake AJ, Camporesi E, Hyde KD, Phillips AJL, Fu CY, Yan JY, Li XH (2016) *Dothiorella* species associated with woody hosts in Italy. *Mycosphere* 7: 51–63

- Dissanayake AJ, Jayawardena RS, Boonmee S, Thambugala KM, Tian Q, Mapook A, Senanayake IC, Yan JY, Li YM, Li XH, Chukeatirote E, Hyde KD (2014). The status of Myriangiaceae (Dothideomycetes). *Phytotaxa*, 176(1), 219-237.
- Dissanayake AJ, Jayawardena RS, Boonmee S, Thambugala KM, Tian Q, Mapook A, Senanayake IC, Yan JY, Liu M, Li XH, Chukeatirote E, Hyde KD (2014) The status of Myriangiaceae (Dothideomycetes). *Phytotaxa* 176: 219–237
- Dissanayake AJ, Phillips AJL, Li XH, Hyde KD 2016 – Botryosphaeriaceae: Current status of genera and species. *Mycosphere* (special issue), Doi 10.5943/mycosphere/si/1b/12
- Divakar P. K., Del-Prado R., Lumbsch H. T., Wedin M., Esslinger T. L., Leavitt S. D., Crespo A. 2012. Diversification of the newly recognized lichen-forming fungal lineage *Montanelia* (Parmeliaceae, Ascomycota) and its relation to key geological and climatic events. *American Journal of Botany* 99(12): 2014-2026.
- Divakar PK, Crespo A, Blanco O, Lumbsch HT (2006) Phylogenetic significance of morphological characters in the tropical Hypotrachyna clade of parmelioid lichens (Parmeliaceae, Ascomycota). *Mol Phyl Evol* 40: 448-458.
- Divakar PK, Crespo A, Núñez-Zapata, Flakus A, Sipman HJM, Elix JA, Lumbsch T (2013) A molecular perspective on generic concepts in the Hypotrachyna clade (Parmeliaceae, Ascomycota). *Phytotaxa* 132 (1): 21–38.
- Divakar PK, Crespo A, Wedin M, Leavitt SD, Hawksworth DL, Myllys L, McCune B, Randle T, Bjerke JW, Ohmura Y, Schmitt I, Boluda CG, Alors D, Roca-Valiente B, Del-Prado R, Ruibal C, Buaruang K, Núñez-Zapata J, Amo de Paz G, Rico VJ, Molina MC, Elix JA, Esslinger TL, Tronstad IKK, Lindgren H, Ertz D, Gueidan C, Saag L, Mark K, Singh G, Dal Grande F, Parnmen S, Beck A, Benatti MN, Blanchon D, Candan M, Clerc P, Goward T, Grube M, Hodkinson BP, Hur J-S, Kantvilas G, Kirika PM, Lendemer J, Mattsson J-E, Messuti MI, Miadlikowska J, Nelsen M, Ohlson JI, Pérez-Ortega S, Saag A, Sipman HJM, Sohrabi M, Thell A, Thor G, Truong C, Yahr R, Upreti DK, Cubas P, Lumbsch HT (2015) Evolution of complex symbiotic relationships in a morphologically derived family of lichen-forming fungi. *New Phytologist* 208:1217–1226
- Divakar, P. K., Kauff F., Crespo A., Leavitt S. D., Lumbsch H. T. 2013. Understanding phenotypical character evolution in parmelioid lichenized fungi (*Parmeliaceae*, Ascomycota) . - *PLoS ONE* 8(11): e83115.
- Divakar, P.K., Crespo, A., Wedin, M., Leavitt, S.D., Hawksworth, D.L., Myllys, L., McCune, B., Randle, T., Bjerke, J.W., Ohmura, Y., Schmitt, I., Boluda, C.G., Alors, D., Roca-Valiente, B., Del-Prado, R., Ruibal, C., Buaruang, K., Nunez-Zapata, J., Amo de Paz, G., Rico, V.J., Molina, M.C., Elix, J.A., Esslinger, T.L., Tronstad, I.K., Lindgren, H., Ertz, D., Gueidan, C., Saag, L., Mark, K., Singh, G., Dal Grande, F., Parnmen, S., Beck, A., Benatti, M.N., Blanchon, D., Candan, M., Clerc, P., Goward, T., Grube, M., Hodkinson, B.P., Hur, J.S., Kantvilas, G., Kirika, P.M., Lendemer, J., Mattsson, J.E., Messuti, M.I., Miadlikowska, J., Nelsen, M., Ohlson, J.I., Perez-Ortega, S., Saag, A., Sipman, H.J., Sohrabi, M., Thell, A., Thor, G., Truong, C., Yahr, R., Upreti, D.K., Cubas, P. and Lumbsch, H.T.. 2015. Evolution of complex symbiotic relationships in a morphologically derived family of lichen-forming fungi. *New Phytol.* In press
- Divakar, P.K., EVOLUTIONARY TRENDS IN SYMBIOSIS: PARMELIACEAE (LICHENIZED FUNGI) A STUDY CASE.
- Divakar, P.K., Lumbsch, H.T., Ferencova, Z., Del Prado, R. and Crespo, A., 2010. Remototrachyna, a newly recognized tropical lineage of lichens in the Hypotrachyna clade (Parmeliaceae, Ascomycota), originated in the Indian subcontinent. *American Journal of Botany*, 97(4), pp.579-590.

- Divakar, P.K.; Del Prado, R., Lumbsch, H.T.; Wedin, M.; Esslinger, T.L.; Leavitt, S.D.; Crespo, A. 2012. Diversification of the newly recognized lichen forming fungal lineage *Montanelia* (Parmeliaceae, Ascomycota) and its relation to key geological and climatic events. *American Journal of Botany*. 99(12):2014-20
- Divakar, P.K., Crespo, A., Wedin, M., Leavitt, S.D., Hawksworth, D.L., Myllys, L., McCune, B., Randle, T., Bjerke, J.W., Ohmura, Y., Schmitt, I., Boluda, C.G., Alors, D., Roca-Valiente, B., Del-Prado, R., Ruibal, C., Buaruang, K., Nunez-Zapata, J., Amo de Paz, G., Rico, V.J., Molina, M.C., Elix, J.A., Esslinger, T.L., Tronstad, I.K., Lindgren, H., Ertz, D., Gueidan, C., Saag, L., Mark, K., Singh, G., Dal Grande, F., Parmen, S., Beck, A., Benatti, M.N., Blanchon, D., Candan, M., Clerc, P., Goward, T., Grube, M., Hodkinson, B.P., Hur, J.S., Kantvilas, G., Kirika, P.M., Lendemer, J., Mattsson, J.E., Messuti, M.I., Miadlikowska, J., Nelsen, M., Ohlson, J.I., Perez-Ortega, S., Saag, A., Sipman, H.J., Sohrabi, M., Thell, A., Thor, G., Truong, C., Yahr, R., Upreti, D.K., Cubas, P. and Lumbsch, H.T. 2015 Evolution of complex symbiotic relationships in a morphologically derived family of lichen-forming fungi. *New Phytol.* 4: 1217–1226
- Dixon, A.P., Faber-Langendoen, D., Josse, C., Morrison, J. and Loucks, C.J., 2014. Distribution mapping of world grassland types. *Journal of Biogeography*, 41(11), pp.2003-2019.
- Döbbeler P. 2012 *Gynonectria intraspora* gen. et sp. nov. (Hypocreales), a perianthicolous phyllosphere fungus with a novel ascospore type. *Mycological Progress* 11(2): 473–481.
- DOBBLER, P. (2011). Two new hepaticolous species of the genus *Octospora* (Pezizales). *Herzogia* 24(2):357-365.
- Doering, J., Deduke, C. and Piercey-Normore, M.D., 2016. Variation in lichen species assemblages and secondary metabolites surrounding *Stereocaulon* species in the boreal forest of Northwestern Manitoba. *Evansia*, 33(2), pp.70-82.
- Doherty, T.A., Khorram, N., Chang, J.E., Kim, H.K., Rosenthal, P., Croft, M. and Broide, D.H., 2012. STAT6 regulates natural helper cell proliferation during lung inflammation initiated by *Alternaria*. *American Journal of Physiology-Lung Cellular and Molecular Physiology*, 303(7), pp.L577-L588.
- Doilom M, Dissanayake AJ, Wanasinghe AN, Boonmee S, Liu JK, Bhat J, Taylor JE, Bahkali AH, McKenzie, EHC, Hyde KD (2016) Microfungi on *Tectona grandis* (teak) in Northern Thailand. *Fungal Divers* DOI 10.1007/s13225-016-0368-7
- Doilom M, Liu JK, Jaklitsch WM, Ariyawansa H, Wijayawardene NN, Chukeatirote E, Zhang M, McKenzie EHC, Geml J, Voglmayr H, Hyde KD (2013) An outline of the family Cucurbitariaceae. *Sydowia* 65:167–192
- Doilom, M., Dissanayake, A.J., Wanasinghe, D.N., Boonmee, S., Liu, J.K., Bhat, D.J., Taylor, J.E., Bahkali, A.H., McKenzie, E.H. and Hyde, K.D., 2016. Microfungi on *Tectona grandis* (teak) in Northern Thailand. *Fungal Diversity*, pp. 1–76.
- Dong, L., Park, J.S. and Woo, J.J., 2015. A-34: Contribution to the Lichen Flora of Vietnam, with Ten New Record Species. *균학회소식*, 27(2), pp.62-62.
- Dong, N., Liu, X., Lu, Y., Du, L., Xu, H., Liu, H., Xin, Z. and Zhang, Z., 2010. Overexpression of TaPIEP1, a pathogen-induced ERF gene of wheat, confers host-enhanced resistance to fungal pathogen *Bipolaris sorokiniana*. *Functional & integrative genomics*, 10(2), pp.215-226.
- Dong, Q.(unpublished). Analysis of Microbial Diversity of the Tomato Soil in Yunnan E'shan. <https://www.ncbi.nlm.nih.gov/nucleotide/KM108749.1>
- Dorai, M.; Vittal, B.P.R. 1988. *Cercospora longispora* sp. nov. from India. *Transactions of the British Mycological Society*. 91(3):521-523.

- Dorfelt, H.; Schmidt, A.R. (2007). A conifer seedling with two herbicolous fungi from the Baltic amber forest. *J. Linn. Soc. Bot.*, 155(4): 449-456.
- Dornelo-Silva, D.; Pereira-Carvalho, R. de C.; Dianese, J.C. (2008) [2007]. New *Stenella* and *Parastenella* species from the Brazilian cerrado. *Mycologia* 99(5): 753-764.
- DOUGOUD R. 2012 *Aeruginoscyphus*, un nouveau genre pour *Peziza sericea* (Helotiales, Hyaloscyphaceae). *Ascomycete.org* , 4 (1) : 1-4.
- Dougoud,R. 2015. *Rutstroemia alnobetulae* sp. nov. (Helotiales, Rutstroemiaceae), une espèce nouvelle des aulnes verts. *Ascomycete.org*. 7(6):336-340
- Dougoud,R.;Van Vooren,N.;Vega,M. 2015. *Cupulina montana* (Pezizales, Pyronemataceae), un nouveau genre et une nouvelle espèce des montagnes d'Europe. *Ascomycete*. 7:39-44
- Doveri & Sarrocco (2013). *Sporormiella octomegaspora*, a new hairy species with eight-celled ascospores from Spain. *Mycotaxon*, Volume 123, pp. 129–140 January–March 2013
- Doveri F. (2004). *Fungi Fimicoli Italici*. A.M.B.Fondazione Centro Studi, Livorno.
- Doveri F. (2008). *Pagine di micologia*, Associazione Micologica Bresadola Centro Studi Micologici 65-66, 110.
- Doveri F. (2011). Addition to “*Fungi Fimicoli Italici*”: An update on the occurrence of coprophilous Basidiomycetes and Ascomycetes in Italy with new records and descriptions. *Mycosphere* 2 (4), 331–427.
- Doveri F. (2014). An update on the genera *Ascobolus* and *Saccobolus* with keys and descriptions of three coprophilous species, new to Italy. *Mycosphere* 5(1), 86–135, Doi 10.5943/mycosphere/5/1/4.
- Doveri F. Additions to “*Fungi Fimicoli Italici*”: An update on the occurrence of coprophilous Basidiomycetes and Ascomycetes in Italy with new records and descriptions. *Mycosphere*. 2011 Jan 1;2(4):331-427.
- Doveri F. Coprophilous discomycetes from the Tuscan archipelago (Italy). Description of two rare species and a new *Trichobolus*. *Mycosphere*. 2012 Jan 1;3(4):503-22.
- Doveri, F. (2010). Une nouvelle variété de *Tripterosporella* sur crottin une occasion de recombiner le pyrenomycete cleistothecial *Cercophora heterospora* dans le genre *Tripterosporella*. *Bull. Mycol. Bot. Dauphiné-Savoie* 50(no. 196): 49-55
- Doveri, F.; Coué, B. 2008. Sur deux taxons nouveaux de *Thecotheus*. *Documents Mycologiques*. 34(135-136):15-40
- Doveri, F.; Pecchia, S.; Sarrocco, S.; Minnocci, A.; Vannacci, G. (2010). *Rodentomyces*, a new hypocrealean genus from Italy. *Fungal Diversity* 42: 57-69
- Doweld G, *Index Fungorum*, 31, 1, 2013
- Doyon, J.B., Sutton, D.A., Theodore, P., Dhillon, G., Jones, K.D., Thompson, E.H., Fu, J., Wickes, B.L., Koehler, J.E. and Schwartz, B.S., 2013. *Rasamsonia argillacea* pulmonary and aortic graft infection in an immune-competent patient. *Journal of clinical microbiology*, 51(2), pp.719-722.
- Dreaden, T.J., Davis, J.M., De Beer, Z.W., Ploetz, R.C., Soltis, P.S., Wingfield, M.J. and Smith, J.A., 2014b. Phylogeny of ambrosia beetle symbionts in the genus *Raffaelea*. *Fungal biology*, 118(12), pp.970-978.
- Dreaden, T.J., Davis, J.M., Harmon, C.L., Ploetz, R.C., Palmateer, A.J., Soltis, P.S. and Smith, J.A., 2014a. Development of multilocus PCR assays for *Raffaelea lauricola*, causal agent of laurel wilt disease. *Plant Disease*, 98(3), pp.379-383.
- D'Souza, M.; Bhat, D.J. 2002. *Didymobotryum spirillum*, a new synnematosus hyphomycete from India. *Mycologia*. 94(3):535-538.
- D'Souza, M.; Singh, S.K.; Bhat, D.J. 2002. New conidial fungi from Andaman Islands, India. *Mycotaxon*. 82:133-143.

- Du, Y.Q., Liu, Y. and Wang, J.H., 2015. Polysaccharides from *Umbilicaria esculenta* cultivated in Huangshan Mountain and immunomodulatory activity. *International journal of biological macromolecules*, 72, pp.1272-1276.
- Duan J, Wu W, Liu XZ (2007) *Dinemasporium* (coelomycetes). *Fungal Divers* 26:205–218
- Duarte S, Batista D, Bärlöcher F, Cássio F, Pascoal C (2015) Some new DNA barcodes of aquatic hyphomycete species. *Mycoscience* 56:102–108
- Duarte S., Batista D., Bärlöcher F., Cássio F. & Pascoal C. 2014. Some new DNA barcodes of aquatic hyphomycete species. *Mycoscience* doi: 10.1016/j.myc.2014.04.002
- Duarte,S., Seena,S., Barlöcher,F., Cassio,F. and Pascoal,C. 2012 Preliminary insights into the phylogeography of six aquatic hyphomycete species. *PLoS ONE* 7 (9), E45289
- Dubey R, Pandey AK (2011) *Bispora aeglei* sp. nov. - a new follicolous hyphomycete from India. [Journal of Mycopathological Research](#) 49:357–359
- Dubey, R.; Pandey, A.K.; Manoharachary, C. (2011). Beltramono a hitherto undescribed Hyphomycetes genus. *J. Mycopathol. Res.* 49(2): 321-324.
- Dubey, U.; Upreti, D.K.; Nayaka, S. (2010). A new species of *Leiorreuma* Eschw. from India. *Lichenologist* 42(6): 711-713.
- Dubey , R.& Pandey, A.K. 2012. *Pseudoacrodictys steviae*– a new generic and species record for India. *J Mycol Pl Pathol* 42 (2): 251-253
- Dubey,R.;Moonnambeth, A.M. 2014. *Sheathnema indicum* gen. et sp. nov. a new sooty mold fungus from northern Western Ghats, India. *Journal of Threatened Taxa*. 6(12):6549-6555
- Dulymamode, R.; Wu, W.-P.; Peerally, A. 1998. Three new Hyphomycetes on *Pandanus* leaves from Mauritius. *Mycoscience*. 39(3):285-291.
- Duong, L.M.; Lumyong, S.; Hyde, K.D.; Jeewon, R. 2004. *Emarcea castanopsidicola* gen. et sp. nov. from Thailand, a new xylariaceous taxon based on morphology and DNA sequences. *Studies in Mycology*. 50(1):253-260
- Duong, T.A.; de Beer, Z.W; Wingfield, B.D; Wingfield, M.J. 2012. Phylogeny and taxonomy of species in the *Grosmannia serpens* complex. *Mycologia*. 104(3):715-732
- Dupont J, Magnin S, Rousseau F, Zbinden M, Frebourg G, Samadi S, Richer de Forges B, Jones EBG (2009) Molecular and ultrastructural characterization of two ascomycetes found on sunken wood off Vanuatu Islands in the deep Pacific Ocean. *Mycol Res* 112:1351–1364
- Durkin, S.R., Henderson, T., Raju, R. and Ellis, D., 2008. Successful treatment of phaeohyphomycotic keratitis caused by *Bipolaris australiensis*. *Clinical & experimental ophthalmology*, 36(7), pp.697-699.
- Dyer, Z.A., Wright, R.S., Rong, I.H. and Jacobs, A., 2008. Back pain associated with endobronchial mucus impaction due to *Bipolaris australiensis* colonization representing atypical allergic bronchopulmonary mycosis. *Medical mycology*, 46(6), pp.589-594.
- Dyko BJ, Sutton BC (1979) Two new and unusual Deuteromycetes. *Transactions of the British Mycological Society* 72:411–417
- Dyko, B.J.; Sutton, B.C.; Roquebert, M.F. 1979. The genus *Protostegia*. *Mycologia*. 71(5):918-934.
- DYMYTROVA LV, Breuss O, Kondratyuk SY. *Agonimia borysthenica*, a new lichen species (Verrucariales) from Ukraine. *Österreichische Zeitschrift für Pilzkunde*. 2011;20:25-8.

- Dymytrova, L., Nadyeina, O., Naumovych, A., Keller, C. and Scheidegger, C., 2013. Primeval beech forests of Ukrainian Carpathians are sanctuaries for rare and endangered epiphytic lichens. *Herzogia*, 26(1), pp.73-89.
- E. Kraichak, R. Lücking, A. Aptroot, A. Beck, P. Dornes, V. John, J.C. Lendemer, M.P. Nelsen, G. Neuwirth, A. Nutakki, S. Parnmen, M. Sohrabi, T. Tønberg & H.T. Lumbsch. 2015. Hidden diversity in the morphologically variable script lichen (*Graphis scripta*) complex (Ascomycota, Ostropales, Graphidaceae). *Organisms, Diversity and Evolution* 15: 447-458.
- E. Kraichak, S. Parnmen, R. Lücking, E. Rivas Plata, A. Aptroot, M.E.S. Cáceres, D. Ertz, A. Mangold, J. A. Mercado-Díaz, K. Papong, D. Van den Broeck & H.T. Lumbsch. 2014. Revisiting the phylogeny of Ocellulariaceae, the second largest tribe within Graphidaceae (lichenized Ascomycota: Ostropales). *Phytotaxa* 189: 52-81.
- E. Punithalingam and Brian M. Spooner 2011 *Miricatena prunicola* (Hyphomycetes), a new genus and species causing leaf spots of *Prunus serotina* in the UK. *Kew Bulletin* Vol. 66, No. 4 (2011), pp. 637-642.
- Ebead GA, Overy DP, Berru  F, Kerr RG. *Westerdykella reniformis* sp. nov., producing the antibiotic metabolites melinacidin IV and chetracin B. *IMA fungus*. 2012 Dec 15;3(2):189-201.
- Edathodu J, Al-Abdely HM, AlThawadi S, Wickes BL, Thompson EH, Wiederhold NP, Madrid H, Guarro J, Sutton DA. Invasive fungal infection due to *Triadelphia pulvinata* in a patient with acute myeloid leukemia. *Journal of clinical microbiology*. 2013 Oct 1;51(10):3426-9.
- Egan, R.S., 2009. Recent literature on lichens-212. *The Bryologist*, 112(1), pp.239-256.
- Eghrari, A.O., Gibas, C., Watkins, T., Vahedi, S., Lee, R., Houle, E., Suarez, M.J., Eberhart, C., Sutton, D.A., Wiederhold, N.P., Sikder, S. Zhang, S.X. 2015 First Human Case of Fungal Keratitis Caused by a Putatively Novel Species of *Lophotrichus*. *J. Clin. Microbiol.* 53 (9), 3063-3067.
- Eghtedari, M., 2015. Asymptomatic fungal cyst of conjunctiva caused by *Bipolaris spicifera*. *Iranian Journal of Medical Sciences*, 31(1), pp.56-58.
- Egidi, E., De Hoog, G. S., Isola, D., Onofri, S., Quaedvlieg, W., De Vries, M., ... & Selbmann, L. (2014). Phylogeny and taxonomy of meristematic rock-inhabiting black fungi in the *Dothideomycetes* based on multi-locus phylogenies. *Fungal Diversity* 65, 127-165.
- Egorova L.N, Mel'nik V (2003) Lichen-forming hyphomycete *Cheiromycina flabelliformis* - A new host and new record in Russia. *Mikologiya i Fitopatologiya* 38(4):23-26.
- Eichler, M., Cezanne, R., Diederich, P., Ertz, D., Van den Broeck, D., van den Boom, P. and S rusiaux, E., 2010. New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. XIII. *Bulletin de la Soci t  des naturalistes luxembourgeois*, 111, pp.33-46.
- Eiji Tanaka, Taketo Ashizawa², Ryoichi Sonoda³ & Chihiro Tanaka⁴ 2008 *Villosiclava virens* gen. nov., comb. nov., teleomorph of *Ustilaginoidea virens*, the causal agent of rice false smut. *Mycotaxon* 106, pp. 491–501
- Eimy Rivas Plata 1,2, Sittiporn Parnmen 1, Bettina Staiger 3, Armin Mangold 4, Andreas Frisch 5, Gothamie Weerakoon 6, Jes s E. Hern ndez M. 7, Marcela E. S. C ceres 8, Klaus Kalb 3,9, Harrie J. M. Sipman 10, Ralph S. Common 11, Matthew P. Nelsen 1,12, Robert L cking 1, H. Thorsten Lumbsch 1 2013 A molecular phylogeny of Graphidaceae (Ascomycota, Lecanoromycetes, Ostropales) including 428 species *MycKeys* 6: 55-94.

- Eisa, M., Chand, R. and Joshi, A.K., 2013. Biochemical and histochemical traits: a promising way to screen resistance against spot blotch (*Bipolaris sorokiniana*) of wheat. *European journal of plant pathology*, 137(4), pp.805-820.
- EKANAYAKA AH, ZHAO Q, JONES GE, PU ED, HYDE KD. Two novel *Acervus* species extend their distribution within Yunnan, China. *Phytotaxa*. 2016 Nov 2;283(1):74-82.
- Ekman S (1997) The genus *Cliostomum* revisited. *Symb Bot Upsal* 32:17-28.
- Ekman S (2001) Molecular phylogeny of the *Bacidiaceae* (Lecanorales, lichenized Ascomycota). *Mycol Res* 105:783–797
- Ekman S, Andersen HL, Wedin M (2008) The limitations of ancestral state reconstruction and the evolution of the ascus in the Lecanorales (lichenized Ascomycota). *Syst Biol* 57:141–156
- Ekman S, Wedin M, Lindblom L, Jørgensen PM (2014) Extended phylogeny and a revised generic classification of the *Pannariaceae* (Peltigerales, Ascomycota). *Lichenologist* 46:627-656.
- Ekman, S. & Blaaid, R. (2011). The Devil in the Details: Interactions between the Branch-Length Prior and Likelihood Model Affect Node Support and Branch Lengths in the Phylogeny of the *Psoraceae*. *Systematic Biology* 60: 541-561.
- Ekman, S. & Svensson, M. (2014). *Brianaria* (*Psoraceae*), a new genus to accommodate the *Micarea sylvicola* group. *The Lichenologist* 46: 285-294.
- Ekman, S. (2001). Molecular phylogeny of the *Bacidiaceae* (Lecanorales, lichenized Ascomycota). *Mycological Research* 105: 783-797.
- Ekman, S., Andersen, H.L. & Wedin, M. (2008). The limitations of ancestral state reconstruction and the evolution of the ascus in the Lecanorales (lichenized Ascomycota). *Systematic Biology* 57: 141-156.
- Ekman, S., Wedin M., Lindblom L., Jørgensen P. M. 2014: Extended phylogeny and a revised generic classification of the *Pannariaceae* (Peltigerales, Ascomycota). *Lichenologist* 46(5): 627-656.
- Ekman,S, Andersen,HL, Wedin M (2008) The limitations of ancestral state reconstruction and the evolution of the ascus in the Lecanorales (lichenized Ascomycota). *Syst. Biol.* 57 (1): 141–156
- EKMAN,S;WEDIN,M;LINDBLOM,L;JØRGENSEN,P.M. 2014. Extended phylogeny and a revised generic classification of the *Pannariaceae* (Peltigerales, Ascomycota). *The Lichenologist*. 46(5):627-656
- El Mhadri, M., Benkirane, R., Touhami, A.O. and Douira, A., 2009. *Citrullus lanatus*, a new host of *Bipolaris spicifera* in Morocco. *Phytopathologia mediterranea*, 48(2), pp.291-293.
- Elix J, A., Kantvilas G. 2015. New taxa and new records of crustose lichens in the family *Physciaceae* (Ascomycota) in Australia. *Australian Lichenology* 76: 16-23.
- Elix JA (2009) *Physciaceae*. - In: McCarthy PM (ed) *Flora of Australia*, Vol. 57, Lichens 5. ABRS and CSIRO Publishing, Canberra and Melbourne, pp. 494-533.
- Elix JA (2007) Four new crustose lichens (lichenized Ascomycota) from Australia. *Australasian Lichenology* 60: 14–19
- Elix JA (2008) Additional lichen records from Australia 67. *Australasian Lichenology* 63: 2–9
- Elix JA, Kantvilas G (2014) New species and new records of the lichen genus *Baculifera* (*Physciaceae*, Ascomycota) in Australia. *Australasian Lichenology* 75: 28–37
- Elix JA, Mayrhofer H (2016) Two new species of *Buellia* sens. lat. (Ascomycota, *Physciaceae*) from New Zealand with 1-septate ascospores. *Australasian Lichenology* 79: 10–15

- Elix JA. New crustose lichen taxa (lichenized Ascomycota) from Australia. *Australasian Lichenology*. 2013;73:45-54.
- Elix, J., 2009. New saxicolous species and new records of *Buellia* sens. lat. and *Rinodinella* (Ascomycota, Physciaceae) in Australia.
- Elix, J.A. (2007). Further new crustose lichens (Ascomycota) from Australia. *Australas. Lichenol.* 61: 21-25.
- Elix, J.A. and Kantvilas, G. 2009. Further new species of *Xanthoparmelia* (Parmeliaceae, Ascomycota) from Tasmania. *Bibliotheca Lichenologica*, 99, pp.123-132.
- Elix, J.A. and Kantvilas, G., 2013. New taxa and new records of *Amandinea* (Physciaceae, Ascomycota) in Australia. *Australasian Lichenology*, 72, pp.3-19.
- Elix, J.A., 2012. Four new species and a new record of *Tephromela* (lichenized Ascomycota) from Australia. *Australas Lichenol.* 71, pp.3-11.
- Elix, J.A.; Kondratyuk, S.Y. (2008). Two new species of *Letrouitia* (Letrouitiaceae, Ascomycota) from Australia. *Australas. Lichenol.* 62: 16-19.
- Elix, JA, Hale, ME. 1987. *Canomaculina*, *Myelochroa*, *Parmelinella*, *Parmelinopsis* and *Parmotremopsis*, five new genera in the Parmeliaceae (lichenized Ascomycotina). *Mycotaxon* 29, 233–244.
- Elliott ML, Des Jardin EA. *Serenomyces* associated with palms in southeastern USA: isolation, culture storage and genetic variation. *Mycologia*. 2014 Jul 1;106(4):698-707.
- ELLIOTT, T.F.; BOUGHER, N.L.; O'DONNELL, K.; TRAPPE, J.M. (2014). *Morchella australiana* sp. nov., an apparent Australian endemic from New South Wales and Victoria.
- Ellis, M.B. 1961. Dematiaceous hyphomycetes. III. *Mycological Papers*. 82:1-55
- Ellis, M.B. 1976. More dematiaceous Hyphomycetes. :1-507.
- El-Said, A.H.M., Sohair, T.H. and El-Hadi, A.G., 2010. Studies on the mycoflora associated with sugarcane factory waste and pollution of River Nile in upper Egypt. *Journal of Yeast and Fungal Research*, 1(10), pp.188-196.
- Elvebakk A. *Pannaria howeana* and *Pannaria streimannii*, two related new lichen species endemic to Lord Howe Island, Australia. *The Lichenologist*. 2012 Jul 1;44(04):457-63.
- Elvebakk, A., Robertsen, E.H., Park, C.H. and Hong, S.G. 2010. *Psorophorus* and *Xanthopsoroma*, two new genera for yellow-green, corticolous and squamulose lichen species, previously in *Psoroma* *Lichenologist* (Lond.) 42 (5), 563-585.
- Enghoff H. & Santamaría S. (2015). Infectious intimacy and contaminated caves—three new species of ectoparasitic fungi (Ascomycota: Laboulbeniales) from blaniulid millipedes (Diplopoda: Julida) and inferences about their transmittal mechanisms. *Org Divers Evol* (2015) 15:249–263
- Ertz D, Bungartz F, Diederich P, Tibell L (2011) Molecular and morphological data place *Blarneya* in *Tylophoron* (Arthoniaceae). *Lichenologist* 43: 345–356.
- Ertz D, Diederich P (2015) Dismantling *Melaspileaceae*: a first phylogenetic study of *Buelliella*, *Hemigrapha*, *Karschia*, *Labrocarpon* and *Melaspilea*. *Fungal Divers* 71:41–164
- Ertz D, Diederich P (2015) Dismantling *Melaspileaceae*: a first phylogenetic study of *Buelliella*, *Hemigrapha*, *Karschia*, *Labrocarpon* and *Melaspilea*. *Fungal Divers* 71:141–164.
- Ertz D, Diederich P, Lawrey JD, Berger F, Freebury CE, Coppins BJ, Gardiennet A, Hafellner J (2015) Phylogenetic insights resolve *Dacampiaceae* (Pleosporales) as polyphyletic: *Didymocyrtis* (Pleosporales, Phaeosphaeriaceae) with *Phoma*-like anamorphs resurrected and segregated form *Polycoccum* (Trypetheliales, Polycoccaceae fam. nov.). *Fungal Diversity* 74: 53–89.

- Ertz D, Heuchert B, Braun U, Freebury CE, Common RS, Diederich P. Contribution to the phylogeny and taxonomy of the genus *Taeniolella*, with a focus on lichenicolous taxa. *Fungal Biology*. 2016 Nov 30;120(11):1416-47.
- Ertz D, Miadlikowska J, Lutzoni F, Dessein S, Raspé O, Vigneron N, Hofstetter V, Diederich P (2009) Towards a new classification of the Arthoniales (Ascomycota) based on a three-gene phylogeny focussing on the genus *Opegrapha*. *Mycol Res* 113:141–152
- Ertz D, Tehler A (2011) The phylogeny of Arthoniales (Pezizomycotina) inferred from nuLSU and RPB2 sequences. *Fungal Divers* 49:47–71.
- Ertz D, Tehler A, Irestedt M, Frisch A, Thor G, Van den Boom P (2015) A large-scale phylogenetic revision of Roccellaceae (Arthoniales) reveals eight new genera. *Fungal Divers* 70:31–53
- Ertz, D. and Tehler, A., 2011. The phylogeny of Arthoniales (Pezizomycotina) inferred from nuLSU and RPB2 sequences. *Fungal Diversity*, 49(1), pp.47-71.
- Ertz, D., Aptroot, A., Van de Vijver, B., Sliwa, L., Moermans, C. and Øvstedal, D., 2014. Lichens from the Utsteinen Nunatak (Sør Rondane Mountains, Antarctica), with the description of one new species and the establishment of permanent plots. *Phytotaxa*, 191(1), pp.99-114.
- Ertz, D., Bungartz, F., Diederich, P. and Tibell, L. 2011. Molecular and morphological data place *Blarneya* in *Tylophoron* (Arthoniaceae). *Lichenologist* (Lond.) 43, 345-356
- Ertz, D., Diederich, P., Brand, A.M., van den Boom, P. and Sérusiaux, E., 2008. New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. XI. *Bulletin de la Société des naturalistes luxembourgeois*, 109, pp.35-51.
- Ertz, D., Flakus, A., Oset, M., Sipman, H.J. and Kukwa, M., 2015. A first assessment of lichenized Arthoniales in Bolivia with descriptions of two new species. *Phytotaxa*, 217(1), pp.1-25.
- Ertz, D., Tehler, A., Irestedt, M., Frisch, A., Thor, G. and van den Boom, P., 2015. A large-scale phylogenetic revision of Roccellaceae (Arthoniales) reveals eight new genera. *Fungal Diversity*, 70(1), pp.31-53.
- Ertz, D.; Diederich, P. (2004). Revision of *Trimmatothele* (Verrucariaceae), and description of *Oevstedalia* for *Trimmatothelopsis antarctica*, a new lichen genus with true ascoconidia. *Mycol. Progr.* 3(3): 229-236.
- Ertz, D.; Diederich, P. 2006. *Gelatinopsis leptogii* (Helotiales, Ascomycota), a new lichenicolous fungus on *Leptogium byssinum* from Belgium and Germany. *The Lichenologist*. 38(6):515-518
- Ertz, Damien, Miadlikowska, J., Lutzoni, F., Dessein, S., Raspe, O., Vigneron, N., Hofstetter, V. and Diederich, P. "Towards a new classification of the Arthoniales (Ascomycota) based on a three-gene phylogeny focussing on the genus *Opegrapha*." *mycological research* 113.1 (2009): 141-152.
- Ertz, D.; Lawrey, J.D.; Common, R.S.; Diederich, P. 2014. Molecular data resolve a new order of Arthoniomycetes sister to the primarily lichenized Arthoniales and composed of black yeasts, lichenicolous and rock-inhabiting species. *Fungal Diversity*. 66:113-137.
- Eschweiler FG (1824) *Systema Lichenum, Genera Exhibens rite distincta, pluribus novis adaucta*. 26 pp.
- Escuredo, O., Seijo, M.C., Fernández-González, M. and Iglesias, I., 2011. Effects of meteorological factors on the levels of *Alternaria* spores on a potato crop. *International Journal of Biometeorology*, 55(2), pp.243-252.
- Espadaler X, Santamaria S (2012) Ecto- and endoparasitic fungi on ants from the Holarctic region. *Psyche: A Journal of Entomology* doi: 10.1155/2012/168478
- Esslinger, T.L. and Dillman, K.L., 2010. *Physconia grumosa* in North America. *The Bryologist*, 113(1), pp.77-80.

- Etayo J. Hongos liquenícolas de Perú. Homenaje a Rolf Santesson. Bulletin de la Société linnéenne de Provence. 2010;61:83-128.
- Etayo JA, van den Boom PI. A first checklist of lichenicolous fungi from the Dominican Republic, including the description of a new species of *Xenonectriella*. *Opuscula Philolichenum*. 2013;12:142-50.
- Etayo, J. & Berger, Fr. 2013. *Isthmoconidium bacidiicola*, a new genus and species of lichenicolous hyphomycetes on *Bacidia* from Bermuda. *Opuscula Philolichenum*. 13:1-5.
- Etayo, J. (2002) *Bibliotheca Lichenol.* 84: 154.
- Etayo, J. (2010) *Euskal Herriko Unibertsitatea/Universidad del País Vasco.Guineana* 16: 501
- ETAYO, J. (2011). *Lichenochora hyperphysciae*, a new lichenicolous fungus found in Mexico and Spain.*Bibliotheca Lichenol.*, 106, 54, 2011.
- Etayo, J. 1995. *Mixtoconidium canariense*, a new genus and species of lichenicolous coelomycetes with dimorphic conidia. *Mycotaxon*. 53:425-432.
- Etayo, J. 2010. Lichenicolous fungi from the western Pyrenees. V. Three new ascomycetes. *Opuscula Philolichenum*. 8:131-139.
- Etayo, J. and Triebel, D., 2010. New and interesting lichenicolous fungi at the Botanische Staatssammlung München. *The Lichenologist*, 42(03), pp.231-240.
- Etayo, J., Flakus, A. and Kukwa, M., 2013. *Niesslia echinoides* (Niessliaceae, Ascomycota), a new lichenicolous fungus on *Erioderma* from Bolivia. *The Lichenologist*, 45(01), pp.21-24.
- Etayo, J.; Diederich, P. (1995). Lichenicolous fungi from the western Pyrenees, France and Spain. I. New species of deuteromycetes. In Daniels, F.J.A.; Schulz, M.; Peine, J. (eds), *Flechten Follmann Contributions to Lichenology in Honour of Gerhard Follmann*, 205-221 Cologne: Geobotanical and Phytotaxonomical Study Group, Botanical Institute, University of Cologne.
- Etayo, J.; Diederich, P. (2000). *Echinodiscus lesdainii* gen. et comb. nov., a new name for *Phacopsis lesdainii* Vouaux (lichenicolous Ascomycetes, Leotiales). *Bull. Soc. Nat. luxemb.* 100: 63-66.
- Etayo, J.; Navarro-Rosines, P. (2008). [A combination and three new species of *Lichenochora* (Phyllachorales, lichenicolous Ascomycota), and additional reports for the genus]. *Revta Catal. Micol.* 30: 27-44.
- Etayo, J.; Sancho, L.G. (2008) *Bibliotheca Lichenol.* 98: 302 pp.
- Etayo, J.; Sancho, L.G. 2008. Hongos liquenícolas del sur de Sudamérica, especialmente de Isla Navarino (Chile). *Bibliotheca Lichenologica*. 98:1-302.
- Etayo, J.; Sharuddin, S.S. 2011. *Verruculina* and *Lichenoverruculina* nom. nov. *Herzogia*. 24:379-380.
- Etayo, J.; Yazici, K. (2009). *Microsphaeropsis caloplacae* sp. nov. on *Caloplaca persica* in Turkey. *Mycotaxon* 107: 297-302.
- Etayo,J.;Flakus,A.;Kukwa, M.;Rodriguez Flakus,P. 2013. *Lichenochora tertia* (Phyllachorales): the third species of the genus growing on *Xanthoria elegans*. *Mycotaxon*. 123:9-13
- evaluating the generic status of *Ilyonectria* and allied genera. *Phytopathologia Mediterranea* 53.
- Evans HC, Johnston PR, Park D, Barreto RW, Soares DR (2010) *Claviradulomyces*, a new genus of *Odontotremataceae* from West African rainforest. *Fungal Biol* 114:41–48.
- Evans, H.C.; Elliot, S.; Hughes, D.P. (2011). Hidden diversity behind the zombie-ant fungus *Ophiocordyceps unilateralis*: four new species described from carpenter ants in Minas Gerais, Brazil. *PLoS ONE* 6(3): e17024

- Evidente, A., Punzo, B., Andolfi, A., Berestetskiy, A. and Motta, A., 2009. Alternethanoxins A and B, polycyclic ethanones produced by *Alternaria sonchi*, potential mycoherbicides for *Sonchus arvensis* biocontrol. *Journal of agricultural and food chemistry*, 57(15), pp.6656-6660.
- Fahala, A.H. I.A. Rahmana, A.M. El-Hassana, M.E. Abdel E.L. Rahmana and E.E. Zijlstra 2010 The safety and efficacy of itraconazole for the treatment of patients with eumycetoma due to *Madurella mycetomatis*. *Transactions Royal Soc Tropical Med & Hyg* 105 Issue 3 Pp. 127-132
- Falbo, M.K., Soccol, V.T., Sandini, I.E., Vicente, V.A., Robl, D. and Soccol, C.R., 2013. Isolation and characterization of the nematophagous fungus *Arthrobotrys conoides*. *Parasitology research*, 112(1), pp.177-185.
- Fallah PM, Shearer CA (2001) Freshwater ascomycetes: new or noteworthy species from north temperate lakes in Wisconsin. *Mycologia*, 566-602.
- Fan L, Cao JZ, Hou CL. *Tuber subglobosum* and *T. wenchuanense*—two new species with spino-reticulate ascospores. *Mycotaxon*. 2013 Aug 1;123(1):95-101.
- Fan L, Hou C, Cannon PF, Li Y (2012) A new species of *Melanospora* on truffles from China. *Mycologia* 104: 1433–1442.
- FAN, L.; LIN, Y.R.; WANG, S.; HOU, C.L. (2012). Two species of *Lirula* on *Abies* from Yunnan, southwest China. *Mycological Progress* 11, (1) pp 279–286
- Fan,X., Du,Z., Liang,Y. and Tian,C. 2016 *Melanconis* (*Melanconidaceae*) associated with *Betula* spp. in China. *Mycol. Prog.* 15, 40.
- Fangyan Z, Danyang Q, Changsheng L (2013) Studies on control effects of different density of 5 fungicides against *Agaricodochium camellia*. *Guangdong Forestry Science and Technology* 2:005
- Farkas E (2015) Names of *Bacidia* s. l. in current use for foliicolous lichens—an annotated nomenclatural study. *Acta Botanica Hungarica* 57(1-2): 51–70
- FARKAS E, FLAKUS A. *Trichonectria calopadiicola* sp. nov.(Hypocreales, Ascomycota): the second species of the family *Bionectriaceae* parasitic on foliicolous lichens discovered in Tanzania. *Phytotaxa*. 2016 Oct 12;278(3):281-6.
- Farkas, E., 2014. Bibliography of foliicolous lichenized fungi, 1952–2013. *Acta Botanica Hungarica*, 56(1-2), pp.33-68.
- Farkas, E., Veres, K. and Czúcz, B., 2011. Statistical analysis of substrate investigations of terricolous *Toninia* species in Hungary. *Acta Botanica Hungarica*, 53(3-4), pp.313-320.
- Farkas,E. Flakus,A; 2015. Rare or Overlooked? — Two Species of *Lyromma* (*Lyrommataceae*, Lichenized Ascomycota) are New for Africa. *Herzogia* 28(1):204-211.
- Farrant, C.A. and Jones, E.B.G. 1986. *Haligena salina*: a new marine pyrenomycete. *Botanical Journal of the Linnean Society* 93: 405-411.
- Fatima, F., Bajpai, P., Pathak, N., Singh, S., Priya, S. and Verma, S.R., 2015. Antimicrobial and immunomodulatory efficacy of extracellularly synthesized silver and gold nanoparticles by a novel phosphate solubilizing fungus *Bipolaris tetramera*. *BMC microbiology*, 15(1), p.1.
- Favero-Longo, S.E. and Piervittori, R., 2012. Cultivation of isidia and transplantation of adult thalli of *Xanthoparmelia tinctoria* in an abandoned asbestos mine. *The Lichenologist*, 44(06), pp.840-844.
- Favero-Longo, S.E., Matteucci, E., Morando, M., Rolfo, F., Harris, T.B. and Piervittori, R., 2015. Metals and secondary metabolites in saxicolous lichen communities on

- ultramafic and non-ultramafic rocks of the western Italian Alps. *Australian Journal of Botany*, 63(4), pp.276-291.
- Fawzi, E.M., Khalil, A.A. and Afifi, A.F., 2009. Antifungal effect of some plant extracts on *Alternaria alternata* and *Fusarium oxysporum*. *African Journal of Biotechnology*, 8(11).
- Fedorenko NM, Stenroos S, Thell A, Kärnefelt I, Elix JA, Hur JS, Kondratyuk SY. Molecular phylogeny of xanthorioid lichens (Teloschistaceae, Ascomycota), with notes on their morphology. *Systematics, biodiversity and ecology of lichens. Bibliotheca Lichenologica.* 2012;108:45-64.
- Fedorenko, N., Stenroos, S., Thell, A., Kärnefelt, I. and Kondratyuk, S., 2009. A phylogenetic analysis of xanthorioid lichens (Teloschistaceae, Ascomycota) based on ITS and mtSSU sequences. *Bibliotheca Lichenologica. Diversity of Lichenology-Anniversary Volume.*, 100, pp.49-84.
- Fedosova, A.G. and Kovalenko, A.E. 2015 Studies on the Geoglossoid fungi of Russia: the genus *Leucoglossum*. *Mycol. Prog.* 14, 26.
- Felle, H.H., Herrmann, A., Schäfer, P., Hückelhoven, R. and Kogel, K.H., 2008. Interactive signal transfer between host and pathogen during successful infection of barley leaves by *Blumeria graminis* and *Bipolaris sorokiniana*. *Journal of plant physiology*, 165(1), pp.52-59.
- Feng P, Lu Q, Najafzadeh MJ, van den Ende AG, Sun J, Li R, Xi L, Vicente VA, Lai W, Lu C, De Hoog GS. Cyphellophora and its relatives in Phialophora: biodiversity and possible role in human infection. *Fungal Diversity*. 2014 Mar 1;65(1):17-45.
- Feng P-Y, de Hoog GS, Najafzadeh MJ, Gerrits van den Ende AHG, Stielow JB, Badali H, Boeger WA, Vicente VA. 2013. *Cladophialophora abundans*, a novel species of Chaetothyriales isolated from the natural environment. *Mycological Progress* 13:381–391.
- Ferencova, Z., Cubas, P., Divakar, P.K., Molina, M.C., Crespo, A. 2014: *Notoparmelia*, a new genus of *Parmeliaceae* (Ascomycota) based on overlooked reproductive anatomical features, phylogeny and distribution pattern. *Lichenologist* 46(1): 51-67.
- Fernández-Brime S, Llimona X, Lutzoni F, Gaya E (2013) Phylogenetic study of *Diploschistes* (lichen-forming Ascomycota: Ostropales: Graphidaceae), based on morphological, chemical, and molecular data. *Taxon* 62(2):267–280.
- Fernandes, M.D.R.V., Pfenning, L.H., Costa-Neto, C.M.D., Heinrich, T.A., Alencar, S.M.D., Lima, M.A.D. and Ikegaki, M., 2009. Biological activities of the fermentation extract of the endophytic fungus *Alternaria alternata* isolated from *Coffea arabica* L. *Brazilian Journal of Pharmaceutical Sciences*, 45(4), pp.677-685.
- Fernandez-Brime, S., Llimona, X., Molnar, K., Stenroos, S., Hognabba, F., Bjork, C., Lutzoni, F.M. and Gaya, E. 2011. Expansion of the Stictidaceae by the addition of the saxicolous lichen-forming genus *Ingvariella*. *Mycologia* 103(4):755-63. doi: 10.3852/10-287.
- Fernández-Brime, S.; Llimona, X.; Navarro-Rosinés, P. (2010). *Lichenostigma rupicolae* (Lichenotheliaceae), a new lichenicolous species growing on *Pertusaria rupicola*. *Lichenologist* 42(3): 242-247.
- Ferrer A, Miller AN, Sarmiento C, Shearer CA (2012) Three new genera representing novel lineages of Sordariomycetidae (Sordariomycetes, Ascomycota) from tropical freshwater habitats in Costa Rican. *Mycologia* 104 (4):865-879. doi:10.3852/11-111
- Ferrer A, Miller AN, Shearer CA (2011) *Minutisphaera* and *Natipusilla*: two new genera of freshwater Dothideomycetes. *Mycologia* 103 (2):411-423. doi:10.3852/10-177

- Ferrer A, Raja HA, Shearer CA (2008) *Lucidascocarpa pulchella*, a new ascomycete genus and species from freshwater habitats in the American tropics. *Mycologia* 100 (4):642-646. doi:Doi 10.3852/07-152r2
- Fidel Landerosa, Teresa Iturriagab, Aarón Rodríguezc, Georgina Vargas-Amadoc, Laura Guzmán-Dávalos 2015 Advances in the phylogeny of *Helvella* (Fungi: Ascomycota), inferred from nuclear ribosomal LSU sequences and morphological data. *Revista Mexicana de Biodiversidad* Volume 86, Issue 4, December 2015, Pages 856–871
- Filippova NV. Discomycetes from plant, leaf and sphagnum litter in ombrotrophic bog (West Siberia). *Environmental dynamics and global climate change*. 2012;3(1):5.
- Florentino, J., 2015. Clarification regarding old records of *Roccella* in the Maltese Islands. *MYCOSPHERE*, 6(6), pp.673-680.
- Firdaus-e-Bareen, Braun U (2007). *Mycofalcella iqbalii*, a new aquatic hyphomycete, and a discussion about the generic concept of *Anguillospora* and similar genera. *Mycotaxon* 102: 355–362.
- Fisher P.J. & Petrini O. 1989. Two aquatic hyphomycetes as endophytes in *Alnus glutinosa* roots. *Mycol. Res.* 92(3): 367-368.
- Fiuza P. O., Ottoni-Boldrini B. M. P., Monteiro J. S., Catena N. R., Hamada N. & Gusmão L. F. P. 2015a. First records of Ingoldian fungi from the Brazilian Amazon. *Brazilian Journal of Botany*, 38(3), 615-621. doi: 10.1007/s40415-015-0157-7.
- Fiuza P.O. & Gusmão L.F.P. 2013. Ingoldian fungi from the semi-arid Caatinga biome of Brazil. *Mycosphere* 4:1133-1150.
- Fiuza P.O., Gusmão L.F.P. & Castañeda-Ruiz R.F. 2015c. *Synchaetomella aquatica* sp. Nov. from submerged leaves from Brazil. *Mycotaxon* 130(4):1135-1139. doi: 10.5248/130.1135
- Fiuza P.O., Ottoni-Boldrini B.M.P., Monteiro J.S., Catena N. R., Hamada N. & Gusmão L. F. P. 2015a. First records of Ingoldian fungi from the Brazilian Amazon. *Brazilian Journal of Botany* 38(3), 615-621. doi: 10.1007/s40415-015-0157-7.
- Fiuza PO, Gusmão LFP (2013) Ingoldian fungi from the semi-arid Caatinga biome of Brazil. *Mycosphere* 4 (6):1133-1150. Doi: 10.5943/mycosphere/4/6/10
- Fiuza, P.O., Gusmão, L.F.P. & Castañeda-Ruiz, R.F. 2015b. Conidial fungi from the semiarid Caatinga biome of Brazil: a new species of *Selenosporella* from submerged leaves. *Mycotaxon* 130: 601-605.
- Fiuza, P.O., Monteiro, J.S., Gusmão, L.F.P & Castañeda-Ruiz, R.F. 2016. *Mirandina uncinata* sp. nov. from submerged leaves from Brazil. *Mycotaxon* 131:141-144.
- Flakus A, Elix JA, Rodriguez P, Kukwa M (2011) New species and records of *Lepraria* (Stereocaulaceae, lichenized Ascomycota) from South America. *Lichenologist* 43:57–66
- Flakus A, Etayo J, Kukwa M (2014) *Melaspilea tucumana*, a new gall-forming lichenicolous fungus from the tropical Andes in Bolivia. *The Lichenologist* 46:657–662
- Flakus A, Kukwa M (2011) *Lepraria maderensis* Kukwa & Flakus, a new lichen species containing gyrophoric and lecanoric acids. *Nova Hedwigia* 92: 95–99
- Flakus A, Lücking R (2008) New species and additional records of foliicolous lichenized fungi from Bolivia. *Lichenologist* 40(5): 423–436
- Flakus AD, Kukwa MA. New records of lichenicolous fungi from Bolivia. *Opuscula Philolichenum*. 2012;11:36-48.
- Flakus, A., Rodriguez Saavedra, P. and Kukwa, M., 2012. A new species and new combinations and records of *Hypotrachyna* and *Remototrachyna* from Bolivia. *Mycotaxon*, 119(1), pp.157-166.

- Flakus, A., Sipman, H.J., Bach, K., Flakus, P.R., Knudsen, K., Ahti, T., Schiefelbein, U., Palice, Z., Meneses, Q., Rosa, I. and Jabłońska, A., 2013. Contribution to the knowledge of the lichen biota of Bolivia. 5. Polish Botanical Journal, 58(2), pp.697-733.
- Flakus, A., Sipman, H.J., Rodriguez Flakus, P., Jabłońska, A., Oset, M., Kukwa, M., Meneses, Q. and Rosa, I., 2015. Contribution to the knowledge of the lichen biota of Bolivia. 7. Polish Botanical Journal, 60(1), pp.81-98.
- Flakus, A.; Lücking, R. (2008). New species and additional records of foliicolous lichenized fungi from Bolivia. *Lichenologist* 40(5): 423-436.
- Flakus, A.; Kukwa, M. 2014. The first squamulose Thelecarpon species (Thelecarpaceae, Ascomycota) discovered in the biological soil crusts in the Bolivian Andes. *Phytotaxa*. 175(5):281-286
- Flakus, A.; Farkas, E. 2013. A contribution to the taxonomy of *Lyromma* (Lyrommataceae, lichenized Ascomycota) with a species key. *Mycotaxon*. 124:127-141.
- Fleck, S.C., Burkhardt, B., Pfeiffer, E. and Metzler, M., 2012. *Alternaria* toxins: altertoxin II is a much stronger mutagen and DNA strand breaking mycotoxin than alternariol and its methyl ether in cultured mammalian cells. *Toxicology letters*, 214(1), pp.27-32.
- Flors, V., Ton, J., Van Doorn, R., Jakab, G., García-Agustín, P. and Mauch-Mani, B., 2008. Interplay between JA, SA and ABA signalling during basal and induced resistance against *Pseudomonas syringae* and *Alternaria brassicicola*. *The Plant Journal*, 54(1), pp.81-92.
- Flotow JV (1849) Lichenes florae silesiae. *Jahresber Schles Ges Vaterl Cult* 27:98-143.
- Fonseka, de R.N., 1960. The morphology of *Chaetospermum chaetosporum*. *Transactions of the British Mycological Society* 43, pp. 631– 636. [http://dx.doi.org/10.1016/S0007-1536\(60\)80053-8](http://dx.doi.org/10.1016/S0007-1536(60)80053-8)
- Fotouhifar, K.B., Hedjaroude, G.A. & Leuchtman, A. (2010) ITS rDNA phylogeny of Iranian strains of *Cytospora* and associated teleomorphs. *Mycologia* 102: 1369–1382.
- Fournier J, Flessa F, Peršoh D, Stadler M. Three new *Xylaria* species from southwestern Europe. *Mycological Progress*. 2011 Mar 1;10(1):33-52.
- Fournier J, Gardiennet A, Lechat C, Priou J-P, Van Vooren N (2010) Note sur quelques Ascomycota aquatiques ou des milieux humides. Résumé
- Fournier J, Raja HA, Shearer CA (2015) Freshwater Ascomycetes: *Jahnula purpurea* (Jahnulales, Dothideomycetes), a new species on submerged wood from Martinique Island, Lesser Antilles. *MycologyKeys*. doi:10.3897/mycokeys.9.4440
- Fournier J, Stadler M, Hyde KD, Duong ML. The new genus *Rostrohypoxylon* and two new *Annulohypoxylon* species from Northern Thailand. *Fungal Diversity*. 2010 Jan 1;40(1):23-36.
- Fournier, J.; Lechat, C. 2011. *Eutypella phaeospora*, a new species on Chenopodiaceae. *Mycotaxon*. 118:441-446
- Frank J, Crous PW, Groenewald JZ, Oertel B, Hyde KD, Phengsintham P, Schroers HJ. (2010). *Microcyclospora* and *Microcyclosporella*: novel genera accommodating epiphytic fungi causing sooty blotch on apple. *Persoonia* 24: 93–105.
- Frank, J.L.; Southworth, D.; Reha, C. 2011. From mycorrhiza to fruiting body: a new species of *Geopora* on *Cercocarpus ledifolius* (Rosaceae). *Mycologia*. 103(6):1194-1200.
- Freire, E.S., Campos, V.P., Pinho, R.S.C., Oliveira, D.F., Faria, M.R., Pohlit, A.M., Noberto, N.P., Rezende, E.L., Pfenning, L.H. and Silva, J.R.C., 2012. Volatile substances produced by *Fusarium oxysporum* from coffee rhizosphere and other microbes affect *Meloidogyne incognita* and *Arthrobotrys conoides*. *Journal of nematology*, 44(4), p.321.

- Freitas LF, Barriga EJ, Barahona PP, Lachance MA, Rosa CA. *Kodamaea transpacifica* fa, sp. nov., a yeast species isolated from ephemeral flowers and insects in the Galápagos Islands and Malaysia: further evidence for ancient human transpacific contacts. *International journal of systematic and evolutionary microbiology*. 2013 Nov 1;63(11):4324-9.
- Friebes G (2012) A key to the non-lichenicolous species of the genus *Capronia* (Herpotrichiellaceae). *Ascomycete.org* 4(3): 55–64
- Friebes G., Wendelin I. 2014. Über einige seltene und interessante Ascomyceten-Funde vom Reinerkogel (Graz, Steiermark. Österreich). *Joannea Botanik* 11: 5-33.
- Frisch A (2006) The lichen family Thelotremataceae in Africa. A revision with special consideration of the taxa from Cameroon and Tanzania. *Biblioth Lichen* 92: 3–370
- Frisch A, Thor G, Ertz D, Grube M (2014) The Arthonialean challenge: restructuring Arthoniaceae. *Taxon* 63:727–744.
- Frisvad JC, Yilmaz N, Thrane U, Rasmussen KB, Samson RA. 2013. *Talaromyces atroroseus*, a new species efficiently producing industrially relevant red pigments *PLoS ONE* 8:e84102
- Fritis, M.C., Lagos, C.R., Sobarzo, N.Q., Venegas, I.M., Sánchez, C.S., Altamirano, H.C., Catalán, L.E. and Palma, W.Q., 2013. Depsides and triterpenes in *Pseudocyphellaria coriifolia* (lichens) and biological activity against *Trypanosoma cruzi*. *Natural product research*, 27(17), pp.1607-1610.
- Fryday AM, Printzen C, Ekman S (2014) *Bryobilimbia*, a new generic name for *Lecidea hypnorum* and closely related species. *Lichenologist* 46:25–37.
- FRYDAY AM. HERTEL H. A contribution to the family Lecideaceae s. lat.(Lecanoromycetidae inc. sed., lichenized Ascomycota) in the southern subpolar region; including eight new species and some revised generic circumscriptions. *The Lichenologist*. 2014 May 1;46(03):389-412.
- Fryday, A.M., 2010. A brief lichen foray in the Mount Washington alpine zone—including *Claurouxia chalybeioides*, *Porina norrlinii* and *Stereocaulon leucophaeopsis* new to North America. *Opuscula Philolichenum*, 8, pp.1-10.
- Fryday, A.M., 2011. New species and combinations in *Calvitimela* and *Tephromela* from the southern subpolar region. *The Lichenologist*, 43(3), p.225.
- FU, C.H.; HSIEH, H.M.; CHEN, C.Y.; CHANG, T.T.; HUANG, Y.M.; JU, Y.M. (2013). *Ophiodiaporthe cyatheae* gen. et sp. nov., a diaporthalean pathogen causing a devastating wilt disease of *Cyathea lepifera* in Taiwan. *Mycologia*, 105(4), 2013, pp. 861–872.
- Fuiano, N., Fusilli, S. and Incorvaia, C., 2012. A role for measurement of nasal IgE antibodies in diagnosis of *Alternaria*-induced rhinitis in children. *Allergologia et immunopathologia*, 40(2), pp.71-74.
- Funck JA, Bec A, Perrière F, Felten V, Danger M. Aquatic hyphomycetes: a potential source of polyunsaturated fatty acids in detritus-based stream food webs. *Fungal Ecology*. 2015 Feb 28;13:205-10.
- G. Neuwirth, A. Aptroot & E. Stocker-Wörgötter. 2017. *Platythecium seychellense*, a new species in the family Graphidaceae (lichenized Ascomycota: Ostropales) from the Seychelles and a world key to the genus. *Lichenologist* 49
- G. Weerakoon, A. Aptroot, H.T. Lumbsch, P.A. Wolseley, S.C. Wijeyaratne & C. Gueidan. 2012. New molecular data on Pyrenulaceae from Sri Lanka reveal two well-supported groups within this family. *Lichenologist* 44: 639-647.
- G.C. Zhao & R.L. Zhao. 2012. THE HIGHER MICROFUNGI FROM FORESTS OF YUNNAN PROVINCE. book:1-572

- G.P. Robideau , F.L. Caruso , P.V. Oudemans , P.S. McManus , M.A. Renaud , M.E. Auclair , G.J. Bilodeau , D. Yee , N.L. Désaulniers , J.W. DeVerna & C.A. Lévesque. Detection of cranberry fruit rot fungi using DNA array hybridization. *Canadian Journal of Plant Pathology* 30(2).
- Gagunashvili, A.N., Davíðsson, S.P., Jónsson, Z.O. and Andrésón, Ó.S., 2009. Cloning and heterologous transcription of a polyketide synthase gene from the lichen *Solorina crocea*. *Mycological research*, 113(3), pp.354-363.
- Gaitnieks, T., Klavina, D., Muiznieks, I., Pennanen, T., Velmala, S., Vasaitis, R. and Menkis, A. 2016 Impact of *Heterobasidion* root-rot on fine root morphology and associated fungi in *Picea abies* stands on peat soils. *Mycorrhiza* 26 (5), 465-473
- Galán R, Checa J, Blanco MN, Platas G, Tena R, Tello S, Hermosilla CE, Jaklitsch WM, Voglmayr H (2015) Taxonomic position of the genus *Bicornispora* and the appearance of a new species *Bicornispora seditiosa*. *Mycologia* 107:793-807.
- Galloway, D.J., 2010. Additions to the *Placopsis* mycobiota (Trapeliaceae, Ascomycota) of southern South America, with notes on new records (including *Aspiciliopsis macrophthalma*), and a revised regional key to the species. *The Lichenologist*, 42(06), pp.727-737.
- Galloway, D.J., 2013. The lichen genera *Aspiciliopsis*, and *Placopsis* (Trapeliales: Trapeliaceae: Ascomycota) in New Zealand. *Phytotaxa*, 120(1), pp.1-194.
- Gams, W., Seifert, K. and Morgan-Jones, G.A., 2009. New and validated hyphomycete taxa to resolve nomenclatural and taxonomic issues. *Mycotaxon*, 110(1), pp.89-108.
- Gams, W., Seifert, K.A. & Morgan-Jones, G. 2009. New and validated hyphomycete taxa to resolve nomenclatural and taxonomic issues. *Mycotaxon* 110: 89-108
- Gams, W.; Fisher, P.J.; Webster, J. 1984. *Onychophora*, a new genus of Phialidic hyphomycetes from dung. *Transactions of the British Mycological Society*. 82(1):174-177.
- Gams, W.; Seifert, K.A.; Morgan-Jones, G. (2009). New and validated hyphomycete taxa to resolve nomenclatural and taxonomic issues. *Mycotaxon* 110: 89-108.
- Gamundí, I.J. 1986. Fungi, Ascomycetes, Cyttariales, Helotiales, Geoglossaceae, Dermateaceae. *Flora Criptogámica de Tierra del Fuego*. 10(4):1-126
- GAMUNDÍ, J. and GIAIOTTI, A. L. (1995): A new species of *Claussenomyces* (Helotiales) from Southern South America. – *New Zealand Journal of Botany* 33: 513–517.
- Ganley, R.J., Brunfeld, S.J. and Newcombe, G. 2004 A community of unknown, endophytic fungi in western white pine. *Proc. Natl. Acad. Sci. U.S.A.* 101 (27), 10107-10112.
- Gao L, Ma Y, Zhao W, Wei Z, Gleason ML, Chen H, Hao L, Sun G, Zhang R. Three new species of *Cyphellophora* (Chaetothyriales) associated with Sooty Blotch and Flyspeck. *PloS one*. 2015 Sep 23;10(9):e0136857.
- Gao, J.M., Xia, J.W., Ma, Y.R., Li, Z. and Zhang, X.G., 2015. *Blastophragma chongqingense* sp. nov. and a new record of *Bahusutrabeija angularis* from southern China. *Mycotaxon*, 130(3), pp.821-825.
- Gao, S.S., Li, X.M. and Wang, B.G., 2009. Perylene derivatives produced by *Alternaria alternata*, an endophytic fungus isolated from *Laurencia* species. *Natural product communications*, 4(11), pp.1477-1480.
- Gao, T.L. and Ren, Q., 2013. New records of *Ochrolechia* and *Placopsis* from the Hengduan Mountains, China. *Mycotaxon*, 122(1), pp.461-466.
- García, D.; Stchigel, A.M.; Cano, J.; Caldusch, M.; Hawksworth, D.L.; Guarro, J. 2006. Molecular phylogeny of *Coniochaetales*. *Mycological Research*. 110(11):1271-1289.
- García, D.; Stchigel, A.M.; Cano, J.F.; Guarro, J. 2004. *Coronatomyces cubensis* gen. et sp. nov., a new ascomycete from Cuban soil. *Studies in Mycology*. 50(1):143-148.

- Gardiennet & Lechat. 2011. Nouvelle espèce du genre *Trichonectria* découverte en France TRICHONECTRIA PYRENAICA SP. NOV. Bulletin de la Société Mycologique de France. Bull. Soc. Mycol. Fr. 127 (3-4):295-299
- Garibaldi A, Bertetti D, Poli A, Gullino ML. First Report of Leaf Spot of Garden Lupin (*Lupinus polyphyllus*) Caused by *Pleiochaeta setosa* in Italy. Plant Disease. 2012 Jun;96(6):909-.
- Garrido-Benavent I, Pérez-Ortega S. Unravelling the diversity of European *Caliciopsis* (Coryneliaceae, Ascomycota): *Caliciopsis valentina* sp. nov. and *C. beckhausii* comb. nov., with a worldwide key to *Caliciopsis*. Mycological Progress. 2015 Mar 1;14(3):1-1.
- Garrido-Benavent, I., Søchting, U., de los Ríos Murillo, A. and Pérez-Ortega, S., 2016. *Shackletonia cryodesertorum* (Teloschistaceae. Mycological Progress, 15(7), pp.743-754.
- Garzoli, L., Gnani, G., Tamma, F., Tosi, S., Varese, G.C. and Picco, A.M., 2015. Sink or swim: Updated knowledge on marine fungi associated with wood substrates in the Mediterranean Sea and hints about their potential to remediate hydrocarbons. Progress in Oceanography, 137, pp.140-148.
- Gasparyan, A. and Sipman, H.J., 2013. New lichen records from Armenia. Mycotaxon, 123, pp.491-492.
- Gasparyan, A. and Sipman, H.J., 2016. The Epiphytic Lichenized Fungi in Armenia: Diversity and Conservation. Phytotaxa, 281(1), pp.1-68.
- Gautam AK, Avasthi S, Bhadauria R. A new species of *Scytalidium* from Himachal Pradesh, India. Journal on New Biological Reports. 2015;4(1):7-10.
- Gautam AK. *Prillieuxina aeglicola* sp. nov.(ascomycota), a new black mildew fungus from Himachal Pradesh, India. Current Research in Environmental & Applied Mycology. 2015;5(1):70-3.
- Gaya E, Fernández-Brime S, Vargas R, Lachlan RF, Gueidan C, Ramírez-Mejía M, Lutzoni F. The adaptive radiation of lichen-forming Teloschistaceae is associated with sunscreens pigments and a bark-to-rock substrate shift. Proceedings of the National Academy of Sciences. 2015 Sep 15;112(37):11600-5.
- Gaya E, Högnabba F, Holguin Á, Molnar K, Fernández-Brime S, Stenroos S, Arup U, Søchting U, Van den Boom P, Lücking R, Sipman HJ. Implementing a cumulative supermatrix approach for a comprehensive phylogenetic study of the Teloschistales (Pezizomycotina, Ascomycota). Molecular Phylogenetics and Evolution. 2012 May 31;63(2):374-87.
- Gaya E, Navarro-Rosinés P, Llimona X, Hladun N, Lutzoni F. Phylogenetic reassessment of the Teloschistaceae (lichen-forming Ascomycota, Lecanoromycetes). mycological research. 2008 May 31;112(5):528-46.
- Gaya, E., Fernandez-Brime, S., Vargas, R., Lachlan, R.F., Gueidan, C., Ramirez-Mejia, M. and Lutzoni, F. 2015. The adaptive radiation of lichen-forming Teloschistaceae is associated with sunscreens pigments and a bark-to-rock substrate shift. Proc. Natl. Acad. Sci. 112(37):11600-5
- Gaya, E., Hognabba, F., Holguin, A., Molnar, K., Fernandez-Brime, S., Stenroos, S., Arup, U., Sochting, U., Van den Boom, P., Lucking, R., Sipman, H.J. and Lutzoni, F. 2012. Implementing a cumulative supermatrix approach for a comprehensive phylogenetic study of the Teloschistales (Pezizomycotina, Ascomycota).Mol. Phylogenet. Evol. 63 (2), 374-387.
- Gayatri Mambiar R, Raveendran K. Eco-biodiversity of marine mycoflora of gulf of mannar biosphere reserve (india). Ecol Environ Conserv. 2009;15(4):739-43.

- Gazis R, Kuo A, Riley R, LaButti K, Lipzen A, Lin J, Amirebrahimi M, Hesse CN, Spatafora JW, Henrissat B, Hainaut M. The genome of *Xylona heveae* provides a window into fungal endophytism. *Fungal biology*. 2016 Jan 31;120(1):26-42.
- Gazis R, Miadlikowska J, Lutzoni F, Arnold AE, Chaverri P. Culture-based study of endophytes associated with rubber trees in Peru reveals a new class of Pezizomycotina: Xylonomycetes. *Molecular phylogenetics and evolution*. 2012 Oct 31;65(1):294-304.
- Ge ZW, Yang ZL, Pfister DH, Carbone M, Bau T, Smith ME. Multigene molecular phylogeny and biogeographic diversification of the earth tongue fungi in the genera *Cudonia* and *Spathularia* (Rhytismatales, Ascomycota). *PloS one*. 2014 Aug 1;9(8):e103457.
- Ge, Y.P., Lv, G.X., Shen, Y.N., Li, M., Deng, S.W., Hoog, S.D., Samerpitak, K. and Liu, W.D., 2012. First report of subcutaneous phaeohyphomycosis caused by *Ochroconis tshawytschae* in an immunocompetent patient. *Medical mycology*, 50(6), pp.637-640.
- Geltner C, Sorschag S, Willinger B, Jaritz T, Saric Z, Lass-Flörl C. Necrotizing mycosis due to *Verruconis gallopava* in an immunocompetent patient. *Infection*. 2015 Dec 1;43(6):743-6.
- Geml, J., Kauff, F., Brochmann, C. and Taylor, D.L., 2010. Surviving climate changes: high genetic diversity and transoceanic gene flow in two arctic-alpine lichens, *Flavocetraria cucullata* and *F. nivalis* (Parmeliaceae, Ascomycota) *J. Biogeogr.* 37 (8), 1529-1542.
- Geng, R.M., Fu, Y., Zhang, W.M., Zhang, J.P. and Yu, L.Q., 2008. Efficacy and Safety of *Bipolaris sorokiniana* and *Bipolaris coicis* for the Control of *Echinochloa crus-galli* in Paddy Field [J]. *Chinese Journal of Rice Science*, 3, p.015.
- Geng, Y.H.; Zhang, T.Y. 2014. Two new species of *Humicola* from soil. *Mycotaxon*. 33:800-805
- Gernandt, D.S., Platt, J.L., Stone, J.K., Spatafora, J.W., Holst-Jensen, A., Hamelin, R.C. and Kohn, L.M. 2001 Phylogenetics of Helotiales and Rhytismatales based on partial small subunit nuclear ribosomal DNA sequences. *Mycologia* 93 (5), 915-933
- Gerra-Inohosa, L., Puspure, I. and Bambe, B., 2015. Epiphytic bryophyte and lichen species diversity on retained trees in young forest stands. *Forest science*. 2015
- Gessler, N.N., Egorova, A.S. and Belozerskaya, T.A., 2014. Melanin pigments of fungi under extreme environmental conditions (Review). *Applied biochemistry and microbiology*, 50(2), pp.105-113.
- Ghate S.D. & Sridhar K.R. 2016. Endophytic aquatic hyphomycetes in roots of riparian tree species of two Western Ghat streams. *Symbiosis* doi:10.1007/s13199-016-0435-6
- Ghazvini, H. and Tekauz, A., 2008. Host-pathogen interactions among barley genotypes and *Bipolaris sorokiniana* isolates. *Plant Disease*, 92(2), pp.225-233.
- Giełwanowska, I. and Olech, M., 2012. New ultrastructural and physiological features of the thallus in Antarctic lichens. *Acta Biologica Cracoviensia Series Botanica*, 54(1), pp.40-52.
- Gilbert OL, Hawksworth, DL (2009) *Claurouxia* D. Hawksw. (1988). In: Smith CW, Aptroot A, Coppins BJ, Fletcher A, Gilbert OL, James PW, Wolseley PA (eds) *The Lichens of Great Britain and Ireland*, 2nd ed. British Lichen Society, London, pp. 338–339.
- Gilgado F, Gene J, Cano J, Guarro J. Reclassification of *Graphium tectonae* as *Parascedosporium tectonae* gen. nov., comb. nov., *Pseudallescheria africana* as *Petriellopsis africana* gen. nov., comb. nov. and *Pseudallescheria fimeti* as

- Lophotrichus fimeti* comb. nov. International journal of systematic and evolutionary microbiology. 2007 Sep 1;57(9):2171-8.
- Gilgado, F.; Cano, J.; Gené, J.; Sutton, D.A.; Guarro, J. (2008). Molecular and phenotypic data supporting distinct species statuses for *Scedosporium apiospermum* and *Pseudallescheria boydii* and the proposed new species *Scedosporium dehoogii*. J. Clin. Microbiol. 46(2): 766-771.
- Gilgado, F.; Gene, J.; Cano, J.F.; Guarro, J. (2010). Heterothallism in *Scedosporium apiospermum* and description of its teleomorph *Pseudallescheria apiosperma* sp. nov.. Medical Mycol. 48(1): 122-128.
- Gimmler H, de Jesus J, Greiser A (2001) Heavy metal resistance of the extreme acidotolerant filamentous fungus *Bispora* sp. Microbial Ecology 42:87–98. doi:10.1007/s002480000077
- Giordani, P., Benesperi, R. and Mariotti, M.G., 2015. Local dispersal dynamics determine the occupied niche of the red-listed lichen *Seiophora villosa* (Ach.) Frödén in a Mediterranean Juniperus shrubland. Fungal Ecology, 13, pp.77-82.
- Giordani, P., Benesperi, R., Rizzi, G. and Brunialti, G., 2009. New records for lichen regional floras of Italy. Webbia, 64(1), pp.153-158.
- Giraldo A, Gené J, Cano J, de Hoog GS, Guarro J. Two new species of *Acremonium* from Spanish soils. Mycologia. 2012 Jun 8:11-402.
- Giraldo A, Gené J, Sutton DA, Madrid H, Cano J, Crous PW, Guarro J. Phylogenetic circumscription of *Arthrographis* (Eremomycetaceae, Dothideomycetes). Persoonia: Molecular Phylogeny and Evolution of Fungi. 2014 Jun;32:102.
- Giraldo A, Sutton DA, Samerpitak K, de Hoog GS, Wiederhold NP, Guarro J, Gené J. Occurrence of *Ochroconis* and *Verruconis* species in clinical specimens from the United States. Journal of clinical microbiology. 2014 Dec 1;52(12):4189-201.
- Giraldo,A., Gene,J., Cano,J., de Hoog,S. and Guarro,J. 2012. Two new species of *Acremonium* from Spanish soils. Mycologia 104:1456-1465.
- Giraldo,A., Gene,J., Sutton,D.A., Madrid,H., Cano,J., Crous,P.W. Guarro,J. 2014 Phylogenetic circumscription of *Arthrographis* (Eremomycetaceae, Dothideomycetes). Persoonia 32, 102-114.
- Giralt, M. and Klaus, K.A.L.B., 2010. *Rinodina fuscoisidiata*, a new muscicolous, isidiate species from Venezuela. The Lichenologist, 42(01), pp.73-76.
- Giralt, M., 2009. *Rinodina etayoi*, a new saxicolous lichen species from the Canary Islands. The Lichenologist, 41(02), pp.141-145.
- Giralt, M., Klaus, K.A.L.B. and Mayrhofer, H., 2009. *Rinodina brasiliensis*, a new corticolous isidiate species, and closely related taxa. The Lichenologist, 41(02), pp.179-187.
- Giralt, M., Van den Boom, P.P., Mayrhofer, H. and Elix, J.A., 2014. Three new species of crustose Physciaceae from Guatemala, with notes on some additional species. Phytotaxa, 164(2), pp.79-90.
- Giralt, M; van den Boom, P.P.G.; Elix, J.A. 2010. *Endohyalina*, the genus in the Physciaceae to accommodate the species of the *Rinodina ericina*-group. Mycological Progress. 9(1):37-48.
- Giraud, S., Favennec, L., Bougnoux, M.E. and Bouchara, J.P., 2013. *Rasamsonia argillacea* species complex: taxonomy, pathogenesis and clinical relevance. Future microbiology, 8(8), pp.967-978.
- Giri, D.K., Sims, W.P., Sura, R., Cooper, J.J., Gavrilov, B.K. and Mansell, J., 2011. Cerebral and renal phaeohyphomycosis in a dog infected with *Bipolaris* species. Veterinary Pathology Online, 48(3), pp.754-757.

- Gladdish, S., Frank, J.L. and Southworth, D. 2010 The serpentine syndrome belowground: hypogeous fungi and ectomycorrhizas associated with conifers. *Canadian Journal of Forest Research*, 2010, 40(8): 1671-1679,
- Glienke C, Pereira OL, Stringari D, Fabris J, Kava-Cordeiro V, Galli Terasawa L, Cunnington J, Shivas RG, Groenewald JZ, Crous PW (2011) Endophytic and pathogenic *Phyllosticta* species, with reference to those associated with Citrus Black Spot. *Persoonia* 26:47–56
- Gnavi G, Ercole E, Panno L, Vizzini A, Varese GC (2014) Dothideomycetes and Leotiomycetes sterile mycelia isolated from the Italian seagrass *Posidonia oceanica* based on rDNA data. *Springerplus* 3: 508
- Goel, M., Sharma, P.K., Dureja, P., Rani, A. and Uniyal, P.L., 2011. Antifungal activity of extracts of the lichens *Parmelia reticulata*, *Ramalina roesleri*, *Usnea longissima* and *Stereocaulon himalayense*. *Archives of Phytopathology and Plant Protection*, 44(13), pp.1300-1311.
- Goh TK, Hyde KD (1999) A synopsis of *Trichocladium* species based on the literature. *Fungal Diversity* 2: 101–118
- Goh TK, Hyde KD, Ho WH (1998) *Aquaphila albicans* gen. et sp. nov., a hyphomycete from submerged wood in the tropics. *Mycol Res* 102(5):587–592.
- Goh TK, Lau WY, Teo KC. A new species of *Nawawia* from Malaysia, with a synopsis of the genus. *Mycotaxon*. 2014 Nov 19;129(1):109-18.
- Goh, T.K.; Hyde, K.D. 1998. A new hyphomycete genus, *Conioscyphopsis*, from wood submerged in a freshwater stream and a review of *Conioscypha*. *Mycological Research*. 102(3):308-312.
- Goh, T.K.; Lau, W.Y.; Teo, K.C. 2014. *Paliphora curviapicis* sp. nov. from Malaysia, and a synopsis of the genus. *Mycotaxon*. 127:145-153.
- Goldmann L, Weir A. Position specificity in *Chitonomyces* (Ascomycota, Laboulbeniomycetes) on *Laccophilus* (Coleoptera, Dytiscidae): a molecular approach resolves a century-old debate. *Mycologia*. 2012 Sep 1;104(5):1143-58.
- Gomathinayagam, S., Rekha, M., Murugan, S.S. and Jagessar, J.C., 2010. The biological control of paddy disease brown spot (*Bipolaris oryzae*) by using *Trichoderma viride* in vitro condition. *Journal of Biopesticides*, 3(1), pp.93-95.
- Gomes RR, Glienke C, Videira SIR, Lombard L, Groenewald JZ, Crous PW (2013) *Diaporthe*: a genus of endophytic, saprobic and plant pathogenic fungi. *Persoonia* 31:1–41
- Gonczol J. & Marvanová L. 2002. *Anguillospora mediocris* sp. nov. from streams in Hungary. *Czech Scientific Society for Mycology* 5: 309–317.
- Gönczöl, J.; Révay, A. 1996. A new *Colispora* (Hyphomycetes) from tree hollows. *Mycotaxon*. 59:237-244
- Goni, R. and Sharma, N., 2015. Additions to lichen flora of Jammu and Kashmir, India. *Tropical Plant Research*, 2(2), pp.78-81.
- Goni, R., Raina, A.K., Magotra, R. and Sharma, N., 2014. Lichen flora of Jammu and Kashmir State, India: An updated checklist. *Tropical Plant Research*, 2(1), pp.64-71.
- Gonzalez-Menendez, V., Perez-Bonilla, M., Martin, J., Munoz, F., Reyes, F., Tormo, J.R. and Genilloud, O. 2016 Multicomponent analysis of the differential induction of secondary metabolite profiles in fungal endophytes. *Molecules*, In press
- Gonzalo Guevara-Guerrero, Greg Bonito, Efrén Cázares-González, Rosanne A. Healy & James Trappe. 2015. Novel Tuber spp. (Tuberaceae, Pezizales) in the *Puberulum* Group from North America. *ascomycets.org. journal*. 7 (6):367-374

- Goodwin SB (2002). The barley scald pathogen *Rhynchosporium secalis* is closely related to the discomycetes *Tapesia* and *Pyrenopeziza*. *Mycological Research* 106: 645–654.
- Gręfenhan T, Schroers H-J, Nirenberg HI, Seifert KA (2011) An overview of the taxonomy, phylogeny, and typification of nectriaceous fungi in *Cosmospora*, *Acremonium*, *Fusarium*, *Stilbella*, and *Volutella*. *Studies in Mycology* 68:79–113
- Gramaje, D.; Agustí-Brisach, C.; Pérez-Sierra, A.; Moralejo, E.; Olmo, D.; Mostert, L.; Damm, D.; Armengol, J. 2012. Fungal trunk pathogens associated with wood decay of almond trees on Mallorca (Spain). *Persoonia*. 28:1-13.
- Granados M, Castañeda-Ruiz RF, Castro O, Minter DW, Kendrick B. Microfungi from Costa Rica. A new species and a new combination in *Codinaea*. *Mycotaxon*. 2014 May 29;127(1):115-20.
- Grandi RA, da Silva P. New record of *Porobeltraniella porosa* (Piroz. & SD Patil) Gusmão, 2004 (Fungi: asexual Ascomycota) for South America. *Check List*. 2014 Oct 14;10(5):1174-5.
- Greif MD, Gibas CCF, Tsuneda A, Currah RS (2007) Ascoma development and phylogeny of an apothecioid Dothideomycete, *Catinella olivacea*. *American Journal of Botany* 94(11): 1890–1899
- Greif MD, Stchigel AM, Miller AN, Huhndorf SM. A re-evaluation of genus *Chaetomidium* based on molecular and morphological characters. *Mycologia*. 2009 Jul 1;101(4):554-64.
- Greiner K, Peršoh D, Weig A, Rambold G. *Phialosimplex salinarum*, a new species of Eurotiomycetes from a hypersaline habitat. *IMA fungus*. 2014 Dec 18;5(2):161-72.
- Grinn-Gofroń, A. and Rapiejko, P., 2009. Occurrence of *Cladosporium* spp. and *Alternaria* spp. spores in Western, Northern and Central-Eastern Poland in 2004–2006 and relation to some meteorological factors. *Atmospheric Research*, 93(4), pp.747-758.
- Grinn-Gofroń, A. and Strzelczak, A., 2008. Artificial neural network models of relationships between *Alternaria* spores and meteorological factors in Szczecin (Poland). *International journal of biometeorology*, 52(8), pp.859-868.
- Grobbelaar, J.W.; Aghayeva, D.N.; Beer, Z.W. de; Bloomer, P.; Wingfield, M.J.; Wingfield, B.D. (2009). Delimitation of *Ophiostoma quercus* and its synonyms using multiple gene phylogenies. *Mycol. Progr.* 8(3): 221-236
- Grochowski, P., 2012. Secondary succession with the participation of protected species of lichens in the charred areas of the forest inspectorate of Lubsko. W: Lipnicki L.(red) *Lichen protection–Protected lichen species*, Sonar Literacki, Gorzów Wielkopolski, pp.205-212.
- Groenewald, J.Z., Nakashima, C., Nishikawa, J., Shin, H.D., Park, J.H., Jama, A.N., Groenewald, M., Braun, U. and Crous, P.W., 2013. Species concepts in *Cercospora*: spotting the weeds among the roses. *Studies in Mycology*, 75, pp.115-170.
- Groenewald, M., Linde, C.C., Groenewald, J.Z. and Crous, P.W., 2008. Indirect evidence for sexual reproduction in *Cercospora beticola* populations from sugar beet. *Plant Pathology*, 57(1), pp.25-32.
- Gross A, Holdenrieder O, Pautasso M, Queloz V, Sieber TN. *Hymenoscyphus pseudoalbidus*, the causal agent of European ash dieback. *Molecular Plant Pathology*. 2014 Jan 1;15(1):5-21.
- Grube M, Baloch E, Lumbsch HT (2004) The phylogeny of Porinaceae (Ostropomycetidae) suggests a neotenic origin of perithecia in Lecanoromycetes. *Mycol. Res.* 108(10): 1111–1118
- Grube M, Matzer M, Hafellner J (1995) A preliminary account of the lichenicolous *Arthonia* species with reddish, K+ reactive pigments. *The Lichenologist*. 27(1):25–42

- Grube, M. 2001. Coniarthonia, a new genus of arthonioid lichens. *The Lichenologist*. 33(6):491-502.
- Grube, M. and Arup, U. 2001. Molecular and morphological evolution in the Physciaceae (Lecanorales, lichenized Ascomycotina), with special emphasis on the genus *Rinodina*. *Lichenologist* (Lond.) 33 (1), 63-72.
- Grube, M., Köberl, M., Lackner, S., Berg, C. and Berg, G., 2012. Host–parasite interaction and microbiome response: effects of fungal infections on the bacterial community of the Alpine lichen *Solorina crocea*. *FEMS microbiology ecology*, 82(2), pp.472-481.
- Grum-Grzhimaylo AA, Debets AJ, van Diepeningen AD, Georgieva ML, Bilanenko EN (2013) *Sodiomyces alkalinus*, a new holomorphic alkaliphilic ascomycete within the Plectosphaerellaceae. *Persoonia: Molecular Phylogeny and Evolution of Fungi*. 31: 147.
- Grum-Grzhimaylo AA, Georgieva ML, Bondarenko SA, Debets AJ, Bilanenko EN. On the diversity of fungi from soda soils. *Fungal Diversity*. 2016 Jan 1;76(1):27-74.
- Grum-Grzhimaylo, A.A; Georgieva, M.L; Debets, A.J.M; Bilanenko, E.N. 2013. Are alkalitolerant fungi of the *Emericellopsis* lineage (Bionectriaceae) of marine origin? *IMA Fungus*. 4(2):213-228
- Grundey, K.C., Woodward, S., Genney, D.R. and Taylor, A.F. 2012. A molecular approach to explore the extent of the threatened fungus *Hypocreopsis rhododendri* within wood. *Fungal. Biol.* 116: 354-362.
- Grünig CR, Queloz V, Duò A, Sieber TN. Phylogeny of *Phaeomollisia piceae* gen. sp. nov.: a dark, septate, conifer-needle endophyte and its relationships to *Phialocephala* and *Acephala*. *Mycological research*. 2009 Feb 28;113(2):207-21.
- Grünig CR, Sieber TN, Rogers SO, Holdenrieder O. Genetic variability among strains of *Phialocephala fortinii* and phylogenetic analysis of the genus *Phialocephala* based on rDNA ITS sequence comparisons. *Canadian Journal of Botany*. 2002 Dec 1;80(12):1239-49.
- Grünig, C.R.; Queloz, V.; Duò, A.; Sieber, T.N. (2009). Phylogeny of *Phaeomollisia piceae* gen. [et] sp. nov.: a dark, septate, conifer-needle endophyte and its relationships to *Phialocephala* and *Acephala*. *Mycol. Res.* 113(2): 207-221.
- Grünig, C.R.; Sieber, T.N. 2005. Molecular and phenotypic description of the widespread root symbiont *Acephala applanata* gen. et sp. nov., formerly known as dark-septate endophyte Type 1. *Mycologia*. 97(3):628-640.
- Gruyter, J. de; Woudenberg, J.H.C.; Aveskamp, M.M.; Verkley, G.J.M.; Groenewald, J.Z.; Crous, P.W. 2012. Redisposition of *Phoma*-like anamorphs in Pleosporales. *Studies in Mycology*. 75:1-36.
- Gryzenhout M, Wingfield BD, Wingfield MJ. Taxonomy, phylogeny, and ecology of bark-inhabiting and tree-pathogenic fungi in the Cryphonectriaceae. *American Phytopathological Society (APS Press)*; 2009.
- Gryzenhout, M.; Tarigan, M.; Clegg, P.A.; Wingfield, M.J. (2010). *Cryptometrion aestuescens* gen. [et] sp. nov. (Cryphonectriaceae) pathogenic to *Eucalyptus* in Indonesia. *Australas. Pl. Path.* 39(2): 161-169.
- Gu H, Lin G, Na L. *Xylaria byttneriae* sp. nov. from Yunnan Province in China. *Mycosystema*. 2014;33(3):567-70.
- Gu, W., 2009. Bioactive metabolites from *Alternaria brassicicola* ML-P08, an endophytic fungus residing in *Malus halliana*. *World Journal of Microbiology and Biotechnology*, 25(9), pp.1677-1683.
- Guang-yu X, Bi-fa S, Ke-ming C, Si-ai F (2008) Study on the control of *Agaricodochium camellia*. *Journal of Hebei Agricultural Sciences* 9:017

- Guarro J, Gené J, Stchigel A, Figueras MJ. 2012. Atlas of soil ascomycetes. CBS Biodiversity Series 10, Utrecht.
- Guatimosim E, Firmino A, Bezerra J, Pereira O, Barreto R, Crous P (2016) Towards a phylogenetic reappraisal of Parmulariaceae and Asterinaceae (Dothideomycetes). *Persoonia* 35:230-241
- Guatimosim E, Pinto HJ, Barreto RW, Prado J. Rhagadolobiopsis, a new genus of Parmulariaceae from Brazil with a description of the ontogeny of its ascomata. *Mycologia*. 2014 Mar 1;106(2):276-81.
- Guatimosim E, Schwartsburd PB, Barreto RW, Crous PW. (2016). Novel fungi from an old niche: cercosporoid and related sexual morphs on ferns. *Persoonia* 37: 106–141.
- Guatimosim E, Schwartsburd PB, Crous PW, Barreto RW. Novel fungi from an ancient niche: lachnoid and chalara-like fungi on ferns. *Mycological Progress*. 2016 Dec 1;15(12):1239-67.
- Gudmundsson, M., Hansson, H., Karkehabadi, S., Larsson, A., Stals, I., Kim, S., Sunux, S., Fajdala, M., Larenas, E., Kaper, T. and Sandgren, M., 2016. Structural and functional studies of the glycoside hydrolase family 3 β -glucosidase Cel3A from the moderately thermophilic fungus *Rasamsonia emersonii*. *Acta Crystallographica Section D: Structural Biology*, 72(7), pp.860-870.
- Guecin F, Kaya A, Soylu MK, Uzun Y. Picoa Vittad., a new truffle genus record for Turkey. *Biological Diversity and Conservation*. 2010;3(3):23-5.
- Gueidan C, Aptroot A, Cáceres MES, Badali H, Stenroos S (2014) A reappraisal of orders and families within the subclass Chaetothyriomycetidae (Eurotiomycetes, Ascomycota). *Mycol Prog* 13:1027–1039
- Gueidan C, Roux C, Lutzoni F. Using a multigene phylogenetic analysis to assess generic delineation and character evolution in Verrucariaceae (Verrucariales, Ascomycota). *Mycological research*. 2007 Oct 31;111(10):1145-68.
- Gueidan C, Thüs H, Pérez-Ortega S. Phylogenetic position of the brown algae-associated lichenized fungus *Verrucaria tavaresiae* (Verrucariaceae). *The Bryologist*. 2011 Sep;114(3):563-9.
- Gueidan C, Truong VD, Lu NT. Phylogeny and taxonomy of *Staurothele* (Verrucariaceae, lichenized ascomycetes) from the karst of northern Vietnam. *The Lichenologist*. 2014 Jul 1;46(04):515-33.
- Gueidan C, Villaseñor CR, de Hoog GS, Gorbushina AA, Untereiner WA, Lutzoni F. 2008. A rock-inhabiting ancestor for mutualistic and pathogen-rich fungal lineages. *Studies in Mycology* 61:111–119.
- Gueidan, C., Monnat, J.-Y., Navarro-Rosines, P. and Roux, C. 2014. *Trimmatothelopsis versipellis*: discovery of several localities in the department of Finistere (France), phylogenetic placement and taxonomic consequences. *Bull Soc Linn Provence* 65, 47-65.
- Gueidan, C., Savić, S., Thüs, H., Roux, C., Keller, C., Tibell, L., Prieto, M., Heiðmarsson, S., Breuss, O., Orange, A. and Fröberg, L., 2009. Generic classification of the Verrucariaceae (Ascomycota) based on molecular and morphological evidence: recent progress and remaining challenges. *Taxon*, 58(1), pp.184-208.
- Gueidan, C., Aptroot, A., da Silva Cáceres, M.E. and Binh, N.Q. 2016 Molecular phylogeny of the tropical lichen family Pyrenulaceae: contribution from dried herbarium specimens and FTA card samples. *Mycol. Prog.* 15, 7
- Guevara G, Bonito G, Trappe JM, Cázares E, Williams G, Healy RA, Schadt C, Vilgalys R. New North American truffles (*Tuber* spp.) and their ectomycorrhizal associations. *Mycologia*. 2013 Jan 1;105(1):194-209.

- Guinea J, Sandoval-Denis M, Escribano P, Peláez T, Guarro J, Bouza E. 2015. *Aspergillus citrinoterreus*, a new species of the section *Terrei* isolated from samples of patients with nonhematological predisposing conditions. *Journal of Clinical Microbiology* 53:611–617.
- Gulder TA, Hong H, Correa J, Egereva E, Wiese J, Imhoff JF, Gross H 2012. Isolation, structure elucidation and total synthesis of lajollamide A from the marine fungus *Asteromyces cruciatus*. *Mar Drugs*. 10(12): 2912-2935.
- Gulis V., Baschien C. & Marvanová L. 2012. Two new *Tricladium* species from streams in Alaska. *Mycologia* 104(6): 1510–1516. doi: 10.3852/12-081
- Gumboski, E.L., 2014. Contribution to the knowledge of lichenized mycota from Southern Brazil. I–Species of *Ramboldia* (Ascomycota: Lecanoraceae). *Acta Biológica Catarinense*, 1(2).
- Gunde-Cimerman, N. and Zalar, P., 2014. Extremely halotolerant and halophilic fungi inhabit brine in solar salterns around the globe. *Food Technology and Biotechnology*, 52(2), p.170.
- Gundersen, A., 2013. Temporal trends in shade sensitive epiphytic cryptogams residing on old trees.
- Guo MT, Qiao M, Li JY, Wang W, Yu ZF. *Verticicladius hainanensis*, a new aquatic hyphomycete. *Mycotaxon*. 2015 Apr 22;130(1):275-8.
- Guo, J., Li, Z.L., Wang, A.L., Liu, X.Q., Wang, J., Guo, X., Jing, Y.K. and Hua, H.M., 2011. Three new phenolic compounds from the lichen *Thamnoia vermicularis* and their antiproliferative effects in prostate cancer cells. *Planta medica*, 77(18), pp.2042-2046.
- Guo, Y.L.; Liu, X.L. 1992. *Alysidiopsis yunnanensis*, a new species of the genus *Alysidiopsis*. *Acta Mycologica Sinica*. 11:213-215.
- Gupta, P. and Sinha, G.P., 2015. Additions to the lichen flora of Sikkim, India.
- Gupta, P. and Sinha, G.P., 2016. A first note on foliicolous lichens of Assam, India. *Journal of Threatened Taxa*, 8(7), pp.9014-9023.
- Gupta, P., Kar, R. and Joseph, S., 2015. A checklist of Lichens of Rajasthan, India. *Current Research in Environmental & Applied Mycology*, 5(4), pp.367-375.
- Gupta, V., Shamas, N., Razdan, V.K., Sharma, B.C., Sharma, R., Kaur, K., Singh, I., John, D. and Kumar, A., 2013. Foliar application of fungicides for the management of brown spot disease in rice (*Oryza sativa* L.) caused by *Bipolaris oryzae*. *African Journal of Agricultural Research*, 8(25), pp.3303-3309.
- Gur L, Frenkel O. First Report of Leaf Spot on Blue Lupin (*Lupinus pilosus*) Caused by *Pleiochaeta setosa* in Israel. *Plant Disease*. 2015 Dec 4.
- Gusmão, L.F.P.; Leão-Ferreira, S.M.; Oliveira Marques, M.F.; Carneiro de Almeida, D.A. 2008. New species and records of *Paliphora* from the Brazilian semi-arid region. *Mycologia*. 100(2):306-309.
- Gusmão, L.F.P.; Piccolo Grandi, R.A. 2001. A new *Neojohnstonia* species from Brazil. *Mycotaxon*. 80:97-100.
- Guu, J.R., Ju, Y.M. and Hsieh, H.J., 2010. Bionectriaceous fungi collected from forests in Taiwan. *Botanical Studies*, 51(1).
- GUZOW-KRZEMIŃSKA B, Halda JP, CZARNOTA P. A new *Agonimia* from Europe with a flabelliform thallus. *The Lichenologist*. 2012;44(01):55-66.
- H. Kashiwadani, A. Aptroot & K.H. Moon. 2009. Pyrenocarpous lichens of Japan, with the resurrection of the genus *Trypetheliopsis*. *Bibliotheca Lichenologica* 99: 247-258.
- H. Zhang, K. D. Hyde, M. A. Abdel-Wahab, F. A. Abdel-Aziz, H. A. Ariyawansa, T. W. KoKo, R. L. Zhao, S. A. Alias, A. H. Bahkali & D. Q. Zhou. 2013. A modern concept for *Helicascus* with a “*Pleurophomopsis*”-like asexual state. *Sydowia*. 65:147-166.

- H.A. van der Aa,; Vanev, S. 2002. A revision of the species described in Phyllosticta. :1-510.
- H.J.M. Sipman, R. Lücking, A. Aptroot, K. Kalb, J.L. Chaves, & L. Umana. 2012. A first assessment of the Ticolichen biodiversity inventory in Costa Rica and adjacent areas: the thelotremoid Graphidaceae (Ascomycota: Ostropales). *Phytotaxa* 55: 1-214.
- Habibi A, Banihashemi Z, Mostowfizadeh-Ghalamfarsa R. Phylogenetic analysis of *Polystigma* and its relationship to Phyllachorales. *Phytopathologia Mediterranea*. 2015 Apr 1;54(1):45.
- Habibi A, Banihashemi Z. Mating system and role of pycnidiospores in biology of *Polystigma amygdalinum*, the causal agent of almond red leaf blotch. *Phytopathologia Mediterranea*. 2016 Apr 1;55(1):98.
- Hadizadeh, I., Peivastegan, B. and Hamzehzarghani, H., 2009. Antifungal activity of essential oils from some medicinal plants of Iran against *Alternaria alternate*. *American Journal of Applied Sciences*, 6(5), pp.857-861.
- Haelewaters D, Zhao SY, De Kesel A, Handlin RE, Royer IR, Farrell BD, Pfister DH. Laboulbeniales (Ascomycota) of the Boston Harbor Islands I: species parasitizing Coccinellidae and Staphylinidae, with comments on typification. *Northeastern Naturalist*. 2015 Aug 19;22(3):459-77.
- Haelewaters D., De Kesel A. 2013. A new species of *Cantharomyces* (Laboulbeniales, Ascomycota) from the Netherlands. *Mycotaxon* 123: 467-472. doi:10.5248/123.467.
- Haelewaters D., Gorczak M., Pfliegler W., Tartally A., Tischer M., Wrzosek M, Pfister D. (2015) Bringing Laboulbeniales into the 21st century: enhanced techniques for extraction and PCR amplification of DNA from minute ectoparasitic fungi. *IMA Fungus* 6(2): 363–372
- Haelewaters D., Minnaar I.A., Clusella-Trullas S. 2016. First finding of the parasitic fungus *Hesperomyces virescens* (Laboulbeniales) on native and invasive ladybirds (Coleoptera, Coccinellidae) in South Africa. *Parasite* 23: 5. doi:10.1051/parasite/2016005
- Haelewaters D., Pfliegler W.P., Szentiványi T., Földvári M., Sándor A.D., Barti L., Camacho J.J., Gort G., Estók P., Hiller T., Dick C.W., Pfister D.H. In review. Laboulbeniales (Fungi, Ascomycota) ectoparasites of Central European bat flies (Diptera, Nycteribiidae): distributional data and host associations. *Parasites & Vectors*.
- Haelewaters, D. & Yaakop, S. (2014) New and interesting Laboulbeniales from southern and southeastern Asia. *Mycotaxon* 129(2): 493-454.
- Haelewaters, D.; Vorst, O. & De Kesel, A. (2014a) New and interesting Laboulbeniales (Fungi, Ascomycota) from the Netherlands. *Nova Hedwigia* 98(1-2): 113-125.
- Haelewaters, Danny; Vorst, Oscar; De Kesel, André 2014 New and interesting Laboulbeniales (Fungi, Ascomycota) from the Netherlands. *Nova Hedwigia* 98 (1-2): 113 – 125.
- Haelewaters,D., Gorczak,M., Pfliegler,W.P., Tartally,A., Tischer,M., Wrzosek,M. and Pfister,D.H. 2015 Bringing Laboulbeniales into the 21st century: enhanced techniques for extraction and PCR amplification of DNA from minute ectoparasitic fungi. *IMA Fungus* 6 (2), 363-372
- Haelewaters,D;Schilthuizen,M;Pfister,DH. 2014. On *Diphymyces* (Laboulbeniales, Ascomycota) in Malaysian Borneo. *Plant Ecology and Evolution*. 147:93-100
- Hafellner J, Mayrhofer H, Poelt J (1979) Die Gattungen der Flechtenfamilie Physciaceae. *Herzogia* 5:39-79.
- Hafellner, J., Kärnefelt, I. and Wirth, V., 2010. Diversity and ecology of lichens in polar and mountain ecosystems. *Nova Hedwigia*, 91(3-4).

- Hafellner, J.; Zimmermann, E. 2012. A lichenicolous species of *Pleospora* (Ascomycota) and a key to the fungi invading *Physcia* species. *Herzogia*. 25(1):47-59
- Hafellner, J. 2015. Distributional and other data for some species of *Didymocyrtis* (Dothideomycetes, Pleosporales, Phaeosphaeriaceae), including their Phoma-type anamorphs. *Fritschiana*. 80:43-88
- Haixia Shi,^{1,2} Zigang Qian,¹ Xinyu Wang,² Dong Liu,² Yanyun Zhang,² Xin Ye,¹ Hiroshi Harada,³ and Lisong Wang 2015 The Genus *Letrouitia* (Letrouitiaceae: Lichenized Ascomycota) New to Cambodia *Mycobiology*. 2013 Jun;43(2):163-165.
- Hájek, J., Váczi, P. and Barták, M., 2009. Photosynthetic electron transport at low temperatures in the green algal foliose lichens *Lasallia pustulata* and *Umbilicaria hirsuta* affected by manipulated levels of ribitol. *Photosynthetica*, 47(2), pp.199-205.
- Halc, M.G.; Knudsen, K.; Candan, M. (2009). *Lichenochora atrans* (Phyllachoraceae), a new lichenicolous species on *Psora decipiens* from Turkey. *Mycotaxon* 109: 239-243.
- Halc, M.G.; Knudsen, K.; Candan, M.; Turk, A.O. (2009). A new species of *Polycoccum* (Dothideales, Dacampiaceae) from Turkey. *Nova Hedwigia* 89(3-4): 431-436.
- Halıcı M, Hawksworth DL, Candan M, Özdemir Türk A (2010) A new lichenicolous species of *Capronia* (Ascomycota, Herpotrichiellaceae), with a key to the known lichenicolous species of the genus. *Fungal Divers* 40:37–40
- Halıcı M.G.; Özdemir Türk, A.; Candan, M. 2008. *Dacampia cladoniicola* sp. nov. (Ascomycota, Dacampiaceae) on *Cladonia* sp. from Turkey. *Mycotaxon*. 103:53-57
- Halıcı MG, Akgül HE, Öztürk C, Kiliç E. *Polycoccum anatolicum* sp. nov. on *Lepraria incana* and a key to *Polycoccum* species known from Turkey. *Mycotaxon*. 2013 Oct 10;124(1):45-50.
- Halıcı MG, Vondrák J, Demirel R, Ceylan A, Candan M. Teloschistaceae (lichenized Ascomycetes) in Turkey II.–Some poorly known taxa. Supported by molecular data. *Nova Hedwigia*. 2014 May 1;98(3-4):449-58.
- Halıcı, M., Kocakaya, M. and Kiriş, Z., 2014. Lichenized and lichenicolous fungi of Bakırdağ (Kayseri, Adana). *Acta Botanica Hungarica*, 56(3-4), pp.319-332.
- Halıcı, M.G., 2015. New records of crustose Teloschistaceae and lichenicolous fungi from Turkey. *Mycotaxon*, 130(3), pp.769-773.
- Halıcı, M.G.; Candan, M. (2009). New lichenicolous fungi from Turkey. *Nova Hedwigia* 88(3-4): 483-490.
- Halıcı, M.G.; Etayo, J.; Candan, M. 2009. Two new lichenicolous species of *Dacampia* on Teloschistaceae. *Mycotaxon*. 109:393-398.
- Halleen F, Schroers HJ, Groenewald JZ, Crous PW (2004) Novel species of *Cylindrocarpon* (*Neonectria*) and *Campylocarpon* gen. nov. associated with black foot disease of grapevines (*Vitis* spp.). *Studies in Mycology*. 50: 431–55.
- Hallmann, C., Fritzljar, D., Stannek, L. and Hoppert, M., 2011. Ascomycete fungi on dimension stone of the “Burg Gleichen”, Thuringia. *Environmental Earth Sciences*, 63(7-8), pp.1713-1722.
- Halonen P., Myllys L, Velmala S, Hyvärinen H (2009) *Gowardia* (Parmeliaceae) – a new alectoroid lichen genus with two species. *Bryologist* 112:138-146
- HAMADA, N. and Niichiro, A.B.E., 2008. Characteristics of recent fungal contamination in bathrooms. *SEIKATSU EISEI* (Journal of Urban Living and Health Association), 52(2), pp.98-106.
- Hämäläinen, A., Kouki, J. and Löhmus, P., 2015. Potential biodiversity impacts of forest biofuel harvest: lichen assemblages on stumps and slash of Scots pine. *Canadian Journal of Forest Research*, 45(10), pp.1239-1247.
- Hamayun, M., Khan, S.A., Kim, H.Y., Chaudhary, M.F., Hwang, Y.H., Shin, D.H., Kim, I.K., Lee, B.H. and Lee, I.J., 2009. Gibberellin production and plant growth enhancement

- by newly isolated strain of *Scolecobasidium tshawytschae*. *J Microbiol Biotechnol*, 19(6), pp.560-565.
- Hambleton S, Egger KN, Currah RS (1998). The genus *Oidiodendron*: Species delimitation and phylogenetic relationship based on nuclear ribosomal DNA analysis. *Mycologia* 90: 854–869.
- Hambleton S, Tsuneda A, Currah RS. Comparative morphology and phylogenetic placement of two microsclerotial black fungi from *Sphagnum*. *Mycologia*. 2003 Sep 1;95(5):959-75.
- Hambleton,S., Nickerson,N.L. and Seifert,K.A. 2005 *Leohumicola*, a new genus of heat-resistant hyphomycetes. *Stud. Mycol.* 53, 29-52
- Han JG, Hosoya T, Shin HD. *Amicodisca castaneae* sp. nov.(Hyaloscyphaceae, Helotiales) on Japanese chestnut bur. *Mycotaxon*. 2012 Jan 5;118(1):89-94.
- Han JG, Hosoya T, Sung GH, Shin HD. Phylogenetic reassessment of Hyaloscyphaceae sensu lato (Helotiales, Leotiomyces) based on multigene analyses. *Fungal biology*. 2014 Feb 28;118(2):150-67.
- Han, H.B., Yang, X.Y., Yang, L.R., Wang, R., Zhang, X.D. And Zhao, Z.G., 2008. Determination of contents of crude protein and amino acids in *Arthrobotrys oligospora* [J]. *Chinese Veterinary Science*, 7, p.017.
- Han, J.G., Hosoya,T., Sung,G.H. and Shin,H.D. 2014 Phylogenetic reassessment of Hyaloscyphaceae sensu lato (Helotiales, Leotiomyces) based on multigene analyses. *Fungal Biol* 118 (2), 150-167.
- Han, J.G.; Choi, Y.J.; Pfister, D.H.; Shin, H.D. (2010). *Scutellinia jejuensis* (Pezizales), a new species from Korea. *Mycotaxon* 112: 47-53.
- Han, J.G.; Park, M.J.; Shin, H.D. (2009). *Psilachnum staphyleae*, a new member of foliicolous Hyaloscyphaceae from Korea. *Mycotaxon* 110: 219-224.
- Han, Q., Huang, L., Buchenauer, H., Wang, C. and Kang, Z., 2010. Cytological study of wheat spike infection by *Bipolaris sorokiniana*. *Journal of phytopathology*, 158(1), pp.22-29.
- HAN, Y.F.; CHEN, W.H.; ZOU, X.; LIANG, Z.Q. (2013). *Gibellula curvispora*, a new species of *Gibellula*. *Mycosystema* 32(5): 778
- Han,J.G., Hosoya,T., Sung,G.H. and Shin,H.D. 2014 Phylogenetic reassessment of Hyaloscyphaceae sensu lato (Helotiales, Leotiomyces) based on multigene analyses. *Fungal Biol* 118 (2), 150-167
- Hanlin, R.T. ; González, M.C. 2013. *Ophiodothella angustissima* comb. nov., a new name for *Acervicylpeatus poriformans* and *O. vaccinii*. *Mycotaxon*. 123:327-334
- Hansen K, Perry BA, Dranginis AW, Pfister DH. A phylogeny of the highly diverse cup-fungus family Pyronemataceae (Pezizomycetes, Ascomycota) clarifies relationships and evolution of selected life history traits. *Molecular phylogenetics and evolution*. 2013 May 31;67(2):311-35.
- Hansen K., Pfister D.H. (2006). Systematics of the Pezizomycetes—the operculate discomycetes. *Mycologia*, 98(6), 2006, pp. 1029–1040.
- Hansen, E.S., 2009. A contribution to the lichen flora of Iceland. *Folia Cryptogamica Estonica*, 46, pp.45-54.
- Hansen, E.S., 2011. A contribution to lichen flora of the Kobbefjord area, West Greenland. *Botanica Lithuanica*, 17(4), pp.151-156.
- Hansen, E.S., 2012. Notes on some new and interesting Greenland lichens IX. *Graphis Scripta*, 24, pp.55-59.
- Hansen, E.S., 2013. Lichens from Peary Land, North Greenland. *Folia Cryptogamica Estonica*, 50, pp.3-11.

- Hansen, E.S., 2014. Contribution to the lichen flora of South East Greenland. I. The Kangerlussuaq area. *Botanica Lithuanica*, 20(2), pp.153-158.
- Hansen, E.S., 2015. Contribution To The Lichen Flora Of South East Greenland. III. The Coastal Area Between 63° And 65° N. *Botanica Lithuanica*, 21(2), pp.119-124.
- Hansen, K., Lobuglio, K.F. and Pfister, D.H. 2005 Evolutionary relationships of the cup-fungus genus *Peziza* and Pezizaceae inferred from multiple nuclear genes: RPB2, beta-tubulin, and LSU rDNA. *Mol. Phylogenet. Evol.* 36 (1), 1-23
- Hansen, K., Perry, B.A., Dranginis, A.W. and Pfister, D.H. 2013 A phylogeny of the highly diverse cup-fungus family Pyronemataceae (Pezizomycetes, Ascomycota) clarifies relationships and evolution of selected life history traits. *Mol Phylogenet Evol.* 2013 May;67(2):311-35.
- Hao, L., Chen, C., Zhang, R., Zhu, M., Sun, G. and Gleason, M.L., 2013. A new species of *Scolecobasidium* associated with the sooty blotch and flyspeck complex on banana from China. *Mycological progress*, 12(3), pp.489-495.
- Harada, H. 2013. *Agonimia deguchii* (lichenized Ascomycota, Verrucariaceae), a new saxicolous species from central Japan. *Hikobia*. 16:307-310
- Harada, H. 2014. *Cresporhaphis chibaensis* sp. nov. (lichenized Ascomycota, Tricho-sphaeriaceae) from Chiba-ken, central Japan. *Lichenology*. 12(1):31-36.
- Harańczyk, H., Nowak, P., Baciór, M., Lisowska, M., Marzec, M., Florek, M. and Olech, M.A., 2012. Bound water freezing in Antarctic Umbilicaria aprina from Schirmacher Oasis. *Antarctic Science*, 24(04), pp.342-352.
- Harimoto, Y., Tanaka, T., Kodama, M., Yamamoto, M., Otani, H. and Tsuge, T., 2008. Multiple copies of AMT2 are prerequisite for the apple pathotype of *Alternaria alternata* to produce enough AM-toxin for expressing pathogenicity. *Journal of general plant pathology*, 74(3), pp.222-229.
- Harrington TC, McNew D, Mayers C, Fraedrich SW, Reed SE (2014) *Ambrosiella roeperi* sp. nov. is the mycangial symbiont of the granulate ambrosia beetle, *Xylosandrus crassiusculus*. *Mycologia* 106:835–845
- Harrington TC, McNew D, Yun HY. Bur oak blight, a new disease on *Quercus macrocarpa* caused by *Tubakia iowensis* sp. nov. *Mycologia*. 2012 Jan 1;104(1):79-92.
- Harrington, T.C., Aghayeva, D.N. and Fraedrich, S.W., 2010. New combinations in *Raffaelea*, *Ambrosiella*, and *Hyalorhinoclaadiella*, and four new species from the redbay ambrosia beetle, *Xyleborus glabratus*. *Mycotaxon*, 111(1), pp.337-361.
- Harrington, T.C., Fraedrich, S.W. and Aghayeva, D.N., 2008. *Raffaelea lauricola*, a new ambrosia beetle symbiont and pathogen on the Lauraceae. *Mycotaxon*, 104, pp.399-404.
- Harrington, T.C., Yun, H.Y., Lu, S.S., Goto, H., Aghayeva, D.N. and Fraedrich, S.W., 2011. Isolations from the redbay ambrosia beetle, *Xyleborus glabratus*, confirm that the laurel wilt pathogen, *Raffaelea lauricola*, originated in Asia. *Mycologia*, 103(5), pp.1028-1036.
- Harrington, T.C.; Aghayeva, D.N.; Fraedrich, S.W. 2010. New combinations in *Raffaelea*, and four new species from the redbay ambrosia beetle, *Xyleborus glabratus*. *Mycotaxon*. 111:337-361.
- Harris, L.B. and Rogers, S.O., 2011. Evolution of small putative group I introns in the SSU rRNA gene locus of *Phialophora* species. *BMC research notes*, 4(1), p.258.
- Harris, R.C. (2009). Four novel lichen taxa in the lichen biota of eastern North America. *Opuscula Philolichenum* 6: 149-156.
- Hashimoto A, Matsumura M, Hirayama K, Yonezawa H, Tanaka K (2016) Taxonomy and phylogeny of *Cryptocoryneum* (Pleosporales, Dothideomycetes). *Mycol Prog* 15:45

- Hashimoto A, Sato G, Matsuda T, Hirayama K, Hatakeyama S, Harada Y, Shirouzu T, Tanaka K (2015a) Molecular taxonomy of *Dinemasporium* and its allied genera. *Mycoscience* 56:86–101
- Hashimoto A, Sato G, Matsuda T, Matsumura M, Hatakeyama S, Harada Y, Ikeda H, Tanaka K (2015b) Taxonomic revision of *Pseudolachnea* and *Pseudolachnella* and establishment of *Neopseudolachnella* and *Pseudodinemasporium* gen. nov. *Mycologia* 107:383–408
- Hatakeyama S, Tanaka K, Harada Y (2005) Bambusicolous fungi in Japan (5): three species of *Tetraploa*. *Mycoscience* 46:196–200
- Hauck, M. and Wirth, V., 2010. Preference of lichens for shady habitats is correlated with intolerance to high nitrogen levels. *The Lichenologist*, 42(04), pp.475-484.
- Hauck, M., Jürgens, S.R., Huneck, S. and Leuschner, C., 2009. High acidity tolerance in lichens with fumarprotocetraric, perlatolic or thamnolic acids is correlated with low pK_{a1} values of these lichen substances. *Environmental pollution*, 157(10), pp.2776-2780.
- Hauck, M., Tønsberg, T., Mayrhofer, H. and Breuss, O., 2013. Lichen-forming and lichenicolous fungi new to Kazakhstan. *Herzogia*, 26(1), pp.103-116.
- Hauck, M., Tønsberg, T., Mayrhofer, H., de Bruyn, U., Enkhtuya, O. and Javkhlan, S., 2013. New records of lichen species from western Mongolia. *Folia Cryptogamica Estonica*, 50, pp.13-22.
- Hausner, G., Reid, J. and Klassen, G.R. 1993 On the subdivision of *Ceratocystis* s.l., based on partial ribosomal DNA sequences. *Can. J. Bot.* 71, 52-63.
- Hawksworth D.L., Crous P.W., Redhead S.A., Reynolds D.R., Samson R.A., Seifert K.A., Taylor J.W., Wingfield M.J., Abaci O., Aime C., Asan A., Bai F.Y., de Beer Z.W., Begerow D., Berikten D., Boekhout T., Buchanan P.K., Burgess T., Buzina W., Cai L., Cannon P.F., Crane J.L., Damm U., Daniel H.M., van Diepeningen A.D., Druzhinina I., Dyer P.S., Eberhardt U., Fell J.W., Frisvad J.C., Geiser D.M., Geml J., Glienke C., Gräfenhan T., Groenewald J.Z., Groenewald M., de Gruyter J., Guého-Kellermann E., Guo L.D., Hibbett D.S., Hong S.B., de Hoog G.S., Houbraken J., Huhndorf S.M., Hyde K.D., Ismail A., Johnston P.R., Kadaifciler D.G., Kirk P.M., Kõljalg U., Kurtzman C.P., Lagneau P.E., Lévesque C.A., Liu X., Lombard L., Meyer W., Miller A., Minter D.W., Najafzadeh M.J., Norvell L., Ozerskaya S.M., Oziç R., Pennycook S.R., Peterson S.W., Pettersson O.V., Quaedvlieg W., Robert V.A., Ruibal C., Schnürer J., Schroers H.J., Shivas R., Slippers B., Spierenburg H., Takashima M., Taşkın E., Thines M., Thrane U., Uztan A.H., van Raak M., Varga J., Vasco A., Verkley G., Videira S.I., de Vries R.P., Weir B.S., Yilmaz N., Yurkov A., Zhang N. 2011. The Amsterdam declaration on fungal nomenclature. *IMA Fungus* 2:105–112
- Hawksworth DL (2016) ["2015"] A synopsis of the tropical pleomorphic lichenicolous genus *Koordersiella* (syn. *Hansfordiellopsis*) under a unified nomenclature. *Journal of Fungal Research* 13: 227–232.
- Hawksworth DL, Aguirre-Hudson B, Ainsworth AM. *Sphinctrina tigillaris*, an overlooked species of *Chaenothecopsis* growing on *Perenniporia meridionalis*, a polypore new to the UK. *The Lichenologist*. 2014 Nov 1;46(06):729-35.
- Hawksworth DL, Dyko BJ (1979) *Lichenodiplis* and *Vouauxiomyces*: two new genera of lichenicolous Coelomycetes. *Lichenologist* 11(1):51–61
- Hawksworth DL, Etayo J (2011) *Calongea*, *Calongia*, and *Calongeomyces* nom. nov. *Lichenologist* 43: 275-276.
- Hawksworth DL, Millanes AM, Wedin M. *Roselliniella* revealed as an overlooked genus of Hypocreales, with the description of a second species on parmelioid lichens. *Persoonia-Molecular Phylogeny and Evolution of Fungi*. 2010 Jun 18;24(1):12-7.

- Hawksworth DL, Santesson R, Tibell L (2011) *Racoleus*, a new genus of sterile filamentous lichen-forming fungi from the tropics, with observations on the nomenclature and typification of *Cystocoleus* and *Racodium*. *IMA Fungus* 2: 71–79.
- Hawksworth DL, van Geel B, Wiltshire PWJ (2016) The enigma of the *Diporothea* palynomorph. *Review of Palaeobotany and Palynology* 235: 94–98.
- Hawksworth, D.L. & Sowter, F.A. (1969). Leicestershire and Rutland lichens, 1950–1969. *Transactions of the Leicester Literary and Philosophical Society* 63: 50–61.
- Hawksworth, D.L. 1977. Three new genera of lichenicolous fungi. *Botanical Journal of the Linnean Society*. 75(2):195-209.
- Hawksworth, D.L., Divakar, P.K., Crespo, A. and Teuvo, A.H.T.I., 2011. The checklist of parmelioid and similar lichens in Europe and some adjacent territories: additions and corrections. *The Lichenologist*, 43(06), pp.639-645.
- Hawksworth, D.L., Tamarit, V.A. and Coppins, B.J., 2008. *Artificial Keys to the Lichenicolous Fungi of Great Britain, Ireland, the Channel Islands, Iberian Peninsula and Canary Islands*. Authors.
- Hawksworth, D.L.; Etayo, J.A. 2011. *Calongea*, *Calongia*, and *Calongeomyces* nom. nov. *The Lichenologist*. 43(3):275-276.
- Hayashi, N. and Fukuta, Y., 2009. Proposal for a new international system of differentiating races of blast (*Pyricularia oryzae* Cavara) by using LTH monogenic lines in rice (*Oryza sativa* L.). *JIRCAS Working report*, 63, pp.11-15.
- Healy RA, Bonito G, Guevara G. The truffle genus *Pachyphloeus* in the US and Mexico: phylogenetic analysis and a new species. *Mycotaxon*. 2009 Jan 1;107(1):61-71.
- Healy RA, Bonito G, Trappe JM. " *Calongea*", a new genus of truffles in the Pezizaceae (Pezizales). In *Anales del Jardín Botánico de Madrid* 2009 (Vol. 66, No. 1, pp. 25-32). *Real Jardín Botánico*.
- Healy, R.; Hobart, C.; Tocci, G.L.G.; Conde, I.P.; Smith, M.E. 2015. Fun with the discomycetes: revisiting collections of Korf's anamorphic Pezizales and Thaxter's New England truffles leads to a connection between forms and the description of two new truffle species: *Pachyphloides pfisteri* and *P. nemoralis*. *Ascomycete.org*. 7(6):357-366
- Healy,R.A., Smith,M.E., Bonito,G.M., Pfister,D.H., Ge,Z.W., Guevara,G.G., Williams,G., Stafford,K., Kumar,L., Lee,T., Hobart,C., Trappe,J., Vilgalys,R. and McLaughlin,D.J. 2013 High diversity and widespread occurrence of mitotic spore mats in ectomycorrhizal Pezizales. *Mol. Ecol*. 22 (6), 1717-1732.
- Hedayati, M.T., Arabzadehmoghadam, A. and Hajheydari, Z., 2009. Specific IgE against *Alternaria alternata* in atopic dermatitis and asthma patients. *Eur Rev Med Pharmacol Sci*, 13(3), pp.187-191.
- Heininger, C. and Spribille, T., 2009. The sorediate species of *Xylographa* in Austria (Baeomycetales, lichenized Ascomycetes). *Herzogia*, 22, pp.129-134.
- Helms G, Friedl T, Rambold G (2003) Phylogenetic relationships of the Physciaceae inferred from rDNA sequence data and selected phenotypic characters. *Mycologia* 95(6):1078-1099.
- Heluta VP, Takamatsu S, Harada M, Voytyuk S (2010). Molecular phylogeny and taxonomy of Eurasian *Neoerysiphe* species infecting Asteraceae and Geranium. *Persoonia* 24: 81–92.
- Hembrom ME, Parihar A, Das K. A new species of *Poronia* from India. *Current Reserch in Enviromnment and Applied Mycology*. 2013;3(2):182-5.
- Hengstmengel, J., 2009. Notes on *Hymenoscyphus*—3: On the nomenclature of *Hymenoscyphus subcarneus* (Ascomycota, Helotiales). *Mycotaxon*, 107(1), pp.267-276.

- Henk, D.A., Weir, A. and Blackwell, M. 2003 *Laboulbeniopsis termitarius*, an ectoparasite of termites newly recognized as a member of the Laboulbeniomycetes. *Mycologia* 95 (4), 561-564
- Hennebert, G.L. 1962. *Wardomyces* and *Asteromyces*. *Canadian Journal of Botany*. 40(9):1203-1216
- Heredia G, Arias-Mota RM, Castañeda-Ruiz RF, Gamboa-Angulo M. New species of *Hughesinia* and *Stachybotryna* and new records of anamorphic fungi from the Yucatan Peninsula, Mexico. *Mycological progress*. 2012 Nov 1;11(4):927-35.
- Heredia G., Gamboa-Angulo M., Arias RM., Castañeda Ruiz RF. 2015. Two new species of *Spadicoides* and *Sporidesmiella* from Yucatán, Mexico. *Mycotaxon*. 130(2):511-516
- Hernández Gutiérrez, A. 2013. New or rare fungi from eastern Amazonia. 1. *Circinoconiopsis amazonica* gen. and sp. nov. *Mycotaxon*. 123:107-111
- Hernandez, R.R. and Knudsen, K., 2012. Late-successional biological soil crusts in a biodiversity hotspot: an example of congruency in species richness. *Biodiversity and Conservation*, 21(4), pp.1015-1031.
- Hernández-Gutiérrez, A.; Sutton, B.C. 1997. *Imimyces* and *Linkosia*, two new genera segregated from *Sporidesmium* sensu lato, and redescription of *Polydesmus*. *Mycological Research*. 101(2):201-209.
- Hernández-Restrepo M, Castañeda-Ruiz RF, Gené J, Silvera-Simón C, Cano J, Guarro J. Two new species of *Solicorynespora* from Spain. *Mycological progress*. 2014 Feb 1;13(1):157-64.
- Hernández-Restrepo M, Groenewald JZ, Crous PW. 2015. *Neocordana* gen. nov., the causal organism of *Cordana* leaf spot of banana. *Phytotaxa* 205: 229–238.
- Hernández-Restrepo M, Mena-Portales J, Gené J, Cano J, Guarro J. New *Bactrodesmiastrum* and *Bactrodesmium* from decaying wood in Spain. *Mycologia*. 2013;105(1):172-80.
- Hernández-Restrepo M, Schumacher RK, Wingfield MJ, Ahmad I, Cai L, Duong TA, Edwards J, Gené J, Groenewald JZ, Jabeen S, Khalid AN. et al. *Fungal Systematics and Evolution: FUSE 2*. *Sydowia*. 2016 Sep 30;68:193-230.
- Hernández-Restrepo, M., Gené, J., Castañeda-Ruiz, R.F., Kirk, P.M. and Guarro, J., 2014. A new species of *Corynesporopsis* from Spain. *Mycotaxon*, 127(1), pp.155-160.
- Hernández-Restrepo, M.; Groenewald, J.Z.; Crous P.W. 2016. Taxonomic and phylogenetic re-evaluation of *Microdochium*, *Monographella* and *Idriella*. *Persoonia*. 36:57-82
- Herrera CS, Rossman AY, Samuels GJ, Lechat C, Chaverri P. Revision of the genus *Corallomycetella* with *Corallonectria* gen. nov. for *C. jatrophae* (Nectriaceae, Hypocreales). *Mycosystema*. 2013 Jun 12;32(3):518-44.
- Herrera-Campos, M., Pérez-Pérez, R.E. and Nash III, T.H., 2016. *Lichens of Mexico*.
- Hertel, H. (1975). Ein vorläufiger Bestimmungsschlüssel für die kryptothallinen, schwarzfruchtigen, saxicolen Arten der Sammelgattung *Lecidea* (Lichenes) in der Holarktis. *Decheniana* 127: 37–78.
- Hertel, H. 1984. Über saxicole, lecideoide Flechten der Subantarktis. *Nova Hedwigia Beih* 79:399-499
- Hertel, H., 2014. A contribution to the family *Lecideaceae* s. lat. (Lecanoromycetidae inc. sed., lichenized Ascomycota) in the southern subpolar region; including eight new species and some revised generic circumscriptions. *The Lichenologist*, 46(03), pp.389-412.
- Hesami, S., Khodaparast, S.A. and Zare, R., 2011. New reports on *Cercospora* and *Cercospora*-like fungi from Guilan Province, Iran. *Iranian Journal of Plant Pathology*, 47(4).
- Hess HE, Müll. E (1951) In: *Berichte der Schweizerischen Botanischen Gesellschaft* 61:18

- Hestmark, G., 2009. New observations and records for Umbilicaria (Umbilicariaceae) in Bolivia. *The Bryologist*, 112(4), pp.833-838.
- Hestmark, G., 2010. Typification of the Andean taxa of Umbilicaria described by William Nylander. *Mycotaxon*, 111, p.51.
- Hestmark, G., 2014. Lectotypification of the name Umbilicaria nylanderiana (Umbilicariaceae). *Taxon*, 63(4), pp.914-917.
- Hestmark, G., 2016. The lichen genus Umbilicaria in Ecuador. *Nordic Journal of Botany*, 34(3), pp.257-268.
- Hestmark, G., Lendemer, J., Lumbsch, H.T., Schull, M., Schoch, C.L., Serusiaux, E., Maddison, D.R., Arnold, E., Lutzoni, F. and Stenroos, S. 2014. A multigene phylogenetic synthesis for the class Lecanoromycetes Ascomycota): 1307 fungi representing 1139 infrageneric taxa, 317 genera and 66 families. *Mol. Phylogenet. Evol.* 79:132-68
- Hestmark, G., Miadlikovska, J., Kauff, F., Fraker, E., Molnar, K. and Lutzoni, F.M. 2010. Single origin and subsequent diversification of Central Andean endemic Umbilicaria species. *Mycologia* 103(1):45-56
- Heuchert B, Sancho LG, Braun U, Hawksworth DL. Bicoloromyces kyffinensis: a new genus and species of lichen-inhabiting conidial fungi from 83° 46'S. *Antarctic Science*. 2015 Oct 1;27(05):421-8.
- Heuchert, B. and Braun, U., 2014. Two new lichen-associated Trimmatostroma species. *Herzogia*, 27(2), pp.227-236.
- Heuchert, B., Zhurbenko, M.P. & Braun, U. (2014): Reassessment of the lichenicolous hyphomycete genus *Talpapellis*. *Herzogia* 27: 83-92.
- Hibbett, D.S. 2007. After the gold rush, or before the flood? Evolutionary morphology of mushroomforming fungi (Agaricomycetes) in the early 21st century. *Mycological Research* 111: 1001-1018.
- Hidayat, I.; Meeboon, J.; To-anun, C. 2007. Anthostomella and Fasciatispora species (Xylariaceae) from palms including F. ujungkulonensis sp. nov. *Mycotaxon*. 102:347-354
- Higgins NF, Connan S, Stengel DB. Factors influencing the distribution of coastal lichens *Hydropunctaria maura* and *Wahlenbergiella mucosa*. *Marine Ecology*. 2015 Dec 1;36(4):1400-14.
- Hill, D.J., Jørgensen, P.M. and Aptroot, A., 2011. *Ramalodium fecundissimum* Henssen discovered in New Guinea. *The Lichenologist*, 43(02), pp.175-177.
- Himmelbrant, D., Stepanchikova, I., Motiejūnaitė, J., Vondrak, J., Tagirdzhanova, G., Gagarina, L. and Kuznetsova, E., 2015. New records of lichens and allied fungi from the Leningrad Region, Russia. VI. *Folia Cryptogamica Estonica*, 52, pp.21-28.
- Himmelbrant, D.E., Motiejūnaitė, J., Pykälä, J., Schiefelbein, U. and Stepanchikova, I.S., 2013. New records of lichens and allied fungi from the Leningrad Region, Russia. IV. *Folia Cryptogamica Estonica*, 50, pp.23-31.
- Himmelbrant, D.E., Motiejūnaitė, J., Stepanchikova, I.S. and Tagirdzhanova, G.M., 2014. New records of lichens and allied fungi from the Leningrad Region, Russia. V. *Folia Cryptogamica Estonica*, 51, pp.49-55.
- Himmelbrant, D.E., Stepanchikova, I.S., Motiejūnaitė, J., Gagarina, L.V. and Dyomina, A.V., 2016. New records of lichens and allied fungi from the Leningrad Region, Russia. VII. *Folia Cryptogamica Estonica*, 53, pp.25-34.
- Hipolito, E., Faria, E., Alves, A.F., De Hoog, G.S., Anjos, J., Gonçalves, T., Morais, P.V. and Estevão, H., 2009. *Alternaria infectoria* brain abscess in a child with chronic granulomatous disease. *European journal of clinical microbiology & infectious diseases*, 28(4), pp.377-380.

- Hirata T, Cunnington JH, Paksiri K, Limkaisang S, Shishkoff N, Grigaliūnaitė B, Sato Y, Takamatsu S (2000). Evolutionary analysis of subsection Magnicellulatae of Podosphaera section Sphaerotheca (Erysiphales) based on the rDNA internal transcribed spacer sequences with special reference to host plants. *Canadian Journal of Botany* 78: 1521–1530.
- Hirayama K, Tanaka K (2011) Taxonomic revision of *Lophiostoma* and *Lophiotrema* based on reevaluation of morphological characters and molecular analyses. *Mycoscience* 52:401–412
- Hirayama K, Tanaka K (2011) Taxonomic revision of *Lophiostoma* and *Lophiotrema* based on reevaluation of morphological characters and molecular analyses. *Mycoscience* 52:401–412
- Hirayama K, Tanaka K, Raja HA, Miller AN, Shearer CA (2010) A molecular phylogenetic assessment of *Massarina ingoldiana* sensu lato. *Mycologia* 102 (3):729-746. doi:10.3852/09-230
- Hirooka Y, Rossman AY, Chaverri P (2011). A morphological and phylogenetic revision of the *Nectria cinnabarina* complex. *Studies in Mycology* 68: 35–56.
- Hirooka Y, Rossman AY, Samuels GJ, et al. (2012). A monograph of *Allantonectria*, *Nectria*, and *Pleonectria* (Nectriaceae, Hypocreales, Ascomycota) and their pycnidial, sporodochial, and synnematosous anamorphs. *Studies in Mycology* 71: 1–210.
- Hirooka Y, Tanney JB, Nguyen HD, Seifert KA. Xerotolerant fungi in house dust: taxonomy of *Spiromastix*, *Pseudospiromastix* and *Sigleria* gen. nov. in *Spiromastigaceae* (Onygenales, Eurotiomycetes). *Mycologia*. 2016 Jan 1;108(1):135-56.
- HIROOKA, Y.; KAWARADANI, M.; SATO, T. (2014). Description of *Gibellulopsis chrysanthemi* sp. nov. from leaves of garland chrysanthemum. *Mycol. Progr.* 13(1): 13-19.
- Hirooka, Y.; Kobayashi, T.; Ono, T.; Rossman, A.Y.; Chaverri, P. (2010). *Verrucostoma*, a new genus in the Bionectriaceae from the Bonin Islands, Japan. *Mycologia* 102(2): 418-429.
- Hirose S, Tanda S, Kiss L, Grigaliūnaitė B, Havrylenko M, Takamatsu S (2005). Molecular phylogeny and evolution of the maple powdery mildew (*Sawadaea*, Erysiphaceae) inferred from nuclear rDNA sequences. *Mycological Research* 109: 912–922.
- Hiroshi H, Yamamoto Y 2007 *Mazaediothecium mohamedii* (Lichenized Ascomycota, Pyrenulaceae), a New Pyrenocarpous Lichen from Peninsular Malaysia. *Lichenology* vol. 6, no. 2 : 135-139.
- Hiruma J, Okubo M, Kano R, Kumagawa M, Hiruma M, Hasegawa A, Kamata H, Tsuboi R. Mating Type Gene (MAT) and Itraconazole Susceptibility of *Trichophyton tonsurans* Strains Isolated in Japan. *Mycopathologia*. 2016 Jun 1;181(5-6):441-4.
- Hisayoshi, T., Shinomura, M., Yokokawa, K., Kuze, I., Konishi, A., Kawaji, K., Kodama, E.N., Hata, K., Takahashi, S., Nirasawa, S. and Sakuda, S., 2015. Inhibition of the DNA polymerase and RNase H activities of HIV-1 reverse transcriptase and HIV-1 replication by *Brasenia schreberi* (Junsai) and *Petasites japonicus* (Fuki) components. *Journal of natural medicines*, 69(3), pp.432-440.
- Hladki, A.I.; Romero, A.I. (2009). Taxonomic and nomenclatural aspects of *Hypoxylon* taxa from southern South America proposed by Spegazzini. *Mycologia* 101(5): 733-744.
- Hodkinson, B.P. and Lendemer, J.C., 2011. Molecular analyses reveal semi-cryptic species in *Xanthoparmelia tasmanica*. *Bibliotheca Lichenologica*, 106, pp.108-119.
- Hodkinson, B.P., 2010. A first assessment of lichen diversity for one of North America's' biodiversity hotspots' in the southern Appalachians of Virginia. *Castanea*, 75(1), pp.126-133.

- Hoffmann N, Hafellner J (2000) Eine Revision der lichenicolen Arten der Sammelgattungen Guignardia und Physalospora (Ascomycotina). *Bibliotheca Lichenologica* 77:1-190.
- Hofmann TA (2009) Plant parasitic Asterinaceae and Microthyriaceae from the Neotropics (Panama). Johann Wolfgang Goethe-University, Germany
- Hofton, T.H.; Baral, H.-O.; Hombler, K. (2009). The ascomycete *Proliferodiscus tricolor* (Sowerby: Fr.) Baral comb. nov., recollected in Scandinavia after 60 years. *Agarica* 28: 33-42
- Högnabba F, Stenroos S, Thell A (2009) Phylogenetic relationship and evolution of photobiont associations in the Lobariaceae (Peltigerales, Lecanoromycetes, Ascomycota). *Bibl Lichenol* 100:157-187.
- Högnabba F, Stenroos S, Thell A. Evolution of cyanobacterial symbioses in Ascomycota. Biodiversity and Ecology of lichens. *Liber Amicorum Harrie Sipman*. *Bibliotheca Lichenologica*. 2009;99:163-84.
- Högnabba, F., Raquel, P.B., Nordin, A., Myllys, L. and Stenroos, S., 2014. Phylogenetic position of the crustose *Stereocaulon* species. *The Lichenologist*, 46(01), pp.103-114.
- Höhnelt, F. von. 1917. System der Diaportheen. *Berichte der Deutschen Botanischen Gesellschaft*, 35:631-638.
- Holec J, Kříž M. Current occurrence of *Pseudoplectania melaena* (Fungi, Ascomycota) in the Boubínský Prales National Nature Reserve. *Silva Gabreta*. 2013;19(2):73-80.
- HOLEC J, LANDA J, KŘÍŽ M, DANEŠ P. Index to fungal genera and species published in Czech Mycology, formerly Česká Mykologie, Volumes 1–64. *Czech Mycology*. 2013;62(2):103-384.
- Holger TH, Nascimbene J. Contributions toward a new taxonomy of Central European freshwater species of the lichen genus *Thelidium* (Verrucariales, Ascomycota). *The Lichenologist*. 2008 Nov 1;40(06):499-521.
- Holt, E.A., Zemp, N., Van Orman, M., Perry, J., Williams, B.T. and Ogden, M., 2015. Macrolichen substrate selection: Patterns among aspen, non-aspen hardwood, and conifer-dominated forests in the Wasatch Mountains, Utah. *The Bryologist*, 118(4), pp.357-366.
- Holubová-Jechová, V. & Borowska, A. 1981. *Hyphodiscosia europaea*, a new species of lignicolous Hyphomycetes. *Ceská Mykologie*. 35(1):29-31.
- Holubová-Jechová, V.; Mercado Sierra, A. 1982. Some new or interesting microfungi from Cuba. *Mycotaxon*. 14(1):309-315.
- Honda K., Kamiyama M., Hirayama K., Me;`nik V.A. 2012. Taxonomic revision of pleomassariaceous fungi based on phylogenetic analyses of SSU and LSU nrDNA. The 55th Annual Meeting of the Mycological Society of Japan: C22 (https://www.jstage.jst.go.jp/article/msj7abst/55/0/55_0_91/_article/-char/ja/)
- Hong, C.F., Hsieh, H.Y., Chen, C.T. and Huang, H.C., 2013. Development of a Semiselective Medium for Detection of *Nalanthamala psidii*, Causal Agent of Wilt of Guava. *Plant Disease*, 97(9), pp.1132-1136.
- Hongsanan S, Bahkali AH, McKenzie EHC, Chukeatirote E, Hyde KD (2014a) Trichopeltinaceae (Dothideomycetes), an earlier name for Brefeldiellaceae, with a new species of *Trichopeltina*. *Phytotaxa* 176(1):270–282
- Hongsanan S, Chomnunti P, Crous PW, Chukeatirote E, Hyde KD. Introducing *Chaetothyriothecium*, a new genus of Microthyriales. *Phytotaxa*. 2014 Feb 24;161(2):157-64.
- Hongsanan S, Hyde KD, Bahkali AH, Camporesi E, Chomnunti P, Ekanayaka H, Gomes AA, Hofstetter V, Jones EG, Pinho DB, Pereira OL. Fungal biodiversity profiles 11–20. *Cryptogamie, Mycologie*. 2015 Oct 15;36(3):355-80.

- Hongsanan S, Li YM, Liu JK, Hofmann T, Piepenbring M, Bhat JD, Boonmee S, Doilom M, Singtripop C, Tian Q, Mapook A, Zeng XY, Bahkali AH, Xu JC, Mortimer PE, Wu HX, Yang JB, Hyde KD (2014) Revision of genera in Asterinales. *Fungal diversity* 68 (1):1-68
- Hongsanan S, Tian Q, Bahkali AH, Yang JB, McKenzie EH, Chomnunti P, Hyde KD. Zeloasperisporiales ord. nov., and two new species of Zeloasperisporium. *Cryptogamie, Mycologie*. 2015 Oct 21;36(3):301-17.
- Hoog, G.S. de. 1978. Notes on some fungicolous hyphomycetes and their relatives. *Persoonia*. 10(1):33-81
- Hoog, G.S. de. 1985. Taxonomy of the Dactylaria complex. IV. *Dactylaria*, *Neta*, *Subulispora* and *Scolecobasidium*. *Studies in Mycology* 26: 1-60.
- Horsfield, A., Wicks, T., Davies, K., Wilson, D. and Paton, S., 2010. Effect of fungicide use strategies on the control of early blight (*Alternaria solani*) and potato yield. *Australasian Plant Pathology*, 39(4), pp.368-375.
- Hosagoudar V, Divya B. 2013 Additions To Black Mildews. *IJBPAS* 2(2): 430-438
- Hosagoudar VB, Chandrababha A (2009) Bramhamyces, a new anomorphic genus from India. *Indian Journal of Science and Technology* 2 (6):17-17
- Hosagoudar VB, Sabeena A, Riju M (2010) Bheemamyces, a new genus of the family Asterinaceae (Ascomycetes). *Journal of Threatened Taxa* 2 (12):1323-1324
- Hosagoudar, V.B. & G.R. Archana (2010). A new species of the genus Ectendomeliola (Meliolaceae) from Kerala, India. *Journal of Threatened Taxa*2(8): 1092-1095.
- Hosagoudar, V.B. (2012). Asterinales of India.
- Hosagoudar, V.B. 2004. Studies on foliicolous fungi. XVI. Clasterosporium flagellatum and its teleomorph. *Zoos' Print Journal*. 19(4):1437-1438
- Hosagoudar, V.B. and Riju, M.C., 2009. Studies on foliicolous fungi-XXXI: the genus Schiffnerula and Sarcinella. *Indian Journal of Science and Technology*, 2(6), pp.7-8.
- Hosagoudar, V.B. and Riju, M.C., 2011. Sarcinella tamarindi sp. nov. from Kerala, India. *Mycosphere*, 2, pp.157-160.
- Hosagoudar, V.B., Sabeena, A. and Riju, M.C., 2010. Sarcinella limoniae sp. nov. from Kerala, India. *Indian Phytopathology*, 63(2), pp.236-237.
- Hosagoudar, V.B., Thimmaiah, C.J. and Jayashankara, M., 2011a. Schiffnerulaceous fungi of Kodagu, Karnataka, India. *Journal of Threatened Taxa*, 3(12), pp.2268-2271.
- Hosagoudar, V.B., Thomas, J. and Agarwal, D.K., 2011b. Two new schiffnerulaceous fungi from Kerala, India. *Journal of Yeast and Fungal Research*, 2(5), pp.85-87.
- Hosagoudar, V.B.; Archana, G.R. 2010. Meliolaceae of Kerala, India - XXXI. *Journal of Threatened Taxa*. 2(5):889-891
- Hosagoudar, V.B.; Archana, G.R.; Dan, M. (2009). Maheshwaramyces, a new genus of the family Lembosiaceae. *Indian Journal of Science and Technology* 2(6): 12-13.
- Hosagoudar, V.B.; Chandrababha, A. (2009). Two new Prillieuxina species from Kerala, India. *Indian Journal of Science and Technology* 2(6): 18: Indian Society for Education and Environment
- Hosagoudar, V.B.; Harish, M. (2010). Vishnumyces, a new genus of the family Asterinaceae. *Indian Phytopath.* 63(1): 85-86.
- Hosagoudar, V.B.; Mathew, S.P.; Babu, D. 2014. Foliicolous fungi of Andaman Islands. *Journal of Threatened Taxa*. 6(2):5447-5463
- Hosagoudar, V.B.; Sabeena, A. 2010. Five new Meliolaceae members from Kerala, India. *Bioscience Discovery*. 2(1):117-121

- Hosoe T, Gloer JB, Raja H, Shearer CA. Radicinol analogs from the freshwater aquatic fungus *Xylomyces chlamydosporus*. Proceedings of the Japanese Association of Mycotoxicology (Japan). 2010.
- Hosoya T, Han JG, Sung GH, Hirayama Y, Tanaka K, Hosaka K, Tanaka I, Shin HD. Molecular phylogenetic assessment of the genus *Hyphodiscus* with description of *Hyphodiscus hyaloscyphoides* sp. nov. Mycological progress. 2011 May 1;10(2):239-48.
- Hosoya, T.; Han, J.G.; Sung, G.H.; Hirayama, Y.; Tanaka, K.; Hosaka, K.; Tanaka, I.; Shin, H.D. 2011. Molecular phylogenetic assessment of the genus *Hyphodiscus* with a note of *Hyphodiscus hyaloscyphoides* sp. nov. Mycological Progress. 10(2):239-248
- Hosoya, T.; Sasagawa, R.; Hosaka, K.; Gi-Ho, S. [sic, = Sung, G.H.]; Hirayama, Y.; Yamaguchi, K.; Toyama, K.; Kakishima, M. (2010). Molecular phylogenetic studies of *Lachnum* and its allies based on the Japanese material. Mycoscience 51(3): 170-181.
- Hou, C.L.; Piepenbring, M. (2009). New species and new records of Rhytismatales from Panama. Mycologia 101(4): 565-572.
- Hou, C.L.; Piepenbring, M. (2009). Two new Rhytismatales on *Rhododendron* from China. Mycologia 101(3): 383-389.
- Hou, C.L.; Trampe, T.; Piepenbring, M. (2010). A new species of *Rhytisma* causes tar spot on *Comarostaphylis arbutoides* (Ericaceae) in Panama. Mycopathologia 169(3): 225-229
- Hou, X.M., Xu, R.F., Gu, Y.C., Wang, C.Y. and Shao, C.L., 2015. Biological and chemical diversity of coral-derived microorganisms. Current medicinal chemistry, 22(32), pp.3707-3762.
- Houbraken J, Samson R. 2011. Phylogeny of *Penicillium* and segregation of Trichocomaceae into three families. Studies in Mycology 70:1–51.
- Houbraken, J., Giraud, S., Meijer, M., Bertout, S., Frisvad, J.C., Meis, J.F., Bouchara, J.P. and Samson, R.A., 2013. Taxonomy and antifungal susceptibility of clinically important *Rasamsonia* species. Journal of clinical microbiology, 51(1), pp.22-30.
- Houbraken, J., Spierenburg, H. and Frisvad, J.C., 2012. *Rasamsonia*, a new genus comprising thermotolerant and thermophilic *Talaromyces* and *Geosmithia* species. Antonie van Leeuwenhoek, 101(2), pp.403-421.
- Hoyt JR, Cheng TL, Langwig KE, Hee MM, Frick WF, Kilpatrick AM. Bacteria isolated from bats inhibit the growth of *Pseudogymnoascus destructans*, the causative agent of white-nose syndrome. PLoS One. 2015 Apr 8;10(4):e0121329.
- Hsieh HM, Lin CR, Fang MJ, Rogers JD, Fournier J, Lechat C, Ju YM. Phylogenetic status of *Xylaria* subgenus *Pseudoxylaria* among taxa of the subfamily Xylarioideae (Xylariaceae) and phylogeny of the taxa involved in the subfamily. Molecular Phylogenetics and Evolution. 2010 Mar 31;54(3):957-69.
- Hsieh, H.M.; Ju, Y.M.; Hsueh, P.R.; Lin, H.Y.; Hu, F.R.; Chen, W.L. (2009). Fungal keratitis caused by a new filamentous hyphomycete *Sagenomella keratitidis*. Bot. Studies 50(3): 331-335
- Hsieh, H.M., Ju, Y.M. and Rogers, J.D. 2005 Molecular phylogeny of *Hypoxyton* and closely related genera Mycologia 97 (4), 844-865.
- <http://dx.doi.org/10.1007/s13225-016-0369-6>
- http://dx.doi.org/10.14601/Phytopathol_Mediterr-14976
- <http://www.ncbi.nlm.nih.gov/nuccore>

- Hu D, Cai L, Chen H, Bahkali AH, Hyde KD. Fungal diversity on submerged wood in a tropical stream and an artificial lake. *Biodiversity and Conservation*. 2010 Dec 1;19(13):3799-808.
- Hu DM, Cai L, Bahkali AH, Hyde KD. Two new freshwater species of Annulatascaceae from China. *Mycotaxon*. 2012 Sep 28;120(1):81-8.
- Hu DM, Cai L, Chen H, Bahkali AH, Hyde KD (2010) Four new freshwater fungi associated with submerged wood from Southwest Asia. *Sydowia* 62 (2):191-203
- Hu D-M, Cai L, Hyde KD (2012) Three new ascomycetes from freshwater in China. *Mycologia*:11-430
- Hu DM, Chen H, Cai L, Bahkali AH, Hyde KD. *Aquapeziza*: a new genus from freshwater and its morphological and phylogenetic relationships to Pezizaceae. *Mycologia*. 2012 Mar 1;104(2):540-6.
- Hu D-M, Liu F, Cai L (2013) Biodiversity of aquatic fungi in China. *Mycology* 4 (3):125-168
- Hu, D.M. 2011. Systematics of freshwater Sordariomycetes and anamorphic fungi & biodiversity of freshwater fungi referring to human disturbance. Beijing Forestry University PhD Dissertation..
- Hu, D.M.; Cai, L.; Chen, H.; Bahkali, A.H.; Hyde, K.D. (2010). Four new freshwater fungi associated with submerged wood from Southwest Asia. *Sydowia* 62(2): 191-203.
- Hu, J., Chen, C., Peever, T., Dang, H., Lawrence, C. and Mitchell, T., 2012. Genomic characterization of the conditionally dispensable chromosome in *Alternaria arborescens* provides evidence for horizontal gene transfer. *BMC genomics*, 13(1), p.1.
- [Hua H](#), [Luo H](#), [Bai Y](#), [Wang K](#), [Niu C](#), [Huang H](#), [Shi P](#), [Wang C](#), [Yang P](#), [Yao B](#) (2014) A thermostable glucoamylase from *Bispora* sp. MEY-1 with stability over a broad pH range and significant starch hydrolysis capacity. [PLoS One](#). 9(11):e113581. doi: 10.1371/journal.pone.0113581
- HuaJie, L., Zhen, C. and QingFeng, W., 2010. Differences in enrichment capability of Co, Cr, Pb, Cu among five Antarctic lichens. *Mycosystema*, 29(5), pp.719-725.
- Huang H, WANG M, ZHANG L, YUE HM, GONG WF, CAI L. *Pochonia cordycepsociata*, a new species associated with Chinese cordyceps in Tibet, China. *Phytotaxa*. 2015 May 25;208(4):278-86.
- Huang, C.H., Pan, J.H., Chen, B., Yu, M., Huang, H.B., Zhu, X., Lu, Y.J., She, Z.G. and Lin, Y.C., 2011. Three bianthraquinone derivatives from the mangrove endophytic fungus *Alternaria* sp. ZJ9-6B from the South China Sea. *Marine drugs*, 9(5), pp.832-843.
- Huang, M.R., 2010. Altitudinal patterns of Stereocaulon (lichenized Ascomycota) in China. *Acta Oecologica*, 36(2), pp.173-178.
- Huang, Y.T.; Chen, C.Y. 2014. *Leptographium globosum* sp. nov., a new species with globose conidia. *Mycological Progress*. 13:841-848
- Huang, Y., Busk, P.K., Herbst, F.A. and Lange, L. 2015 Genome and secretome analyses provide insights into keratin decomposition by novel proteases from the non-pathogenic fungus *Onygena corvina*. *Appl. Microbiol. Biotechnol.* 99 (22), 9635-9649
- Hubka V, Dobiasova S, Lyskova P, Mallatova N, Chlebkova J, Skorepova M, Kubatova A, Dobias R, Chudickova M, Kolarik M. *Auxarthron ostraviense* sp. nov., and *A. umbrinum* associated with non-dermatophytic onychomycosis. *Medical mycology*. 2013 Aug 1;51(6):614-24.
- Hubka V, Kolařík M, Kubátová A, Peterson SW. 2013. Taxonomic revision of *Eurotium* and transfer of species to *Aspergillus*. *Mycologia* 105:912–937.

- Hubka V, Nováková A, Kolařík M, Jurjević Ž, Peterson SW. 2015. Revision of *Aspergillus* section *Flavipedes*: seven new species and proposal of section *Jani* sect. nov. *Mycologia* 107:169–208.
- Hubka V, Nováková A, Peterson SW, Frisvad JC, Sklenář F, Matsuzawa T, Kubátová A, Kubátová A. 2016a. A reappraisal of *Aspergillus* section *Nidulantes* with descriptions of two new sterigmatocystin-producing species. *Plant Systematics and Evolution* 302:1267–1299.
- Hubka V, Nováková A, Samson RA, Houbraken J, Frisvad JC, Sklenář F, Varga J, Kolařík M. 2016b. *Aspergillus europaeus* sp. nov., a widely distributed soil-borne species related to *A. wentii* (section *Cremeri*). *Plant Systematics and Evolution* 302:641–650.
- Hubka V, Peterson SW, Frisvad JC, Yaguchi T, Kubátová A, Kolařík M. 2013b. *Aspergillus waksmanii* sp. nov. and *Aspergillus marvanovae* sp. nov., two closely related species in section *Fumigati*. *International Journal of Systematic and Evolutionary Microbiology* 63:783–789.
- Hubka, V., Réblová, M., Řehulka, J., Selbmann, L., Isola, D., de Hoog, G.S., Kolařík, & M. (2014). *Bradomyces* gen. nov. (Chaetothyriales, Trichomeriaceae), a new ascomycete genus accommodating poorly differentiated melanized fungi. *Antonie van Leeuwenhoek Journal of Microbiology* 106, 979-992.
- Hubka, V.; Cmokova, A.; Skorepova, M.; Mikula, P.; Kolarik, M. 2014. *Trichophyton onychocola* sp. nov. isolated from human nail. *Medical Mycology*. 52:285-292
- Hubka, V.; Dobiášová, S.; Dobiáš, R.; Kolařík, M. 2014. *Microsporum aenigmaticum* sp. nov. from *M. gypseum* complex, isolated as a cause of tinea corporis. *Medical Mycology*. 52(4):387-396
- Hue A (1891) *Lichenes exoticos a professore W. Nylander descriptos vel recognitos et in herbario musei Parisiense pro maxima parte asservatos in ordine systematico deposit.* *Nouv Arch du Muséum d'Hist Nat* 3 sér. 3:33-120.
- Hughes SJ, Atkinson TJ, Seifert KA. New Zealand fungi 37: two new species of the sooty mould genus *Metacapnodium* with dictyoseptate ascospores. *New Zealand Journal of Botany*. 2012 Dec 1;50(4):381-7.
- Hughes SJ, Kendrick WB (1965) New Zealand Fungi 4. *Zanclospora* gen. nov. *New Zealand Journal of Botany* 6:323–375
- Hughes SJ, Seifert KA. Taxonomic and nomenclatural notes on sooty mould names based on species mixtures: *Hormiscium handelii* and *Torula lechleriana*. *Mycoscience*. 2012 Jan 1;53(1):17-24.
- Hughes, S.J., 2007. *Heteroconium* and *Pirozynskiella* n. gen., with comments on conidium transeptation. *Mycologia*, 99(4), pp.628-638.
- Huhndorf S.M., Miller A.N. 2008. A new species of *Camarops* and phylogenetic analysis of related taxa in the Boliniaceae. *North American Fungi* 3(7): 231-239.
- Huhndorf S.M., Miller A.N., Fernandez F. A. (2004). Molecular systematics of the Sordariales: the order and the family Lasiosphaeriaceae redefined. *Mycologia*, 96(2), 2004, pp. 368–387.
- Huhndorf SM, Miller AN, Greif M, Samuels GJ. *Amplistroma* gen. nov. and its relation to *Wallrothiella*, two genera with globose ascospores and acrodontium-like anamorphs. *Mycologia*. 2009 Nov 1;101(6):904-19.
- Huhndorf, S.M.; Greif, M.; Mugambi, G.K.; Miller, A.N. (2008). Two new genera in the Magnaporthaceae, a new addition to *Ceratosphaeria* and two new species of *Lentomitella*. *Mycologia* 100(6): 940-955
- Huhndorf, S.M.; Miller, A.N. (2008). A new species of *Camarops* and phylogenetic analysis of related taxa in the Boliniaceae. *N. Amer. Fung.* 3(7): 231-239

- Huhndorf, S.M., Greif, M., Mugambi, G.K. and Miller, A.N. 2008 Two new genera in the Magnaporthaceae, a new addition to *Ceratosphaeria* and two new species of *Lentomitella*. *Mycologia* 100 (6), 940-955
- Huhndorf, S.M., Miller, A.N. and Fernandez, F.A. 2004 Molecular systematics of the Sordariales: the order and the family Lasiosphaeriaceae redefined. *Mycologia* 96 (2), 368-387.
- Huhtinen S.; Laukka, T.; Döbbeler, P.; Stenroos, S. (2010). Six novelties to European bryosymbiotic discomycetes. *Nova Hedwigia* 90(3-4): 413-431.
- Huhtinen, S.; Hawksworth, D.L.; Ihlen, P.G. (2008). Observations of two glassy-haired lichenicolous discomycetes. *Lichenologist* 40(6): 549-557.
- Hui F, Ren Y, Chen L, Li Y, Zhang L, Niu Q. Molecular Phylogenetic Analysis Reveals the New Genus *Hemisphaericaspora* of the Family Debaromycetaceae. *PloS one*. 2014 Jul 30;9(7):e103737.
- Hujšlová M, Kubátová A, Kostovčík M, Blanchette RA, de Beer ZW, Chudíčková M, Kolařík M (2014) Three new genera of fungi from extremely acidic soils. *Mycological Progress* 13:819–831
- Hujšlová, M., Kubátová, A., Kostovčík, M., & Kolařík, M. (2013). *Acidiella bohemica* gen. et sp. nov. and *Acidomyces* spp. (Teratosphaeriaceae), the indigenous inhabitants of extremely acidic soils in Europe. *Fungal Diversity*, 58, 33-45
- Humber RA1, Rocha LF, Inglis PW, Kipnis A, Luz C. 2013 Morphology and molecular taxonomy of *Evlachovaea*-like fungi, and the status of this unusual conidial genus. *Fungal Biol.* 2013 Jan;117(1):1-12.
- Hunter GC, Crous PW, Carnegie AJ, Burgess TI, Wingfield MJ. *Mycosphaerella* and *Teratosphaeria* diseases of Eucalyptus; easily confused and with serious consequences. *Fungal Diversity*. 2011 Sep 1;50(1):145.
- Hüseyin, E., Selçuk, F. & Churakov, B.P. 2014. A new species of *Berkleasium* from Ulyanovsk, Russia. *Mycosphere* 5(3), 462-466
- Hustad VP, Miller AN, Dentinger BT, Cannon PF. Generic circumscriptions in Geoglossomycetes. *Persoonia: Molecular Phylogeny and Evolution of Fungi*. 2013 Dec;31:101.
- Hustad, V.P. and Miller, A.N. 2011 Phylogenetic placement of four genera within the Leotiomyces. *N Am Fungi* 6 (9), 1-13
- Hustad, V.P. and Miller, A.N. 2015 *Maasoglossum*, a basal genus in Geoglossomycetes. *Mycoscience* 56, Issue 6, 572–579.
- Hwang, J., Zhao, Q., Yang, Z.L., Wang, Z. and Townsend, J.P. 2015 Solving the ecological puzzle of mycorrhizal associations using data from annotated collections and environmental samples – an example of saddle fungi. *Environ Microbiol Rep* 7 (4), 658-667
- Hyde K D, Jones E B G, Liu J-K, Ariyawansa H, Boehm E et al. (2013) Families of Dothideomycetes. *Fungal Diversity* 63: 1–313.
- Hyde KD (1996) Fungi from palms. XXIX. *Arecophila* gen. nov. (Amphisphaeriaceae, Ascomycota), with five new species and two new combinations. *Nova Hedwigia*. 63:81–100
- Hyde KD (1996). Fungi from palms. XXXII. *Arecomyces* gen. nov., with seven new species. *Sydowia*. 48:224–240
- Hyde KD, Hongsanan S, Jeewon R, Bhat DJ et al. (2016) Fungal diversity notes 367–490: taxonomic and phylogenetic contributions to fungal taxa. *Fungal Diversity* 80, 1–270.
- Hyde KD, Jones EBG (1987) Marine fungi from the Seychelles. VII. *Bathyascus grandisporus* sp. nov. from mangrove wood. *Bot Mar* 30:413–416

- Hyde KD, Jones EBG (1989) Marine fungi from Seychelles. VIII. *Rhizophila marina*, a new ascomycete from mangrove prop roots. *Mycotaxon* 34(2): 527-533.
- Hyde KD, Jones EBG, Liu JK, Ariyawansa H, Boehm E, Boonmee S, Braun U, Chomnunti P, Crous PW, Dai DQ, Diederich P, Dissanayake A, Doilom M, Doveri F, Hongsanan S, Jayawardena R, Lawrey JD, Li YM, Liu YX, Lucking R, Monkai J, Muggia L, Nelsen MP, Pang KL, Phookamsak R, Senanayake IC, Shearer CA, Suetrong S, Tanaka K, Thambugala KM, Wijayawardene NN, Wikee S, Wu HX, Zhang Y, Aguirre-Hudson B, Alias SA, Aptroot A, Bahkali AH, Bezerra JL, Bhat DJ, Camporesi E, Chukeatirote E, Gueidan C, Hawksworth DL, Hirayama K, De Hoog S, Kang JC, Knudsen K, Li WJ, Li XH, Liu ZY, Mapook A, McKenzie EHC, Miller AN, Mortimer PE, Phillips AJL, Raja HA, Scheuer C, Schumm F, Taylor JE, Tian Q, Tibpromma S, Wanasinghe DN, Wang Y, Xu JC, Yacharoen S, Yan JY, Zhang M (2013) Families of Dothideomycetes. *Fungal Divers* 63 (1):1-313. doi: 10.1007/S13225-013-0263-4
- Hyde KD, McKenzie EHC, KoKo TW (2011) Towards incorporating anamorphic fungi in a natural classification—checklist and notes for 2010. *Mycosphere* 2:1–88
- Hyde KD, Nilsson RH, Alias SA, Ariyawansa HA, Blair JE, Cai L, de Cock AWAM, Dissanayake AJ, Glockling SL, Goonasekara ID, Gorczak M, Hahn M, Jayawardena RS, van Kan JAL, Laurence MH, Lévesque CA, Li XH, Liu JK, Maharachchikumbura SSN, Manamgoda DS, Martin FN, McKenzie EHC, McTaggart AR, Mortimer PE, Nair PVR, Pawłowska J, Rintoul TL, Shivas RG, Spies CFJ, Summerell BA, Taylor PWJ, Terhem RB, Udayanga D, Vaghefi N, Walther G, Wilk M, Wrzosek M, Xu JC, Yan JY, Zhou N 2014. One stop shop: backbone trees for important phytopathogenic genera: I (2014) *Fungal Diversity* 67:21–125
- Hyde, K.D. 1995. Fungi from palms. XVI. *Cocoicola* gen. nov. *Nova Hedwigia*. 60(3-4):599-604
- Hyde, K.D. 1995. Tropical Australasian fungi. VII. New genera and species of ascomycetes. *Nova Hedwigia*. 61(1-2):119-140.
- Hyde, K.D. 1995. Two new interesting ascomycetes from Irian Jaya and Papua New Guinea. *Mycotaxon*. 55:275-282.
- Hyde, K.D., McKenzie, E.H.C. and KoKo, T.W., 2011. Towards incorporating anamorphic fungi in a natural classification—checklist and notes for 2010. *Mycosphere*, 2(1), pp.1-88.
- Hyde, K.D.; Cannon, P.F. (1999). Fungi Causing Tar Spots on Palms. *Mycol. Pap.* 175: 114 pp.
- Hyde, K.D.; Fröhlich, J.; Taylor, J.E. 1997. *Cocoicola livistoncola*, sp. nov., and notes on *Cocoicola cylindrospora* from palms. *Mycoscience*. 38(3):255-258.
- Hyde, K.D.; Goh, T.K. 1999. Fungi on submerged wood from the River Coln, England. *Mycological Research*. 103(12):1561-1574.
- Hyde, K.D.; Jones, E.B.G. (1989). Intertidal mangrove fungi from Brunei. *Lautospora gigantea* gen. et sp. nov., a new loculoascomycete from prop roots of *Rhizophora* spp.. *Bot. Mar.* 32(3): 479-482.
- Hyde, K.D.; Jones, E.B.G. 1992. Intertidal mangrove fungi: *Pedumispora* gen. nov. (Diaporthales). *Mycological Research*. 96:78-80
- Hyde, Kevin D. (1993). Tropical Australian freshwater fungi. VI. *Tiarosporella paludosa* and *Clohesyomyces aquaticus* gen. et sp. nov. (Coelomycetes). *Aust. Syst. Bot.* 6(2): 169-173.
- Hyde, Kevin D.; Sutton, B.C. (1992). *Nypaella frondicola* gen. et sp. nov., *Plectophomella nypae* sp. nov. and *Pleurophomopsis nypae* sp. nov. (Coelomycetes) from intertidal fronds of *Nypa fruticans*. *Mycol. Res.* 96(3): 210-214.

- I. Pérez-Vargas, J. Etayo & C. Hernández-Padrón. 2013. New species of lichenicolous fungi from the Canary Islands. *Phytotaxa*. 99(2):58-64.
- Iftikhar, S., Asad, S., Mujeeb-Kazi, A. and Ahmad, I., 2009. In vitro screening of synthetic hexaploid wheat lines against *Bipolaris sorokiniana* in Pakistan. *Pak. J. Bot*, 41(4), pp.1989-2001.
- Iftikhar, S., Asad, S., Munir, A., Sultan, A. and Ahmad, I., 2009. Hosts of *Bipolaris sorokiniana*, the major pathogen of spot blotch of wheat in Pakistan. *Pak. J. Bot*, 41(3), pp.1433-1436.
- Ihlen, P.G. & Ekman, S. (2002). Outline of phylogeny and character evolution in *Rhizocarpon* (Rhizocarpaceae, lichenized Ascomycota) based on nuclear ITS and mitochondrial SSU ribosomal DNA sequences. *Biological Journal of the Linnean Society* 77: 535-546.
- Illman, W.I.; White, G.P. 1985. A new *Morrisographium*-like species with appendaged conidia assigned to the genus *Conicomycetes*. *Canadian Journal of Botany*. 63(3):419-422.
- Imazaki, A., Tanaka, A., Harimoto, Y., Yamamoto, M., Akimitsu, K., Park, P. and Tsuge, T., 2010. Contribution of peroxisomes to secondary metabolism and pathogenicity in the fungal plant pathogen *Alternaria alternata*. *Eukaryotic cell*, 9(5), pp.682-694.
- Imed Sbissi, Mohamed Neffati Abdellatif Boudabous Claude Murat Maher Gtari 2010 Phylogenetic affiliation of the desert truffles *Picoa juniperi* and *Picoa lefebvrei*. *Antonie van Leeuwenhoek* 98, Issue 4, pp 429–436.
- Imoulan A, Wu HJ, Lu WL, Li Y, Li BB, Yang RH, Wang WJ, Wang XL, Kirk PM, Yao YJ. *Beauveria medogensis* sp. nov., a new fungus of the entomopathogenic genus from China. *Journal of invertebrate pathology*. 2016 Sep 30;139:74-81.
- Inácio CA & Cannon PF (2008). The genera of the 'Parmulariaceae'. CBS Fungal Biodiversity Centre.
- Inácio CA, Araújo K, Piepenbring M (2012) A new genus of Parmulariaceae from Panama. *Mycological Progress* 11 (1):1-6
- Inácio CA, Cannon PF (2003) *Viegasella* and *Mintera*, two new genera of Parmulariaceae (Ascomycota), with notes on the species referred to *Schneepia*. *Mycological research* 107 (01):82-92
- Inderbitzin P1, Lim SR, Volkmann-Kohlmeyer B, Kohlmeyer J, Berbee ML (2004) *Index Fungorum* (2016) <http://www.indexfungorum.org>, Accessed in December 2016
- Ingold C. T. 1943. Further observations on aquatic hyphomycetes of decaying leaves. *Trans. Br. Mycol. Soc.* 26(3-4): 104-115. doi: 10.1016/S0007-1536(43)80015-2
- Ingold C.T. 1942. Aquatic hyphomycetes of decaying alder leaves. *Trans. Br. Mycol. Soc.* 25: 339–417.
- Ingold C.T. 1958. New aquatic hyphomycetes: *Lemonniera brachycladia*, *Anguillospora crassa* and *Fluminispora ovalis*. *Trans. Br. Mycol. Soc.* 41(3): 365-372.
- Ingold C.T. 1974. *Tricladium chaetocladium* sp.nov., an aquatic hyphomycete from Britain. *Trans. Br. Mycol. Soc.* 63(3):624-626.
- Ingold C.T. 1975. An illustrated guide to aquatic and waterborne hyphomycetes (fungi imperfect). Freshwater Biological Association Scientific Publication, Cumbria.
- Inoka K Hettiarachchige, Piyumi N Ekanayake, Ross C Mann, Kathryn M Guthridge, Timothy I Sawbridge, German C Spangenberg and John W Forster 2015

- Phylogenomics of asexual *Epichloë* fungal endophytes forming associations with perennial ryegrass. *BMC Evolutionary Biology* 15:72.
- Inuma T, Khodaparast SA, Takamitsu S (2007). Multilocus phylogenetic analyses within *Blumeria graminis*, a powdery mildew fungus of cereals. *Molecular Phylogenetics and Evolution* 44(2): 741–751.
- Iqbal S.H. 1972. New aquatic hyphomycetes. *Trans. Br. Mycol. Soc.*59(2): 301-307.
- Irinyi,L., Serena,C., Garcia-Hermoso,D., Arabatzis,M., Desnos-Ollivier,M., Vu,D., Cardinali,G., Arthur,I., Normand,A.C.,Giraldo,A., da Cunha,K.C., Sandoval-Denis,M., Hendrickx,M., Nishikaku,A.S., de Azevedo Melo,A.S., Merseguel,K.B., Khan,A., Parente Rocha,J.A., Sampaio,P., da Silva Briones,M.R., E Ferreira,R.C., de Medeiros Muniz,M., Castanon-Olivares,L.R., Estrada-Barcenas,D., Cassagne,C., Mary,C., Duan,S.Y., Kong,F., Sun,A.Y., Zeng,X., Zhao,Z., Gantois,N., Botterel,F., Robbertse,B., Schoch,C., Gams,W., Ellis,D., Halliday,C., Chen,S., Sorrell,T.C., Piarroux,R., Colombo,A.L., Pais,C., de Hoog,S., Zancope-Oliveira,R.M., Taylor,M.L., Toriello,C., de Almeida Soares,C.M., Delhaes,L., Stubbe,D., Dromer,F., Ranque,S., Guarro,J., Cano-Lira,J.F., Robert,V., Velegraki,A. and Meyer,W. 2015 International Society of Human and Animal Mycology (ISHAM)-ITS reference DNA barcoding database-the quality controlled standard tool for routine identification of human and animal pathogenic fungi. *Med. Mycol.* 53 (4), 313-337.
- Isaka M, Chinthanom P, Rachtawee P, Srichomthong K, Srikitikulchai P, Kongsaree P, Prabpai S. Cytotoxic hydroanthraquinones from the mangrove-derived fungus *Paradictyoarthrinium diffractum* BCC 8704. *The Journal of antibiotics*. 2015 May 1;68(5):334-8.
- Isaka M, Yangchum A, Intamas S, Kocharin K, Jones EBG, Kongsaree P, Prabpai S (2009) Aigialomycins and related polyketide metabolites from the mangrove fungus *Aigialus parvus* BCC 5311. *Tetrahedron* 65:4396–4403
- Isaka M1, Palasarn S, Prathumpai W, Laksanacharoen P 2011 Pimarane diterpenes from the endophytic fungus *Eutypella* sp. BCC 13199. *Chem Pharm Bull (Tokyo)*. 2011;59(9):1157-9.
- Ishihara, A., Nakao, T., Mashimo, Y., Murai, M., Ichimaru, N., Tanaka, C., Nakajima, H., Wakasa, K. and Miyagawa, H., 2011. Probing the role of tryptophan-derived secondary metabolism in defense responses against *Bipolaris oryzae* infection in rice leaves by a suicide substrate of tryptophan decarboxylase. *Phytochemistry*, 72(1), pp.7-13.
- Ishiwada, N., Takeshita, K., Yaguchi, T., Nagasawa, K., Takeuchi, N., Hishiki, H., Watanabe, A., Kamei, K. and Shimojo, N., 2016. The First Case of Invasive Mixed-Mold Infections Due to *Emericella nidulans* var. *echinulata* and *Rasamsonia piperina* in a Patient with Chronic Granulomatous Disease. *Mycopathologia*, 181(3-4), pp.305-309.
- Isiloglu, M.; Alli, H.; Spooner, B.M.; Solak, M.H. (2010). *Morchella anatolica* (Ascomycota), a new species from southwestern Anatolia, Turkey. *Mycologia* 102(2): 455-458.
- Ismail SI, Batzer JC, Harrington TC, Crous PW, Lavrov DV, Li H, Gleason ML. Ancestral state reconstruction infers phytopathogenic origins of sooty blotch and flyspeck fungi on apple. *Mycologia*. 2016 Mar 1;108(2):292-302.
- Ismed, F., Lohézic-Le Dévéhat, F., Delalande, O., Sinbandhit, S., Bakhtiar, A. and Boustie, J., 2012. Lobarin from the Sumatran lichen, *Stereocaulon halei*. *Fitoterapia*, 83(8), pp.1693-1698.
- Isola D, Selbmann L, de Hoog GS, Fenice M, Onofri S, Prenafeta-Boldú FX, Zucconi L. 2013. Isolation and screening of black fungi as degraders of volatile aromatic hydrocarbons. *Mycopathologia* 175:369–379.

- Isola D, Zucconi L, Onofri S, Caneva G, de Hoog GS, Selbmann L. 2015. Extremotolerant rock-inhabiting black fungi from Italian monumental sites. *Fungal Diversity* 76:75–96.
- Issakainen, J., Jalava, J., Hyvonen, J., Sahlberg, N., Pirnes, T. and Campbell, C.K. 2003 Relationships of *Scopulariopsis* based on LSU rDNA sequences. *Med. Mycol.* 41 (1), 31-42
- Ito M, Takamatsu S (2010). Molecular phylogeny and evolution of subsection *Magnicellulatae* (Erysiphaceae: Podosphaera) with special reference to host plants. *Mycoscience* 51: 34–43.
- Ito T, Nakagiri A (1994) *Stellatospora*, a new genus of the Sordariaceae. *Mycoscience* 35:413-415
- Iturriaga T, Fernández R, Castañeda-Ruiz RF, Minter DW, da Cruz AC. *Scolecobeltrania*, an interesting new microfungus from Venezuela. *Mycotaxon*. 2013 Oct 10;124(1):143-8.
- Iwen PC, Schutte SD, Florescu DF, Noel-Hurst RK, Sigler L. Invasive *Scopulariopsis brevicaulis* infection in an immunocompromised patient and review of prior cases caused by *Scopulariopsis* and *Microascus* species. *Medical mycology*. 2012 Aug 1;50(6):561-9.
- IZQUIERDO-SAN AGUSTIN, L.; SIERRA, S.; RODRIGUEZ-GUTIERREZ, I.; CASTRO-SANTIUSTE, S.; CIFUENTES, J. (2013). A new species of *Scutellinia* from Mexico. *Mycotaxon* 125: 258 (2013)
- J. Luo; E. Walsh; N. Zhang. 2014. Four new species in Magnaporthaceae from grass roots in New Jersey Pine Barrens. *Mycologia*. 106(3):580-588
- J. Varga, 1,2,* J.C. Frisvad, 3 and R.A. Samson 2011 Two new aflatoxin producing species, and an overview of *Aspergillus* section *Flavi*. *Stud Mycol.* 2011 Jun 30; 69(1): 57–80.
- Jacobs, K., Holtzman, K. and Seifert, K.A. 2005 orphology, phylogeny and biology of *Gliocephalis hyalina*, a biotrophic contact mycoparasite of *Fusarium* species. *Mycologia* 97 (1), 111-120.
- Jagadeesh Ram TAM, Sinha, GP (2016) A world key to *Cryptothecia* and *Myriostigma* (Arthoniaceae), with new species and new records from the Andaman and Nicobar Islands, India. *Phytotaxa* 266(2):103–114.
- Jagielski, T; Sandoval-Denis, M; Yu, J; Yao, L; Bakula, Z; Kalita, J; Skóra, M; Krzyściak, P; de Hoog, G.S; Guarro, J; Gené, J. 2016. Molecular taxonomy of scopulariopsis-like fungi with description of new clinical and environmental species. *Fungal Biology*. 120(4):586-602
- Jaklitsch W, Baral H-O, Lücking R, Lumbsch H T (2016) Ascomycota. In *Syllabus of Plant Families* (Frey W, ed.) 1 (2). 23th edn. Stuttgart: Borntraeger Science Publishers.
- Jaklitsch W, Pöldmaa K, Samuels GJ. 2008. Reconsideration of *Protocrea* (Hypocreales, Hypocreaceae). *Mycologia* 100: 962-984.
- Jaklitsch W.M. & Voglmayr H. (2017): Three former taxa of Cucurbitaria and considerations on *Petrakia* in the Melanommataceae. – *Sydowia* 69: 81–95.
- Jaklitsch WM, Gardiennet A, Voglmayr H (2016) Resolution of morphology-based taxonomic delusions: *Acrocordiella*, *Basiseptospora*, *Blogiascospora*, *Clypeosphaeria*, *Hymenopleella*, *Lepteutypa*, *Pseudapiospora*, *Requienella*, *Seiridium* and *Strickeria*. *Persoonia* 37:82–105
- Jaklitsch WM, Olariaga I, Voglmayr H. *Teichospora* and the Teichosporaceae. *Mycological progress*. 2016 Mar 1;15(3):1-20.
- Jaklitsch WM, Pöldmaa K, Samuels GJ. Reconsideration of *Protocrea* (Hypocreales, Hypocreaceae). *Mycologia*. 2008 Nov 1;100(6):962-84.
- Jaklitsch WM, Réblová M. 2015. *Savoryellaceae* Jaklitsch & Réblová. *Index Fungorum* 209: 1.

- Jaklitsch WM, Voglmayr H. Biodiversity of Trichoderma (Hypocreaceae) in Southern Europe and Macaronesia. *Studies in mycology*. 2015 Mar 31;80:1-87.
- Jaklitsch WM, Voglmayr H. *Stromatonectria* gen. nov. and notes on *Myrmaeciella*. *Mycologia*. 2011 Mar 1;103(2):431-40.
- Jaklitsch, W.M., Fournier, J., Rogers, J.D. & Voglmayr, H. (2014) Phylogenetic and taxonomic revision of *Lopadostoma*. *Persoonia* 32: 52–82; doi: org/10.3767/003158514X679272.
- Jaklitsch, W.M.; Pöldmaa, K.; Samuels, G.J. (2008). Reconsideration of *Protocrea* (Hypocreales, Hypocreaceae). *Mycologia* 100(6): 962-984
- Jaklitsch, W.M. and Voglmayr, H. 2011 *Stromatonectria* gen. nov. and notes on *Myrmaeciella*. *Mycologia* 103(2): 431–440
- Jamshidnejad, V., Sahebani, N. and Etebarian, H., 2013. Potential biocontrol activity of *Arthrotrrys oligospora* and *Trichoderma harzianum* BI against *Meloidogyne javanica* on tomato in the greenhouse and laboratory studies. *Archives of Phytopathology and Plant Protection*, 46(13), pp.1632-1640.
- Jankowiak, R. and Rossa, R., 2008. Associations between *Pityogenes bidentatus* and fungi in young managed Scots pine stands in Poland. *Forest Pathology*, 38(3), pp.169-177.
- Janneke Aylward Email author, Emma T. Steenkamp, Léanne L. Dreyer, Francois Roets, Brenda D. Wingfield and Michael J. Wingfield. 2016 Genome sequences of *Knoxdaviesia capensis* and *K. proteae* (Fungi: Ascomycota) from *Protea* trees in South Africa. *Standards in Genomic Sciences* 11:22
- Janni, M., Sella, L., Favaron, F., Blechl, A.E., De Lorenzo, G. and D'Ovidio, R., 2008. The expression of a bean PGIP in transgenic wheat confers increased resistance to the fungal pathogen *Bipolaris sorokiniana*. *Molecular Plant-Microbe Interactions*, 21(2), pp.171-177.
- Jayalal U, Oh SO, Lücking R, Joshi S, Kim JA, Park JS, Hur JS. Contributions to the foliicolous lichens flora of South Korea. *Mycobiology*. 2013 Dec 1;41(4):202-9.
- Jayalal U, Wolseley P, Gueidan C, Aptroot A, Wijesundara S, Karunaratne V (2012) *Anzia mahaelyensis* and *Anzia flavotenuis*, two new lichen species from Sri Lanka. *Lichenologist* 44:381–389
- Jayalal, U., Aptroot, A. and Hur, J.S., 2012. The lichen genus *Polychidium* new to South Korea. *Mycobiology*, 40(4), pp.252-254.
- Jayalal, U., Aptroot, A., Nguyen, T.T., Dzung, N.A., Joshi, S., Oh, S.O. and Hur, J.S., 2013. Further additions to the macrolichen mycota of Vietnam. *Mycotaxon*, 124(1), pp.51-59.
- Jayalal, U., Divakar, P.K., Joshi, S., Oh, S.O., Kim, J.A. and Hur, J.S., 2014. Overview of *Xanthoparmelia* taxa from South Korea including the description of two new species (Parmeliaceae, Ascomycota). *Phytotaxa*, 181(2), pp.96-109.
- Jayanetti DR, Yue Q, Bills GF, Gloer JB. Hypocoprins A–C: new sesquiterpenoids from the coprophilous fungus *Hypocopra rostrata*. *Journal of natural products*. 2014 Dec 30;78(3):396-401.
- Jayasiri SC, Ariyawansa HA, Jones EBG, Kang JC 2015. Towards a natural classification of Dothideomycetes: 8. The genera *Cocconia*, *Dianesea*, *Endococcus* and *Lineostroma*, *Phytotaxa* 255(1): 066–074
- Jayasiri SC, Jones EBG, Kang JC, Promputtha I, 2015. A new species of genus *Anteaglonium* (Anteagloniaceae, Pleosporales) with its asexual morph, *Phytotaxa* 263, 233–244

- Jayawardena RS, Ariyawansa HA, Singtripop C, Li YM, Yan JY, Li XH, Nilthong S, Hyde KD (2014) A re-assessment of Elsinoaceae (Myriangiales, Dothideomycetes). *Phytotaxa* 176(1):120–138
- Jeewon R1, Liew EC, Hyde KD (2003) Molecular systematics of the Amphisphaeriaceae based on cladistic analyses of partial LSU rDNA gene sequences. *Mycol Res* 107:1392-1402
- Jeng, R.S.; Cain, R.F. 1976. Collematospora, a new genus of the Trichosphaeriaceae. *Canadian Journal of Botany*. 54(21):2429-2433
- Jeyaprakash, A., Davison, D.A. and Schubert, T.S., 2014. Molecular detection of the laurel wilt fungus, *Raffaelea lauricola*. *Plant Disease*, 98(4), pp.559-564.
- Jia, C., Zhang, L., Liu, L., Wang, J., Li, C. and Wang, Q., 2013. Multiple phytohormone signalling pathways modulate susceptibility of tomato plants to *Alternaria alternata* f. sp. *lycopersici*. *Journal of experimental botany*, 64(2), pp.637-650.
- Jia, G.J.; Lin, Y.R.; Hou, C.L. 2011. A new species of *Coccomyces* (Rhytismatales, Ascomycota) from Mt Huangshan, China. *Mycotaxon*. 118:231-235
- Jian Ma, Ji-Wen Xia, Rafael F. Castañeda-Ruíz, Xiu-Guo Zhang. 2014. *Antinakataea setulosa* gen. et sp. nov. and *Uberispora formosa* sp. nov. from southern China. *Mycologia*. 13:753-758
- Jiang, Y.L. and Zhang, T.Y., 2008. New species of *Bipolaris*, *Scolecobasidium* and *Torula* from soil. *Mycotaxon*, 104, pp. 135–140.
- Jiang, Y.L. and Zhang, T.Y., 2008. New species of *Bipolaris*, *Scolecobasidium* and *Torula* from soil. *Mycotaxon*.
- Jiang, Y.L.; Xu, J.J.; Wu, Y.M.; Zhang, Y.L.; Liu, H.M.; Pan, H.Q.; Zhang, T.Y. (2011). Studies on *Cephalotrichum* from soils in China twelve new species and two new combinations. *Mycotaxon* 117: 207-225.
- Jiang, Y.L.; Zhang, T.Y. 2010. Two new species of *Humicola* from soil. *Mycotaxon*. 111:117-120
- Jiao, J.I.A., Xing, J.H., Dong, J.G., Han, J.M. and Liu, J.S., 2011. Functional analysis of MYB73 of *Arabidopsis thaliana* against *Bipolaris oryzae*. *Agricultural Sciences in China*, 10(5), pp.721-727.
- Jie, C-Y.; Zhou, Q-X.; Zhao, W-AS.; Jinag, Y-L.;Hyde, K.D.; Mckenzie, E.H.C.; Wang, Y. 2013. A new *Myrmecridium* species from Guizhou, China. *Mycotaxon*. 124:1-8
- Jindamorakot S, Yukphan P, Yamada Y. *Kockiozyma* gen. nov., for *Zygozyma suomiensis*: the phylogeny of the Lipomycetaceous yeasts. *Annals of microbiology*. 2012 Dec 1;62(4):1831-40.
- Jindamorakot, S.; Am-in, S.; Yukphan, P.; Yamada, Y. (2011). *Limtongia* gen. nov. for *Zygozyma smithiae* (Lipomycetaceae). *Annals of Microbiology* 61(3): 689-693.
- Jing Luo; Emily Walsh; Ning Zhang. 2015. Toward monophyletic generic concepts in Magnaporthales: species with *Harpophora* asexual states. *Mycologia*. 170(3):641-646
- Johnson, D.; Sung, G.H.; Hywel-Jones, N.L.; Luangsa-ard, J.J.; Bischoff, J.F.; Kepler, R.M.; Spatafora, J.W. (2009). Systematics and evolution of the genus *Torrubiella* (Hypocreales, Ascomycota). *Mycol. Res.* 113(3): 279-289
- Johnson, R.G., Jones, E.B.G. and Moss, S.T. 1987. Taxonomic studies of the Halosphaeriaceae: *Ceriosporopsis*, *Haligena* and *Appendichordella* gen. nov. *Canadian Journal of Botany* 65: 931- 942.
- JOHNSTON P.R., SEIFERT K.A., STONE J.K., ROSSMAN A.Y. & MARVANOVÁ L. (2014) Recommendations on generic names competing for use in Leotiomyces (Ascomycota). *IMA FUNGUS* 5(1): 91–120.

- Johnston PR, Park D, Baral H-O, Galán R, Platas G, Tena R (2014a) The phylogenetic relationships of *Torrendiella* and *Hymenotorrendiella* gen. nov. within the Leotiomyces. *Phytotaxa* 177:1–25.
- Johnston PR, Park D. 2013. The phylogenetic position of *Lanzia berggrenii* and its sister species. *Mycosystema*. 32:366-385.
- Johnston PR, Steel JB, Park D, Ludwig LR. A bryophilous member of the Leotiomyces from New Zealand, *Bryoclavicus campylopi* gen. et sp. nov. *New Zealand Journal of Botany*. 2013 Dec 1;51(4):321-7.
- Johnston, P.R., Park, D. and Manning, M.A. 2010 *Neobulgaria alba* sp. nov. and its Phialophora-like anamorph in native forests and kiwifruit orchards in New Zealand. *Mycotaxon* 113, 385-396
- Jones (2010) *FUNGI. Biol. Mar. Mediterr.* 17:681–684
- Jones EB, Zuccaro A, Nakagiri A, Mitchell JL, Pang KL. Phylogenetic relationships of the genus *Sigmoidea* and a new genus *Halosigmoidea* gen. nov. *Bot Mar.* 2009;52:349-59.
- Jones EBG, Hyde KD, Pang KL, Suetrong S (2012) Phylogeny of the Dothideomycetes and other classes of marine Ascomycota. In: Jones EBG and Pang KL (eds.) *Marine Fungi and Fungal-like Organisms. DE GRUYTER* 17–34
- Jones EBG, Sakayaroj J, Suetrong S, Somrithipol S, Pang KL (2009) Classification of marine Ascomycota, anamorphic taxa and Basidiomycota. *Fungal Divers* 35:1–187
- Jones EBG, Suetrong S, Bahkali AH, Abdel-Wahab MA, Boekhout T, Pang KL (2015) Classification of marine Ascomycota, Basidiomycota, Blastocladiomycota and Chytridiomycota. *Fungal Divers* 73:1–72
- Jones EBG, Suetrong S, Cheng WH, Rungjindamai N, Sakayaroj J, Boonyuen N, Somrithipol S, Abdelwahab MA, Pang KL (2014) An additional fungal lineage in the Hypocreomycetidae (*Falcocladium* species) and the taxonomic reevaluation of *Chaetosphaeria chaetosa* and *Swampomyces* species, based on morphology, ecology and phylogeny. *Cryptogam Mycol* 35(2):119–138
- Jones EBG, Suetrong S, Sakayaroj J, Bahkali AH, Abdel-Wahab MA, Boekhout T, Pang KL (2015) Classification of marine Ascomycota, Basidiomycota, Blastocladiomycota and Chytridiomycota. *Fungal Divers* 73:1–72
- Jones, E B G and Ward, A.W. (1973). Septate conidia in *Asteromyces cruciatus*. *Transactions of the British Mycological Society* 61: 181 186.
- Jones, E.B.G., Johnson, R.G. and Moss, S.T. 1983. *Ocostaspora apilongissima* gen. et sp. nov: A new marine Pyrenomycete from wood. *Botanica Marina* 24: 353-360.
- Jones, E.B.G., Pilantanapak, A., Chatmala, I., Sakayaroj, J., Phongpaichit, S. and Choeyklin, R. (2005a). Thai marine fungal diversity. *Songklanakarin Journal of Science and Technology* 28: 687-708.
- Jones, E.B.G., Sakayaroj, J., Suetrong, S., Somrithipol, S. and Pang, K.L. 2009. Classification of marine Ascomycota, anamorphic taxa and Basidiomycota. *Fungal Diversity* 35: 1-203.
- Jones, E.B.G.; Johnson, R.G.; Moss, S.T. 1984. Taxonomic studies of the Halosphaeriaceae: *Halosphaeria Linder*. *Botanica Marina*. 27:129-143.
- Jørgensen PM (1996) On the nomenclature of lichen phototypes. *Taxon* 45: 663-664.
- Jørgensen PM (2004) Further contributions to the Pannariaceae (lichenized Ascomycetes) of the Southern Hemisphere. In: Döbberler P and Rambold G (eds.): *Contributions to Lichenology. Festschrift in Honour of Hannes Hertel. Biblioth. Lichenol.* 88: 229–253
- Jørgensen PM, Andersen HL (2015) The lichen genus *Psoromidium* (Pannariaceae) re-evaluated, with nomenclatural notes on *Degeliella* and *Psoromaria*. *Lichenologist* 47:343-348.

- Jørgensen PM, Gjerde I. Notes on some pannariaceous lichens from New Caledonia. *Cryptogamie, Mycologie*. 2012 Mar;33(1):3-9.
- Jørgensen PM, Nordin A. (2009) Lichens in Scandinavia known mainly from Norwegian type-specimens. *Graphis Scripta* 21(1): 1–20
- Jørgensen, P.M. (2008) *Vahliella*, a new lichen genus. *Lichenologist* 40: 221–225
- Jørgensen, P.M. and Andersen, H.L., 2015. The lichen genus *Psoromidium* (Pannariaceae) re-evaluated, with nomenclatural notes on *Degeliella* and *Psoromaria*. *The Lichenologist*, 47(05), pp.343-348.
- Jørgensen, P.M. and Palice, Z., 2010. Additions to the lichen family Pannariaceae in Ecuador. *Nordic Journal of Botany*, 28(5), pp.623-628.
- Jørgensen, P.M., 2010. New discoveries in the lichen genus *Staurolemma* Körber. *Nova Hedwigia*, 90(1-2), pp.153-159.
- Jørgensen, P.M., James, P.W. & Jarvis, C.E. (1994). Linnaean lichen names and their typification. *Botanical Journal of the Linnean Society* 115: 261-405.
- Jorge-Villar, S.E., Miralles, I., Ferrón, C.C. and Hernandez, V., 2011. Raman spectroscopy study of lichens using three spectrometers under different experimental conditions: analyses of the results with relevance for extraplanetary exploration. *Analytical Methods*, 3(12), pp.2783-2791.
- Joseph, S. and Sinha, G.P., 2015. Contributions to the genus *Synarthonia* (lichenized Ascomycota, Arthoniaceae). *The Lichenologist*, 47(02), pp.123-130.
- Joseph, S., Sinha, G.P. and Ramachandran, V.S., 2013. A new record of *Syncesia* (Lichenized ascomycota) from India with additional taxonomic characters. *Taiwania*, 58(4), pp.300-304.
- Joshi S and Jae-Seoun Hur 2012 A New Record of the Genus *Mycobilimbia* (Ramalinaceae) from South Korea. *Mycobiology*. 40(2):91-93
- Joshi S1, Jayalal U, Lökös L, Park JS, Oh SO, Koh YJ, Hur JS. 2013 *Leiorreuma exaltatum* and *Trapelia coarctata*, New to Korean Lichen Flora. *Mycobiology*. Mar;41(1):56-8.
- Joshi Y, Nguyen TT, Lökös L, Koh YJ, Hur JS. Two new records of the lichen genus *Placynthiella Elenkin* in South Korea. *Mycobiology*. 2011 Mar 1;39(1):54-6.
- Joshi, S., Nguyen, T.T., Dzung, N.A., Jayalal, U., Oh, S.O. and Hur, J.S., 2013. New records of corticolous lichens from Vietnam. *Mycotaxon*, 123(1), pp.479-489.
- Joshi, S., Upreti, D.K. and Das, P., 2011. Lichen diversity assessment in Pindari glacier valley of Uttarakhand, India. *Geophytology*, 41(1-2), pp.25-41.
- Joshi, S., Upreti, D.K. and Divakar, P.K., 2011. A new species of lichen genus *Syncesia* (Roccellaceae) from India. *The Bryologist*, 114(1), pp.215-219.
- Joshi, Santosh; Nguyen, Thi Thuy; Dzung, Nguyen Anh; Jayalal, Udeni; Oh, Soon-Ok; Hur, Jae-Seoun 2015 New records of corticolous lichens from Vietnam. *Mycotaxon*, 123., 479-489
- Joshi, Santosh; Upreti, Dalip K.; Haridas, Biju 2012 Nomenclatural notes on the lichen genera *Leucodecton* and *Myriotrema* (Graphidaceae) in India. *Mycotaxon*, Volume 122: 467-482.
- Joshi, Y., Koh, Y.J. and Hur, J.S., 2010. Three new records of lichen genus *Rhizocarpon* from South Korea. *Mycobiology*, 38(3), pp.219-221.
- Joshi, Y., Upadhyay, S., Shukla, S., Nayaka, S. and Rawal, R.S., 2015. New records and an updated checklist of lichenicolous fungi from India. *Mycosphere*, 6(2), pp.195-200.
- Josphine A, Senthilkumar G, Madhanraj P, Panneerselvam A (2011) Diversity of Fungi from Drift Wood of Muthupet Mangroves. *Asian J. Pharm. Ana.* 1:53–55
- Joubert, A., Bataille-Simoneau, N., Champion, C., Guillemette, T., Hudhomme, P., Iacomini-Vasilescu, B., Leroy, T., Pochon, S., Poupard, P. and Simoneau, P., 2011. Cell wall integrity and high osmolarity glycerol pathways are required for adaptation of

- Alternaria brassicicola* to cell wall stress caused by brassicaceous indolic phytoalexins. *Cellular microbiology*, 13(1), pp.62-80.
- Joubert, A., Simoneau, P., Campion, C., Bataillé-Simoneau, N., Iacomi-Vasilescu, B., Poupard, P., Francois, J.M., Georgeault, S., Sellier, E. and Guillemette, T., 2011. Impact of the unfolded protein response on the pathogenicity of the necrotrophic fungus *Alternaria brassicicola*. *Molecular microbiology*, 79(5), pp.1305-1324.
- Ju YM, Roger JD (2002) The genus *Nemania* (Xylariaceae). *Nova Hedw* 74:75–120
- Judith, C., Rossman, A.Y., Kennedy, A.H., Cáceres, O. and Piepenbring, M., 2015. *Microchrysophaera graminicola*, an enigmatic new genus and species in the Hypocreales from Panama. *Mycological Progress*, 14(9), pp.1-12.
- Jumpathong, I., Seshime, J., Fujii, Y., Peberdy, J. and Lumyong, S. 2011 Genome screening for reducing type I polyketide synthase genes in tropical fungi associated with medicinal plants. *World Journal of Microbiology and Biotechnology* 27, 9, pp 1989–1995.
- Jungbluth, P. and Marcelli, M.P., 2011. The *Pyxine pungens* complex in São Paulo State, Brazil. *The Bryologist*, 114(1), pp.166-177.
- Jungbluth, P., Marcelli, M.P. and Kalb, K., 2011. A new species and a new record of *Pyxine* (Physciaceae) with norstictic acid from São Paulo State, Brazil. *Mycotaxon*, 115(1), pp.435-442.
- Jupa, R., Hájek, J., Hazdrová, J. and Barták, M., 2012. Interspecific differences in photosynthetic efficiency and spectral reflectance in two Umbilicaria species from Svalbard during controlled desiccation. *Czech Polar Rep*, 2, pp.31-41.
- Jurga Motiejūnaitė, Wolfgang von Brackel, Darius Stončius, Žydrūnas Preikša 2011 Contribution to the Lithuanian flora of lichens and allied fungi. III. *BOTANICA LITHUANICA* 17(1): 39–46.
- Jurjević Ž, Kubátová A, Kolařík M, Hubka V. 2015. Taxonomy of *Aspergillus* section *Petersonii* sect. nov. encompassing indoor and soil-borne species with predominant tropical distribution. *Plant Systematics and Evolution* 301:2441–2462.
- Jurjevic, Z., Hubka, V. and Peterson, S., 2016. *Rasamsonia columbiensis*. *Persoonia*, 36, pp.404-405.
- Jury, S.L., 2013. Lichens collected during the fifth “Iter Mediterraneum” in Morocco, 8-27 June, 1992. *Bocconea*, 26, pp.145-149.
- K. Kalb, A. W. Archer, J. Sutjaritturakan and K. Boonpragob 2009: New or otherwise interesting lichens V. - In: A. Aptroot, M. R. D. Seaward and L. B. Sparrius: Biodiversity and Ecology of Lichens. *Liber Amicorum Harrie Sipman*. Bibliotheca Lichenologica 99. J. Cramer in der Gebrüder Borntraeger Verlagsbuchhandlung, Berlin-Stuttgart, pp. 225-246.
- Ka, Kang-Hyeon; Jeon, Sung-Min; Ryoo, Rhim; Kang, Jung-A; Hong, Ki-Sung 2015 First Record of *Mattiolomyces terfezioides* and *Tricholoma bakamatsutake* in Korea. *The Korean Journal of Mycology* 43, Issue 2, 2015, pp.125-128
- Kaewwichian R, Limtong S. *Nakazawaea siamensis* fa, sp. nov., a yeast species isolated from phylloplane. *International journal of systematic and evolutionary microbiology*. 2014 Jan 1;64(1):266-70.
- Käffer, M.I., Koch, N.M., Aptroot, A., de A, M. and Suzana, M., 2015. New records of corticolous lichens for South America and Brazil. *Plant Ecology and Evolution*, 148(1), pp.111-118.
- Kagan-Zur, Nurit Roth-Bejerano, Yaron Strit, Asucion Monte, eds. 2014. *Desert Truffles: phylogeny, physiology, distribution and domestication*. 397 pp. Springer Verlag

- Kajale SC, Sonawane MS, Sharma R, Shouche YS. *Leptoxyphium kurandae*-New record of insect gut associated sooty mould fungus from India. *MYCOSPHERE*. 2015 Jan 1;6(2):133-8.
- Kajitani Y, Masuya H. *Ceratocystis ficicola* sp. nov., a causal fungus of fig canker in Japan. *Mycoscience*. 2011 Sep 1;52(5):349-53.
- Kalb K (2004) *Dirinaria*. - In: Nash TH III, Ryan BD, Diederich P, Gries C, Bungartz F (eds.) *Lichen Flora of the Greater Sonoran Desert Region, II*. Lichens Unlimited, Arizona State University, Tempe, Arizona, pp. 98-103.
- Kalb K (2007) New or otherwise interesting lichens. In: Kärnefelt, I.; Thell, A.: *Lichenological Contributions in Honour of David Galloway*. *Biblioth. Lichenol.* 95: 297–316
- Kalb K (2009) New taxa and new records of thelotremoid Graphidaceae. *Herzogia*. 22:17–42
- Kalb K, Archer AW, Sutjaritturakan J, Boonpragob K (2009) New or otherwise interesting lichens V. *Biblioth. Lichenol* 99:225–246
- Kalb K, Buaruang K, MongkolsukP, Boonpragob K (2012) New or otherwise interesting lichens. VI, including a lichenicolous fungus. *Phytotaxa* 42: 35–47
- Kalb K, Staiger B, Elix JA, Lange U, Lümbusch HT (2008) A new circumscription of the genus *Ramboldia* (Lecanoraceae, Ascomycota) based on morphological and molecular evidence. *Nova Hedwigia* 86(1-2): 23–42
- Kalb K, Staiger B, Elix, JA (2004) A monograph of the lichen genus *Diorygma* - a first attempt. *Symb Bot Upsal* 34(1):133-181.
- Kalb, K. & Elix, J.A. (1995). The lichen genus *Physcidia*. *Bibliotheca Lichenologica* 57: 265-296.
- Kalb, K., Buaruang, K., Papong, K. and Boonpragob, K., 2009. New or otherwise interesting lichens from the tropics, including the lichen genus *Ramboldia* in Thailand. *Mycotaxon*, 110(1), pp.109-123.
- Kalb, K./ Polyiam, W./ Rivas Plata, E./ Bawingan, P.A./ Kalb, K./ Lücking, R. 2016: 'Missing links' alive? Novel taxa represent morphological transitions between distinctive phenotypes among extant Graphidaceae (lichenized Ascomycota: Ostropales). - *Phytotaxa* 268(2): 110-122.
- Kalb, K.; Giralt, M. 2011. *Orcularia*, a segregate from the lichen genera *Buellia* and *Rinodina* (Lecanoromycetes, Caliciaceae). *Phytotaxa*. 38:53-60
- Kalko GV. New for Russia and rare species of anamorphic fungi on conifers from saint petersburg suburbs. *Mikol Fitopatol.* 2011;45(4):356-61.
- Kamal (2010) *Cercosporoid Fungi of India* [vii], 351 pp. Dehra Dun: Bishen Singh Mahendra Pal Singh.
- Kamal, M.M. and Mia, M.A.T., 2009. Diversity and pathogenicity of the rice brown spot pathogen, *Bipolaris oryzae* (Breda de Haan) Shoem. in Bangladesh assessed by genetic fingerprint analysis. *Bangladesh Journal of Botany*, 38(2), pp.119-125.
- Kambar, Y., Vivek, M.N., Manasa, M., Vinayaka, K.S., Mallikarjun, N. and Kekuda, P.T.R., 2014. Antimicrobial Activity of *Leptogium burnetiae*, *Ramalina hossei*, *Roccella montagnei* and *Heterodermia diademata*. *International Journal of Pharmaceutical and Phytopharmacological Research*, 4(3), pp.164-168.
- KAMGAN NKUEKAM, G.; BEER, Z.W. DE; WINGFIELD, M.J.; ROUX, J. (2012). A diverse assemblage of *Ophiostoma* species, including two new taxa on eucalypt trees in South Africa. *Mycol. Progr.* 11(2): 526
- Kamgan Nkuekam, G.; Jacobs, K.; Beer, Z.W. de; Wingfield, M.J.; Roux, J. (2008). *Pesotum australi* [sic] sp. nov. and *Ophiostoma quercus* associated with *Acacia mearnsii* trees in Australia and Uganda, respectively. *Australas. Pl. Path.* 37(4): 406-416.

- Kamgan Nkuekam, G.; Solheim, H.; Beer, Z.W. de; Grobbelaar, J.W.; Jacobs, K.; Wingfield, M.J.; Roux, J. (2010). *Ophiostoma* species, including *Ophiostoma borealis* sp. nov., infecting wounds of native broad-leaved trees in Norway. *Cryptog. Mycol.* 31(3): 285-303.
- Kamila C. Correia; Erlen K. C. Silva; Marcos P. S. Câmara; Rui Sales Jr.; Eduardo S. G. Mizubuti, Josep Armengol, José García-Jiménez; Sami J. Michereff 2014 Fitness components of *Monosporascus cannonballus* isolates from northeastern Brazilian melon fields. *Trop. plant pathol.* vol.39 no.3
- Kang HJ, Sigler L, Lee J, Gibas CF, Yun SH, Lee YW. *Xylogone ganodermophthora* sp. nov., an ascomycetous pathogen causing yellow rot on cultivated mushroom *Ganoderma lucidum* in Korea. *Mycologia.* 2010 Sep 1;102(5):1167-84.
- Kang J.C., Hyde K.D., Kong R.Y.C. 1999. Studies of *Amphisphaeriales*: The *Amphisphaeriaceae* (sensu stricto). *Mycological Research* 103: 53-64.
- Kang, H.J.; Sigler, L.; Lee, J.K.; Gibas, C.F.C.; Yun, S.H.; Lee, Y.W. (2010). *Xylogone ganodermophthora* sp. nov., an ascomycetous pathogen causing yellow rot on cultivated mushroom *Ganoderma lucidum* in Korea. *Mycologia* 102(5): 1167-1184.
- Kanigowski, P., Flakus, A., Oset, M., Kowalewska, A., Rykaczewki, M. and Kukwa, M., 2016. The lichen family *Parmeliaceae* in Poland. *Xanthoparmelia* species containing usnic acid. *Herzogia*, 29(1), pp.108-119.
- Kantvilas G, Divakar PK (2013) New combinations in *Austroparmelina* (*Parmeliaceae*). - *Australasian Lichenology* 73: 6–7
- Kantvilas G, Leavitt SD, Elix JA, Lumbsch HT. Additions to the genus *Trapelia* (*Trapeliaceae*: lichenised Ascomycetes). *Australian Systematic Botany.* 2015 Jun 29;27(6):395-402.
- Kantvilas, G. & Lumbsch, H.T. (2009). *Meridianelia*, a new genus in the *Elixiaceae* (Ascomycota) from Tasmania. *The Lichenologist* 41: 261-270.
- Kantvilas, G., 2014. New species of the genus *Rimularia* Nyl. from Tasmania. *The Lichenologist*, 46(03), pp.349-364.
- Kantvilas, G., 2014. The lichen family *Hymeneliaceae* in Tasmania, with the description of a new species. *Kanunnah*, 7, pp.127-140.
- Kantvilas, G., 2015. Observations on the genus *Tephromela* (lichenised Ascomycetes) in Tasmania, with the Description of a New Species.
- Kantvilas, G., 2016. Further additions to the lichen genus *Ramboldia* (*Lecanoraceae*) from Australia.
- Kantvilas, G., Leavitt, S.D., Elix, J.A. and Lumbsch, H.T., 2015. Additions to the genus *Trapelia* (*Trapeliaceae*: lichenised Ascomycetes). *Australian Systematic Botany*, 27(6), pp.395-402.
- Kaounas V., Agnello C., Alvarado P. 2016. *Genea cephalonicae* sp. nov. (Ascomycota, Pezizales), a new hypogeous species from Greece. *ascomycete.org.* 8(3):105-110.
- Karagöz, Y., Aslan, A. and Aptroot, A., 2011. *Diplolemma*, *Lecanora*, and *Xanthoria* lichen species new to Turkey. *Mycotaxon*, 115(1), pp.115-119.
- Karakehian JM, LoBuglio KF, Pfister DH. Placement of the genus *Angelina* within *Rhytismatales* and observations of *Angelina rufescens*. *Mycologia.* 2014 Jan 1;106(1):154-62.
- Karakoti, N., Bajpai, R., Upreti, D.K., Mishra, G.K., Srivastava, A. and Nayaka, S., 2014. Effect of metal content on chlorophyll fluorescence and chlorophyll degradation in lichen *Pyxine coccinea* (Sw.) Nyl.: a case study from Uttar Pradesh, India. *Environmental earth sciences*, 71(5), pp.2177-2183.

- Karandikar, K.G., Singh, P.N. and Singh, S.K. (2015). *Mycoenterolobium flabelliforme*: a new anamorphic fungus from India. *Plant Pathology & Quarantine* 5: 49–51.
- Karandikar, K.G.; Singh, S.K. (2010). *Lylea indica*: a new hyphomycete species from India. *Mycotaxon* 112: 257-260.
- Karaoglanidis, G.S., Luo, Y. and Michailides, T.J., 2011. Competitive ability and fitness of *Alternaria alternata* isolates resistant to QoI fungicides. *Plant Disease*, 95(2), pp.178-182.
- Kärnefelt I et al. (1993) The lichen genera *Arctocetraria*, *Cetraria* and *Cetrariella* (Parmeliaceae) and their presumed evolutionary affinities. *Bryologist* 96:394–404.
- Kärnefelt I, Thell A (1996) A new classification for the *Dactylina/Dufourea* complex. *Nova Hedwigia* 62:487-511.
- Kärnefelt, I., Seaward, M.R. and Thell, A., 2012. Systematics, biodiversity and ecology of lichens. *Acta Botanica Hungarica*, 54, pp.3-4.
- Kasahara, K., Miyamoto, T., Fujimoto, T., Oguri, H., Tokiwano, T., Oikawa, H., Ebizuka, Y. and Fujii, I., 2010. Solanapyrone synthase, a possible Diels–Alderase and iterative type I polyketide synthase encoded in a biosynthetic gene cluster from *Alternaria solani*. *ChemBioChem*, 11(9), pp.1245-1252.
- Katumoto, K. 1975. The Hemisphaeriales in Japan. *Bulletin of the Faculty of Agriculture Yamaguchi University*. 26:45-122
- KAUR, S.; GEHLOT, P. (2011). New pyrenomycetous genus from India. *Journal of Mycology and Plant Pathology* 41(3): 487
- Kawada M, Someno T, Inoue H, Ohba SI, Masuda T, Kato T, Ikeda D. NBRI16716A, a new antitumor compound against human prostate cancer cells, produced by *Perisporiopsis melioides* Mer-f16716. *The Journal of antibiotics*. 2010 Jun 1;63(6):319-23.
- Kawahigashi, H., Kasuga, S., Ando, T., Kanamori, H., Wu, J., Yonemaru, J.I., Sazuka, T. and Matsumoto, T., 2011. Positional cloning of *ds1*, the target leaf spot resistance gene against *Bipolaris sorghicola* in sorghum. *Theoretical and applied genetics*, 123(1), pp.131-142.
- Kaya, A., 2009. Macrofungi of Huzurlu high plateau (Gaziantep-Turkey). *Turkish Journal of Botany*, 33(6), pp.429-437.
- Kaya, M., Halıcı, M.G., Duman, F., Erdoğan, S. and Baran, T., 2015. Characterisation of α -chitin extracted from a lichenised fungus species *Xanthoria parietina*. *Natural product research*, 29(13), pp.1280-1284.
- Kaźmierska, E. and Kossowska, M., 2016. Contribution to the lichen biota of the Stawy Milickie nature reserve and its adjacent area (Lower Silesia, southwestern Poland). *history*, 51(1), p.1075.
- KC Rajeshkumar, PW Crous, JZ Groenewald, KA Seifert (2016) Resolving the phylogenetic placement of *Porobeltraniella* and allied genera in the Beltraniaceae. *Mycol Progress* 15:1119–1136
- Keilor Rojas-Jimenez, K., Hernandez, M., Blanco, J., Vargas, L.D., Acosta-Vargas, L.G. and Tamayo, G. 2016 Richness of cultivable endophytic fungi along an altitudinal gradient in wet forests of Costa Rica. *Fungal Ecol* 20, 124-131
- Keke Liu†, Weiwei Zhang†, Yiling Lai, Meichun Xiang, Xiuna Wang, Xinyu Zhang and Xingzhong Liu 2014 *Drechslerella stenobrocha* genome illustrates the mechanism of constricting rings and the origin of nematode predation in fungi. *BMC Genomics* 201415:114.
- Kekuda, P.T.R., Akarsh, S., Nawaz, A.N., Ranjitha, M.C., Darshini, S.M. and Vidya, P., 2016. In vitro Antifungal Activity of Some Plants Against *Bipolaris sorokiniana*

- (Sacc.) Shoem. *International Journal of Current Microbiology and Applied Sciences*, 5(6), pp.331-337.
- Kelly, L.J., Hollingsworth, P.M., Coppins, B.J., Ellis, C.J., Harrold, P., Tosh, J. and Yahr, R. 2011. DNA barcoding of lichenized fungi demonstrates high identification success in a floristic context. *New Phytol.* 191 (1), 288-300.
- Kepler R, Ban S, Nakagiri A, Bischoff J, Hywel-Jones N, Owensby CA, Spatafora JW. The phylogenetic placement of hypocrealean insect pathogens in the genus *Polycephalomyces*: an application of One Fungus One Name. *Fungal biology*. 2013 Sep 30;117(9):611-22.
- Kepler RM, Humber RA, Bischoff JF, Rehner SA. 2014. Clarification of generic and species boundaries for *Metarhizium* and related fungi through multigene phylogenetics. *Mycologia* 106: 811-829.
- Kepler RM, Sung G-H, Ban S, Nakagiri A, Chen M-J, Huang B, Li Z, Spatafora JW. 2012. New teleomorph combinations in the entomopathogenic genus *Metacordyceps*. *Mycologia* 104: 182-197.
- Kepler RM, Sung GH, Harada Y, Tanaka K, Tanaka E, Hosoya T, Bischoff JF, Spatafora JW (2012) Host jumping onto close relatives and across kingdoms by *Tyrannicordyceps* (Clavicipitaceae) gen. nov. and *Ustilagoidea* (Clavicipitaceae). *Am J Bot* 99(3): 552–561.
- Kerr, A.M., 2014. Catalogue of the Lichens of the Mariana Islands ex Elix & McCarthy's (2008) Checklist of Pacific Island Lichens.
- Ketner-Oostra, R., Sparrius, L.B. and Sýkora, K.V., 2010. Development of lichen-rich communities. Inland drift sand landscapes, pp.235-254.
- Khalid Pervaiz Akhtar, Nighat Sarwar, Kamran Saleem, Shaukat Ali 2013 *Gibbago trianthemae* causes *Trianthema portulacastrum* (horse purslane) blight in Pakistan. *Australasian Plant Disease Notes* 8, Issue 1, pp 109–110.
- Khare R, Rai H, Upreti DK, Dubey U, Gupta RK. 2010 Occurrence of rare, crustose lichen, *Ophioparma ventosa* (Ophioparmaceae, lichenized Ascomycota), from alpine regions of Arunachal Pradesh, India. *Feddes Repertorium*. Dec 1;121(5-6):184-8.
- Khare, R., Upreti, D.K., Nayaka, S. and Gupta, R.K., 2009. Diversity of Soil lichens in India. *Soil Microflora*, Daya Publishing House. New Delhi, pp.64-75.
- Kharpukhaeva, T.M. and Mukhortova, L.V., 2016. Dynamics of interaction between lichens and fallen deadwood in forest ecosystems of the eastern Baikal region. *Contemporary Problems of Ecology*, 9(1), pp.125-139.
- Khodaparast SA, Takamatsu S, Hedjaroude GA (2001). Phylogenetic structure of the genus *Leveillula* (Erysiphales: Erysiphaceae) inferred from the nucleotide sequences of the rDNA ITS region with special reference to the *L. taurica* species complex. *Mycological Research* 105: 909–918.
- Khodaparast, S.A., Niinomi, S. & Takamatsu, S. (2007). Molecular and morphological characterization of *Leveillula* (Ascomycota: Erysiphales) on monocotyledonous plants. *Mycological Research* 111: 673–679.
- Khodaparast, S.A., Takamatsu, S., Harada, M., Abbasi, M. & Samadi, S. (2012). Additional rDNA ITS sequences and its phylogenetic consequences for the genus *Leveillula* with emphasis on conidium morphology. *Mycological Progress* 11: 741–752.
- Khodaparast, S.A., Takamatsu, S., Shadlou, A., Damadi, M., Pirnia, M., Jahani, M. (2016) Notes on the genus *Leveillula* (Erysiphaceae): a new unrecorded species and notes on *Leveillula* infecting *Ficus*, *Cucurbita* and *Tropaeolum* in Iran. *Phytotaxa* 260(3): 267–275.
- Khunnamwong, P., Lertwattanasakul, N., Jindamorakot, S., Limtong, S. and Lachance, M.A., 2015. Description of *Diutina* gen. nov., *Diutina siamensis*, fa sp. nov., and

- reassignment of *Candida catenulata*, *Candida mesorugosa*, *Candida neurugosa*, *Candida pseudorugosa*, *Candida ranongensis*, *Candida rugosa* and *Candida scorzettiae* to the genus *Diutina*. *International journal of systematic and evolutionary microbiology*, 65(12), pp.4701-4709.
- Kihara, J., Moriwaki, A., Tanaka, N., Tanaka, C., Ueno, M. and Arase, S., 2008. Characterization of the BMR1 gene encoding a transcription factor for melanin biosynthesis genes in the phytopathogenic fungus *Bipolaris oryzae*. *FEMS microbiology letters*, 281(2), pp.221-227.
- Kihara, J., Tanaka, N., Ueno, M. and Arase, S., 2009. Cloning and expression analysis of two opsin-like genes in the phytopathogenic fungus *Bipolaris oryzae*. *FEMS microbiology letters*, 295(2), pp.289-294.
- Kiliass H (1985) *Cephalophysia* (Hertel) *Kiliass* gen. nov., eine weitere Gattung der Teloschistaceae mit einzelligen Sporen. *Herzogia* 7:181–190.
- Kilic, M., Altintas, D.U., Yilmaz, M., Kendirli, S.G., Karakoc, G.B., Taskin, E., Ceter, T. and Pinar, N.M., 2010. The effects of meteorological factors and *Alternaria* spore concentrations on children sensitised to *Alternaria*. *Allergologia et immunopathologia*, 38(3), pp.122-128.
- Kim, H.S., Kim, J.Y., Lee, H.K., Kim, M.S., Lee, S.R., Kang, J.S., Kim, H.M., Lee, K., Hong, J.T., Kim, Y. and Han, S.B., 2010. Dendritic cell activation by glucan isolated from *Umbilicaria esculenta*. *Immune network*, 10(6), pp.188-197.
- Kim, K.H., Choi, Y.J., Seo, S.T. and Shin, H.D., 2009b. *Raffaelea quercus-mongolicae* sp. nov. associated with *Platypus koryoensis* on oak in Korea. *Mycotaxon*, 110(1), pp.189-197.
- Kim, M.K., Park, H. and Oh, T.J., 2013. Antimicrobial properties of the bacterial associates of the Arctic lichen *Stereocaulon* sp. *African Journal of Microbiology Research*, 7(28), pp.3651-3657
- Kim, M.Y., Sohn, J.H., Ahn, J.S. and Oh, H., 2009. Alternaramide, a cyclic depsipeptide from the marine-derived fungus *Alternaria* sp. SF-5016. *Journal of natural products*, 72(11), pp.2065-2068.
- Kim, S.W., Kim, K.S., Lamsal, K., Kim, Y.J., Kim, S.B., Jung, M., Sim, S.J., Kim, H.S., Chang, S.J., Kim, J.K. and Lee, Y.S., 2009a. An in vitro study of the antifungal effect of silver nanoparticles on oak wilt pathogen *Raffaelea* sp. *J Microbiol Biotechnol*, 19(8), pp.760-764.
- Kimbrough J, Korf R (1963). Nomenclatural notes. V. *Uncinula polychaeta* and the genera *Pleochaeta* and *Uncinulopsis*. *Mycologia* 55: 619–626.
- Kinalioglu, K. and Aptroot, A., 2011. *Carbonea*, *Gregorella*, *Porpidia*, *Protomicarea*, *Rinodina*, *Solenopsora*, and *Thelenella* lichen species new to Turkey. *Mycotaxon*, 115(1), pp.125-129.
- King KM, West JS, Brunner PC, Dyer PS, Fitt BDL 2013. Evolutionary Relationships between *Rhynchosporium lolii* sp. nov. and Other *Rhynchosporium* Species on Grasses. *PLoS ONE* 8(10): e72536. doi:10.1371/journal.pone.0072536
- King KM, West JS, Fitt BDL, Dyer PS 2014. Differences in MAT gene distribution and expression between *Rhynchosporium* species on grasses. *Plant Pathology* 64: 344–354.
- Kirby, B.M., Barnard, D., Tuffin, I.M. and Cowan, D.A., 2011. Ecological distribution of microorganisms in terrestrial, psychrophilic habitats. In *Extremophiles Handbook* (pp. 839-863). Springer Japan.

- Kirchmair M, Neuhauser S, Buzina W, Huber L. The taxonomic position of *Roesleria subterranea*. *Mycological research*. 2008 Oct 31;112(10):1210-9.
- Kirika P, Mugambia G, Lücking R, Lumbsch HT (2012) New records of lichen-forming fungi from Kenya. *Journal of East African Natural History* 101(1):73–98
- Kirk P, Cannon PF, Minter DW, Stalpers JA (2008) *Ainsworth & Bisby's Dictionary of the Fungi*. 10th edn CAB International, Wallingford, UK
- Kirk PM et al. (2013) *IMA Fungus*
- Kirk PM, Stalpers JA, Braun U, Crous PW, Hansen K, Hawksworth DL, Hyde KD, Lücking R, Lumbsch TH, Rossman AY, Seifert KA, Stadler M (2013) A without-prejudice list of generic names of fungi for protection under the International Code of Nomenclature for algae, fungi, and plants. *IMA Fungus* 4, 381–443. doi:10.5598/imafungus.2013.04.02.17
- Kirk, P.M. 1982. New or interesting microfungi V. Microfungi colonizing *Laurus nobilis* leaf litter. *Transactions of the British Mycological Society*. 78(2):293-303
- Kirk, P.M. 1986. New or interesting microfungi XV. Miscellaneous hyphomycetes from the British Isles. *Transactions of the British Mycological Society* 86: 409-428. [http://dx.doi.org/10.1016/S0007-1536\(86\)80185-1](http://dx.doi.org/10.1016/S0007-1536(86)80185-1)
- Kirk, P.M.; Cannon, P.F.; David, J.C.; Stalpers, J.A.. 2001. *Dictionary of the fungi*. :1-655
- Kirschner R (2009). *Cercosporiella* and *Ramularia*. *Mycologia* 101: 110–119.
- Kirschner R, Liu LC. *Mycosphaerellaceae* fungi and new species of *Venustosynnema* and *Zasmidium* on ferns and fern allies in Taiwan. *Phytotaxa*. 2014 Aug 20;176(1):309-23.
- Kirschner, R., 2009. *Cercosporiella* and *Ramularia*. *Mycologia*, 101(1), pp.110-119.
- Kirschner, R., 2015. Phylogenetic placement of a new species of *Corynesporopsis* from dead acacia wood indicates occurrence of tetric conidiogenesis within *Xylariales*. *Phytotaxa*, 192(1), pp.24-34.
- Kirschner, R., Pang, K-L. and Jones, E.B.G. (2013). Two cheirosporous hyphomycetes reassessed based on morphological and molecular examination. *Mycological Progress* 12: 29-36.
- Kirschner, R., Piepenbring, M. and Chen, C.J. (2004). Some cercosporoid hyphomycetes from Taiwan, including a new species of *Stenella* and new reports of *Distocercospora pachyderma* and *Phacellium paspali*. *Fungal Diversity* 17: 57-68.
- Kirschner, R.; Chen, C.J. (2010). Two new species of *Ramichloridium*-like hyphomycetes from senescent leaves of night-scented lily (*Alocasia odora*) in Taiwan. *Fungal Diversity* 40: 41-50
- Kirschner, R.; Oberwinkler, F. 1999. *Cylindrocarpostylus*, a new genus based on a hyphomycete rediscovered from bark beetle galleries. *Mycological Research*. 103(9):1152-1156.
- Kirschner, R.; Piepenbring, M. 2006. A new hyphomycete genus and species with pectinate conidia from a rainforest in Panama - a living fungal fossil?. *Mycological Progress*. 5(3):136-138
- Kirschstein, W. 1939. Über neue, seltene und kritische Ascomyceten und Fungi imperfecti. II. *Annales Mycologici*, 37:88-140
- Kiss L, Khosla K, Jankovics T, Niinomi S, Braun U, Takamatsu S. (2006). A morphologically ill-founded powdery mildew species, *Pleochaeta indica*, is recognised as a phylogenetic species based on the analysis of the nuclear ribosomal DNA sequences. *Mycological Research* 110: 1299–1306.
- Kiyuna T, An KD, Kigawa R, Sano C, Miura S, Sugiyama J. Bristle-like fungal colonizers on the stone walls of the Kitora and Takamatsuzuka Tumuli are identified as *Kendrickiella* phycomycetes. *Mycoscience*. 2012 Nov 1;53(6):446-59.

- Kjer, J., Wray, V., Edrada-Ebel, R., Ebel, R., Pretsch, A., Lin, W. and Proksch, P., 2009. Xanalteric acids I and II and related phenolic compounds from an endophytic *Alternaria* sp. isolated from the mangrove plant *Sonneratia alba*. *Journal of natural products*, 72(11), pp.2053-2057.
- Klaubauf, S., Tharreau, D., Fournier, E., Groenewald, J.Z., Crous, P.W., De Vries, R.P. and Lebrun, M.H., 2014. Resolving the polyphyletic nature of *Pyricularia* (Pyriculariaceae). *Studies in mycology*, 79, pp.85-120.
- Klavina, D., Muiznieks, I., Gaitnieks, T., Lazdins, A., Nikolajeva, V., Bardule, A. and Menkis, A. 2016 Fine root development and mycorrhization in Norway spruce stands a year after fertilization with potassium sulphate and wood ash *JOURNAL OF FOREST SCIENCE*, 62(1): 17–23
- Klavina, D., Pennanen, T., Gaitnieks, T., Velmala, S., Lazdins, A., Lazdina, D. Menkis, A. 2016 The ectomycorrhizal community of conifer stands on peat soils 12 years after fertilization with wood ash. *Mycorrhiza* 26 (2), 153-160.
- Klaysuban, A., Sakayaroj, J. and Jones, E.B.G. 2014. An additional marine fungal lineage in the Diatrypaceae, Xylariales: *Pedumispora rhizophorae*, *Botanica Marina* 57(5): 413-420.
- Kleczeński, N.M. and Flory, S.L., 2010. Leaf Blight Disease on the Invasive Grass *Microstegium vimineum* Caused by a *Bipolaris* sp. *Plant Disease*, 94(7), pp.807-811.
- Klepsland, J. and Tønberg, T., 2012. *Schaereria corticola* from the Canary Islands, new to Africa.
- Knapp DG, Kovács GM, Zajta E, Groenewald JZ, Crous PW (2015) Dark septate endophytic pleosporalean genera from semiarid areas. *Persoonia* 35:87–100
- Knight, A., Bannister, J.M., Ludwig, L.R., Malcolm, W.M. and Orlovich, D.A., 2013. Rediscovery of pycnidia in *Thamnia vermicularis*: implications for chemotype occurrence and distribution. *The Lichenologist*, 45(03), pp.397-411.
- Knight, N.L., Platz, G.J., Lehmsiek, A. and Sutherland, M.W., 2010. An investigation of genetic variation among Australian isolates of *Bipolaris sorokiniana* from different cereal tissues and comparison of their abilities to cause spot blotch on barley. *Australasian Plant Pathology*, 39(3), pp.207-216.
- Knudsen K J, Sheard W, Kocourkova J, Mayrhofer H (2013) A new lichenicolous lichen from Europe and western North America in the genus *Dimelaena* (Physciaceae). *Bryologist* 116:257-262.
- Knudsen K, Elix JA, Reeb V (2008) A preliminary study of the genera *Acarospora* and *Pleopsidium* in South America. *Opuscula Philolichenum* 5:1-22
- Knudsen K, Flakus A, Kukwa M (2012) A contribution to the study of *Acarosporaceae* in South America. *Lichenologist* 44:253–262
- Knudsen K, Kocourkova J (2009) Lichens, lichenicolous and allied fungi of the Santa Monica mountains, Part 4: Additions and corrections to the annotated checklist. *Opuscula Phil* 7:29–48.
- Knudsen K, Lendemer JC, Harris RC. Lichens and lichenicolous fungi—no. 15: miscellaneous notes on species from eastern North America. *Opuscula Philolichenum*. 2011;9:45-75. 108(4): 709-715
- Knudsen K. A preliminary study of *Pleopsidium stenosporum* (Stizenb. ex Hasse) K. Knudsen. *Opuscula Philolichenum*. 2011;9:77-83.
- Knudsen, K. and Kocourková, J., 2010. Lichens, lichenicolous and allied fungi of the Santa Monica Mountains, Part 5: additions and corrections to the Annotated Checklist. *Opuscula Philolichenum*, 8, pp.83-100.

- Knudsen, K. and Kocourková, J., 2012. Lichenological notes 5: Neotypification of *Sarcogyne magnussonii* (Acarosporaceae). *Mycotaxon*, 121, pp.139-145.
- Knudsen, K. and Lendemer, J.C., 2016. A new perspective on *Melanophloea*, *Thelocarpella* and *Trimmatothelopsis*: species previously placed in multiple families are united within a single genus in the Acarosporaceae. *The Bryologist*, 119(3), pp.266-279.
- Knudsen, K. and McCune, B., 2013. A New Squamulose *Sarcogyne* from Oregon. *North American Fungi*, 8, pp.1-6.
- Knudsen, K., Flakus, A. and Kukwa, M., 2012. A contribution to the study of Acarosporaceae in South America. *The Lichenologist*, 44(02), pp.253-262.
- Knudsen, K., Gökhan Halıcı, M. and Kocakaya, M., 2009. *Sarcogyne magnispora* (Acarosporaceae), a new species in the nivea group from Turkey. *Mycotaxon*, 107(1), pp.413-417.
- Knudsen, K., Kocourková, J. and McCune, B., 2013. *Sarcogyne mitziae* (Acarosporaceae), a new species from biotic soil crusts in western North America. *The Bryologist*, 116(2), pp.122-126.
- Knudsen, K., Kocourkova, J., Westberg, M. and Wheeler, T., 2016. Two new species of *Acarosporaceae* from North America with carbonized epihymenial accretions. *The Lichenologist*, 48(5), pp.347-354.
- Knudsen, K.; Breuss, O.; Kocourkova, J. (2009). A new species of *Placocarpus* (Verrucariaceae) from southern California. *Lichenologist* 41(6): 627-630.
- Knudsen, K.; Kocourkova, J. (2010). A new *Lichenostigma* species (genus incertae sedis) from southern California. *Bryologist* 113(2): 229-234.
- Knudsen, K.; Lendemer, J.C. (2009). *Naetrocymbe herrei* (Pleosporales: Ascomycetes), a new lichenized saxicolous species from the coast of central California, USA. *Opuscula Philolichenum* 6: 59-64
- Kobayashi, H., Sano, A., Aragane, N., Fukuoka, M., Tanaka, M., Kawaura, F., Fukuno, Y., Matsuishi, E. and Hayashi, S., 2008. Disseminated infection by *Bipolaris spicifera* in an immunocompetent subject. *Medical mycology*, 46(4), pp.361-365.
- Kobayashi, T., Iijima, K., Radhakrishnan, S., Mehta, V., Vassallo, R., Lawrence, C.B., Cyong, J.C., Pease, L.R., Oguchi, K. and Kita, H., 2009. Asthma-related environmental fungus, *Alternaria*, activates dendritic cells and produces potent Th2 adjuvant activity. *The Journal of Immunology*, 182(4), pp.2502-2510.
- Kobmoo N, Mongkolsamrit S, Wutikhun T, Tasanathai K, Khonsanit A, Thanakitpipattana D, Luangsa-Ard JJ. New species of *Ophiocordyceps unilateralis*, an ubiquitous pathogen of ants from Thailand. *Fungal biology*. 2015 Jan 31;119(1):44-52.
- Kocakaya M, Halıcı MG, Aksoy A. *Zwackhiomyces turcicus* sp. nov.(Ascomycota, Xanthopyreniaceae) from Turkey. *Mycotaxon*. 2011 Apr 1;116(1):329-33.
- Koch J, 1974, Marine fungi on driftwood from the west coast of Jutland, Denmark. *Friesia* 10: 209-250.
- Koch J, Pang KL, Jones EBG (2007) *Rostrupiella danica* gen. et sp nov., a *Lulworthia*-like marine lignicolous species from Denmark and the USA. *Bot Mar* 50:294–301
- Koch, J. and Jones, E.B.G. (1983). Vedboende havsvampe fra danske Kyster. *Svampe* 8: 49-65.
- Koch, J. and Jones, E.B.G. (1989). The identity of *Crinigera maritima* and three new genera of marine cleistothecial ascomycetes. *Canadian Journal of Botany* 67: 1183-1197
- Koch, J., Jones, E.B.G. and Moss, S.T. (1983). *Groenhiella bivestia*, gen. et sp. nov., a lignicolous marine fungus from Denmark. *Botanica Marina* 26: 265-270.

Kocharin K, Supothina S, Prathumpai W (2013) Hypothemycin production and its derivatives diversifying of *Aigialus parvus* BCC 5311 influenced by cultural condition. *Advances in Bioscience and Biotechnology* 4:1049–1056

Kocourková, Hawksworth DL (2008)

Kocourková, J. (2009). Observations on the genus *Neolamya*, with the description of the new species *N. xanthoparmeliae* (Ascomycota, genera incertae sedis). *Opuscula Philolichenum* 6: 137-148

Kocourková, J., Fryday, A.M., Knudsen, K. and Lendemer, J.C., 2010. Studies in lichens and lichenicolous fungi: more notes on taxa from North America 6. *Mycotaxon*, 111(1), pp.423-429.

Kocourkova, J.; Knudsen, K. (2011). *Endococcus thelommatis*, a new lichenicolous fungus from southern California. *Bibliotheca Lichenol.* 106: 173-178

Kocourková, J.; Knudsen, K. 2009. *Gelatinopsis acarosporicola* (Helotiaceae), a new lichenicolous fungus on *Acarospora socialis* from western North America. *The Bryologist.* 112(2):363-367.

Kodsueb,R., Jeewon,R., Vijaykrishna,D., McKenzie,E.H.C., Lumyong,P., Lumyong,S. and Hyde,K.D. 2006 Systematic revision of Tubeufiaceae based on morphological and molecular data. *Fungal Divers.* 21, 105-130.

Kohli, M.M., Mehta, Y.R., Guzman, E., Viedma, L.D. and Cubilla, L.E., 2011. *Pyricularia blast*-a threat to wheat cultivation. *Czech J. Genet. Plant Breed*, 47, pp.S130-S134.

Kohlmeyer J (1973) Spathulosporales, a new order and possible missing link between Laboulbeniales and Pyrenomycetes. *Mycologia* 65:614-647

Kohlmeyer J (1980) Tropical and subtropical filamentous fungi of the Western Atlantic Ocean. *Bot Mar* 23:529–544

Kohlmeyer J (1981) Marine fungi from Easter Island and notes on *Thalassoascus*. *Mycologia* 73:833–843

Kohlmeyer J and Volkmann-Kohlmeyer B 1993. A new marine *Dryosphaera* (Ascomycotina) from the tropics. *Canadian Journal of Botany*, 1993, 71(7): 992-995

Kohlmeyer J, 1968. Danische Meerespilze (Ascomycetes). *Ber Deitsch Bot ges* 81: 53-61.

Kohlmeyer J, Kohlmeyer E (1979) *Marine Mycology* □ *The Higher Fungi*. Academic Press, New York.

Kohlmeyer J, Spatafora JW, Volkmann-Kohlmeyer B (2000). Lulworthiales, a new order of marine Ascomycota. *Mycologia* 92:453–458

Kohlmeyer J, Volkmann-Kohlmeyer B (1987) *Thalassogena*, a new ascomycetous genus in the Halosphaeriaceae. *Syst Ascomycet* 6:223–228

Kohlmeyer J, Volkmann-Kohlmeyer B (1991) Illustrated key to the filamentous marine fungi. *Bot Mar* 34:1–61

Kohlmeyer J, Volkmann-Kohlmeyer B (2003) Marine Ascomycetes from algae and animal hosts. *Bot Mar* 46:285–306

Kohlmeyer J. 1969 Nova Hedwigia 2: 329

Kohlmeyer, J. 1970. Ein neuer Ascomycet auf Hydrozoen im Südatlantik. *Berichte der Deutschen Botanischen Gesellschaft.* 83:505-509

Kohlmeyer, J. and Kohlmeyer, E. (1979). *Marine Mycology. The Higher Fungi.* Academic Press, New York

Kohlmeyer, J.; Volkmann-Kohlmeyer, B. (2000). Fungi on *Juncus roemerianus* 14. Three new coelomycetes, including *Floricola*, anam.-gen. nov.. *Bot. Mar.* 43(4): 385-392.

Kohlmeyer, J.; Volkmann-Kohlmeyer, B. 1990. Revision of marine species of *Didymosphaeria* (Ascomycotina). *Mycological Research.* 94:685-690

Kohlmeyer, J.; Volkmann-Kohlmeyer, B.; Eriksson, O.E. (1995). Fungi on *Juncus roemerianus* 2. New dictyosporous Ascomycetes. *Bot. Mar.* 38(2): 165-174.

- Kolařík M, Hujslová M, Vazquez-Campos X (2015) Acidotolerant genus *Fodinomyces* (Ascomycota: Capnodiales) is a synonym of *Acidiella*. *Czech Mycol* 67:37-38
- KOLAŘÍK M. New combinations for ergot species described under their anamorphic names by S. Pažoutová and colleagues. *Czech Mycology*. 2015 Jul 2;67(2).
- Kolařík M., Hulcr J., Kirkendall L.R. 2015. New species of *Geosmithia* and *Graphium* associated with ambrosia beetles in Costa Rica. *Czech Mycology*. 67:29-35.
- Kolařík, M.; Freeland, E.; Utley, C.; Tisserat, N. 2011. *Geosmithia morbida* sp. nov., a new phytopathogenic species living in symbiosis with the walnut twig beetle (*Pityophthorus juglandis*) on *Juglans* in USA. *Mycologia*. 103(2):325-332
- Kolařík, M.; Hulcr, J. 2009. Mycobiota associated with the ambrosia beetle *Scolytodes unipunctatus* Blandford (Coleoptera: Curculionidae, Scolytinae). *Mycological Research*. 113(1):44-60
- Kolařík, M.; Kirkendall, L.R. 2010. Evidence for a new lineage of primary ambrosia fungi in *Geosmithia* Pitt (Ascomycota: Hypocreales). *Fungal Biology*. 114:676-689
- Kondratyuk S, Kärnefelt I, Thell A, Elix J, Kim J, Jeong MH, Yu NN, Kondratiuk A, Hur JS. A revised taxonomy for the subfamily Caloplacoideae (Teloschistaceae, Ascomycota) based on molecular phylogeny. *Acta Botanica Hungarica*. 2014 Feb 25;56(1-2):141-78.
- Kondratyuk S, Lőkös L, Kim JA, Kondratiuk AS, Jeong, M-H, Jang SH, Oh S-O, Hur J-S (2015) New members of the Pertusariales (Ascomycota) proved by combined phylogenetic analysis. *Stud Bot Hung* 46(2):95-110.
- Kondratyuk S, Lőkös L, Tschabanenko S, Haji Moniri M, Farkas E, Wang X, Oh SO, Hur JS. New and noteworthy lichen-forming and lichenicolous fungi. *Acta Botanica Hungarica*. 2013 Sep 1;55(3-4):275-349.
- Kondratyuk S.Y., Kim J.A., Yu N.-H., Jeong M.-H., Jang S.H., Kondratiuk A.S., Zarei-Darki B., Hur J.-S. 2015 *Zeroviella*, a new genus of xanthorioid lichens (Teloschistaceae, Ascomycota) proved by three gene phylogeny.—*Ukr. Bot. J.* —72(6): 574—584.
- Kondratyuk SY, Kärnefelt I, Thell A, Elix JA, Kim J, Kondratiuk AS, Hur JS. *Brownlielloideae*, a new subfamily in the Teloschistaceae (Lecanoromycetes, Ascomycota). *Acta Botanica Hungarica*. 2015 Sep;57(3-4):321-43.
- Kondratyuk SY, Kärnefelt I, Thell A, Elix JA, Kim JA, Kondratiuk AS, Hur JS. *Ovealmbornia reginae* (Teloschistaceae, Ascomycetes), a new xanthorioid lichen from South Africa. *Herzogia*. 2015 Nov;28(2):465-72.
- Kondratyuk SY, Kim JA, Yu NH, Jeong MH, Jang SH, Kondratiuk AS, Zarei-Darki B, Hur JS. *Zeroviella*, a new genus of xanthorioid lichens (Teloschistaceae, Ascomycota) proved by three gene phylogeny. *Ukrainian Botanical Journal*. 2015;72:574-584.
- Kondratyuk SY, Lőkös L, Farkas E, Oh S-O, Hur J-S (2015) New and noteworthy lichen-forming and lichenicolous fungi 3. *Acta Bot. Hung.* 57(3-4): 345–382
- Kondratyuk SY, Lőkös L, Halda JP, Haji Moniri M, Farkas E, Park JS, Lee BG, Oh SO, Hur JS. New and noteworthy lichen-forming and lichenicolous fungi 4*. *Acta Botanica Hungarica*. 2016 Mar;58(1-2):75-136.
- Kondratyuk, Kim, Yu, Jeong, Jang, Kondratiuk, Zarei-Darki & Hur., 2015. *Ukr. Bot. J.* 72(6): 582.
- Kondratyuk, S. and Kondratyuk, A., 2014. A039: Molecular Phylogeny and Current Taxonomy of the Teloschistaceae (Lecanoromycetes, Ascomycota). *균학회소식*, 26(2), pp.72-72.
- Kondratyuk, S., 2016. Current Stage of Molecular Phylogeny of the Teloschistaceae (Lichen-Forming Ascomycota). *균학회소식*, 28(2), pp.67-67.

- Kondratyuk, S., Jeong, M.H., Yu, N.H., Kärnefelt, I., Thell, A., Elix, J., Kim, J., Kondratyuk, A. and Hur, J.S., 2013. Four new genera of Teloschistoid lichens (Teloschistaceae, Ascomycota) based on molecular phylogeny. *Acta Botanica Hungarica*, 55(3-4), pp.251-274.
- Kondratyuk, S., Kärnefelt, I., Thell, A., Elix, J., Kim, J., Jeong, M.H., Yu, N.N., Kondratiuk, A. and Hur, J.S., 2014. A revised taxonomy for the subfamily Caloplacoideae (Teloschistaceae, Ascomycota) based on molecular phylogeny. *Acta Botanica Hungarica*, 56(1-2), pp.141-178.
- Kondratyuk, S., Yatsyna, A., Lökös, L., Galanina, I., Haji Moniri, M. and Hur, J.S., 2013. Three new Xanthoria and Rusavskia species (Teloschistaceae, Ascomycota) from Europe. *Acta Botanica Hungarica*, 55(3-4), pp.351-365.
- KONDRATYUK, S.; LOKOS, L.; TSCHABANENKO, S.; HAJI MONIRI, M.; FARKAS, E.; WANG, X.Y.; OH, S.O.; HUR, J.S. (2013). New and noteworthy lichen-forming and lichenicolous fungi. *Acta bot. hung.* 55(3-4): 275-349.
- Kondratyuk, S.Y., Jeong, M.H., Galanina, I.A., Yakovchenko, L.S., Yatsyna, A.P. and Hur, J.S., 2015. Molecular phylogeny of placodioid lichen-forming fungi reveal a new genus, *Sedelnikovaea*. *Mycotaxon*, 129(2), pp.269-282.
- Kondratyuk, S.Y., Jeong, M.-H., Yu, N.-H., Kärnefelt, I., Thell, A., Elix, J.A., Kim, J., Kondratiuk, A.S. & Hur, J.-S. (2014a). A revised taxonomy for the subfamily Caloplacoideae (Teloschistaceae, Ascomycota) based on molecular phylogeny. *Acta Bot Hungarica* 56:93–123.
- Kondratyuk, S.Y., Jeong, M.-H., Yu, N.-N., Kärnefelt, I., Thell, A., Elix, J.A., Kim, J., Kondratiuk, A.S. and Hur, J.-S. 2014. A revised taxonomy for the subfamily Caloplacoideae (Teloschistaceae, Ascomycota) based on molecular phylogeny
- Kondratyuk, S.Y., Kärnefelt, I., Thell, A., Elix, J.A., Kim, J.A., Kondratiuk, A.S. and Hur, J.-S. 2015b. Brownlielloideae, a new subfamily in the Teloschistaceae Lecanoromycetes, Ascomycota). *Acta Bot Hung* 57 (3-4), 321-343.
- Kondratyuk, S.Y., Lökös, L., Halda, J.P., Haji Moniri, M., Farkas, E., Park, J.S., Lee, B.G., Oh, S.O. and Hur, J.S., 2016. New and noteworthy lichen-forming and lichenicolous fungi 4. *Acta Botanica Hungarica*, 58(1-2), pp.75-136.
- Kondratyuk, S.Y., Lökös, L., Kapetz, N.V., Pleskach, L.Y., Kim, J., Kondratiuk, A.S. and Hur, J.S., 2015. *Physcia ucrainica* sp. nova (Physciaceae, Ascomycota) from the Crimean Peninsula, proved by molecular phylogeny. *Acta Botanica Hungarica*, 57(1-2), pp.143-163.
- Kondratyuk, S.Y., Lökös, L., Kim, J.A., Kondratiuk, A.S., Jeong, M.H., Jang, S.H., Oh, S.O. and Hur, J.S., 2015a. Three New Monotypic Genera of the Caloplacoid Lichens (Teloschistaceae, Lichen-Forming Ascomycetes). *Mycobiology*, 43(3), pp.195-202.
- Kondratyuk, S.Y.; Jeong, M.-H.; Yu, N.-N.; Kärnefelt, I.; Thell, A.; Elix, J.A.; Kim, J.; Kondratiuk, A.S.; Hur, J.-S. 2014. A revised taxonomy for the subfamily Caloplacoideae (Teloschistaceae, Ascomycota) based on molecular phylogeny. *Acta Botanica Hungarica*. 56(1-2):93-123
- Kondratyuk, S.Y.; Lökös, L.; Farkas, E.; Oh, S.-O.; Hur, J.-S. 2015. New and noteworthy lichen-forming and lichenicolous fungi 2. *Acta Botanica Hungarica*. 57(1-2):77-141
- Kondratyuk, S.Y.; Lökös, L.; Kärnefelt, I.; Thell, A.; Elix, J.A.; Oh, S.-O.; Hur, J.-S. 2016. Three new *Orientophila* species (Teloschistaceae, Ascomycota) from eastern Asia. *Graphis Scripta*. 28(1-2):50-58
- Kondratyuk, S.Y.; Lökös, L.; Kim, J.A.; Kondratiuk, A.S.; Jeong, M.-H.; Jang, S.H.; Oh, S.-O.; Hur, J.-S. 2015. New members of the Pertusariales (Ascomycota) proved by combined phylogenetic analysis. *Studia Botanica Hungarica*. 46(2):95-110

- KONDRATYUK, S. Y., TSCHABANENKO S. I., ELIX J. A., OH S., THELL A. & HUR J.-S. 2013. *Nipponoparmelia perplicata* sp. nov. (Parmeliaceae, Ascomycota) from eastern Asia. *Mycotaxon*. 126:37-44
- Kondratyuk, S.Y., Jeong, M.-H., Yu, N.-N., Karnefelt, I., Thell, A., Elix, J.A., Kim, J., Kondratiuk, A.S. and Hur, J.-S. 2014. A revised taxonomy for the subfamily Caloplacoideae (Teloschistaceae, Ascomycota) based on molecular phylogeny. *Acta Bot Hung* 56 (1-2), 93-123
- Konoreva, L.A., Chesnokov, S.V. and Davydov, E.A., 2016. *Stictis* and *Schizoxylon* (Stictidaceae, Ostropales) in Russia. *Herzogia*, 29(2), pp.706-711.
- Koorders, S.H. 1907. Botanische Untersuchungen. Verhandelingen Koninklijke Nederlandse Akademie van Wetenschappen Afdeling Natuurkunde. 13(4), pp.1-264
- Korf RP, Zhuang W-Y (1985) A synoptic key to the species of *Lambertella* (Sclerotiniaceae), with comments on a version prepared for TAXADAT, Anderegg's computer program. *Mycotaxon* 24:361-386.
- Kosanić, M., Ranković, B. and Stanojković, T., 2012. Antioxidant, antimicrobial, and anticancer activity of 3 Umbilicaria species. *Journal of food science*, 77(1), pp.T20-T25.
- Kossowska, M. and Szczepańska, K., 2016. Current distribution and ecology of lichens in a biodiversity hotspot in the Mały Śnieżny Kocioł glacial cirque, Sudetes, Poland. *Herzogia*, 29(1), pp.120-136.
- Košuthová, A., Fernández-Brime, S., Westberg, M. and Wedin, M., 2016. *Collolechia* revisited and a re-assessment of ascus characteristics in Placynthiaceae (Peltigerales, Ascomycota). *The Lichenologist*, 48(01), pp.3-12.
- Koukol O, Baldrian P. Intergeneric variability in enzyme production of microfungi from pine litter. *Soil Biology and Biochemistry*. 2012 Jun 30;49:1-3.
- Koukol O, Kolářová Z (2010) *Bactrodesmium gabretae* (anamorphic Helotiales), a new sporodochial species described from spruce needles. *Nova Hedwigia* 91 (1-2):243-248
- KOUKOL O. A new species of *Rhexoampullifera* (Pezizomycotina) from a rotten broadleaved trunk. *CZECH MYCOLOGY* 64(1): 73–78
- Koukol O. New species of *Chalara* occupying coniferous needles. *Fungal Diversity*. 2011 Jul 1;49(1):75-91.
- Koukol, O. 2012. A new species of *Infundichalara* from pine litter. *Mycotaxon*. 120:343-352
- Koukol, O., 2010. Revision of “*Septonema ochraceum*” revealed three new species of Venturiaceae and Herpotrichiellaceae. *Mycological progress*, 9(3), pp.369-378.
- Koukol, O., Kelnarova, I. and Cerny, K. 2014. Recent observations of sooty bark disease of sycamore maple in Prague (Czech Republic) and the phylogenetic placement of *Cryptostroma corticale*. *Forest Pathology* 45(1): 21–27.
- Kovács GM, Balázs TK, Calonge FD, Martín MP. The diversity of *Terfezia* desert truffles: new species and a highly variable species complex with intrasporocarpic nrDNA ITS heterogeneity. *Mycologia*. 2011 Jul 1;103(4):841-53.
- Kovács GM, Trappe JM, Alsheikh AM, Hansen K, Healy RA, Vági P. *Terfezia* disappears from the American truffle mycota as two new genera and *Mattiolomyces* species emerge. *Mycologia*. 2011 Jul 1;103(4):831-40.
- Kovacs, G. M., J. M. Trappe, A.M. Alsheikh, K. Boka, and T. F. Elliott. 2008. *Imaia*, a new truffle genus to accommodate *Terfezia gigantea*. *Mycologia*, 100:930–939.
- Kovacs, G.M., Trappe, J.M., Alsheikh, A.M., Hansen, K., Healy, R.A. and Vagi, P. 2011. *Terfezia* disappears from the American truffle mycota as two new genera and *Mattiolomyces* species emerge. *Mycologia* 103 (4), 831-840

- Kowalski T, Holdenrieder O. The teleomorph of *Chalara fraxinea*, the causal agent of ash dieback. *Forest Pathology*. 2009 Oct 1;39(5):304-8.
- KOWALSKI T., KRAI W. & BEDNARZ B. (2016) Fungi on stems and twigs in initial and advanced stages of dieback of European ash (*Fraxinus excelsior*) in Poland. *European Journal of Forest Research* 135: 565-579.
- Kowalski, M., Hausner, G. and Piercey-Normore, M.D., 2011. Bioactivity of secondary metabolites and thallus extracts from lichen fungi. *Mycoscience*, 52(6), pp.413-418.
- Kraichak E, Parnmen S, Lücking R, Plata ER, Aptroot A, Cáceres MES, Ertz D, Mangold A, Mercado-Diaz JA, Papong K, van den Broeck D, Weerakoon G, Lumbsch HT (2014) Revisiting the phylogeny of Ocellularieae, the second largest tribe within Graphidaceae (lichenized Ascomycota: Ostropales). *Phytotaxa* 189 (1): 52–81
- Kraichak, E./ S. Parnmen/ R. Lücking/ H. T. Lumbsch 2013: *Gintarasia* and *Xalocoa*, two new genera to accommodate temperate to subtropical species in the predominantly tropical Graphidaceae (Ostropales, Ascomycota). - *Australian Systematic Botany* 26: 466-474.
- KRAICHAK, E.; PARNMEN, S.; LÜCKING, R.; RIVAS PLATA, E.; APTROOT, A.; CÁCERES, M.E.S.; ERTZ, D.; MANGOLD, A.; MERCADO-DÍAZ, J.A.; PAPONG, K.; VAN DEN BROECK, D.; LUMBSCH, H.T. 2014. Revisiting the phylogeny of Ocellularieae, the second largest tribe within Graphidaceae (lichenized Ascomycota: Ostropales). *Phytotaxa*. 189:52-81
- Kristiina, M., Lauri, S. Andres, S., Thell, A. and Randlane, T., 2012. Testing morphology-based delimitation of *Vulpicida juniperinus* and *V. tubulosus* (Parmeliaceae) using three molecular markers. *The Lichenologist*, 44(06), pp.757-772.
- Kristinsson, H., Heiðmarsson, S. and Hansen, E.S., 2014. Lichens from Iceland in the collection of Svanhildur Svane. *Botanica Lithuanica*, 20(1), pp.14-18.
- Kruys Å, Castlebury LA. Molecular phylogeny of Sydowiellaceae—resolving the position of *Cainiella*. *Mycologia*. 2012 Mar 1;104(2):419-26.
- Kruys A, Huhndorf S, Miller A (2015) Coprophilous contributions to the phylogeny of Lasiosphaeriaceae and allied taxa within Sordariales (Ascomycota, Fungi). *Fungal Diversity* 70(1):101–113.
- Kruys Å. & Wedin M. (2009). Phylogenetic relationships and an assessment of traditionally used taxonomic characters in the Sporormiaceae (Pleosporales, Dothideomycetes, Ascomycota), utilising multi-gene phylogenies *Systematics and Biodiversity* 7 (4): 465–478, doi:10.1017/S1477200009990119 C_ The Natural History Museum.
- Kruys Å. (2015). New species of *Preussia* with 8-celled ascospores (Sporormiaceae, Pleosporales, Ascomycota). *Phytotaxa* 234 (2): 143–150.
- Kruys Å. N. (2005). *Phylogenetic Relationships and Species Richness of Coprophilous Ascomycetes* Department of Ecology and Environmental Science, Umeå University Umeå 2005.
- Kruys Å., Castlebury L.A. 2012. Molecular phylogeny of *Sydowiellaceae* – resolving the position of *Cainiella*. *Mycologia* 104: 419-426.
- Kruys Å., Eriksson O.E. & Wedin M. (2006). Phylogenetic relationships of coprophilous Pleosporales (Dothideomycetes, Ascomycota), and the classification of some bitunicate taxa of unknown position. *Mycological Research* 110, 527–536.
- Kruys Å., Huhndorf S.M. & Miller A.N. (2015). Coprophilous contributions to the phylogeny of Lasiosphaeriaceae and allied taxa within Sordariales (Ascomycota, Fungi). *Fungal Diversity* (2015) 70:101–113. DOI 10.1007/s13225-014-0296-3.
- Kruys, A.; Wedin, M. (2009). Phylogenetic relationships and an assessment of traditionally used taxonomic characters in the Sporormiaceae (Pleosporales, Dothideomycetes, Ascomycota), utilising multi-gene phylogenies. *Syst. Biodiv.* 7(4): 465-478

- Kruys, A., Eriksson, O.E. and Wedin, M. 2006 Phylogenetic relationships of coprophilous Pleosporales (Dothideomycetes, Ascomycota), and the classification of some bitunicate taxa of unknown position JOURNAL Mycol. Res. 110 (PT 5), 527-536 (2006)
- Krzewicka B. A revision of Verrucaria s.l. (Verrucariaceae) in Poland. Polish Botanical Studies. 2012;27(3):143.
- Krzewicka, B. and Wilk, K., 2009. Umbilicaria isidiosa (lichenized Ascomycota), a new species from Bolivia. Mycotaxon, 109(1), pp.165-170.
- Krzewicka, B., 2010. Umbilicaria rhizinata comb. nov. (lichenized Ascomycota). The Lichenologist, 42(04), pp.491-493.
- Krzewicka, B., Garcia, M.A., Johansen, S.D., Sancho, L.G. and Martín, M.P., 2009. Morphological and nuclear ribosomal DNA data support distinguishing two new species of Umbilicaria (Umbilicariaceae, Ascomycota) from Europe. The Lichenologist, 41(06), pp.631-648.
- Kuan, C.S., Yew, S.M., Toh, Y.F., Chan, C.L., Ngeow, Y.F., Lee, K.W., Na, S.L., Yee, W.Y., Hoh, C.C. and Ng, K.P., 2015. Dissecting the fungal biology of Bipolaris papendorffii: from phylogenetic to comparative genomic analysis. DNA Research, p.dsv007.
- Kubiak, D. and Guzow-Krzemińska, B., 2014. Herbarium record of Vulpicida tubulosus (Lichenized Ascomycota) from locality beyond its known distribution range. Polish Journal of Environmental Studies, 23(2), pp.577-583.
- Kubiak, D., Osyczka, P. and Rola, K., 2016. Spontaneous restoration of epiphytic lichen biota in managed forests planted on habitats typical for temperate deciduous forest. Biodiversity and Conservation, 25(10), pp.1937-1954.
- KUČERA V, LIZOŇ P, KAUTMANOVÁ I. Geoglossoid fungi in Slovakia II. Trichoglossum octopartitum, a new species for the country. Czech Mycology. 2010;62(1):13-8.
- Kuhnert E, Sir EB, Lambert C, Hyde KD, Hladki AI, Romero AI, Rohde M, Stadler M. Phylogenetic and chemotaxonomic resolution of the genus Annulohyphoxylon (Xylariaceae) including four new species. Fungal Diversity. 2017:1-43.
- Kukwa M, Pérez-Ortega S. A second species of Botryolepraria from the Neotropics and the phylogenetic placement of the genus within Ascomycota. Mycological progress. 2010 Aug 1;9(3):345-51.
- Kukwa M, Schiefelbein U, Flakus A (2013) A contribution to the lichen family Graphidaceae (Ostropales, Ascomycota) of Bolivia. Herzogia 26:231–252
- Kukwa, M. and Flakus, A., 2009. New or interesting records of lichenicolous fungi from Poland VII. Species mainly from Tatra Mountains. Herzogia, 22, pp.191-211.
- Kukwa, M., 2010. Additions to the list of lichens and lichenicolous fungi of Gdanskie Pomerania. order.
- Kukwa, M., Łubek, A., Szymczyk, R. and Zalewska, A., 2012. Seven lichen species new to Poland. Mycotaxon, 120(1), pp.105-118.
- Kumar, J.V., Kumari, B.R., Sujatha, G. and Castano, E., 2008. Production of plants resistant to Alternaria carthami via organogenesis and somatic embryogenesis of safflower cv. NARI-6 treated with fungal culture filtrates. Plant Cell, Tissue and Organ Culture, 93(1), pp.85-96.
- Kumar, P., Anshu, V. and Kumar, S., 2011. Morpho-pathological and Molecular Characterization of Bipolaris oryzae in Rice (Oryza sativa). Journal of phytopathology, 159(1), pp.51-56.

- Kumar, U., Joshi, A.K., Kumar, S., Chand, R. and Röder, M.S., 2009. Mapping of resistance to spot blotch disease caused by *Bipolaris sorokiniana* in spring wheat. *Theoretical and Applied Genetics*, 118(4), pp.783-792.
- Kumar, U., Joshi, A.K., Kumar, S., Chand, R. and Röder, M.S., 2010. Quantitative trait loci for resistance to spot blotch caused by *Bipolaris sorokiniana* in wheat (*T. aestivum* L.) lines 'Ning 8201' and 'Chirya 3'. *Molecular breeding*, 26(3), pp.477-491.
- Kumar, V., Haldar, S., Pandey, K.K., Singh, R.P., Singh, A.K. and Singh, P.C., 2008. Cultural, morphological, pathogenic and molecular variability amongst tomato isolates of *Alternaria solani* in India. *World Journal of Microbiology and Biotechnology*, 24(7), pp.1003-1009.
- Kuna, P., Kaczmarek, J. and Kupczyk, M., 2011. Efficacy and safety of immunotherapy for allergies to *Alternaria alternata* in children. *Journal of Allergy and Clinical Immunology*, 127(2), pp.502-508.
- Kurniawati E, Zhang H, Chukeatirote E, Sulistyowati L, Moslem MA, Hyde KD. Diversity of freshwater ascomycetes in freshwater bodies at amphoe mae chan, Chiang Rai. *Cryptogam Mycol.* 2010;31(3):323-31.
- Kurokawa, S, Osorio, HS 2002. A new species of *Parmotremopsis* (Parmeliaceae) from Uruguay. *Comunicaciones Botánicas Museos Nacionales de Historia Natural y Antropología* 6(123): 1-3.
- Kurtzman CP, Price NP, Ray KJ, Kuo TM. Production of sophorolipid biosurfactants by multiple species of the *Starmerella* (*Candida*) *bombicola* yeast clade. *FEMS microbiology letters*. 2010 Oct 1;311(2):140-6.
- Kurtzman CP, Robnett CJ, Blackwell M. Description of *Teunomyces* gen. nov. for the *Candida kruisii* clade, *Suhomyces* gen. nov. for the *Candida tanzawaensis* clade and *Suhomyces kilbournensis* sp. nov. *FEMS yeast research*. 2016 Aug 1;16(5):fow041.
- Kurtzman CP, Robnett CJ. *Alloascoidea hylecoeti* gen. nov., comb. nov., *Alloascoidea africana* comb. nov., *Ascoidea tarda* sp. nov., and *Nadsonia starkeyi-henricii* comb. nov., new members of the Saccharomycotina (Ascomycota). *FEMS yeast research*. 2013 Aug 1;13(5):423-32.
- Kurtzman CP, Robnett CJ. Relationships among genera of the Saccharomycotina (Ascomycota) from multigene phylogenetic analysis of type species. *FEMS yeast research*. 2013 Feb 1;13(1):23-33.
- Kurtzman CP, Robnett CJ. Three new anascoptic genera of the Saccharomycotina: *Danielozyma* gen. nov., *Deakozyma* gen. nov. and *Middelhovenomyces* gen. nov. *Antonie van Leeuwenhoek*. 2014 May 1;105(5):933-42.
- Kurtzman CP, Suzuki M. Phylogenetic analysis of ascomycete yeasts that form coenzyme Q-9 and the proposal of the new genera *Babjeviella*, *Meyerozyma*, *Milleromyces*, *Priceomyces*, and *Scheffersomyces*. *Mycoscience*. 2010 Jan 1;51(1):2-14.
- Kurtzman CP. Biotechnological strains of *Komagataella* (*Pichia*) *pastoris* are *Komagataellaphaffii* as determined from multigene sequence analysis. *Journal of industrial microbiology & biotechnology*. 2009 Nov 1;36(11):1435.
- Kurtzman CP. Description of *Groenewaldozyma* gen. nov. for placement of *Candida auringiensis*, *Candida salmanticensis* and *Candida tartarivorans*. *Antonie van Leeuwenhoek*. 2016 Jul 1;109(7):1041-5.

- Kurtzman CP. Description of *Martiniozyma* gen. nov. and transfer of seven *Candida* species to *Saturnispora* as new combinations. *Antonie van Leeuwenhoek*. 2015 Oct 1;108(4):803-9.
- Kurtzman, C.P. 2012. *Citeromyces hawaiiensis* sp. nov., an ascosporic yeast associated with *Myoporum sandwicense*. *International Journal of Systematic and Evolutionary Microbiology*. 62:1215-1219.
- Kurtzman, C.P.; Robnett, C.J.; Basehoar-Powers, E. (2008). Phylogenetic relationships among species of *Pichia*, *Issatchenkia* and *Williopsis* determined from multigene sequence analysis, and the proposal of *Barnettozyma* gen. nov., *Lindnera* gen. nov. and *Wickerhamomyces* gen. nov.. *FEMS Yeast Res.* 8(6): 939-954
- Kurtzman, C.P.; Suzuki, M. (2010). Phylogenetic analysis of ascomycete yeasts that form coenzyme Q-9 and the proposal of the new genera *Babjeviella*, *Meyerozyma*, *Millerozyma*, *Priceomyces*, and *Scheffersomyces*. *Mycoscience* 51(1): 2-14
- Kušan I, Matočec N, Mešić A, Tkalčec Z. A new species of *Thecotheus* from Croatia with a key to the known species with apiculate spores. *Sydowia*. 2015 Jan 1;67:51-63.
- Kušan I, Matočec N, Mešić A, Tkalčec Z. *Tricharina tophiseda*—a new species from Croatia, with a revision of *T. japonica* (Pyronemataceae, Pezizales). *Phytotaxa*. 2015 Jul 28;221(1):35-47.
- Kusari S, Zühlke S, Košuth J, Čellárová E, Spiteller M. Light-independent metabolomics of endophytic *Thielavia subthermophila* provides insight into microbial hypericin biosynthesis. *Journal of natural products*. 2009 Sep 11;72(10):1825-35.
- Kuthubutheen, A.J. 1987. *Paliphora porosa* sp. nov. on leaf litter from Malaysia. *Transactions of the British Mycological Society*. 89(2):270-273.
- Kuznetsova, E.S., Motiejūnaitė, J., Stepanchikova, I.S., Himelbrant, D.E. and Czarnota, P., 2012. New records of lichens and allied fungi from the Leningrad Region, Russia. III. *Folia Cryptogamica Estonica*, 49, pp.31-37.
- Qin L., M. Qiao & Z.F. Yu, *Annals of Microbiology*, 61(3), 594, 2011
- Lachance MA, Kurtzman CP. The yeast genus *Tortispora* gen. nov., description of *Tortispora ganteri* sp. nov., *Tortispora mauiana* fa, sp. nov., *Tortispora agaves* fa, sp. nov., *Tortispora sangerardonensis* fa, sp. nov., *Tortispora cuajiniquilana* fa, sp. nov., *Tortispora starmeri* fa, sp. nov. and *Tortispora phaffii* fa, sp. nov., reassignment of *Candida caseinolytica* to *Tortispora caseinolytica* fa, comb. nov., emendation of *Botryozyma*, and assignment of *Botryozyma*, *Tortispora* gen. nov. and *Trigonopsis* to the family *Trigonopsidaceae* fam *International journal of systematic and evolutionary microbiology*. 2013 Aug 1;63(8):3104-14.
- Lachance MA, Perri AM, Farahbakhsh AS, Starmer WT. Genetic structure of *Kurtzmaniella cleridarum*, a cactus flower beetle yeast of the Sonoran and Mojave Deserts: speciation by distance?. *FEMS yeast research*. 2013 Nov 1;13(7):674-81.
- Lackner M, de Hoog GS, Yang L, Moreno LF, Ahmed SA, Andreas F, Kaltseis J, Nagl M, Lass-Flörl C, Risslegger B, Rambach G. Proposed nomenclature for *Pseudallescheria*, *Scedosporium* and related genera. *Fungal Diversity*. 2014 Jul 1;67(1):1-0.
- Lackner M, Klaassen CH, Meis JF, van den Ende AG, de Hoog GS. Molecular identification tools for sibling species of *Scedosporium* and *Pseudallescheria*. *Medical mycology*. 2012 Jul 1;50(5):497-508.
- Lackner, M, de Hoog, GS, Yang, L, Moreno, LF, Ahmed, SA, Andreas, F, Kaltseis, J, Nagl, M, Lass-Floerl, C, Risslegger, B, Rambach, G, Speth, C, Robert, V, Buzina, W, Chen, S, Bouchara, J-P, Cano-Lira, JF, Guarro, J, Gene, J, Fernandez Silva, F, Haido, R,

- Haase, G, Havlicek, V, Garcia-Hermoso, D, Meis, JF, Hagen, F, Kirchmair, M, Rainer, J, Schwabenbauer, K, Zoderer, M, Meyer, W, Gilgado, F, Schwabenbauer, K, Vicente, VA, Pieckova, E, Regenermel, M, Rath, P-M, Steinmann, J, de Alencar, XW, Symoens, F, Tintelnot, K, Ulfig, K, Velegraki, A, Tortorano, AM, Giraud, S, Mina, S, Rigler-Hohenwarter, K, Hernando, FL, Ramirez-Garcia, A, Pellon, A, Kaur, J, Bergter, EB, de Meirelles, JV, da Silva, ID, Delhaes, L, Alastruey-Izquierdo, A, Li, R, Lu, Q, Moussa, T, Almaghrabi, O, Al-Zahrani, H, Okada, G, Deng, S, Liao, W, Zeng, J, Issakainen, J & Liporagi Lopes, LC 2014, 'Proposed nomenclature for Pseudallescheria, Scedosporium and related genera' Fungal Diversity, vol 67, no. 1, pp. 1-10., 10.1007/s13225-014-0295-4
- Læssøe, T; Srikitikulchai, P.; Luangsa-ard, J.J.D.; Stadler, M. 2013. *Theissenia* reconsidered, including molecular phylogeny of the type species *T. pyrenocrata* and a new genus *Durotheca* (Xylariaceae, Ascomycota). *IMA Fungus*. 4(1):57-69
- Lafalme, G., Broders, K.D., Cote, C., Munck, I. Iriarte G, Innes, L. 2015 Priority of *Lophophacidium* over *Canavirgella*: taxonomic status of *Lophophacidium dooksii* and *Canavirgella banfieldii*, causal agents of a white pine needle disease. *Mycologia* 107 no. 4 745-753.
- Laflamme, G. and Smerlis, E. *Gremmeniella balsamea* sp. nov. on balsam fir in Canada *N Am Fungi* 7 (4), 1-14.
- Lahlali, R., McGregor, L., Song, T., Gossen, B.D., Narisawa, K. and Peng, G., 2014. *Heteroconium chaetospira* induces resistance to clubroot via upregulation of host genes involved in jasmonic acid, ethylene, and auxin biosynthesis. *PloS one*, 9(4), p.e94144.
- Lamit, L.J., Bowker, M.A., Holeski, L.M., Næsborg, R.R., Wooley, S.C., Zinkgraf, M., Lindroth, R.L., Whitham, T.G. and Gehring, C.A., 2011. Genetically-based trait variation within a foundation tree species influences a dominant bark lichen. *Fungal Ecology*, 4(1), pp.103-109.
- Landvik, S., Shaile, N.F.J. and Eriksson, O.E. (1996). SSU rDNA sequence support for a close relationship between the Elaphomycetales and the Eurotiales and Onygenales. *Mycoscience* 37: 237-241.
- Lang, S.I., Cornelissen, J.H., Shaver, G.R., Ahrens, M., Callaghan, T.V., Molau, U., ter Braak, C.J., Hölzer, A. and Aerts, R., 2012. Species occurrence and richness of lichen, bryophytes and vascular plants near Abisko, Sweden and Toolik lake, Alaska.
- Lange, O.L. and Belnap, J., 2016. How Biological Soil Crusts Became Recognized as a Functional Unit: A Selective History. In *Biological Soil Crusts: An Organizing Principle in Drylands* (pp. 15-33). Springer International Publishing.
- Lantieri A, Smith ME, Pfister DH. A new species of *Ruhlandiella* (Pezizaceae) from Italy. *Mycological progress*. 2012 May 1;11(2):509-13.
- Lantieri, A.; Pfister, D.H. 2010. A new species of *Marcelleina* from Italy. *Mycotaxon*. 111:465-469
- Lantieri, A., Johnston, P.R., Park, D., Lantz, H. and Merdadi, G. 2011 *Hypoderma siculum* sp. nov. from Italy. *Mycotaxon* 118, 393-401
- Lantz, H., Johnston, P.R., Park, D. and Minter, D.W. 2011 Molecular phylogeny reveals a core clade of Rhytismatales. *Mycologia* 103 (1), 57-74.
- Lapmak, K., Lumyong, S., Thongkumtha, S., Wongputtisin, P. and Sardud, U., 2010. L-asparaginase production by *Bipolaris* sp. BR438 isolated from brown rice in Thailand. *Chiang Mai J. Sci.*, 37(1), pp. 160-164.
- Laska, G., Kiercul, S., Stocki, M., Bajguz, A. and Pasco, D., 2015. Cancer-chemopreventive activity of secondary metabolites isolated from *Xanthoparmelia conspersa* lichen. *Planta Medica*, 81(16), p.PM_59.

- Latha, P., Anand, T., Ragupathi, N., Prakasam, V. and Samiyappan, R., 2009. Antimicrobial activity of plant extracts and induction of systemic resistance in tomato plants by mixtures of PGPR strains and Zimmu leaf extract against *Alternaria solani*. *Biological Control*, 50(2), pp.85-93.
- Laudon JR, Hawksworth DL (1988) Proposal to conserve *Aspicilia* Massal. against several names (Lichenized Ascomycota: Hymeneliaceae). *Taxon* 37(2):478–479.
- Laundon JR (2012) Proposal to conserve *Chrysothrix*, nom. cons., against an additional name, *Alysphaeria* (lichenised Ascomycota). *Taxon* 61(6):1321.
- Lawrence, C.B., Mitchell, T.K., Craven, K.D., Cho, Y.R., Cramer, R.A. and Kim, K.H., 2008. At death's door: *Alternaria* pathogenicity mechanisms. *The Plant Pathology Journal*, 24(2), pp.101-111.
- Lawrence, D.P., Gannibal, P.B., Peever, T.L. and Pryor, B.M., 2013. The sections of *Alternaria*: formalizing species-group concepts. *Mycologia*, 105(3), pp.530-546.
- LAWREY, J.D.; DIEDERICH, P.; NELSEN, M.P.; SIKAROODI, M.; GILLEVET, P.M.; BRAND, A.M.; VAN DEN BOOM, P. (2011). The obligately lichenicolous genus *Lichenocodium* represents a novel lineage in the Dothideomycetes. *Fungal Biol.* 2011 Feb;115(2):176-87.
- Lawrey, J.D., Marson, G., Etayo, J., Dal-Forno, M., Driscoll, K., Diederich, P. 2015 Molecular data support establishment of a new genus for the lichenicolous species *Neobarya usneae* (Hypocreales). *Bryologist* 118 (1), 83-92
- Le Pogam P, Le Lamer AC, Siva B, Legouin B, Bondon A, Gratton J, Jacquemin D, Rouaud I, Ferron S, Obermayer W, Babu KS. Minor Pyranonaphthoquinones from the Apothecia of the Lichen *Ophioparma ventosa*. *Journal of natural products*. 2016 Mar 2;79(4):1005-11
- Leão-Ferreira SM, Pascholati Gusmão LF, Castañeda Ruiz RF. Conidial fungi from the semi-arid Caatinga biome of Brazil. Three new species and new records. *Nova Hedwigia*. 2013 May 1;96(3-4):479-94.
- Leavitt, S.D. and Clair, L.L.S., 2011. Estimating *Xanthoparmelia* (Parmeliaceae) population density in subalpine communities in southern Utah, USA using two distance methods, with implications for assessing community composition. *The Bryologist*, 114(3), pp.625-636.
- Leavitt, S.D., Johnson, L. and St Clair, L.L. 2011b. Species delimitation and evolution in morphologically and chemically diverse communities of the lichen-forming genus *Xanthoparmelia* (Parmeliaceae, Ascomycota) in western North America. *Am. J. Bot.* 98 (2), 175-188.
- Leavitt, S.D., Johnson, L.A., Goward, T. and Clair, L.L.S., 2011a. Species delimitation in taxonomically difficult lichen-forming fungi: an example from morphologically and chemically diverse *Xanthoparmelia* (Parmeliaceae) in North America. *Molecular Phylogenetics and Evolution*, 60(3), pp.317-332.
- Leavitt, S.D., Lumbsch, H.T. and St. Clair, L.L., 2013. Contrasting demographic histories of two species in the lichen-forming fungal genus *Xanthomendoza* (Teloschistaceae, Ascomycota). *The Bryologist*, 116(4), pp.337-349.
- Lechat C, Fournier J. Two new species of *Lasionectria* (Bionectriaceae, Hypocreales) from Guadeloupe and Martinique (French West Indies). *Mycotaxon*. 2013 Jan 9;121(1):275-80.
- Lechat, C.; Courtecuisse, R. (2010). A new species of *Ijuhya*, *I. antillana*, from the French West Indies. *Mycotaxon* 113: 443-447.
- Lechat, C. and Fournier, J. 2017 Four new species of *Ijuhya* (Bionectriaceae) from Belgium, metropolitan France and French Guiana. *Ascomyceteorg* 9 (1), 11-18

- Lee LW, Wang GJ, Lin MH, Ju YM, Lin YW, Chen FY, Lee TH (2013) [Isolation and characterization of sesquiterpenes from *Arecophila saccharicola* YMJ96022401 with NO production inhibitory activity](#). *Phytochemistry* 85:129–136
- Lee S, Tamayo-Castillo G, Pang C, Clardy J, Cao S, Kim KH (2016) Diketopiperazines from Costa Rican endolichenic fungus *Colpoma* sp. CR1465A. *Bioorg Med Chem Lett*. 26(10): 2438-41.
- Lee SC, Han KS, Park JH, Cho SE, Shin HD. First report of frosty mildew caused by *Mycopappus alni* on Asian pear in Korea. *Journal of Phytopathology*. 2013 Dec;161(11-12):866-9.
- Lee SK, Lee SH, Cho SE, Park JH, Shin HD. Confirmation of the Presence of *Pleochaeta shiraiana* Associated with Powdery Mildew of *Celtis sinensis* in Korea. *Research in Plant Disease*. 2011;17(3):391-5.
- Lee SS, Alias SA, Jones EBG, Zainuddin N, Chan HT (2012) Checklist of Fungi of Malaysia. Research Pamphlet No.132. Swan Printing Sdn. Bhd., Seri Kembangan, Malaysia
- Lee, H.B.; Park, J.Y.; Jung, H.S.; Summerbell, R.C. 2006. *Phaeomoniella zymoides* and *Phaeomoniella pinifoliorum* spp. nov., new acid-tolerant epiphytic fungi isolated from pine needles in Korea. *Mycologia*. 98(4):598-611
- Lee, J.S., Min, G.H. and Lee, J.S., 2009. Nutritional and physicochemical characteristics of the antimentia acetylcholinesterase-inhibiting methanol extracts from *Umbilicaria esculenta*. *Mycobiology*, 37(3), pp.203-206.
- Lee, S.B., Go, Y.S., Bae, H.J., Park, J.H., Cho, S.H., Cho, H.J., Lee, D.S., Park, O.K., Hwang, I. and Suh, M.C., 2009. Disruption of glycosylphosphatidylinositol-anchored lipid transfer protein gene altered cuticular lipid composition, increased plastoglobules, and enhanced susceptibility to infection by the fungal pathogen *Alternaria brassicicola*. *Plant Physiology*, 150(1), pp.42-54.
- Lee, S.J.; Strobel, G.A.; Eisenman, K.; Geary, B.; Vargas, P.N.; Strobel, S.A. (2009). *Aurosphaeria*, a novel coelomycetous genus. *Mycotaxon* 107: 463-472.
- Lee, Y.B.; Na, Y.H. (2009). A new species of the genus *Coreomyces* (Laboulbeniales, Ascomycotina) collected from the island of Java, Indonesia. *Mycobiology* 37(4): 300-301
- Lendemer JC (2003) *Dermiscellum oulocheila*, forgotten priority and nomenclatural confusion in the Physciaceae (lichenized Ascomycetes). *Bryologist* 106(2):311-313.
- Lendemer JC (2010a) *Lepraria larrainiana* (Stereocaulaceae, Lichenized Ascomycetes), a new species from Central Chile. *Gayana Bot* 67:238–241
- Lendemer JC (2010b) Notes on *Lepraria* s.l. (Lecanoromycetes, Ascomycota) in North America: New species, new reports, and preliminary keys. *Brittonia* 62: 267–292
- Lendemer JC (2011) A taxonomic revision of the North American species of *Lepraria* s.l. that produce divaricatic acid, with notes on the type species of the genus *L. incana*. *Mycologia* 103:1216–1229
- Lendemer JC (2012) Perspectives on chemotaxonomy: molecular data confirm the existence of two morphologically distinct species within a chemically defined *Lepraria caesiella* (Stereocaulaceae). *Castanea* 77:89–105
- Lendemer JC (2013) Molecular phylogenetic evidence corroborates morphology but not chemistry in the *Lepraria neglecta* group (Stereocaulaceae). *Mem New York Bot Garden* 108:127–153
- Lendemer JC, Hodkinson BP (2012) *Chirleja buckii*, a new genus and species of lichenized-fungi from Tierra del Fuego, southern South America. *New Zealand J Bot* 50(4):449–456.

- Lendemer JC, Hodkinson BP (2013) A radical shift in the taxonomy of *Lepraria* s.l.: Molecular and morphological studies shed new light on the evolution of asexuality and lichen growth form diversification. *Mycologia* 105:994–1018
- Lendemer, J. C., B. P. Hodkinson 2012: Recognition of the *Parmelia crozalsiana* group as the genus *Crespoa*. *North American Fungi* 7(2): 1-5.
- Lendemer, J.C. and Harris, R.C., 2014. Studies in lichens and lichenicolous fungi—No. 19: Further notes on species from the Coastal Plain of southeastern North America. *Opuscula Philolichenum*, 13, pp.155-176.
- Lendemer, J.C. and Harris, R.C., 2015. *Xyleborus nigricans*, a second species for the previously monospecific genus newly found in the Mid-Atlantic Coastal Plain of North America. *The Bryologist*, 118(3), pp.284-292.
- Lendemer, J.C., 2009. Another Record of the Rare and Endangered Species *Phaeophyscia leana*. *Evansia*, 26(3), pp.142-143.
- Lendemer, J.C., 2010. Reassessment of the genus *Catillochroma* (lichenized Ascomycota, Ramalinaceae). *The Lichenologist*, 42(05), pp.587-600.
- Lendemer, J.C., 2012. Contributions to the Lichen Flora of Pennsylvania.—Further New and Interesting Reports of Lichens and Lichenicolous Fungi, Part 2.
- Lendemer, J.C., Harris, R.C. and Tripp, E.A., 2013. The lichens and allied fungi of Great Smoky Mountains National Park. *Memoires of the New York Botanical Garden*, 104, pp.1-152.
- Lendemer, J.C., Kocourková, J. and Knudsen, K., 2009. Studies in lichen and lichenicolous fungi: more notes on taxa from North America. *Mycotaxon*, 108, pp.491-497.
- Lendemer, J.C.; Harris, R.C.; Ruiz, A.M. 2016. A Review of the Lichens of the Dare Regional Biodiversity Hotspot in the Mid-Atlantic Coastal Plain of North Carolina, eastern North America. *Castanea*. 81:1-77.
- Lendemer, J.C.; Harris, R.C.; Tripp, E.A. 2013. The Lichens and allied fungi of Great Smoky Mountains National Park: an annotated checklist with comprehensive keys. *Memoirs of the New York Botanical Garden*. 104:1-152.
- Lendemer, J.C.; Knudsen, K. 2008. Studies in lichens and lichenicolous fungi: further notes on North American taxa. *Mycotaxon*. 103:75-86
- Leonard KJ, Suggs EG (1974) *Setosphaeria prolata*, the ascigerous state of *Exserohilum prolatum*. *Mycologia* 66: 281–297.
- Leonardo L, Mazzilli BP, Damatto SR, Saiki M, De Oliveira SM. Assessment of atmospheric pollution in the vicinity of a tin and lead industry using lichen species *Canoparmelia texana*. *Journal of environmental radioactivity*. 2011 Oct 31;102(10):906-10.
- Letourneau A, Seena S, Marvanová L, Bärlocher F. Potential use of barcoding to identify aquatic hyphomycetes. *Fungal Diversity*. 2010 Jan 1;40(1):51-64.
- Leuchtmann, A. and Clemençon, H. 2012 The taxonomic position of the genus *Heydenia* (Pyronemataceae, Pezizales) based on molecular and morphological data. *Mycol. Prog.* 11 (3), 699-710
- [Léveillé JH \(1846\) Descriptions des champignons de l'herbier du Muséum de Paris. Annales des Sciences Naturelles Botanique. 5:249–305](#)
- Lewis Smith, R.I., 2009. Further additions to the lichen flora of Antarctica and South Georgia. *Nova Hedwigia*, 88(1-2), pp.157-168.
- Li ,Z.J;C.N;H.C.L. 2014. New species and new records of Rhytismataceae from Japan. *Mycological Progress*.
- Li DM, de Hoog GS, Lindhardt Saunte DM, Gerrits van den Ende AHG, Chen XR. 2008. *Coniosporium epidermidis* sp. nov., a new species from human skin. *Studies in Mycology* 61:131–136.

- Li GJ, Hyde KD, Zhao RL, Hongsanan S, Abdel-Aziz FA et al. 2016 Fungal diversity notes 253–366: taxonomic and phylogenetic contributions to fungal taxa *Fungal Divers* 78, 1–237
- LI J, PHOOKAMSAK R, MAPOOK A, BOONMEE S, BHAT JD, HYDE KD, LUMYONG S. *Seifertia shangrilaensis* sp. nov. (Melanommataceae), a new species from Southwest China. *Phytotaxa*. 2016 Sep 5;273(1):34-42.
- Li JY, Qiao M, Peng J, Qian WY, Yang GZ, Yu ZF. *Uncispora hainanensis* sp. nov. isolated from decayed leaves. *Mycotaxon*. 2015 Jan 8;129(2):473-6.
- Li SH, Zheng LY, Liu CY, Wang Y, Li L, Zhao YC, Zhang XL, Yang M, Xiong HK, Qing Y, Wang L. Two new truffles species, *Tuber alboubilicium* and *Tuber pseudobrumale* from China. *Mycological Progress*. 2014 Nov 1;13(4):1157-63.
- Li WJ, Bhat JD, Hyde KD, Wang Y (2014) Towards a natural classification of Dothideomycetes 4: The genera *Bryopelta*, *Bryorella*, *Bryosphaeria*, *Lophiosphaerella* and *Maireella* (Dothideomycetes incertae sedis) *Phytotaxa* 176 (1): 28–41.
- Li WJ, Maharachchikumbura SSN, Li QR, Bhat DJ, Camporesi E, Tian Q, Senanayake IC, Dai DQ, Chomnunti P, Hyde KD (2015) Epitypification of *Broomella vitalbae* and Introduction of a Novel Species of *Hyalotiella*. *Cryptogam Mycol* 36(1):93–108
- Li Y, Xiao J, de Hoog GS, Wang X, Wan Z, Yu J, Liu W, Li R. 2017. Biodiversity and human-pathogenicity of *Phialophora verrucosa* and relatives in Chaetothyriales. *Persoonia* 38:1–19.
- Li YM, Haixia WU, Hang C, Hyde KD (2011) Morphological studies in Dothideomycetes: *Elsinoe* (Elsinoaceae), *Butleria* and three excluded genera. *Mycotaxon* 115: 507–520.
- Li, D.W., Zhao, G., Yang, C., Jalsrai, A. and Kerin, B., 2013. Four noteworthy hyphomycetes from indoor environments. *Mycotaxon*, 125(1), pp.111-121.
- Li, D.W.; Cowles, R.; Vossbrinck, C. 2008. *Metarhiziosis microspora* gen. et sp. nov. associated with the elongate hemlock scale. *Mycologia*. 100: 460-466.
- Li, G.J., Hyde, K.D., Zhao, R.L., Hongsanan, S., Abdel-Aziz, F.A., Abdel-Wahab, M.A., Alvarado, P., Alves-Silva, G., Ammirati, J.F., Ariyawansa, H.A. and Baghela, A., 2016. Fungal diversity notes 253–366: taxonomic and phylogenetic contributions to fungal taxa. *Fungal Diversity*, pp.1-237.
- Li, J., Yang, J., Liang, L. and Zhang, K.Q., 2008. Taxonomic revision of the nematode-trapping fungus *Arthrobotrys multisecondaria*. *The Journal of Microbiology*, 46(5), pp.513-518.
- Li, Q; Chen, Y.X; Zheng, C.T; Lu,D.D; Lin, Y.R. 2015. *Coccomyces neolitseae* sp.nov. from Zhangjiajie, China. *Mycotaxon*. 130:289-293.
- Li, S., Yu, Z., Zhang, Y., Qiao, M., Guo, J. and Zhang, K., 2009. *Arthrobotrys nonseptata*, a new anamorph from an *Orbilia* species. *Mycotaxon*, 109(1), pp.247-254.
- Li, X.F.; Lu, T.; Lu, B.S.; Hyde, K.D. 2009. *Emarcea rostrispora* nom. nov. (Xylariaceae, Ascomycota) on wood from Taiwan. *Mycosystema*. 28(1):151-153
- Li,W.H;Xiao,Y.X;Wang,C.S;Zhang,R;Batzer,J.C;Sun,G.Y;Gleason,M.L. 2012. A new species of *Devriesia* causing sooty blotch and flyspeck on Rubber Tree in China. 12:733-738.
- Liang J, Han Y, Du W, Liang Z, Li Z. *Chrysosporium linfenense*: a new *Chrysosporium* species with keratinolytic activity. *Mycotaxon*. 2009 Oct 1;110(1):65-71.
- Liang ZQ, Han YF, Chu HL, Fox RT. Studies on the genus *Paecilomyces* in China V. *Taifanglania* gen. nov. for some monophialidic species. *Fungal Diversity*. 2009 Jan 31;34:69.
- Liang, L., Shen, R., Mo, Y., Yang, J., Ji, X. and Zhang, K.Q., 2015. A proposed adhesin *AoMad1* helps nematode-trapping fungus *Arthrobotrys oligospora* recognizing host signals for life-style switching. *Fungal Genetics and Biology*, 81, pp.172-181.

- Liang, L., Wu, H., Liu, Z., Shen, R., Gao, H., Yang, J. and Zhang, K., 2013. Proteomic and transcriptional analyses of *Arthrotrichum oligosporum* cell wall related proteins reveal complexity of fungal virulence against nematodes. *Applied microbiology and biotechnology*, 97(19), pp.8683-8692.
- Liberato JR, Barreto RW, Niinomi S, Takamatsu S (2006). *Queirozia turbinata* (Phyllactiniaee, Erysiphaceae): a powdery mildew with dematiaceous anamorph. *Mycological Research* 110: 567–574.
- Ligoxigakis, E.K., Papaioannou, I.A., Markakis, E.A. and Typas, M.A., 2013. First report of pink rot of Phoenix and Washingtonia species caused by *Nalanthamala vermoeseni* in Greece. *Plant Disease*, 97(2), pp.285-285.
- Lim, Y.W., Kim, B.K., Kim, C., Jung, H.S., Kim, B.S., Lee, J.H. and Chun, J., 2010. Assessment of soil fungal communities using pyrosequencing. *The Journal of Microbiology*, 48(3), pp.284-289.
- Limtong S, Jindamorakot S, Am-In S, Kaewwichian R, Nitiyon S, Yongmanitchai W, Nakase T. *Candida uthaithanina* sp. nov., an anamorphic yeast species in *Nakaseomyces* clade isolated in Thailand. *Antonie van Leeuwenhoek*. 2011 May 1;99(4):865-71.
- Lin, C.H. and Chung, K.R., 2010. Specialized and shared functions of the histidine kinase- and HOG1 MAP kinase-mediated signaling pathways in *Alternaria alternata*, a filamentous fungal pathogen of citrus. *Fungal Genetics and Biology*, 47(10), pp.818-827.
- Lin, C.H., Yang, S.L. and Chung, K.R., 2009. The YAP1 homolog-mediated oxidative stress tolerance is crucial for pathogenicity of the necrotrophic fungus *Alternaria alternata* in citrus. *Molecular plant-microbe interactions*, 22(8), pp.942-952.
- Lin, C.H., Yang, S.L. and Chung, K.R., 2011. Cellular responses required for oxidative stress tolerance, colonization, and lesion formation by the necrotrophic fungus *Alternaria alternata* in citrus. *Current microbiology*, 62(3), pp.807-815.
- Lin, C.H., Yang, S.L., Wang, N.Y. and Chung, K.R., 2010. The FUS3 MAPK signaling pathway of the citrus pathogen *Alternaria alternata* functions independently or cooperatively with the fungal redox-responsive AP1 regulator for diverse developmental, physiological and pathogenic processes. *Fungal Genetics and Biology*, 47(4), pp.381-391.
- Linaldeddu BT, Alves A, Phillips AJL. 2016b – *Sardiniella urbana* gen. et sp. nov., a new member of the Botryosphaeriaceae isolated from declining *Celtis australis* trees in Sardinian streetscapes. *Mycosphere* Doi 10.5943/mycosphere/si/1b/5.
- Lindblom, L. and Söchting, U., 2013. Genetic diversity of the photobiont of the bipolar lichen-forming ascomycete *Xanthomendoza borealis*. *Herzogia*, 26(2), pp.307-322.
- Lindblom, L., 2014. *Xanthomendoza poeltii* is a synonym of *X. oregana* (Teloschistaceae, lichen-forming ascomycetes). *The Lichenologist*, 46(06), pp.829-832.
- Lindemann U, Vega M, Alvarado P. Revision der Gattung *Kotlabaea*: *K. deformis*, *K. delectans* und *K. benkertii*. *Zeitschrift für Mykologie*. 2015;81:2.
- Lindemann U, Vega M, Richter T, Alvarado P (2014): *Octosporopsis nicolai* – a mysterious member of the Pyronemataceae. *Zeitschrift für Mykologie* 80/2: 565-592.
- Lindemann U., Vega M., Alvarado, P. 2015. Revision der Gattung *Kotlabaea*: *K. deformis*, *K. delectans* und *K. Benkertii*. *Deutsche Gesellschaft für Mykologie*. 81: 373 – 402
- Lindemann, U; Böhning, T. 2016. *Tricharina glabra* (Pezizales) – eine neue Art in einer schwierigen Gattung. *Zeitschrift für Mykologie*. 82(2):449-458
- Linnakoski, R.; Beer, Z.W. de; Ahtiainen, J.; Sidorov, E.; Niemela, P.; Pappinen, A.; Wingfield, M.J. (2010). *Ophiostoma* spp. associated with pine- and spruce-infesting bark beetles in Finland and Russia. *Persoonia* 25: 72-93

- Linnakoski, R.; Beer, Z.W. de; Rousi, M.; Niemelä, P.; Pappinen, A.; Wingfield, M.J. (2008). Fungi, including *Ophiostoma karelicum* sp. nov., associated with *Scolytus ratzeburgi* infesting birch in Finland and Russia. *Mycol. Res.* 112(12): 1475-1488.
- Linnakoski, R.; de Beer, Z.W.; Duong, T.A.; Niemelä, P., Pappinen, A.; Wingfield, M.J. 2012. *Grosmannia* and *Leptographium* spp. associated with conifer-infesting bark beetles in Finland and Russia, including *Leptographium taigensis* sp. nov. *Antonie van Leeuwenhoek.* 102:375-399
- Linnakoski,R., Mahilainen,S., Harrington,A., Vanhanen,H., Eriksson,M., Mehtatalo,L., Pappinen,A. and Wingfield,M.J. Seasonal Succession of Fungi Associated with *Ips typographus* Beetles and Their Phoretic Mites in an Outbreak Region of Finland. *PLoS ONE* 11 (5), E0155622 (2016)
- Lintott, W.H. and Lintott, E.A. (2002). Marine fungi from New Zealand. In: *Fungi in Marine Environments* (ed. K.D. Hyde) *Fungal Diversity Research Series* 7: 285-292.
- Lisov, A., Zavarzina, A., Zavarzin, A., Demin, V. and Leontievsky, A., 2012. Dimeric and monomeric laccases of soil-stabilizing lichen *Solorina crocea*: purification, properties and reactions with humic acids. *Soil Biology and Biochemistry*, 45, pp.161-167.
- Lisowska, M., 2011. Lichen recolonisation in an urban-industrial area of southern Poland as a result of air quality improvement. *Environmental monitoring and assessment*, 179(1-4), pp.177-190.

Literature where new genera were described:

- Liu CY, Zhuang WY. Phylogeny of some genera in the Pyronemataceae (Pezizales, Ascomycetes). *Mycosystema.* 2006;25(4):546-58.
- Liu F, Cai L. Morphological and molecular characterization of a novel species of *Simplicillium* from China. *Cryptogamie, Mycologie.* 2012 Jun;33(2):137-44.
- Liu J.K., Hyde K.D., Jones K.B.G. et al. 2015. Fungal diversity 1-110: taxonomic and phylogenetic contributions to fungal species. *Fungal Diversity* 72: 1-197.
- Liu JK, Jones EBG, Chukeatirote E, Bahkali AH, Hyde KD (2011a) *Lignincola conchicola* from palms with a key to the species of *Lignincola*. *Mycotaxon* 117:343–349
- Liu JK, Phookamsak R, Dai DQ, Tanaka K, Jones EBG, Xu JC, Chukeatirote E, Hyde KD (2014) *Roussioellaceae*, a new pleosporalean family to accommodate the genera *Neoroussioella* gen. nov., *Roussioella* and *Roussioellopsis*. *Phytotaxa* 181:1–33
- Liu JK, Phookamsak R, Doilom M, Wikee S, Li YM, et al. 2012 – Towards a natural classification of Botryosphaerales. *Fungal Diversity* 57, 149–210.
- Liu JK, Phookamsak R, Jones EBG, Zhang Y, Ko-Ko TW, Hu HL, Boonmee S, Doilom M, Chukeatirote E, Bahkali AH, Wang Y, Hyde KD (2011) *Astrosphaeriella* is polyphyletic, with species in *Fissuroma* gen. nov., and *Neoastrosphaeriella* gen. nov. *Fungal Divers* 51:135–154
- Liu JK, Phookamsak R, Jones EBG, Zhang Y, Ko-Ko TW, Hu HL, Boonmee S, Doilom M, Chukeatirote E, Bahkali AH, Wang Y, Hyde KD (2011b) *Astrosphaeriella* is polyphyletic, with species in *Fissuroma* gen. nov., and *Neoastrosphaeriella* gen. nov. *Fungal Divers* 51:135–154
- [Liu Q](#), [Wang Y](#), [Luo H](#), [Wang L](#), [Shi P](#), [Huang H](#), [Yang P](#), [Yao B](#) (2015) Isolation of a novel cold-active family 11 Xylanase from the filamentous fungus *Bispora antennata* and deletion of its N-terminal amino acids on thermostability. [Applied Biochemistry and Biotechnology](#) 175:925–936. doi: 10.1007/s12010-014-1344-x
- Liu TT, Hu DM, Liu F, Cai L. Polyphasic characterization of *Plectosphaerella oligotrophica*, a new oligotrophic species from China. *mycoscience.* 2013 Sep 30;54(5):387-93.
- Liu, C.Y.; Zhuang, W.Y. 2006. Relationships among some members of the genus *Otidea* (Pezizales, Pyronemataceae). *Fungal Diversity.* 23:181-192

- Liu, D., Lokos, L., Lee, B.G., Woo, J.J. and Hur, J.S., 2016. The Genus *Physcidia* in Vietnam, and a New Possible Family Physcidiaceae D. Liu & Hur nov. Proposed Based on the Molecular Phylogeny. *균학회소식*, 28(2), pp.65-65.
- Liu, D., Wang, X.Y. and Wang, L., 2014. A018: Five New Species in the Family Sphaerophoraceae, with a Key to All Species Reported in China. *균학회소식*, 26(2), pp.69-69.
- Liu, F.; Hu, D.M.; Cai, L. 2012. *Conlarium duplumascospora* gen. et. sp. nov. and *Jobellisia guangdongensis* sp. nov. from freshwater habitats in China. *Mycologia*. 104(5):1178-1186
- Liu, J.K.; Jones, E.B.G.; Chukeatirote, E.; Bahkali, A.H.; Hyde, K.D. 2011. *Lignincola conchicola* from palms with a key to the species of *Lignincola*. *Mycotaxon*. 117:343-349
- Liu, J.K.; Phookamsak, R.; Dai, D.Q.; Tanaka, K.; Jones, E.B.G.; Xu, J.C.; Chukeatirote, E.; Hyde, K.D. 2014. Roussoellaceae, a new pleosporalean family to accommodate the genera *Neoroussoella* gen. nov., *Roussoella* and *Roussoellopsis*. *Phytotaxa*. 181(1):1-33
- Liu, S., Su, H., Su, X., Zhang, F., Liao, G. and Yang, X., 2014. *Arthrotrys xiangyunensis*, a novel nematode-trapping taxon from a hot-spring in Yunnan Province, China. *Phytotaxa*, 174(2), pp.89-96.
- Liu, X.X., Zhuang, W.Y., Zeng, Z.Q. and Zhao, P. 2016 Newly discovered sclerotiniaceous fungi from China. *Nova Hedwigia*, Volume 102, Numbers 3-4, pp. 347-357(11).
- Lluvia Flores-Rentería; Matthew K. Lau; Louis J. Lamit; Catherine A. Gehring. 2014. An elusive ectomycorrhizal fungus reveals itself: a new species of *Geopora* (Pyronemataceae) associated with *Pinus edulis*. *Mycologia*. 106(3):553-563
- Lodha, B.C. & Chandra Reddy, K.R. 1974. *Hyphodiscosia* gen. nov. from India. *Trans Br Mycol Soc* 62:418–421.
- Logesh, A.R., Chinlapianga, M., Shukla, A.C. and Upreti, D.K., 2015. Studies on Lichens of Mizoram, Northeast India. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, pp.1-13.
- Logrieco, A., Moretti, A. and Solfrizzo, M., 2009. *Alternaria* toxins and plant diseases: an overview of origin, occurrence and risks. *World Mycotoxin Journal*, 2(2), pp.129-140.
- Löhmus, A. and Löhmus, P., 2010. Epiphyte communities on the trunks of retention trees stabilise in 5 years after timber harvesting, but remain threatened due to tree loss. *Biological Conservation*, 143(4), pp.891-898.
- Lohtander K, Oksanen I, Rikkinen J (2002) A phylogenetic study of *Nephroma* (lichen-forming Ascomycota). *Mycol Res* 106(7):777-787.
- Loizides, M; Bellanger, J-M; Clowez, P; Richard, F; Moreau, P-A. 2016. Combined phylogenetic and morphological studies of true morels (Pezizales, Ascomycota) reveal Cyprus as the new hotspot of *Morchella* diversity. *Mycological Progress*. 15(4/39):1-16
- Loizides, M; Carbone, M; Alvarado, P. 2015. *Geoglossum dunense* (Ascomycota, Geoglossales): a new species from the Mediterranean islands of Cyprus and Malta. *Mycological Progress*. 14(6/41):1-8
- Lombard L, Chen SF, Mou X, Zhou XD, Crous PW, Wingfield MJ (2015b) New species, hyper-diversity and potential importance of *Calonectria* spp. from Eucalyptus in South China. *Studies in mycology* 80:151–188
- Lombard L, Crous PW, Wingfield BD, Wingfield MJ (2010a). *Phylogeny and systematics*
- Lombard L, Crous PW, Wingfield BD, Wingfield MJ (2010b). Species concepts in *Calonectria* (*Cylindrocladium*). *Studies in Mycology* 66: 1–14

Lombard L, Merwe NA van der, Groenewald JZ, Crous PW (2014) Lineages in Nectriaceae: re-

- Lombard L, Shivas RG, To-Anun C, Crous PW (2012) Phylogeny and taxonomy of
Lombard L, van der Merwe NA, Groenewald JZ, Crous PW (2015a) Generic concepts in Nectriaceae. *Stud Mycol* 80:189–245
- London, L.S., 2016. *Schismatomma galactinum* (lichenized ascomycota), a lichen species new to India. *CURRENT SCIENCE*, 110(5), p.770.
- López de Silanes, M.E.; Etayo, J.; Paz-Bermúdez, G. 2009. *Pronectria pilosa* (Hypocreaceae) sp. nov. and other lichenicolous fungi found on Collemataceae in the Iberian Peninsula. *The Bryologist*. 112(1):101-108.
- Loppi, S. and Nascimbene, J., 2010. Monitoring H₂S air pollution caused by the industrial exploitation of geothermal energy: the pitfall of using lichens as bioindicators. *Environmental Pollution*, 158(8), pp.2635-2639.
- Lorch, J.M.; Minnis, A.M.; Meteyer, C.U.; Redell, J.A.; White, J.P.; Kaarakka, H.M.; Muller, L.M.; Lindner, D.L.; Verant, M.L.; Shearn-Bochsler, V.; Blehert, D.S. 2014. The Fungus *Trichophyton redellii* sp. nov. Causes Skin Infections that Resemble White-nose Syndrome of Hibernating Bats. *Journal of Wildlife Diseases*. 51:36-47
- Lou, J., Fu, L., Peng, Y. and Zhou, L., 2013. Metabolites from *Alternaria* fungi and their bioactivities. *Molecules*, 18(5), pp.5891-5935.
- Lu, M., Zhou, X.D., De Beer, Z.W., Wingfield, M.J. and Sun, J.-H. 2009 Ophiostomatoid fungi associated with the invasive pine-infesting bark beetle, *Dendroctonus valens*, in China. *Fungal Divers*. 38, 133-145
- Luangsa-ard, J.J.; Houbraken, J.A.M.P.; Doorn, T. van; Hong, S.B.; Borman, A.M.; Hywel-Jones, N.L.; Samson, R.A. (2011). *Purpureocillium*, a new genus for the medically important *Paecilomyces lilacinus*. *FEMS Microbiol. Lett.* 321(2): 141-149.
- Luangsaphabool, T., Piapukiew, J., Parmen, S., Nelsen, M.P., Lumbsch, H.T. and Sangvichien, E. 2016 Diversity of the *Trypethelium eluteriae* group in Thailand (Ascomycota, Trypetheliales). *Lichenologist* (Lond.) 48, 53-60
- Łubek, A., 2012. The lichen biota of „Skalki Piekło pod Niekłaniem“ Nature Reserve—current state and changes in species composition over the past 100 years. *Pol. J. Natur. Sci*, 27(2), pp.135-150.
- Lücking R (2008) Foliicolous lichenized fungi. *Fl Neotrop Monogr* 103:1–866.
- Lücking R (2015). Thelotremoid Graphidaceae from the NYBG herbarium: New species, range extensions, and a forgotten lichen. *Opuscula Philolichenum*. 14:1–57
- Lücking R 2014 A key to species of the *Ocellularia papillata*, *perforata* and *terebrata* morphodemes. *Glalia* 6(3): 1-35.
- Lücking R, Archer AW, Aptroot A (2009) A world-wide key to the genus *Graphis* (Ostropales: Graphidaceae). *Lichenologist* 41:363–452
- LÜCKING R, BREUSS 2012 A new species of *Thelotrema*, a new combination, *Leucodecton isidioides*, and a key to thelotremoid lichens of Macaronesia (lichenised Ascomycota: Graphidaceae). *Österr. Z. Pilzk.* 21: 127-133.
- Lücking R, Hawksworth DL (2007) Names for lichen-forming fungi introduced by Ciferri and Tomaselli are illegitimate and not available for use, except for three cases. *Taxon* 56: 1274–1284
- Lücking R, Kalb K (2002) New species and further additions to the foliicolous lichen flora of Kenya (East Africa), including the first lichenicolous *Aulaxina* (Ostropales: Gomphillaceae). *Bot. J. Linn. Soc.* 139: 171–180
- Lücking R, Rivas Plata E, Kalb, K., Common, R., Barcenas Peña, A & Duya, M. V. 2011 *Halegrapha* (Ascomycota: Graphidaceae), an enigmatic new genus of tropical lichenized fungi dedicated to Mason E. Hale. Jr. *Lichenologist* 43: 331-344

- Lücking R, Sérusiaux E, Vezda A (2005) Phylogeny and systematics of the lichen family Gomphillaceae (Ostropales) inferred from cladistic analysis of phenotype data. *Lichenologist* 37(2): 123–170
- Lucking R, Stuart BL, Lumbsch HT (2004) Phylogenetic relationships of Gomphillaceae and Asterothyriaceae: evidence from a combined Bayesian analysis of nuclear and mitochondrial sequences. *Mycologia* 96 (2):283–294.
- Lücking R, Tehler A, Bungartz F, Rivas Plata E, Lumbsch HT (2013) Journey from the West: Did tropical Graphidaceae (lichenized Ascomycota: Ostropales) evolve from a saxicolous ancestor along the American Pacific coast. *Am J Bot.* 100(5):844–56
- Lücking R. (2008) Foliicolous Lichenized Fungi. *Flora Neotropica Monograph* 103. Organization for Flora Neotropica and The New York Botanical Garden Press, Bronx, New York
- Lücking R., Nelsen M.P., Aptroot A., Barillas de Klee R., P.A. Bawingan, M.N. Benatti, F. Bungartz, M.E.S. Cáceres, L. da Silva Canêz, J.-L. Chaves, D. Ertz, R.E. Esquivel, L.I. Ferraro, A. Grijalva, C. Gueidan, J.E. Hernández M., A. Knight, H.T. Lumbsch, M.P. Marcelli, J. Mercado-Díaz, B. Moncada, E.A. Morales, T. Orozco, S. Parnmen, E. Rivas Plata, N. Salazar-Allen, A. Spielmann & N. Ventura. 2016. A phylogenetic framework for reassessing generic concepts and species delimitation in the lichenized family Trypetheliaceae (Ascomycota: Dothideomycetes). *Lichenologist* 48: 739-762.
- Lücking, R. (2008) Foliicolous lichenized fungi. *Flora Neotropica* 103: 1–866.
- Lücking, R., Aptroot, A., Boonpragob, K., Cáceres, M.E.S., Ertz, D., Harris, R.C., Jia, Z.-F., Kalb, K., Kraichak, E., Lendemer, J.C., Mangold, A., Manoch, L., Mercado-Díaz, J., Moncada, B., Mogkulsuk, P., Papong, K., Parnmen, S., Peláez, R., Poengsunoen, V., Rivas-Plata, E., Saipunkaew, W., Sipman, H.J.M., Sutjaritturakan, J., van den Broeck, D., von Konrat, M., Weerakoon, G. & Lumbsch H.T. (2014) One hundred and seventy five new species of Graphidaceae: closing the gap or a drop in the bucket? *Phytotaxa* 189(1): 7–38.
- Lücking, R., Johnston, M.K., Aptroot, A., Kraichak, E., Lendemer, J.C., Boonpragob, K., Cáceres, M.E., Ertz, D., Ferraro, L.I., Jia, Z.F. and Kalb, K., 2014. One hundred and seventy-five new species of Graphidaceae: closing the gap or a drop in the bucket?.
- Lücking, R., Lumbsch, H.T., Di Stefano, J.F., Lizano, D., Carranza, J., Bernecker, A., Chaves, J.L. and Umana, L. 2008. *Eremithallus costaricensis* (Ascomycota: Lichinomycetes: Eremothallales), a new fungal lineage with a novel lichen symbiotic lifestyle discovered in an urban relict forest in Costa Rica. *Symbiosis* 46 (3), 161-170.
- Lücking, R., Parnmen, S. & Lumbsch, H.T. (2012) *Mangoldia*, a new lichen genus in the family Graphidaceae (Ascomycota: Ostropales). *Phytotaxa* 69: 1–5.
- Lücking, R., Plata, E.R., Parnmen, S., Staiger, B., Mangold, A., Frisch, A., Weerakoon, G., Hernandez, J., Cáceres, M., Kalb, K. and Sipman, H., 2013. A molecular phylogeny of Graphidaceae (Ascomycota, Lecanoromycetes, Ostropales) including 428 species. *MycoKeys*, 6, p.55.
- Lücking, R., Sérusiaux, E., Maia, L.C. & Pereira, C.G. 1998. A revision of the names of foliicolous lichenized fungi published by Batista and co-workers between 1960 and 1975. *Lichenologist* 30(2): 121–191.
- Lucking, R./ A. Tehler/ F. Bungartz/ E. Rivas Plata/ H. T. Lumbsch 2013: Journey from the West: Did tropical Graphidaceae (lichenized Ascomycota: Ostropales) evolve from a saxicolous ancestor along the American Pacific coast?. *Am. J. Bot.* 100(5): 844-856.
- Lücking, R./ S. Parnmen/ T. Lumbsch 2012: *Mangoldia*, a new lichen genus in the family Graphidaceae (Ascomycota: Ostropales). - *Phytotaxa* 69: 1-5.
- Lumbsch HT, Huhndorf SM. eds. (2010) Outline of Ascomycota 2009. *Myconet* 14:1–64

- Lümbusch HT, Nelsen MP, Lücking R (2008) The phylogenetic position of Haematommataceae (Lecanorales, Ascomycota), with notes on secondary chemistry and species delimitation. *Nova Hedwigia* 86(1-2): 105–114
- Lümbusch H.T., Huhndorf S.M. 2010. Outline of Ascomycetes – 2009. *Fieldiana* 1: 1-64.
- Lümbusch HT (1997) A comparison of ascoma ontogeny supports the inclusion of the Eigleraceae in the Hymeneliaceae (Lecanorales). *The Bryologist* 100(2):180–192.
- Lümbusch HT, Ahti T, Altermann S, Amo De Paz G, Aptroot A, Arup U, Bárcenas Peña A, Bawingan PA, Benatti MN, Betancourt L, Björk CR, Boonpragob K Brand M, Bungartz F, Cáceres MES, Candan M, Chaves JL, Clerc P, Common R, Coppins BJ, Crespo A, Dal-Forno M, Divakar PK, Duya MV, Elix JA, Elvebakk A, Fankhauser JD, Farkas E, Itatí Ferraro L, Fischer E, Galloway DJ, Gaya E, Giralt M, Goward T, Grube M, Hafellner J, Hernández M, JE, Herrera Campos MA, Kalb K, Kärnefelt I, Kantvilas G, Killmann D, Kirika P, Knudsen K, Komposch H, Kondratyuk S, Lawrey JD, Mangold A, Marcelli MP, McCune B, Messuti MI, Michlig A, Miranda González R, Moncada B, Naikatini A, Nelsen MP, Øvstedal DO, Palice Z, Papong K, Parmen S, Pérez-Ortega S, Printzen C, Rico VJ, Rivas Plata E, Robayo J, Rosabal D, Ruprecht U, Salazar Allen N, Sancho L, Santos De Jesus L, Santos Vieira T, Schultz M, Seaward MRD, Sérusiaux E, Schmitt I, Sipman HJM, Sohrabi M, Søchting U, Søggaard MZ, Sparrius LB, Spielmann A, Spribille T, Sutjaritturakan J, Thammathaworn A, Thell A, Thor G, Thüs H, Timdal E, Truong C, Türk R, Umaña Tenorio L, Upreti DK, van den Boom P, Vivas Rebuelta M, Wedin M, Will-Wolf S, Wirth V, Wirtz N, Yahr R, Yeshitela K, Ziemmeck F, Wheeler T, Lücking R (2011) One hundred new species of lichenized fungi: a signature of undiscovered global diversity. *Phytotaxa* 18:1–127
- Lümbusch HT, Huhndorf SH (2010) *Myconet* Volume 14. Part One. Outline of Ascomycota—2009. *Fieldiana, Life and Earth Sciences* 1:1–42
- Lümbusch HT, Huhndorf SM (2007) What-ever happened to the pyrenomycetes and loculoascomycetes? *Mycological Research* 111: 1064–1074.
- Lümbusch HT, Huhndorf SM (2010) Outline of Ascomycota – 2009 *Fieldiana Life and Earth Sciences*. 1:1–60
- Lümbusch HT, Huhndorf SM (2011) *Myconet* Volume 14. Part One. Outline of Ascomycota—2009. Part Two. Notes on Ascomycete Systematics. Nos. 4751–5113.
- Lümbusch HT, Huhndorf SM. 2009 - *Myconet* Volume 14, Part One. Outline of Ascomycota-2009 Part Two. Notes on Ascomycete Systematics. Nos. 4751–5113. *Fieldiana Life and Earth Sciences* 1-64.
- Lümbusch HT, Huhndorf SM. eds. (2010) Outline of Ascomycota 2009. *Myconet* 14:1–64
- Lümbusch HT, Huhndorf, S.M. (2010) *Myconet* 14(2). Outline of Ascomycota—2010. *Fieldiana, Life and Earth Sciences* 1: 42–64.
- Lümbusch HT, Kraichak E, Parmen S, Rivas Plata E, Aptroot A, Cáceres MES, Ertz D, Feuerstein SC, Mercado-Díaz JA, Staiger B, Van den Broeck D, Lücking R (2014) New higher taxa in the lichen family Graphidaceae (lichenized Ascomycota: Ostropales) based on a three-gene skeleton phylogeny. *Phytotaxa* 189:89–51
- Lümbusch HT, Lindemuth R (2001) Major lineages of Dothideomycetes (Ascomycota) inferred by SSU and LSU rDNA sequences. *Mycological Research* 105: 901–908.
- Lümbusch HT, Schmitt I, Lücking R, Wiklund E, Wedin M (2007) The phylogenetic placement of Ostropales within Lecanoromycetes (Ascomycota) revisited. *Mycol. Res.* 111 (PT 3), 257–267
- Lümbusch HT, Schmitt I, Palice Z, Wiklund E, Ekman S, Wedin M (2004) Supraordinal phylogenetic relationships of Lecanoromycetes based on a Bayesian analysis of combined nuclear and mitochondrial sequences. *Mol Phylogenet Evol* 31:822–832

- Lumbsch HT, Zimmermann DG, Schmitt I. Phylogenetic position of ephemeral lichens in Thelocarpaceae and Vezdaeaceae (Ascomycota). *Bibliotheca Lichenologica*. 2009;100:389-98.
- Lumbsch T, Kantvilas G, Parnmen S. Molecular data support placement of *Cameronia* in Ostropomycetidae (Lecanoromycetes, Ascomycota). *MycKeys*. 2012 Nov 30;5:31.
- Lumbsch, H. T. and Huhndorf, S. M., 2011. *Myconet* Volume 14. Part One. Outline of Ascomycota—2009. Part Two. Notes on Ascomycete Systematics. Nos. 4751–5113.
- Lumbsch, H.T., 2014. Steven D. Leavitt, Theodore L. Esslinger, Eric Steen Hansen, Pradeep K. Divakar, Ana Crespo, Bradley F. Loomis &. *Org Divers Evol*, 14, pp.11-20.
- Lumbsch, H.T., Kraichak, E., Parnmen, S., Plata, E.R., Aptroot, A., Caceres, M.E., Ertz, D., Feuerstein, S.C., Mercado-Diaz, J.A., Staiger, B. and Van den Broeck, D., 2014. New higher taxa in the lichen family Graphidaceae (lichenized Ascomycota: Ostropales) based on a three-gene skeleton phylogeny.
- Lumbsch, H.T., Lücking, R.O.B.E.R.T. and Tibell, L.E.I.F., 2009. Molecular data place *Tylophoron* as an additional calicioid genus in the Arthoniales (Ascomycota). *Biblioth Lichenol*, 99, pp.285-296.
- Lumbsch, H.T.; Divakar, P.K.; Messuti, M.I.; Mangold, A.; Lücking, R. (2010). A survey of thelotremoid lichens (Ascomycota: Ostropales) in subantarctic regions excluding Tasmania. *Lichenologist* 42(2): 203-224.
- Lumbsch, T., Kantvilas, G. and Parnmen, S., 2012. Molecular data support placement of *Cameronia* in Ostropomycetidae (Lecanoromycetes, Ascomycota). *MycKeys*, 5, p.31.
- Lumbsch,H.T., Parnmen,S., Kraichak,E., Papong,K.B. and Luecking,R. 2014 High frequency of character transformations is phylogenetically structured within the lichenized fungal family Graphidaceae (Ascomycota: Ostropales). *System. Biodivers.* 12 (3), 271-291 (2014)
- Lumbsch,H.T., Schmitt,I., Lindemuth,R., Miller,A., Mangold,A., Fernandez,F. and Huhndorf,S. 2005 Performance of four ribosomal DNA regions to infer higher-level phylogenetic relationships of inoperculate euascomycetes (Leotiomyceta). *Mol. Phylogenet. Evol.* 34 (3), 512-524
- [Luo H](#), [Li J](#), [Yang J](#), [Wang H](#), [Yang Y](#), [Huang H](#), [Shi P](#), [Yuan T](#), [Fan Y](#), [Yao B](#) (2009a) A thermophilic and acid stable family-10 xylanase from the acidophilic fungus *Bispora* sp. MEY-1. *Extremophiles* 13:849–857. doi:10.1007/s00792-009-0272-0
- [Luo H](#), [Wang Y](#), [Wang H](#), [Yang J](#), [Yang Y](#), [Huang H](#), [Yang P](#), [Bai Y](#), [Shi P](#), [Fan Y](#), [Yao B](#) (2009b) A novel highly acidic beta-mannanase from the acidophilic fungus *Bispora* sp. MEY-1: gene cloning and overexpression in *Pichia pastoris*. [Applied Microbiology and Biotechnology](#) 82:453-461. doi: 10.1007/s00253-008-1766-x
- Luo J, Zhang N (2013) *Magnaporthiopsis*, a new genus in Magnaporthaceae (Ascomycota). *Mycologia*105:1019–29
- Luo Y, Lu XH, Bi W, Liu F, Gao W. 2016. *Talaromyces rubrifaciens*, a new species discovered from heating, ventilation, and air conditioning systems in China. *Mycologia* 108:773–779.
- Luo ZL, Bahkali AH, Liu XY, Phookamsak R. Zhao YC, Xhou DQ, Su HY, Hyde KD (2016) *Poaceascoma aquaticum* sp. nov. (Lentitheciaceae), a new species from submerged bamboo in freshwater. *Phytotaxa* 253:71–80
- Luo, H., Yamamoto, Y., Kim, J.A., Jung, J.S., Koh, Y.J. and Hur, J.S., 2009. Lecanoric acid, a secondary lichen substance with antioxidant properties from *Umbilicaria antarctica* in maritime Antarctica (King George Island). *Polar Biology*, 32(7), pp.1033-1040.
- Luo, J. and Zhuang, W.Y., 2010. New species and new Chinese records of Bionectriaceae (Hypocreales, Ascomycota). *Mycological progress*, 9(1), pp.17-25.

- Lutzoni F, Kauff F, Cox CJ, McLaughlin D, Celio G, Dentinger B, Padamsee M, Hibbett D, James TY, Baloch E, Grube M. Assembling the fungal tree of life: progress, classification, and evolution of subcellular traits. *American journal of botany*. 2004 Oct 1;91(10):1446-80.
- Lutzoni FM, Brodo IM (1995) A generic redelimitation of the *Ionaspis*-*Hymenelia* complex (lichenized Ascomycotina). *Syst Bot* 20:224–258.
- M. Nelsen, R. Lücking, E. R. Plata and J. S. Mbatchou 2010: *Heiomasia*, a new genus in the lichen-forming family Graphidaceae (Ascomycota: Lecanoromycetes: Ostropales) with disjunct distribution in Southeastern North America and Southeast Asia. - *Bryologist* 113(4): 742-751.
- M.E.S. Cáceres, A. Aptroot, S. Parnmen & R. Lücking. 2014. Remarkable diversity of the lichen family Graphidaceae in the Amazon rain forest of Rondônia, Brazil. *Phytotaxa* 189: 87-136.
- Ma HX, Vasilyeva L, Li Y. The genus *Xylaria* in the south of China—3. *X. atroglobosa* sp. nov. *Mycotaxon*. 2012 Apr 12;119(1):381-4.
- Ma HX, Vasilyeva L, Li Y. *Xylaria* in southern China—8. *X. bannaensis* sp. nov. and *X. brunneovinosa* new to the mainland. *Mycotaxon*. 2013 Nov 20;125(1):251-6.
- Ma J, Ma LG, Zhang YD, Xia JW, Zhang XG. New species and a new record of *Solicorynespora* from southern China. *Mycotaxon*. 2012 Apr 12;119(1):95-102.
- Ma J, Wang Y, Ma LG, Zhang YD, Castañeda-Ruíz RF, Zhang XG. Three new species of *Neosporidesmium* from Hainan, China. *Mycological Progress*. 2011 May 1;10(2):157-62.
- Ma J, Xia JW, Zhang XG, Luo YQ, Castañeda-Ruíz RF. *Solicorynespora* species associated with dead branches of subtropical forests in southern china. *Cryptogamie, Mycologie*. 2016 Apr 8.
- Ma J, Zhang XG, Castañeda-Ruiz RF. New species of *Acrodictys* and *Repetophragma* from dead branches in China. *Mycotaxon*. 2014 May 29;127(1):129-34.
- Ma J, Zhang YD, Ma LG, Castañeda-Ruíz RF, Zhang XG. Three new species of *Sporidesmiella* from southern China. *Mycoscience*. 2012 May 1;53(3):187-93.
- Ma, J. 2016. *Sporidesmiella guangdongensis* and *S. jiangxiensis* spp. nov. on dead branches from southern China. *Sydowia*. 68:113-118
- Ma, J., Ma, L.G., Zhang, Y.D., Castañeda-Ruíz, R.F. and Zhang, X.G., 2012. New species or records of *Endophragmiella* and *Heteroconium* from southern China. *Cryptogamie, Mycologie*, 33(2), pp.127-135.
- Ma, J., Ma, L.G., Zhang, Y.D., Castañeda-Ruíz, R.F. and Zhang, X.G., 2012. New species and record of *Corynesporopsis* and *Hemicorynespora* from southern China. *Nova Hedwigia*, 95(1-2), pp.233-241.
- Ma, J., Ma, L.G., Zhang, Y.D., Zhang, X.G., 2011. Three new hyphomycetes from southern China. *Mycotaxon*, 117, pp. 247–253.
- Ma, J., Ren, S.C., Ma, L.G., Zhang, Y.D. and Zhang, X.G., 2010. New records of *Corynesporopsis* from China. *Mycotaxon*, 114(1), pp.423-428.
- Ma, J., Zhang, K., Zhang, X.G., 2008. Two new *Ellisembia* species from Hainan, China. *Mycotaxon*, 104, pp. 141–145.
- Ma, J., Zhang, X.G. & Castaneda-Ruiz, R.F. 2014. New species of *Acrodictys* and *Repetophragma* from dead branches in China. *Mycotaxon* 127: 129-134
- Ma, J., Zhang, Y.D., Ma, L.G., Ren, S.C., Zhang, X.G., 2010. Taxonomic studies of *Ellisembia* from Hainan, China. *Mycotaxon*, 114, pp.417–421.
- Ma, L.G., Ma, J., Zhang, Y.D. and Zhang, X.G., 2012. A new *Corynesporella* species and two first records from China. *Mycotaxon*, 119(1), pp.83-88.

- Ma, L.G., Ma, J., Zhang, Y.D., Ruíz, R.F.C. and Zhang, X.G., 2012. New species and records of *Heteroconium* (anamorphic fungi) from southern China. *Mycoscience*, 53(6), pp.466-470.
- Ma, L.G.; Ma, J.; Zhang, Y.D.; Zhang, X.G. 2011. *Craspedodidymum* and *Corynespora* spp. nov. and a new anamorph recorded from southern China. *Mycotaxon*. 117:351-358.
- Ma, Y.R., Xia, J.W., Zhang, X.G. & Castañeda-Ruiz, R.F. 2015. New species of *Phaeomonilia* and *Mirandina* from dead branches in China. *Mycotaxon* 130(3): 775-781. <http://dx.doi.org/10.5248/130.775>
- Ma,L.G.;Xia,J.W.;Ma,Y.R.;Castañeda-Ruiz,R.F.;Zhang, X.G. 2014. Two new species of *Spadicoides* and *Gangliostilbe* from southern China. *Mycological Progress*. 13:547-552
- Machado, A.R., Pinho, D.B., Silva, M. and Pereira, O.L., 2012. First report of leaf spot disease caused by *Cercospora pfaffiae* on Brazilian ginseng (*Pfaffia glomerata*) in Brazil. *Plant Disease*, 96(11), pp.1702-1702.
- Machouart M, Samerpitak K, de Hoog GS, Gueidan C (2014) A multigene phylogeny reveals that *Ochroconis* belongs to the family *Sympoventuriaceae* (Venturiales, Dothideomycetes). *Fungal Divers* 65:77–88.
- Maciá-Vicente JG, Glynou K, Piepenbring M. 2016. A new species of *Exophiala* associated with roots. *Mycol Progress* 15:18.
- Madrid H, Hernández-Restrepo M, Gené J, Cano J, Guarro J, Silva V. New and interesting chaetothyrialean fungi from Spain. *Mycological Progress*. 2016 Oct 1;15(10-11):1179-201.
- Madrid H, Hernández-Restrepo M, Gené J, Cano J, Guarro J, Silva V. 2016. New and interesting chaetothyrialean fungi from Spain. *Mycological Progress* 15:1179–1201.
- Madrid, H.; Cano, J.; Gené, J.; Guarro, J. 2011. Two new species of *Cladorrhinum*. *Mycologia*. 103(4):795-805
- Madrid, H.; Cano, J.F.; Stchigel, A.; Gené, J.; Guarro, J. (2010). *Ramophialophora humicola* and *Fibulochlamys chilensis*, two new microfungi from soil. *Mycologia* 102(3): 605-612.
- Madrid, H.; Gené, J.; Cano, J.; Guarro, J. 2011. A new species of *Leptodiscella* from Spanish soil. *Mycological Progress*. 11:535-541.
- Magain N, Goffinet B, Sérusiaux E (2012) Further photomorphs in the lichen family Lobariaceae from Reunion (Mascarene archipelago) with notes on the phylogeny of *Dendriscoaulon* cyanomorphs. *Bryologist* 115(2):243-254.
- Magain N, Sérusiaux E (2012) A further new species in the lichen genus *Arctomia*: *A. borbonica* from Reunion (Mascarene archipelago). *MycoKeys* 4:9–21
- Magain N, Sérusiaux E. Do photobiont switch and cephalodia emancipation act as evolutionary drivers in the lichen symbiosis? A case study in the Pannariaceae (Peltigerales). *PloS one*. 2014 Feb 24;9(2):e89876.
- Magain, N., Miadlikowska, J., Goffinet, B., Serusiaux, E. and Lutzoni, F.2016. Macroevolution of Specificity in Cyanolichens of the Genus *Peltigera* Section *Polydactylon* (Lecanoromycetes, Ascomycota). *Syst. Biol.* 2016 Aug 6. pii: syw065. [Epub ahead of print]
- Magain, N.; Sérusiaux, E. 2015. Dismantling the treasured flagship lichen *Sticta fuliginosa* (Peltigerales) into four species in Western Europe. *Mycological Progress*. (2015) 14:97:1-33
- Magalhães, D.M.A., Luz, E.D.M.N., Magalhães, A.F., Dos Santos, M.V.O., Barbosa, F.R., Magalhães, L.A. and Bezerra, J.L. (2014). Anamorphic fungi of the Atlantic forest of

- southern Bahia: new records and *Dactylaria pseudomanifesta* sp. nov. *Mycotaxon* 128: 185-194.
- Magyar D, Shoemaker RA, Bobvos J, Crous PW, Groenewald JZ. *Pyrigemmula*, a novel hyphomycete genus on grapevine and tree bark. *Mycological Progress*. 2011 Aug 1;10(3):307-14.
- Mahajan VK, Sharma V, Prabha N, Thakur K, Sharma NL, Rudramurthy SM, Chauhan PS, Mehta KS, Abhinav C. A rare case of subcutaneous phaeohyphomycosis caused by a rhytidhysterion species: A clinico-therapeutic experience. *Int J Dermatol*. 2014;53(12):1485-9.
- Maharachchikumbura SN, Hyde KD, Jones EBG, McKenzie EHC, Huang SK, Abdel-Wahab MA, Daranagama DA, Dayarathne M, D'souza MJ, Goonasekara ID, Hongsanan S, Jayawardena RS, Kirk PM, Konta S, Liu JK, Liu Z-Y, Norphanphoun C, Pang KL, Perera RH, Senanayake IC, Shang Q, Shenoy BD, Xiao Y, Bahkali AH, Kang J, Somrothipol S, Suetrong S, Wen T, Xu J (2015) Towards a natural classification and backbone tree for Sordariomycetes. *Fungal Divers* 72:199–301
- Maharachchikumbura SSN, Hyde KD, Jones EBG, McKenzie EHC, Bhat JD, Dayarathne MC, Huang S-K2, Norphanphoun C, Senanayake IC, Perera RH1, Shang Q-J, Xiao Y, D'souza MJ, Hongsanan S, Jayawardena RS, Daranagama DA, Konta S, Goonasekara ID, Zhuang WY, Jeewon R, Phillips AJL, Abdel-Wahab MA, Al-Sadi AM, Bahkali AH, Boonmee S, Boonyuen N, Cheewangkoon R, Dissanayake AJ, Kang J, Li Q-R, Liu JK, Liu XZ, Liu Z-Y, Luangsa-ard JJ, Pang K-L, Phookamsak R, Promputtha I, Suetrong S, Stadler M, Wen T, Wijayawardene NN. 2016 – Families of Sordariomycetes. *Fungal Diversity* 79:1–317.
- Mahmoud, R.S. and Narisawa, K., 2013. A new fungal endophyte, *Scolecobasidium humicola*, promotes tomato growth under organic nitrogen conditions. *PloS one*, 8(11), p.e78746.
- Maier, M.S., Rosso, M.L., Fazio, A.T., Adler, M.T. and Bertoni, M.D., 2009. Fernene triterpenoids from the lichen *Pyxine berteriana*. *Journal of natural products*, 72(10), pp.1902-1904.
- Maier, S., Schmidt, T.S., Zheng, L., Peer, T., Wagner, V. and Grube, M., 2014. Analyses of dryland biological soil crusts highlight lichens as an important regulator of microbial communities. *Biodiversity and conservation*, 23(7), pp.1735-1755.
- Makhija U, Patwardhan PG (1994) A contribution towards a monograph of the lichen genus *Cryptothecia* (family Arthoniaceae). *Current Res Pl Sci* 1994:57–72
- Malíček, J., Bouda, F., Liška, J., Palice, Z. and Peksa, O., 2015. Contribution to the lichen biota of the Romanian Carpathians. *Herzogia*, 28(2), pp.713-735.
- Malíček, J., Palice, Z. and Vondrák, J., 2015. New lichen records and rediscoveries from the Czech Republic and Slovakia.
- Malloch D, Cain RF (1971) New cleistothecial Sordariaceae and a new family, Coniochaetaceae. *Can J Bot* 49:869–880.
- Malloch D, Sigler L, Hambleton S, Vanderwolf KJ, Gibas CF, McAlpine DF. Fungi associated with hibernating bats in New Brunswick caves: the genus *Leuconeurospora*. *Botany*. 2016 Jun 10(ja).
- Mamgain, A., Roychowdhury, R. and Tah, J., 2013. *Alternaria* pathogenicity and its strategic controls. *Res J Biol*, 1, pp.1-9.
- Man,B., Wang,H., Xiang,X., Wang,R., Yun,Y. and Gong,L. 2015 Phylogenetic diversity of culturable fungi in the Heshang Cave, central China. *Front Microbiol* 6, 1158
- Manamgoda, D.S., Cai, L., McKenzie, E.H., Crous, P.W., Madrid, H., Chukeatirote, E., Shivas, R.G., Tan, Y.P. and Hyde, K.D., 2012. A phylogenetic and taxonomic re-

- evaluation of the *Bipolaris-Cochliobolus-Curvularia* complex. *Fungal Diversity*, 56(1), pp.131-144.
- Manamgoda, D.S., Rossman, A.Y., Castlebury, L.A., Crous, P.W., Madrid, H., Chukeatirote, E. and Hyde, K.D., 2014. The genus *Bipolaris*. *Studies in mycology*, 79, pp.221-288.
- Mandal, N.C.; Dasgupta, M.K. 1984. Five new diseases of perishable fruits in storage. *Indian Phytopathology*. 37(4):673-676
- Mangold A, Martin MP, Luecking R., Lumbsch HT (2008) Molecular phylogeny suggests synonymy of *Thelotrema* within *Graphidaceae* (Ascomycota: Ostropales). *Taxon* 57(2): 476–486
- Mangold A., J.E. Elix & H.T. Lumbsch 2009 *Thelotrema*. *Fl. Austr.* 57: 195-420.
- Mangold, A.; Elix, J.A.; Lumbsch, H.T. 2009. *Thelotrema*. *Flora of Australia*. 57:653-659
- Mangold, A.; Martin, M.P.; Kalb, K.; Luecking, R.; Lumbsch, H.T. (2008). Molecular data shows that *Topeliopsis* (Ascomycota, *Thelotrema*) is polyphyletic. *Lichenologist* 40(1): 39-46.
- Manoharachary C, Kunwar IK, Kumar GS, Reddy BS, Agarwal DK (2010) Two new species of *Actinocladium* Ehrenb. from India. *Indian Phytopathology* 63:83–84
- Manoharachary, C., Bagyanarayana, G., Rao, N.K. and Kunwar, I.K., 2009. *Chasakopama*, a new dematiaceous hyphomycetous genus from India. *Mycotaxon*, 110(1), pp.459-463.
- Manoharachary, C.; Agarwal, D.K.; Rao, N.K. 2004. A new anamorphic genus from India. *Indian Phytopathology*. 57(2):161-163.
- Manoharachary, C.; Rao, N.K.; Agarwal, D.K.; Kunwar, I.K. 2004. *Hawksworthia* gen. nov. from India. *Indian Phytopathology*. 57(4):499-500.
- Manojlovic, N., Vasiljevic, P., Juskovic, M., Najman, S., Bogdanovic-Duanovic, G., Joksimovic, Z. and Milenkovic-Andjelkovic, A., 2010b. Screening of *Thamnolia vermicularis* var. *subuliformis* for antimicrobial, antioxidant and cytotoxic activities. *Planta Medica*, 76(12), p.P442.
- Manojlović, N.T., Vasiljević, P., Jusković, M. and Janković, S.N.S., 2010.a HPLC analysis and cytotoxic potential of extracts from the lichen, *Thamnolia vermicularis* var. *subuliformis*. *Journal of Medicinal Plants Research*, 4(9), pp.817-823.
- Manojlovic, N.T., Vasiljevic, P.J., Maskovic, P.Z., Juskovic, M. and Bogdanovic-Dusanovic, G., 2011. Chemical composition, antioxidant, and antimicrobial activities of lichen *Umbilicaria cylindrica* (L.) Delise (*Umbilicariaceae*). *Evidence-based complementary and alternative medicine*, 2012.
- Mansour, A.M., 2010. Contribution to knowledge of some soil fungi in eastern region in Lybia. *J Product Dev*, 15(3), pp.395-404.
- Mapook A, Boonmee S, Ariyawansa HA, Tibpromma S, Campesori E, Jones EG, Bahkali AH, Hyde KD. Taxonomic and phylogenetic placement of *Nodulosphaeria*. *Mycological progress*. 2016 Apr 1;15(4):1-5.
- Mapook A, Boonmee S, Liu JK, Jones EG, Bahkali AH, Hyde KD. Taxonomic and phylogenetic placement of *Phaeodimeriella* (*Pseudoperisporiaceae*, *Pleosporales*). *Cryptogamie, Mycologie*. 2016 Jul 26.
- Mapook,A., Hyde,K.D., Dai,D.-Q., Li,J., Jones,E.B.G., Bahkali,A.H. Boonmee,S. 2016 *Muyocopronales*, ord. nov., (*Dothideomycetes*, *Ascomycota*) and a reappraisal of *Muyocopron* species from northern Thailand. *Phytotaxa* 265 (3), 225-237.
- Mapperson, R.R., Kotiw, M., Davis, T.A. & Dearnaley, J.D.W. (2014). The diversity and antimicrobial activity of *Preussia* sp. Endophytes isolated from Australian dry rainforests. *Current Microbiology* 68: 30–37. <http://dx.doi.org/10.1007/s00284-013-0415-5>

- Marbach B (2000) Corticole und lignicole Arten der Flechtengattung *Buellia* sensu lato in den Subtropen und Tropen. *Bibliotheca Lichenol* 74:1-384
- Marek S. Molecular phylogeny of *Phymatotrichopsis omnivora*. In *PHYTOPATHOLOGY* 2005 Jun 1 (Vol. 95, No. 6, pp. S65-S65).
- MARGARITA HERNÁNDEZ-RESTREPO, RAFAEL F. CASTAÑEDA-RUIZ, JOSEPA GENÉ, JOSEP GUARRO, DAVID W. MINTER & MARC STADLER. 2012. Microfungi from Portugal: *Minimelanolocus manifestus* sp. nov. and *Vermiculariopsiella pediculata* comb. nov. *Mycotaxon*. 122:135-143
- Maria Prieto, Martin Westberg & Matthias Schultz 2015 New Records of Lichinomycetes in Sweden and the Nordic Countries. *Herzogia* 28(1):142-152.
- Marincowitz, S., Gryzenhout, M. and Wingfield, M.J., 2010. New and rare coelomycetes with appendage-bearing conidia from Pondoland, South Africa. *Mycotaxon*, 111(1), pp.309-322.
- Marincowitz, S.; Crous, P.W.; Groenewald, J.Z.; Wingfield, M.J. (2008) *CBS Diversity Ser.* 7: [iii], 166 pp.+ incl. colour plates Utrecht: Centraalbureau voor Schimmelcultures.
- Marincowitz, S.; Crous, P.W.; Groenewald, J.Z.; Wingfield, M.J. 2008. Microfungi occurring on the Proteaceae in the fynbos. :1-166
- Marincowitz, S.; Gryzenhout, M.; Wingfield, M.J. (2010). New and rare coelomycetes with appendage-bearing conidia from Pondoland, South Africa. *Mycotaxon* 111: 309-322.
- Marin-Felix Y, Cano-Lira JF, Guarro J, Stchigel AM. *Leiothecium cristatum* sp. nov. and *Aspergillus posadasensis* sp. nov., two species of Eurotiales from rainforest soils in South America. *International journal of systematic and evolutionary microbiology*. 2014 Aug 1;64(8):2871-7.
- Mark, K., Cornejo, C., Keller, C., Fluck, D. and Scheidegger, C. 2016. Barcoding lichen-forming fungi using 454 pyrosequencing is challenged by artifactual and biological sequence variation *Genome* 59 (9), 685-704.
- Mark, K., Saag, L., Saag, A., Thell, A. and Randle, T. 2012. Testing morphology-based delimitation of *Vulpicida juniperinus* and *V. tubulosus* (Parmeliaceae) using three molecular markers. *Lichenologist (Lond.)* 44 (6), 757-772.
- Martellos, S., Attorre, F., Farcomeni, A., Francesconi, F., Pittao, E. and Tretiach, M., 2014. Species distribution models backing taxa delimitation: the case of the lichen *Squamarina cartilaginea* in Italy. *Flora-Morphology, Distribution, Functional Ecology of Plants*, 209(12), pp.698-703.
- Martín MP, LaGreca S, Lumbsch T (2003) Molecular phylogeny of *Diploschistes* inferred from ITS sequence data. *Lichenologist* 35: 27-32.
- Martinez, A.D.S., Franzener, G. and Stangarlin, J.R., 2010. Damages caused by *Bipolaris maydis* in *Panicum maximum* cv. Tanzânia. *Semina: Ciências Agrárias (Londrina)*, 31(4), pp.863-870.
- Marvanová L & Laichmanová M. (2014) *Campylospora leptosoma* sp. nov. and characteristics of *Campylospora* spp., based on morphology and on ITS sequences. *Mycosphere* 5(2): 245–261.
- Marvanová L, Bárlocher F (2001) Hyphomycetes from Canadian streams. VI. Rare species in pure cultures. *Czech Mycology* 53:1–28
- Marvanová L. & Descals E. 1985. New and critical taxa of aquatic hyphomycetes. *Botanical Journal of the Linnean Society* 91:1-23. doi: 10.1111/j.1095-8339.1985.tb01130.x
- Marvanová L. 1980. New or noteworthy aquatic hyphomycetes. *Clavatospora, Heliscella, Nawawia e Heliscina*. *Trans. Br. Mycol. Soc.*75(2): 221-231.

- Marvanová L. 1984. Two new *Tricladium* species from mountain streams. *Mycotaxon* 19:93-100.
- Marvanová L. 1997. Freshwater hyphomycetes: a survey with remarks on tropical taxa. In: Janardhanan KK, Rajendran C, Natarajan K, Hawksworth DL (eds) *Tropical mycology*. Science Publishers, Enfield, pp 169–226.
- Marvanová, L. 1988. New Hyphomycetes from aquatic environments in Czechoslovakia. *Transactions of the British Mycological Society*. 90:607-617.
- Marvanová, L. 1997. *Cladochasiella divergens* gen. et sp. nov. *Cryptogamie Mycologie*. 18(4):285-289.
- Marvanová, L.; Pascoal, C.; Cássio, F. 2003. New and rare hyphomycetes from streams of Northwest Portugal. Part I. *Cryptogamie Mycologie*. 24(4):339-358
- Masiulionis, V.E.; Cabello, M.; Seifert, K.A.; Rodrigues, A.; Pagnocca, F.C. 2015. *Escovopsis trichodermoides* sp. nov., isolated from a nest of the lower attine ant *Mycocepurus goeldii*. *Antonie van Leeuwenhoek*. 107:731-740.
- Masson, D., Divakar, P. K. and Serusiaux, E. *Hypotrachyna penduliloba* and *Remototrachyna pandani*, two new species in the hyperdiverse lichen family Parmeliaceae from Reunion in the Mascarene archipelago 2015. *Mycol. Prog.* 14, 22.
- Masumoto S, Tojo M, Uchida M, Imura S. Morphological and molecular characterization of *Rhytisma filamentosum* sp. nov. from Nagano Prefecture, Japan. *Mycological Progress*. 2015 Jun 1;14(6):1-6.
- Masumoto S, Tojo M, Uchida M, Imura S. *Rhytisma polaris*: morphological and molecular characterization of a new species from Spitsbergen Island, Norway. *Mycological progress*. 2014 Feb 1;13(1):181-8.
- Masuya, H.; Yamaoka, Y.; Wingfield, M.J. 2009. Ophiostomatoid fungi and their associations with bark beetles in Japan. *CBS Biodiversity Series*. 96:275-293.
- Matei, S. and Fendrihan, S., 2008. Microbiological studies of East Antarctic soils. *Geophysical Research Abstracts*, Vol. 10.
- Mateus, N., Aguirre, J. and Luecking, R., 2012. Contributions to the foliicolous lichen biota of Chocó (Colombia). *Caldasia*, 34(1), pp.25-32.
- MATHUR N, SINGH O, MAHESWARI CU. *Polyrostrata*, a new genus of Sphaeropsidaceae from India. *Indian Phytopathology*.;62(2):233-6.
- Matočec N, Kušan I, Ozimec R (2014) The genus *Polycephalomyces* (Hypocreales) in the frame of monitoring *Veternica* cave (Croatia) with a new segregate genus *Perennicordyceps*. *Ascomycete.org*, 6 (5) : 125-133.
- Matos, T., Cerar, T., Praprotnik, M., Krivec, U. and Pirš, M., 2015. First recovery of *Rasamsonia argillacea* species complex isolated in adolescent patient with cystic fibrosis in Slovenia—case report and review of literature. *Mycoses*, 58(8), pp.506-510.
- Matsuda S, Takamatsu S. 2003. Evolution of host-parasite relationships of *Golovinomyces* (Ascomycete: Erysiphaceae) inferred from nuclear rDNA sequences. *Molecular Phylogenetics and Evolution* 27: 314–327.
- Matsuda, Y., Kimura, K. and Ito, S.I., 2010. Genetic characterization of *Raffaelea quercivora* isolates collected from areas of oak wilt in Japan. *Mycoscience*, 51(4), pp.310-316.
- Matsushima T. 1987. *Matsushima mycological memoirs no. 5*. Matsushima Fungus Collection, Kobe, Japan.
- Matsushima T. 1993. *Matsushima Mycological Memoirs N° 7*. Published by the author, Kobe.
- Matsushima, T. 1975. *Icones microfungorum a Matsushima lectorum*. Nippon Printing Co, Osaka.

- Matsushima, T. 1980. Saprophytic microfungi from Taiwan, part 1, hyphomycetes. Matsushima mycological memoirs no. 1. Matsushima Fungus Collection, Kobe, Japan.
- Matsushima, T. 1980. Saprophytic microfungi from Taiwan, part 1. Hyphomycetes. Matsushima Mycological Memoirs. 1:1-82.
- Matsushima, T. 1983. Matsushima Mycological Memoirs 3. Matsushima Mycological Memoirs. 3:1-90.
- Matsushima, T. 1987. Matsushima Mycological Memoirs 5. Matsushima Mycological Memoirs. 5:1-100
- Matsushima, T. 1989. Matsushima Mycological Memoirs N° 6. Published by the author, Kobe, Japan.
- Matsushima, T. 2001. Matsushima Mycological Memoirs 9. Matsushima Mycological Memoirs. 10:1-214.'
- Matsuwaki, Y., Wada, K., White, T., Moriyama, H. and Kita, H., 2012. *Alternaria* fungus induces the production of GM-CSF, interleukin-6 and interleukin-8 and calcium signaling in human airway epithelium through protease-activated receptor 2. *International archives of allergy and immunology*, 158(Suppl. 1), pp.19-29.
- Matthew C. Allendera, Daniel B. Raudabaugh, Frank H. Gleason, Andrew N. Miller "The natural history, ecology, and epidemiology of *Ophidiomyces ophiodiicola* and its potential impact on free-ranging snake populations." *Fungal Ecology* 17 (2015): 187-196.
- Matthews, J.A. and Trenbirth, H.E., 2011. Growth rate of a very large crustose lichen (*Rhizocarpon* subgenus) and its implications for lichenometry. *Geografiska Annaler: Series A, Physical Geography*, 93(1), pp.27-39.
- Matusinsky, P., Frei, P., Mikolasova, R., Svacinova, I., Tvaruzek, L. and Spitzer, T., 2010. Species-specific detection of *Bipolaris sorokiniana* from wheat and barley tissues. *Crop Protection*, 29(11), pp.1325-1330.
- Matwiejuk, A. and Bohdan, A., 2011. New Records of *Plectocarpon lichenum* from Bialowieza Forest (Poland). *Herzogia*, 24(2), pp.381-383.
- Matwiejuk, A. and Korobkiewicz, K., 2012. Lichens of Narew and its surroundings (Podlasie, North-Eastern Poland). *Roczniki Akademii Rolniczej w Poznaniu. Botanika-Steciana*, 16.
- Mayers CG, McNew DL, Harrington TC, Roeper RA, Fraedrich SW, Biedermann PH, Castrillo LA, Reed SE (2015) Three genera in the Ceratocystidaceae are the respective symbionts of three independent lineages of ambrosia beetles with large, complex mycangia. *Fungal Biology* 119:1075–1092
- Mayfield III, A.E., Smith, J.A., Hughes, M. and Dreaden, T.J., 2008. First report of laurel wilt disease caused by a *Raffaelea* sp. on avocado in Florida. *Plant Disease*, 92(6), pp.976-976.
- Mayrhofer, H., Drescher, A., Stešević, D. and Bilovitz, P.O., 2013. Lichenized fungi of a chestnut grove in Livari (Rumija, Montenegro). *Acta Botanica Croatica*, 72(2), pp.337-346.
- Mayrhofer, H., Malíček, J., Rohrer, A., Svoboda, D. and Bilovitz, P.O., 2012. New or otherwise interesting lichenized and lichenicolous fungi from Macedonia. *Inst. für Pflanzenwiss.*.
- Mazzaferro L, Piñuel L, Minig M, Breccia JD. Extracellular monoenzyme deglycosylation system of 7-O-linked flavonoid β -rutinosides and its disaccharide transglycosylation activity from *Stilbella fimetaria*. *Archives of microbiology*. 2010 May 1;192(5):383-93.

- Mbenoun M, De Beer ZW, Wingfield MJ, Wingfield BD, Roux J. Reconsidering species boundaries in the *Ceratocystis paradoxa* complex, including a new species from oil palm and cacao in Cameroon. *Mycologia*. 2014 Jul 1;106(4):757-84.
- Mbenoun M, Wingfield MJ, Begoude Boyogueno AD, Nsouga Amougou F, Petchayo Tigang S, Hoopen GM, Mfegue CV, Dibog L, Nyassé S, Wingfield BD, Roux J. Diversity and pathogenicity of the Ceratocystidaceae associated with cacao agroforests in Cameroon. *Plant Pathology*. 2016 Jan 1;65(1):64-78.
- McCarthy PM, Stajsic V. *Phylloblastia blechnicola* (Ascomycota, Verrucariaceae), a new leaf-inhabiting lichen from southern Victoria, Australia. *Muelleria*. 2013;31:49-52.
- McCarthy, P. and Elix, J., 2016. Five new lichen species (Ascomycota) from south-eastern Australia. *Telopea*, 19, pp.137-151.
- McCarthy, P.M. (2010). New and interesting foliicolous lichens from Australia. *Australas. Lichenol.* 66: 4-15.
- McCarthy, P.M. and Kantvilas, G., 2013. *Psoroglaena halmaturina* sp. nov.(lichenised Ascomycota, Verrucariaceae) from Kangaroo Island, South Australia. *Journal of the Adelaide Botanic Garden*, pp.1-4.
- McCarthy, P.M. and Kantvilas, G., 2013. Two new species of *Sarcogyne* (lichenised Ascomycota: Acarosporaceae) from central and southern Australia. *Journal of the Adelaide Botanic Garden*, pp.15-21.
- McCarthy, P.M. and Kantvilas, G., 2014. *Placynthium australiense* sp. nov.(lichenised Ascomycota, Placynthiaceae) from South Australia. *Journal of the Adelaide Botanic Gardens*, pp.1-5.
- McCarthy, P.M., 2014. Additional lichen records from Australia 77. Verrucariaceae. *Australasian Lichenology*, 75, pp.3-5.
- McCune B, Stone J (2009) *Leightonimyces phillipsii*, a synnematosous soil-dwelling hyphomycete new to North America. *North American Fungi* 4 (5): 1–4.
- McCune, B. and Curtis, M.J., 2012. *Umbilicaria semitensis* (lichenized fungi: Umbilicariaceae) resurrected. *The Bryologist*, 115(2), pp.255-264.
- McCune, B. and Rosentreter, R., 2014. New lichen records from Oregon to Alaska in North America. *Evansia*, 31(1), pp.1-7.
- McCune, B., Di Meglio, J. and Curtis, M.J., 2014. An unusual ascospore shape and a new species, *Umbilicaria nodulospora* (Umbilicariaceae), from California and Oregon. *The Bryologist*, 117(2), pp.170-178.
- McCune, B.; Altermann, S. (2009). *Letharia gracilis* (Parmeliaceae), a new species from California and Oregon. *Bryologist* 112(2): 375-378.
- McKenzie, E.H.C. (2009). A new species of *Lylea* (hyphomycetes) on *Rhopalostylis* (Arecaceae) in New Zealand. *Mycotaxon* 109: 39-42.
- McKenzie, E.H.C. (2010). Three new phragmosporous hyphomycetes on *Ripogonum* from an 'ecological island' in New Zealand. *Mycotaxon* 111: 183-196.
- McKenzie, E.H.C. 2008. Two new dictyosporous hyphomycetes on Pandanaceae. *Mycotaxon* 104: 23–28
- McKenzie, E.H.C., 2010. Three new phragmosporous hyphomycetes on *Ripogonum* from an 'ecological island' in New Zealand. *Mycotaxon*, 111, pp. 183–196.
- McKenzie, E.H.C.; Park, D.; Bellgard, S.E.; Johnston, P.R. 2010. A new species of *Pyricularia* (hyphomycetes) on *Cortaderia* (Poaceae) in New Zealand. *Mycosphere*. 1(3):223-228
- McMullin R, Lendemmer J, Heather B (2016, in press) Molecular insights into the lichen genus *Alectoria* (Parmeliaceae) in North America. *Canadian Science Publishing, Botany*.
- McMullin, R.T. and Arsenault, A., 2016. The Calicioids of Newfoundland, Canada. *Opuscula Philolichenum*, 15, pp.92-104.

- Mcmullin, R.T., Maloles, J.R. and Newmaster, S.G., 2015. New and interesting lichens from Ontario, Canada—II. *Opuscula Philolichenum*, 14, pp.93-108.
- Mcmullin, R.T., Thompson, I.D. and Newmaster, S.G., 2013. Lichen conservation in heavily managed boreal forests. *Conservation Biology*, 27(5), pp.1020-1030.
- McTaggart AR, Shivas RG, Braun U (2007) *Annelosympodia orbiculata* gen. et sp. nov. and *Scolecostigma flagellariae* sp. nov. from Australia. *Australasian Plant Pathology* 36: 573-579.
- Medeiros, I.D., Fryday, A.M. and Rajakaruna, N., 2014. Additional lichen records and mineralogical data from metal-contaminated sites in Maine. *Rhodora*, 116(967), pp.323-347.
- Meena, N., Mishra, V.K., Baranwal, D.K., Singh, A.K., Rai, V.P., Prasad, R., Arun, B. and Chand, R., 2014. Genetic Evaluation of Spring Wheat (*Triticum aestivum* L.) Recombinant Inbred Lines for Spot Blotch (*Bipolaris Sorokiniana*) Resistance and Yield Components under Natural Conditions for South Asia. *Journal of Agricultural Science and Technology*, 16(6), pp.1429-1440.
- Meena, P.D., Awasthi, R.P., Chattopadhyay, C., Kolte, S.J. and Kumar, A., 2016. *Alternaria* blight: a chronic disease in rapeseed-mustard. *Journal of Oilseed Brassica*, 1(1), pp.1-11.
- Meirelles L. A.; Montoya Q. V.; Solomon, S. E.; Rodrigues, A. 2015. New Light on the Systematics of Fungi Associated with Attine Ant Gardens and the Description of *Escovopsis kreiselii* sp. nov. *PLoS ONE*. 10:1-14.
- Mejia, L.C.; Castlebury, L.A.; Rossman, A.Y.; Sogonov, M.V.; White, J.F. 2008. Phylogenetic placement and taxonomic review of the genus *Cryptosporella* and its synonyms *Ophiovalsa* and *Winterella* (Gnomoniaceae, Diaporthales). *Mycological Research*. 112(1):23-35.
- Mejia, L.C.; Rossman, A.Y.; Castlebury, L.A.; Yang, Z.L.; White, J.F. Jr. 2012. *Occultocarpon*, a new monotypic genus of Gnomoniaceae on *Alnus nepalensis* from China. *Fungal Diversity*. 52(1):99-105
- Mejia, L.C.; Rossman, A.Y.; Castlebury, L.C.; White, J.F. 2011. New species, phylogeny, host-associations, and geographic distribution of genus *Cryptosporella* (Gnomoniaceae, Diaporthales). *Mycologia*. 103(2):379-399
- Mek'nik, V.A.; Alexandrova, A.V.; Braun, U. 2014. Two new species and several new records of hyphomycetes from Vietnam. *Mycosphere*. 5:591-600
- Mel'nik VA (2000). *Opredelitel' Gribov Rossii, Klass Hyphomycetes*. Vyp. 1, Sem. Dematiaceae. Nauka, St. Petersburg.
- Mel'nik VA, Braun U. *Atractilina alinae* sp. nov. and *Neosporidesmium vietnamense* sp. nov.—two new synnematous hyphomycetes from Vietnam. *Mycobiota*. 2013;3:1-9.
- Mel'nik VA, Crous PW. *Braunomyces dictyosporus* gen. sp. nov. from vietnam. *IMA fungus*. 2014 Jun 1;5(1):1-5.
- Mel'nik VA. Anamorphic fungi of Vietnam. I. *Mikologiya i Fitopatologiya*. 2011;45:323-31.
- Mel'nik VA. *Phaeoisaria vietnamensis* sp. nov. and *P. clematidis* (hyphomycetes) from Vietnam. *Mycosphere*. 2012 Jan 1;3(6):957-60.
- Melech, A.V., 2010. *Stereocaulon leucophaeopsis* and *S. tornense* new to Russia from the Murmansk region. *Graphis Scripta*, 22(2), pp.63-64.
- Melnik, V.A. & Sutton, B.C. 1981. *Hyphodiscosia mirabilis* sp. nov. *Transactions of the British Mycological Society*. 76(3):491-519.
- Mel'nik, V.A., Braun, U. and Alexandrova, V. (2013). *Dactylaria mucoglobifera* sp. nov. - a new species from Vietnam. *Schlechtendalia* 25: 49-52.

- Melo R.F.R., Miller A.N., Santiago ALCMA, Maia L.C. (2014). The genera *Ascobolus* and *Saccobolus* (Ascobolaceae, Pezizales) in Brazil. *Mycosphere* 5(6), 790–804, Doi 10.5943/mycosphere/5/6/9.
- Méndez-Mayboca F, Checa J, Esqueda M, Chacón S. New records of loculoascomycetes from natural protected areas in Sonora, Mexico. *Mycotaxon*. 2010;111:19-30.
- Menezes AA, Xavier-Leite AB, De Jesus KA, Aptroot A, Cáceres MEDS (2013) Two new *Crypthonia* species and a new *Synnesia* from Chapada do Araripe, Ceará, NE Brazil (Ascomycota: Arthoniales), with a key to *Crypthonia*. *Lichenologist* 45:657–664.
- Menezes, A., Leite, A., Otsuka, A., Jesus, L. and Cáceres, M. 2011. New records of crustose and microfoliose corticolous lichens in Caatinga vegetation of the semi-arid region in Alagoas. *Acta Botanica Brasilica*, 25(4), pp.885-889.
- Menezes, A.A., Xavier-Leite, A.B., Costa, L., Aptroot, A. and da Silva Cáceres, M.E., 2013. New species of Arthoniales from NE Brazil. *The Lichenologist*, 45(05), pp.611-617.
- Menezes, A.A., Xavier-Leite, A.B., de Jesus, K.A., Aptroot, A. and da Silva Cáceres, M.E., 2013. Two new *Crypthonia* species and a new *Synnesia* from Chapada do Araripe, Ceará, NE Brazil (Ascomycota: Arthoniales), with a key to *Crypthonia*. *The Lichenologist*, 45(05), pp.657-664.
- Menezes, AA;Lima,EL;Xavier-Leite,AB;Maia,LC;Aptroot,A;Cáceres,MES. 2013. New species of Arthoniales from NE Brazil. *The Lichenologist*. 45(5):611-617.
- Menezes¹, A.A., de Souza Souto¹, L. and Aptroot, A., 2013. MICROLIQUENS CORTICÍCOLAS DA CHAPADA DO ARARIPE, CEARÁ. PROGRAMA DE PÓS-GRADUAÇÃO EM ECOLOGIA E CONSERVAÇÃO, p.38.
- Menezes¹, A.A., de Souza Souto¹, L. and Lücking, R., 2013. COMPOSIÇÃO DE ESPÉCIES E A INFLUÊNCIA DE FATORES AMBIENTAIS NA RIQUEZA E COMPOSIÇÃO DE MICROLIQUENS CORTICÍCOLAS EM DIFERENTES FITOFISIONOMIAS. PROGRAMA DE PÓS-GRADUAÇÃO EM ECOLOGIA E CONSERVAÇÃO, p.77.
- Menkis A, Urbina H, James TY, Rosling A. *Archaeorhizomyces borealis* sp. nov. and a sequence-based classification of related soil fungal species. *Fungal biology*. 2014 Dec 31;118(12):943-55.
- Menkis A, Vasaitis R. Fungi in roots of nursery grown *Pinus sylvestris*: ectomycorrhizal colonisation, genetic diversity and spatial distribution. *Microbial ecology*. 2011 Jan 1;61(1):52-63.
- Mercado Sierra, A.; Alayo Soto, R.; Mena Portales, J.; Armas, L.F. de. 1988. Hongos entomógenos de Cuba: nueva especie de *Clathroconium* sobre araña. *Acta Botanica Cubana*. 56:1-5
- Mercado Sierra, A.; Figueras, M.J.; Mena Portales, J. 1996. A new species of *Alisidiopsis* from Mexico. *Mycotaxon*. 60:443-448.
- Mercado Sierra, A.; Mena Portales, J. 1988. Nuevos o raros hifomicetes de Cuba. B. Un nuevo género sobre *Roystonea regia*. *Acta Botanica Cubana*. 53:1-5.
- Mercado Sierra, A.; Mena Portales, J. 1992. Nuevos o raros hifomicetes de Cuba VII. Especies enteroblásticas. *Acta Botanica Hungarica*. 37(1-4):63-73.
- Mercado-Díaz JA, Lücking R, Parmen S (2014) Two new genera and twelve new species of Graphidaceae from Puerto Rico suggest a high degree of endemism. *Phytotaxa* 189:186–203
- Messuti, M.I., Codesal, P.L., Mangold, A., Luecking, R. and Lumbsch, H.T., 2010. New or interesting *Chapsa* and *Topeliopsis* species (Ascomycota: Ostropales) from Argentina. *The Lichenologist*, 42(02), pp.191-195.
- Messuti, M.I., Lumbsch, H.T., Luecking, R. and Altermann, S., 2011. One hundred new species of lichenized fungi: a signature of undiscovered global diversity.

- Messuti, M.I., Passo, A., Scervino, J.M. and Vidal-Russell, R. 2016. The species pair *Pseudocyphellaria pilosella-piloselloides* (lichenized Ascomycota: Lobariaceae) is a single species. *Lichenologist* (Lond.) 48 (2), 141-146.
- Methven, A.S., Zelski, S.E. and Miller, A.N. 2013. A molecular phylogenetic assessment of the genus *Gyromitra* in North America. *Mycologia*. 105(5):1306-14.
- Meunier, J.D., Kirman, S., Strasberg, D., Grauby, O. and Dussouillez, P., 2014. Incipient weathering by *Stereocaulon vulcani* at Réunion volcanic island. *Chemical Geology*, 382, pp.123-131.
- Meyer B (2002) Die Flechtengattung *Clauzadea*. *Sendtnera* 8:85–154.
- Miadlikowska J et al. (2014) A multigene phylogenetic synthesis for the class Lecanoromycetes (Ascomycota): 1307 fungi representing 1139 infrageneric taxa, 317 genera and 66 families. *Mol Phyl Evol* 79:132–168.
- Miadlikowska J, Kauff F et al. (2006) New insights into classification and evolution of the Lecanoromycetes (Pezizomycotina, Ascomycota) from phylogenetic analyses of three ribosomal RNA- and two protein-coding genes. *Mycologia* 98(6):1088–1103.
- Miadlikowska J, Kauff F, Högnabba F, Oliver JC, Molnár K, Fraker E, Gaya E, Hafellner J, Hofstetter V, Gueidan C, Otálora MAG, Hodkinson B, Kukwa M, Lücking R, Björk C, Sipman HJM, Burgaz AR, Thell A, Passo A, Myllys L, Goward T, Fernández-Brime S, Hestmark G, Lendemer J, Lumbsch HT, Schmult M, Schoch C, Sérusiaux E, Maddison DR, Arnold AE, Lutzoni F, Stenroos S (2014) A multigene phylogenetic synthesis for the class Lecanoromycetes (Ascomycota): 1307 fungi representing 1139 infrageneric taxa, 317 genera and 66 families. *Mol Phylogenetic Evol* 79:132–168
- Miadlikowska J, Schoch CL, Kageyama SA, Molnar K, Lutzoni F, McCune B (2011) Hypogymnia phylogeny, including *Cavernularia*, reveals biogeographic structure. *The Bryologist* 114(2):392–400.
- Miadlikowska J., Richardson D., Magain N., Ball B., Anderson F., Cameron R., Lendemer J. C., Truong C., Lutzoni, F. 2014. Phylogenetic placement, species delimitation, and cyanobiont identity of endangered aquatic *Peltigera* species (lichen-forming Ascomycota, Lecanoromycetes). *American Journal of Botany* 101(7): 1141-1156.
- Miadlikowska, J., Kauff, F., Högnabba, F., Oliver, J.C., Molnar, K., Fraker, E., Gaya, E., Hafellner, J., Hofstetter, V., Gueidan, C., Kukwa, M., Luecking, R., Björk, C., Sipman, H.J., Burgaz, A.R., Thell, A., Passo, A., Myllys, L., Goward, T., Fernández-Brime, S., Hestmark, G., Lendemer, J., Lumbsch, H.T., Schmult, M., Schoch, C.L., Sérusiaux, E., Maddison, D.R., Arnold, E., Lutzoni, F. and Stenroos, S. 2014. A multigene phylogenetic synthesis for the class Lecanoromycetes (Ascomycota): 1307 fungi representing 1139 infrageneric taxa, 317 genera and 66 families. *Mol. Phylogenetic Evol.* 79:132-68.
- Mies, B.A., 2015. New or interesting lichens from the Limousin region (Western Massif Central, France). *Herzogia*, 28(2), pp.473-483.
- Miller AN, Vasilyeva LN, Rogers JD. 2007 – *Chlorostroma subcubisporum* gen. et. sp. nov. and notes on the systematic position of *Thuemenella cubispora*. *Sydowia* 59 (1): 138 - 147.
- MILLER jr OK, Henkel TW, James TY, Miller SL. *Pseudotulostoma*, a remarkable new volvate genus in the Elaphomycetaceae from Guyana. *Mycological Research*. 2001 Oct 1;105(10):1268-72.
- Miller, A.N.; Shearer, C.A.; Bartolata, M.; Huhndorf, S.M. 2006. *Cuspidatispora xiphiago* gen. et sp. nov. from an eastern North American creek. *Mycoscience*. 47(4):218-223
- Miller, A.N.; Huhndorf, S.M.; Fournier, J. 2014. Phylogenetic relationships of five uncommon species of *Lasiosphaeria* and three new species in the Helminthosphaeriaceae (Sordariomycetes). *Mycologia*. 106(3):505-524

- Miller, J.E., McCune, B., Kofranek, D., Villella, J., Demmer, R., Mergenthaler, K. and Barber, A.C., 2011. Lichens from the South Slough and Horsfall Dunes on the southern Oregon coast. *Evansia*, 28(4), pp.92-99.
- Miller, J.E., Rossman, A., Rosentreter, R. and Ponzetti, J., 2011. Lichen ecology and diversity of a sagebrush steppe in Oregon: 1977 to the present. *North American Fungi*, 6, pp.1-14.
- Millot, M., Delebassée, S., Liagre, B., Vignaud, L., Sol, V. and Mambu, L., 2014. Screening of lichen extracts on HT-29 human colon-cancer cells. *Planta Medica*, 80(16), p.P1N5.
- Minckler, D., Small, K.W. and Walsh, T.J., 2014. Clinical and pathologic features of *Bipolaris endophthalmitis* after intravitreal triamcinolone. *JAMA ophthalmology*, 132(5), pp.630-632.
- Minnis AM, Kennedy AH, Grenier DB, Palm ME, Rossman AY (2012) Phylogeny and taxonomic revision of the Planistromellaceae including its coelomycetous anamorphs: contributions towards a monograph of the genus *Kellermania*. *Persoonia* 29:11–28
- Minnis AM, Lindner DL. Phylogenetic evaluation of *Geomyces* and allies reveals no close relatives of *Pseudogymnoascus destructans*, comb. nov., in bat hibernacula of eastern North America. *Fungal biology*. 2013 Sep 30;117(9):638-49.
- Minnis, A.M.; Kennedy, A.H.; Grenier, D.B.; Rehner, S.A.; Bischoff, J.F. 2011. *Asperisporium* and *Pantospora* (Mycosphaerellaceae): epitypifications and phylogenetic placement. *Persoonia*. 27:1-8
- Minnis, A.M.; Rossman, A.Y.; Farr, D.F.; Olsen, R.T. (2010). *Fungal planet* 51. *Sphaerographium nyssicola* sp. nov.. *Persoonia* 25: 122-123
- Minnis,A.M. and Lindner,D.L. 2013 Phylogenetic evaluation of *Geomyces* and allies reveals no close relatives of *Pseudogymnoascus destructans*, comb. nov., in bat hibernacula of eastern North America. *Fungal Biology* 117, 9, 638–649.
- Minter, D. W.; Aguirre-Hudson, B.; Cannon, P. F. 2015 *Naetrocymbe nitescens*. [Descriptions of Fungi and Bacteria]. IMI Descriptions of Fungi and Bacteria No.206 pp.Sheet 2059 ref.10
- Minter, D.W. (2009). *Cyberlindnera*, a replacement name for *Lindnera* Kurtzman et al., nom. illegit.. *Mycotaxon* 110: 473-476
- MIRABOLFATHY, M.; JU, Y.M.; HSIEH, H.M.; ROGERS, J.D. (2013). *Obolarina persica* sp. nov., associated with dying *Quercus* in Iran. *Mycoscience* 54, Issue 5, 315–320
- Miralles, I., Edwards, H.G., Domingo, F. and Jorge-Villar, S.E., 2015. Lichens around the world: a comprehensive study of lichen survival biostrategies detected by Raman spectroscopy. *Analytical Methods*, 7(16), pp.6856-6868.
- Miralles-Mellado, I., Cantón, Y. and Solé-Benet, A., 2011. Two-dimensional porosity of crusted silty soils: indicators of soil quality in semiarid rangelands?. *Soil Science Society of America Journal*, 75(4), pp.1330-1342.
- Mishra K, Das S, Goyal S, Gupta C, Rai G, Ansari MA, Saha R, Singal A. Subcutaneous mycoses caused by *rhytidhysterium* species in an immunocompetent patient. *Med Mycol Case Rep*. 2014;5(1):32-4.
- Mishra, A.K., Mishra, A., Kehri, H.K., Sharma, B. and Pandey, A.K., 2009. Inhibitory activity of Indian spice plant *Cinnamomum zeylanicum* extracts against *Alternaria solani* and *Curvularia lunata*, the pathogenic dematiaceous moulds. *Annals of Clinical Microbiology and Antimicrobials*, 8(1), p.1.
- Mishra, S., Singh, B.R., Singh, A., Keswani, C., Naqvi, A.H. and Singh, H.B., 2014. Biofabricated silver nanoparticles act as a strong fungicide against *Bipolaris sorokiniana* causing spot blotch disease in wheat. *PloS one*, 9(5), p.e97881.

- Mitrovic T, Stamenkovic S, Cvetkovic V, Radulovic N, Mladenovic M, Stankovic M, Topuzovic M, Radojevic I, Stefanovic O, Vasic S, Comic L. *Platismatia glauca* and *Pseudevernia furfuracea* lichens as sources of antioxidant, antimicrobial and antibiofilm agents. *EXCLI journal*. 2014;13:938.
- Mittermeier, V.K., Schmitt, N., Volk, L.P., Suárez, J.P., Beck, A. and Eisenreich, W., 2015. Metabolic Profiling of Alpine and Ecuadorian Lichens. *Molecules*, 20(10), pp.18047-18065.
- Miyamoto, Y., Ishii, Y., Honda, A., Masunaka, A., Tsuge, T., Yamamoto, M., Ohtani, K., Fukumoto, T., Gomi, K., Peever, T.L. and Akimitsu, K., 2009. Function of genes encoding acyl-CoA synthetase and enoyl-CoA hydratase for host-selective ACT-toxin biosynthesis in the tangerine pathotype of *Alternaria alternata*. *Phytopathology*, 99(4), pp.369-377.
- Miyamoto, Y., Masunaka, A., Tsuge, T., Yamamoto, M., Ohtani, K., Fukumoto, T., Gomi, K., Peever, T.L. and Akimitsu, K., 2008. Functional analysis of a multicopy host-selective ACT-toxin biosynthesis gene in the tangerine pathotype of *Alternaria alternata* using RNA silencing. *Molecular plant-microbe interactions*, 21(12), pp.1591-1599.
- Mizuno, H., Kawahigashi, H., Kawahara, Y., Kanamori, H., Ogata, J., Minami, H., Itoh, T. and Matsumoto, T., 2012. Global transcriptome analysis reveals distinct expression among duplicated genes during sorghum-Bipolaris sorghicola interaction. *BMC plant biology*, 12(1), p.1.
- Mohabe S, Nayaka S, Reddy AM. 2015 *Stigmatochroma microspora* (Physciaceae), a new species from India. *J. New Biolog. Rep.* 4(2): 128
- Mohammadi, P., 2011. Spectrofluorometry as a tool to evaluate biocide efficiency on deteriorating rock fungi. *Iranian Journal Of Biology*, 24 (6), pp. 818 - 825.
- Molina MC, Crespo A, Blanco O, Hladun N, Hawksworth DL (2002) Molecular phylogeny and status of *Diploicia* and *Diplotomma*, with observations on *Diploicia subcanescens* and *Diplotomma rivasmartinezii*. *Lichenologist* 34:509–519.
- Molina, M.C., Divakar, P.K., Zhang, N., Gonzalez, N. and Struwe, L. 2013. Non-developing ascospores in apothecia of asexually reproducing lichen-forming fungi. *Int. Microbiol.* 16 (3), 145-155.
- Molnár, K., Lőkös, L., Schrett-Major, Á. and Farkas, E., 2012. Molecular genetic analysis of *Xanthoparmelia pulvinaris* (Ascomycota, Lecanorales, Parmeliaceae). *Acta Botanica Hungarica*, 54(1-2), pp.125-130.
- Monaghan MT, Wild R, Elliot M, Fujisawa T, Balke M, Inward DJ, Lees DC, Ranaivosolo R, Eggleton P, Barraclough TG, Vogler AP. Accelerated species inventory on Madagascar using coalescent-based models of species delineation. *Systematic biology*. 2009:syp027.
- Moncada B, Lücking R, Betancourt-Macuase L (2013) Phylogeny of the Lobariaceae (lichenized Ascomycota: Peltigerales), with a reappraisal of the genus *Lobariella*. *Lichenologist* 45(2):203–263.
- Moncada B, Lücking R, Suárez A (2014) Molecular phylogeny of the genus *Sticta* (lichenized Ascomycota: Lobariaceae) in Colombia. *Fungal Divers* 64(1):205-231.
- Moncada B, Luecking R, COCA LF. Six new apotheciate species of *Sticta* (lichenized Ascomycota: Lobariaceae) from the Colombian Andes. *The Lichenologist*. 2013 Sep 1;45(05):635-56.
- Moncada B, Luecking R. Ten new species of *Sticta* and counting: Colombia as a hot spot for unrecognized diversification in a conspicuous macrolichen genus. *Phytotaxa*. 2012 Nov 30;74(1):1-29.

- Moncada, B., Reidy, B. and Lücking, R., 2014. A phylogenetic revision of Hawaiian *Pseudocyphellaria* sensu lato (lichenized Ascomycota: Lobariaceae) reveals eight new species and a high degree of inferred endemism. *The Bryologist*, 117(2), pp.119-160.
- Mongkolsamrit, S.; Luangsa-ard, J.J.; Hywel-Jones, N.L. (2011). *Samuelsia mundiveteris* sp. nov. from Thailand. *Mycologia* 103(4): 921-927
- Mongkolsuk, P., Meesim, S., Poengsungnoen, V. and Kalb, K., 2012. The lichen family Physciaceae in Thailand—I. The genus *Pyxine*. *Phytotaxa*, 59(1), pp.32-54.
- Moniri, M.H. and Sipman, H.J., 2011. Lichens from three mountain sites in Khorasan provinces, Iran, including four species new to Iran. *Cryptogamie, Mycologie*, 32(2), pp.145-150.
- Moniri, M.H., 2010. A Small Lichen Collection from Darkesh, NE Iran. *Journal of Environmental Science and Engineering*, 4(4), p.36.
- Moniri, M.H., Jandaghi, M. and Masroornia, M., 2011. A note on lichens in the vicinity of Mashhad (Razavi Khorasan, NE Iran). *Iran. J. Bot*, 17, pp.132-136.
- Moniri, M.H., Sipman, H.J. and Schultz, M., 2015. New records of lichenized and lichenicolous fungi from Northeastern Iran.
- Moniri, M.H., Soltani, A. and Kamyabi, S., 2009. Some lichens from Kashmar, NE Iran. *Journal of Applied and Natural Science*, 1(2), pp.286-290.
- Monkai J, Liu JK, Boonmee S, Chomnunti P, Chukeatirote E, Jones EBG, Wang Y, Hyde KD (2013) Planistromellaceae (Botryosphaeriales). *Cryptogam Mycol* 34:45–77
- Monteiro JS, Carmo LT, Fiúza PO, Ottoni BM, Gusmão LF, Castañeda-Ruiz RF. New species of microfungi from Brazilian Amazon rainforests. *Mycotaxon*. 2014 May 29;127(1):81-7.
- Monteiro JS, Castañeda-Ruiz RF, Gusmão LFP (2014) *Helicodochium*, a new microfungus from submerged wood from Brazil. *Mycotaxon*. 127:5–9
- Monteiro, J.S. and Gusmão, L.F.P., 2014. Two new species of *Ceratosporella* (anamorphic fungi) from Brazilian Amazon forest. *Nova Hedwigia*, 98(3-4), pp.481-490.
- Monteiro, J.S.; Carmo, L.T.; Fiúza, P.O.; Ottoni, B.M.P.; Gusmão, L.F.P.; Castañeda-Ruiz, R.F. 2014. New species of microfungi from Brazilian Amazon rainforests. *Mycotaxon*. 127:81-87
- Moon, K.H.; Aptroot, A. (2009). Pyrenocarous lichens in Korea. *Bibliotheca Lichenol.* 99: 297-314
- Moon, K.H.; Nakanishi, S.; Kashiwadani, H. (2008). Notes on species of Graphidaceae (Ascomycotina) from eastern Asia with three new species. *Mem. Natn Sci. Mus Tokyo*, 45: 85-91.
- Moreno G, Alvarado P, Manjón JL. Phylogenetic affiliation of *Choiromyces magnusii* and *C. venosus* Tuberaceae Ascomycota) from Spain. *Mycological progress*. 2012 May 1;11(2):463-71.
- Moreno G, Lizárraga M, Esqueda M, Galán R, Alvarado P. New records of little-known species of *Carbomyces* (Carbomycetaceae, Ascomycota). *Mycotaxon*. 2012 Sep 28;120(1):89-98.
- Moreno-Pérez P, Gamboa-Angulo M, Heredia G, Canto-Canché B, Rosado-Vallado M, Medina-Baizabal IL, Tapia-Tusell R (2014) Antagonistic properties of micromycetes isolated from sinkholes of the Yucatán Peninsula against fungal phytopathogens. *Rev. Mex. Mic* 40:27–36
- Moreno-Rico O, Groenewald JZ, Crous PW. 2014. Follicolous fungi from *Arctostaphylos pungens* in Mexico. *IMA Fungus*. 5(1):7-15
- Morgan-Jones, G.; Sinclair, R.C.; Eicker, A. 1987. Notes on hyphomycetes. LV. *Craneomyces* gen.nov. and *Trichobotrys effusa*. *Mycotaxon*. 30:345-350.

- Morgenstern K, Döring M, Krabel D. Rhabdocone needle cast—investigations on various Douglas fir tissue types. *European journal of plant pathology*. 2013 Nov 1;137(3):495-504.
- Mori Y, Sato Y, Takamatsu S (2000a). Evolutionary analysis of the powdery mildew fungi using nucleotide sequences of the nuclear ribosomal DNA. *Mycologia* 92: 74–93.
- Mori Y, Sato Y, Takamatsu S (2000b). Molecular phylogeny and radiation time of Erysiphales inferred from the nuclear ribosomal DNA sequences. *Mycoscience* 41: 437–447.
- Morin L., Shivas RG, Piper MC, Tan YP (2010) *Austropleospora osteospermi* gen. et sp. nov. and its host specificity and distribution on *Chrysanthemoides monilifera* ssp. *rotundata* in Australia. *Fungal Diversity* 40: 65-74.
- Morita, H., Tsuchiya, T., Kishibe, K., Noya, S., Shiro, M. and Hirasawa, Y., 2009. Antimitotic activity of lobaric acid and a new benzofuran, sakisacaulon A from *Stereocaulon sasakii*. *Bioorganic & medicinal chemistry letters*, 19(13), pp.3679-3681.
- Mostafanezhad, H., Sahebani, N. and Nourinejad Zarghani, S., 2014. Control of root-knot nematode (*Meloidogyne javanica*) with combination of *Arthrobotrys oligospora* and salicylic acid and study of some plant defense responses. *Biocontrol Science and Technology*, 24(2), pp.203-215.
- Motiejūnaitė J 2012 New data on distribution of *Lemmopsis pelodes* in Lithuania. *Botanica Lithuanica* 18(2): 166–168
- Motiejūnaitė, J. and Grochowski, P., 2014. Miscellaneous new records of lichens and lichenicolous fungi. *Herzogia*, 27(1), pp.193-198.
- Motiejūnaitė, J., Chesnokov, S.V., Czarnota, P., Gagarina, L.V., Frolov, I., Himelbrant, D., Konoreva, L.A., Kubiak, D., Kukwa, M., Moisejevs, R. and Stepanchikova, I., 2016. Ninety-one species of lichens and allied fungi new to Latvia with a list of additional records from Kurzeme. *Herzogia*, 29(1), pp.143-163.
- Motiejūnaitė, J., Kukwa, M., Lõhmus, P., Markovskaja, S., Oset, M., Lukošienė, I.P., Stončius, D. and Uselienė, A., 2013. Contribution to the Lithuanian flora of lichens and allied fungi. IV. *Botanica Lithuanica*, 19(1), pp.3-7.
- Motiejūnaitė, J., von BRACKEL, W., Stončius, D. and Preikša, Ž., 2011. Contribution to the Lithuanian flora of lichens and allied fungi. III. *Botanica Lithuanica*, 17(1), pp.39-46.
- Motiejūnaitė, J.U.R.G.A. and Czyżewska, K.R.Y.S.T.Y.N.A., 2008. Additions to the biota of lichens and lichenicolous fungi of Poland with note on *Lecania prasinoidea* in eastern and central Europe. *Polish Bot. J*, 53(2), pp.155-162.
- Motlagh, M.R.S. and Anvari, M., 2010. Genetic variation in a population of *Bipolaris oryzae* based on RAPD-PCR in north of Iran. *African Journal of Biotechnology*, 9(36).
- Motlagh, M.R.S. and Kaviani, B., 2008. Characterization of new *Bipolaris* spp.: the causal agent of rice brown spot disease in the north of Iran. *International Journal of Agriculture and Biology*, 10(6), pp.638-642.
- Mouhadjir, A., Matray, O., Giraud, S., Mély, L., Marguet, C., Sermet-Gaudelus, I., Le Gal, S., Labbé, F., Person, C., Troussier, F. and Ballet, J.J., 2016. Long-term *Rasamsonia argillacea* complex species colonization revealed by rep-PCR in cystic fibrosis patients. *Journal of Clinical Microbiology*, pp.JCM-01462.
- Moya-Elizondo, E.A., Jacobsen, B.J., Hogg, A.C. and Dyer, A.T., 2011. Population dynamics between *Fusarium pseudograminearum* and *Bipolaris sorokiniana* in wheat stems using real-time qPCR. *Plant disease*, 95(9), pp.1089-1098.
- Mugambi GK, Huhndorf SM (2009) Molecular phylogenetics of *Pleosporales*: *Melanommataceae* and *Lophiostomataceae* reclassified (Plesporomycetidae, Dothideomycetes, Ascomycota). *Stud Mycol* 64:103–121

- Mugambi GK, SM Huhndorf. 2009. Parallel evolution of hysterothecial ascomata in ascolocularous fungi (Ascomycota, Fungi). *Systematics and Biodiversity* 7, 453–464.
- Mugambi, G.K. & Huhndorf, S.M. (2009) Molecular phylogenetics of Pleosporales: Melanommataceae and Lophiostomataceae re-circumscribed (Pleosporomycetidae, Dothideomycetes, Ascomycota). *Studies in Mycology* 64: 103–121. <http://dx.doi.org/10.3114/sim.2009.64.05>.
- Mugambi, G.K.; Huhndorf, S.M. (2010). Multigene phylogeny of the Coronophorales: morphology and new species in the order. *Mycologia* 102(1): 185-210.
- Muggia L, Gueidan C, Grube M (2010) Phylogenetic placement of some morphologically unusual members of Verrucariales. *Mycologia* 102: 835–846.
- Muggia L, Kocourková J, Knudsen K (2015) Disentangling the complex of Lichenothelia species from rock communities in the desert. *Mycologia* 107: 1233–1253
- Muggia L, Kopun T, Ertz D (2015) Phylogenetic placement of the lichenicolous, anamorphic genus Lichenodiplis and its connection to Muellerella-like teleomorphs. *Fungal Biology* 119: 1115–1128.
- a prevailing motif in the evolution of ketoacyl synthase domains of polyketide synthases from lichenized fungi. *Mycological research*. 2008 Feb 29;112(2):277-88.
- Muggia, L., Baloch, E., Stabentheiner, E., Grube, M. and Wedin, M. 2011. Photobiont association and genetic diversity of the optionally lichenized fungus *Schizoxylon albescens* FEMS Microbiol. Ecol. 75 (2): 255-272
- Muggia, L., Gueidan, C. and Grube, M., 2010. Phylogenetic placement of some morphologically unusual members of Verrucariales. *Mycologia*, 102(4), pp.835-846.
- Muggia, L., Gueidan, C., Knudsen, K., Perlmutter, G. and Grube, M., 2013. The lichen connections of black fungi. *Mycopathologia*, 175(5-6), pp.523-535.
- Muggia, L., Hafellner, J. and Obermayer, W. 2011. New species of *Rinodina* Unpublished 2 (bases 1 to 470) Submitted (05-JUL-2011).
- Muggia, L., Nelson, P., Wheeler, T., Yakovchenko, L.S., Tonsberg, T. and Spribille, T. 2011. Convergent evolution of a symbiotic duet: The case of the lichen genus *Polychidium* (Peltigerales, Ascomycota). *Am. J. Bot.* 98 (10), 1647-1656.
- Muggia, L., Nelson, P., Wheeler, T., Yakovchenko, L.S., Tønsberg, T. and Spribille, T., 2011. Convergent evolution of a symbiotic duet: the case of the lichen genus *Polychidium* (Peltigerales, Ascomycota). *American Journal of Botany*, 98(10), pp.1647-1656.
- Muggia, L., Pérez-Ortega, S., Fryday, A., Spribille, T. and Grube, M., 2014. Global assessment of genetic variation and phenotypic plasticity in the lichen-forming species *Tephromela atra*. *Fungal Diversity*, 64(1), pp.233-251.
- Muggia, L., Zellnig, G., Rabensteiner, J. and Grube, M., 2010. Morphological and phylogenetic study of algal partners associated with the lichen-forming fungus *Tephromela atra* from the Mediterranean region. *Symbiosis*, 51(2), pp.149-160.
- Muggia, L., Kopun, T. and Ertz, D. 2015 Phylogenetic placement of the lichenicolous, anamorphic genus Lichenodiplis and its connection to Muellerella-like teleomorphs. *Fungal Biol* 119 (11), 1115-1128.
- Mukherjee, A.K., Carp, M.J., Zuchman, R., Ziv, T., Horwitz, B.A. and Gepstein, S., 2010. Proteomics of the response of *Arabidopsis thaliana* to infection with *Alternaria brassicicola*. *Journal of proteomics*, 73(4), pp.709-720.
- Mukhopadhyay SK, Chatterjee S, Gauri SS, Das SS, Mishra A, Patra M, Ghosh AK, Das AK, Singh SM, Dey S. Isolation and characterization of extracellular polysaccharide Thelebolan produced by a newly isolated psychrophilic Antarctic fungus *Thelebolus*. *Carbohydrate polymers*. 2014 Apr 15;104:204-12.
- Müller, E.; Farr, M.L. 1971. A new genus of the Schizothyriaceae from the Pacific north-west. *Mycologia*. 63(5):1080-1083.

- Müller, M.E. and Korn, U., 2013. *Alternaria* mycotoxins in wheat—A 10 years survey in the Northeast of Germany. *Food Control*, 34(1), pp.191-197.
- Mullineux, T. and Hausner, G. 2009 Evolution of rDNA ITS1 and ITS2 sequences and RNA secondary structures within members of the fungal genera *Grosmannia* and
- Mungai P., Hyde K.D., Cai L., Njogu J.G., Chukeatirote K. (2011). Coprophilous ascomycetes of northern Thailand. *Current Research in E & AM* 1 (2), 135-159.
- Mungai P.G., Chukeatirote E., Njogu J.G., Hyde K.D. (2012). Studies of coprophilous ascomycetes in Kenya. *Podospora* species from wildlife dung. *Mycosphere* 3(6), 978–981, Doi 10.5943 /mycosphere/3/6/12.
- Mungai P.G., Chukeatirote E., Njogu J.G., Hyde K.D. (2012). Studies of coprophilous ascomycetes in Kenya: *Sordariales* from wildlife dung. *Mycosphere* 3(4), 437–448, Doi 10.5943 /mycosphere/3/4/7
- Mungai P.G., Njogu J.G., Chukeatirote E., Hyde K.D. (2012). Studies of coprophilous ascomycetes in Kenya – *Ascobolus* species from wildlife dung. *Current Research in Environmental & Applied Mycology* 2(1), 1-16, Doi 10.5943/cream/2/1/1. Doveri F. (2012). An exceptional find on rabbit dung from Italy: third record worldwide of *Ascobolus perforatus*. *Mycosphere* 3 (1), 29–35. <http://dx.doi.org/10.5943/mycosphere/3/1/3>.
- Mungai, P.G., Njogu, J.G., Chukeatirote, E. & Hyde, K.D. (2012). Coprophilous ascomycetes in Kenya: *Sporormiella* from wildlife dung. *Mycology* 3: 234–251.
- Muniz D, Llop E, Hladun NL. *Sphinctrina paramerae*, a new Mediterranean lichenicolous species with non-septate spores. *The Lichenologist*. 2013 Mar 1;45(02):137-43.
- Muntanola-Cvetkovic, M. & Gomez-Bolea, A., 1993. *Chaetospermum chaetosporum* (coelomycetes) first record from the Iberian Peninsula. *Mycotaxon*, 47, pp. 59–65.
- Munzenberger, B.; Bubner, B.; Wollecke, J.; Sieber, T.N.; Bauer, R.; Fladung, M.; Huttel, R.F. (2009). The ectomycorrhizal morphotype *Pinihiza sclerotia* is formed by *Acephala macrosclerotiorum* sp. nov., a close relative of *Phialocephala fortinii*. *Mycorrhiza* 19(7): 481-492.
- Murata, N., Aoki, T., Kusaba, M., Tosa, Y. and Chuma, I., 2014. Various species of *Pyricularia* constitute a robust clade distinct from *Magnaporthe salvinii* and its relatives in *Magnaportheaceae*. *Journal of General Plant Pathology*, 80(1), pp.66-72.
- Murillo C, Albertazzi FJ, Carranza J, Lumbsch HT, Tamayo G. Molecular data indicate that *rhytidhysterium rufulum* (ascomycetes, patellariales) in costa rica consists of four distinct lineages corroborated by morphological and chemical characters. *Mycol Res*. 2009;113(4):405-16.
- Musvuugwa T, Dreyer LL, De Beer WZ, Oberlander K, Duong T, Roets F. 2015. New species of *Ophiostomatales* from *Scolytinae* and *Platypodinae* beetles in the Cape Floristic Region, including the discovery of the sexual state of *Raffaelea*. *Antonie van Leeuwenhoek*. 108:933-950
- Muthukrishnan, S., Sanjayan, K.P. and Jahir, H.K., 2012. Species composition, seasonal changes and community ordination of alkalotolerant micro fungal diversity in a natural scrub jungle ecosystem of Tamil Nadu, India. *Mycosphere*, 3, pp.92-109.
- Muthumary, J. 1986. *Conostroma quercicola* sp. nov. from India. *Current Science*. 55:1081-1082
- Mycobank (2016) <http://www.mycobank.org>, Accessed in December 2016
- Myllys L, Velmla S, Holien H, Halonen P, Wang L-S, Goward T (2011) Phylogeny of the genus *Bryoria*. *Lichenologist* 43: 617–638.
- Myllys, L., Velmala, S., Lindgren, H., Glavich, D., Carlberg, T., Li-Song, W.A.N.G. and Goward, T., 2014. Taxonomic delimitation of the genera *Bryoria* and *Sulcaria*, with a

- new combination *Sulcaria spiralifera* introduced. *The Lichenologist*, 46(06), pp.737-752.
- Nadyeina, O., 2009. The lichen-forming and lichenicolous fungi of the Donetsk Upland (Ukraine). *Mycologia Balcanica*, 6, pp.37-53.
- Nadyeina, O., Grube, M. and Mayrhofer, H., 2010. A contribution to the taxonomy of the genus *Rinodina* (Physciaceae, lichenized Ascomycotina) using combined ITS and mtSSU rDNA data. *The Lichenologist*, 42(05), pp.521-531.
- Nag Raj T. (1977) *Ypsilonia, Acanthotheciella, and Kazulia gen. nov.* *Canadian Journal of Botany*. 55:1599–1622. doi: 10.1139/b77–188
- Nag Raj TR (1993) *Coelomycetous anamorphs with appendage-bearing conidia*. Mycologue Publications, Waterloo
- Nag Raj TR, DiCosmo F (1981b) *Icones generum coelomycetum XII*. *Uni Waterloo Bio Ser* 22:1–41.
- Nag Raj, T.R. (1989). *Genera coelomycetum. XXVI. Amarenographium, Callistospora, Hyalothyridium, Orphanocoela anam.-gen. nov., Scolecosporiella, and Urohendersoniella*. *Can. J. Bot.* 67(11): 3169-3186.
- Nag Raj, T.R. 1973. *Genera coelomycetum. IX. Brycekendrickia gen. nov. and Vasudevella*. *Canadian Journal of Botany*. 51(7):1337-1341.
- Nag Raj, T.R. 1977. *Miscellaneous microfungi II*. *Canadian Journal of Botany*. 55(7):757-765.
- Nag Raj, T.R. 1988. *Genera coelomycetum. XXIV. Chithramia anam. gen. nov.* *Canadian Journal of Botany*. 66(5):903-906.
- Nag Raj, T.R., 1993. *Coelomycetous anamorphs with appendage-bearing conidia*. Mycologue Publications, Waterloo, Canada, 1101 pp.
- Nag Raj, T.R.; DiCosmo, F. 1984. *Genera coelomycetum. XXII. Amphiciliella, Choanatiara anam.-gen. nov., Ciferriella, Collonaemella, Cymbothyrium, Melanostroma, Phialophorophoma and Thyrsidina*. *Canadian Journal of Botany*. 62(4):709-721
- Nagahama T, Abdel-Wahab MA, Nogi Y, Miyazaki M, Uematsu K, Hamamoto M, Horikoshi K. *Dipodascus tetrasporeus sp. nov., an ascosporeogenous yeast isolated from deep-sea sediments in the Japan Trench*. *International journal of systematic and evolutionary microbiology*. 2008 Apr 1;58(4):1040-6.
- Nagano, Y., Nagahama, T. and Abe, F., 2014. Cold-adapted yeasts in deep-sea environments. In *Cold-adapted Yeasts* (pp. 149-171). Springer Berlin Heidelberg.
- NAGAO H. (2008) *Discomycetes on decayed tree fern. (3) Lachnum lanariceps and Lachnum oncospermaum new to Japan*. *Mycoscience* 49: 403-406.
- Nagaraju D, Kunwar IK, Sureshkumar G, Manoharachary C. *A new synnematosous hyphomycetous fungus—Bhadradriella gen. nov. from India*. *Journal of Mycology and Plant Pathology*. 2011;41(2):238.
- NAGARAJU, D.; KUNWAR, I.K.; SURESH KUMAR, G.; MANOHARACHARY, C. (2011). *Custingophora lignicola sp. nov. and Chaetopsina indica sp. nov. from India*. *Journal of Mycology and Plant Pathology*, 41(1), 9,
- Najafzadeh MJ, Sun J, Vicente V, Xi L, Gerrits van den Ende AHG, de Hoog GS. 2010. *Fonsecaea nubica sp. nov., a new agent of human chromoblastomycosis revealed using molecular data*. *Medical Mycology* 48:800–806.
- Najafzadeh MJ, Sun J, Vicente VA, Klaassen CHW, Bonifaz A, Gerrits van den Ende AHG, Menken SBJ, de Hoog GS. 2011a. *Molecular epidemiology of Fonsecaea species*. *Emerging Infectious Diseases* 17:464–469.

- Najafzadeh MJ, Vicente VA, Sun J, Meis JF, de Hoog GS. 2011b. *Fonsecaea multimorphosa* sp. nov., a new species of Chaetothyriales isolated from a feline cerebral abscess. *Fungal Biology* 115:1066–1076.
- Nakagiri A (1993) A new marine Ascomycete in Spathulosporales, *Hispidicarpomyces galaxauricola* gen. et. sp. nov. (*Hispidicarpomycetaceae* fam. nov.), inhabiting a red alga, *Galaxaura falcata*. *Mycologia* 85:638-652
- Nakagiri A, Ito T (1997) *Retrostium amphiroae* gen. et sp. nov. inhabiting a marine red alga, *Amphiroa zonata*. *Mycologia* 89:485-493
- Nakagiri A, Okane I, Ito T, Katamoto K (1997) *Lanceispora amphibia* gen. et sp. nov., a new amphisphaeriaceous ascomycete inhabiting senescent and fallen leaves of mangrove. *Mycoscience* 38: 207-213
- Nakagiri A. & Tubaki K. 1983. *Lindra obtusa* a new marine ascomycetes and its *Anguillospora* anamorph. *Mycologia* 75:487-497.
- Nakagiri, A. and Ito, T. 1997. *Retrostium amphiroae* gen. et sp. nov. inhabiting a marine red alga, *Amphiroa zonata*. *Mycologia* 89(3): 485-493.
- NALIM, F.A.; SAMUELS, G.J.; WIJESUNDERA, R.L.; GEISER, D.M. (2011). New species from the *Fusarium solani* species complex derived from perithecia and soil in the Old World tropics. *Mycologia* 103(6):1302-30.
- Nallathambi, P., Umamaheswari, C., Thakore, B.B.L. and More, T.A., 2009. Post-harvest management of ber (*Ziziphus mauritiana* Lamk) fruit rot (*Alternaria alternata* Fr. Keissler) using *Trichoderma* species, fungicides and their combinations. *Crop Protection*, 28(6), pp.525-532.
- Nambiar GR, Raveendran K (2009) Manglicolous Marine Fungi on Avicennia and Rhizophora along Kerala Coast (India). *Middle-East Journal of Scientific Research* 4:48–51
- Nambiar GR, Raveendran K, Jaleel CA (2009) Marine mycoflora of south India with special emphasis on Lignicolous Marine Fungi. *Front. Biol. China* 4:436–441
- Nambiar GR, Raveendran K. Marine mycoflora in backwater ecosystem of kerala, india. *J Environ Biol.* 2009;30(5):647-9.
- Nattah, I., Ajaj, A., Chliyeh, M., Touhami, A.O., Benkirane, R. and Douira, A., 2014. Contribution to the inventory of lichens encountered in the reserve of Sidi Boughaba (Morocco). *Int. J. Pure App. Biosci*, 2(6), pp.103-107.
- Naumann, T.A., Wicklow, D.T. and Kendra, D.F., 2009. Maize seed chitinase is modified by a protein secreted by *Bipolaris zeicola*. *Physiological and molecular plant pathology*, 74(2), pp.134-141.
- Navarrete F, Abreo E, Martínez S, Bettucci L, Sandra LU. Pathogenicity and molecular detection of Uruguayan isolates of *Greeneria uvicola* and *Cadophora luteo-olivacea* associated with grapevine trunk diseases. *Phytopathologia Mediterranea*. 2011 Dec 18;50(4):166-75.
- Navarro-Rosinés, P.; Hladun, N.L.; Llimona, X. 2008. *Gelatinopsis heppiae* sp. nov. (Leotiales, Ascomycota) un hongo liquenícola sobre *Heppia despraeuxii* de Aragón (NE de España). *Revista Catalana de Micologia*. 30:57-64.
- Navarro-Rosinés, P.; Zhurbenko, M.; Roux, C. 2010. *Pseudopyrenidium* un nouveau genre pour inclure *Weddellomyces tartaricola* (champignon lichénicole non lichénisé, Ascomycota). *Bulletin de la Société Linnéenne de Provence*. 61:129-140
- Nawawi A. 1974. Two new *Tricladium* species. *Trans. Br. Mycol. Soc.* 63(2): 267-272.
- Nawawi A. 1976. *Condylospora* gen. nov. a hyphomycete from a foam samples. *Trans. Br. Mycol. Soc.* 66:363–365. doi:10.1016/s0007-1536(76)80077-0

- Nawawi A. & Kuthubutheen A.J. 1988. Additions to *Condylospora* (hyphomycetes) from Malaysia. *Mycotaxon* 33:329–338.
- Nawawi, A.; Kuthubutheen, A.J. 1987. *Clathrosporium intricatum* gen. et sp. nov. an aero-aquatic hyphomycete. *Transactions of the British Mycological Society*. 89(3):407-411
- Nawawi, A.; Kuthubutheen, A.J. 1989. A new taxon in *Colispora* (Hyphomycetes) from Malaysia. *Mycotaxon*. 34(2):497-501
- Nayaka, S. and Saxena, P., 2014. Physiological responses and ecological success of lichen *Stereocaulon foliolosum* and moss *Racomitrium subsecundum* growing in same habitat in Himalaya. *Indian J. fundam. appl. Life Sci*, 4, pp.167-179.
- Nayaka, S. and Upreti, D.K., 2011, May. An inventory of lichens in Uttar Pradesh through bibliographic compilation. In *National conference on forest biodiversity: earth's living treasure* (Vol. 22).
- Nayaka, S. and Upreti, D.K., 2011. Distribution and diversity of lichens in Schirmacher Oasis, and neighbouring Nunataks, East Antarctica.
- Nayaka, S., Upreti, D.K., Ponmurugan, P. and Ayyappadasan, G., 2013. Two new species of saxicolous *Pyxine* with yellow medulla from southern India. *The Lichenologist*, 45(01), pp.3-8.
- Nekoduka S, Kanematsu S, Tanaka K, Harada Y, Sano T. *Valdensia* leaf blight of highbush blueberry caused by *Valdensinia heterodoxa*, a new fungal disease in Japan. *Journal of General Plant Pathology*. 2012 May 1;78(3):151-9.
- Nekoduka S, Tanaka K, Harada Y, Sano T (2010). Phylogenetic affinity of *Mycochaetophora gentianae*, the causal fungus of brown leaf spot on gentian (*Gentiana triflora*), to *Pseudocercospora*-like hyphomycetes in Helotiales.
- Nelsen MP, Chavez N, Sackett-Hermann E, Thell A, Randle T, Divakar PK, Rico VJ, Lumbsch HT (2011) The cetrarioid core group revisited (Lecanorales: Parmeliaceae). *Lichenologist* 43:537–551
- Nelsen MP, Lücking R, Andrew CJ, Plata ER, Chaves JL, Cáceres ME, Ventura N. Dismantling *Herpothallon*: *Herpothallon antillarum* (Arthoniomycetes: Arthoniaceae) is a member of the genus *Diorygma* (Lecanoromycetes: Graphidaceae). *The Bryologist*. 2012 Aug 7;115(2):313-21.
- Nelsen MP, Lücking R, Aptroot A, Andrew CJ, Cáceres M, Rivas Plata E, Gueidan C, da Silva Canêz L, Knight A, Ludwig LR, Mercado-Díaz JA, Parmen S, Lumbsch HT (2014) Elucidating phylogenetic relationships and genus-level classification within the fungal family Trypetheliaceae (Ascomycota: Dothideomycetes). *Taxon* 63: 974–992.
- Nelsen MP, Lücking R, Grube M, Mbatchou JS, Muggia L, Rivas Plata E, Lumbsch HT (2009) Unravelling the phylogenetic relationships of lichenised fungi in Dothideomyceta. *Studies in Mycology* 64: 135–144.
- Nelsen MP, Lücking R, Mbatchou JS, Andrew CJ, Spielmann AA, Lumbsch HT (2011) New insights into relationships of lichen-forming Dothideomycetes. *Fungal Divers* 51:155–162
- Nelsen, M.P. and Gargas, A., 2009. Assessing clonality and chemotype monophyly in *Thamnomia* (Icmadophilaceae). *The Bryologist*, 112(1), pp.42-53.
- Nelsen, M.P., Chavez, N., Sackett-Hermann, E., Thell, A., Randle, T., Divakar, P.K. and LUMBSCH, H.T., 2011. The cetrarioid core group revisited (Lecanorales: Parmeliaceae). *The Lichenologist*, 43(06), pp.537-551.
- Nelsen, M.P., Lücking, R., Grube, M., Mbatchou, J.S., Muggia, L., Rivas Plata, E. & Lumbsch, H.T. (2009) Unravelling the phylogenetic relationships of lichenised fungi in Dothideomyceta. *Studies in Mycology* 64: 135–144.

- Nelsen, M.P., Lumbsch, H.T., Luecking, R. and Elix, J.A. 2008. Further evidence for the polyphyly of *Lepraria* (Lecanorales: Stereocaulaceae). *Nova Hedwigia* 87, 361-371
- Nelsen, M.P., Thell, A., Leavitt, S.D., Hampton-Miller, C.J. and Lumbsch, H.T., 2013. A reappraisal of *Masonhalea* (Parmeliaceae, Lecanorales) based on molecular and morphological data. *The Lichenologist*, 45(06), pp.729-738.
- Nelsen, M.P., Luecking, R., Andrew, C.J., Aptroot, A., Caceres, M.E.S., Mercado-Diaz, J.A., Rivas Plata, E. and Lumbsch, H.T. 2014 Molecular phylogeny reveals the true colors of Myeloconidaceae (Ascomycota: Ostropales). *Aust. Syst. Bot.* 27, 38-47
- Nelsen, M.P., Luecking, R., Aptroot, A., Andrew, C.J., Caceres, M., Rivas Plata, E., Gueidan, C., da Silva Canez, L., Knight, A., Ludwig, L.R., Mercado-Diaz, J., Parmmen, S. and Lumbsch, H.T. 2014 Elucidating phylogenetic relationships and genus-level classification within the fungal family Trypetheliaceae (Dothideomycetes: Ascomycota). *Taxon* 63 (5), 974-992 (2014)
- Netam, R.S., Bahadur, A.N., Tiwari, U. and Tiwari, R.K.S., 2011. Efficacy of plant extracts for the Control of (*Pyricularia grisea*) Blast of Rice under Field Condition of Bastar, Chhattisgarh. *Research Journal of Agricultural Sciences*, 2(2), pp.269-271.
- Nguanhom, J., Cheewangkoon, R., Groenewald, J.Z., Braun, U., To-Anun, C. and Crous, P.W., 2015. Taxonomy and phylogeny of *Cercospora* spp. from Northern Thailand. *Phytotaxa*, 233(1), pp.27-48.
- Nguyen, H.D.T.; Seifert, K.A. 2008. Description and DNA barcoding of three new species of *Leohumicola* from South Africa and the United States. *Persoonia*. 21:57-69
- Nicoletti R, Wołczańska A, Carella A. Occurrence of *Zetiaspizna unicolor* as an endophyte of myrtle (*Myrtus communis*) in Italy. *PETRIA*. 2010;20(2):p-581.
- Ninad Dharkar, Anand Subhedar, Dilip Hande and M.A. Shahezad 2010 Two New Fungal Species From Vidarbha, India. *J Mycol Pl Pathol*, Vol. 40, No.2, 235-237
- Nishida H, Tajiri Y, Sugiyama J. Multiple origins of fungal group I introns located in the same position of nuclear SSU rRNA gene. *Journal of molecular evolution*. 1998 Apr 1;46(4):442-8.
- Niu, X.M. and Zhang, K.Q., 2011. *Arthrobotrys oligospora*: a model organism for understanding the interaction between fungi and nematodes. *Mycology*, 2(2), pp.59-78.
- Nizam, S., Verma, S., Singh, K., Aggarwal, R., Srivastava, K.D. and Verma, P.K., 2012. High reliability transformation of the wheat pathogen *Bipolaris sorokiniana* using *Agrobacterium tumefaciens*. *Journal of microbiological methods*, 88(3), pp.386-392.
- Nkuekam GK, Wingfield MJ, Mohammed C, Carnegie AJ, Pegg GS, Roux J. *Ceratocystis* species, including two new species associated with nitidulid beetles, on eucalypts in Australia. *Antonie van Leeuwenhoek*. 2012 Feb 1;101(2):217-41.
- Nonaka K, Ishii T, Shiomi K, Ōmura S, Masuma R. *Virgaria boninensis*, a new hyphomycete (Xylariaceae) from soils in the Bonin Islands, Japan. *Mycoscience*. 2013 Sep 30;54(5):394-9.
- Nonaka K, Kaifuchi S, Ōmura S, Masuma R. Five new *Simplicillium* species (Cordycipitaceae) from soils in Tokyo, Japan. *Mycoscience*. 2013 Jan 31;54(1):42-53.
- Nonaka K, Kaifuchi S, Omura S, Masuma R. Three new *Pochonia* taxa (Clavicipitaceae) from soils in Japan. *Mycologia*. 2013 Aug 6:12-32.
- Nonaka K, Miyazaki H, Iwatsuki M, Shiomi K, Tomoda H, Ōmura S, Masuma R. *Staphylotrichum boninense*, a new hyphomycete (Chaetomiaceae) from soils in the Bonin Islands, Japan. *Mycoscience*. 2012 Jul 1;53(4):312-8.
- Nordin A (2000) Taxonomy and phylogeny of *Buellia* species with pluriseptate spores (Lecanorales, Ascomycotina). *Symb. Bot. Upsal.* 33(1):1-117.

- Nordin A, Savić S, Tibell L (2010) Phylogeny and taxonomy of *Aspicilia* and *Megasporaceae*. *Mycologia* 102(6): 1339–1349
- Nordin A, Tibell L (2005) Additional species in *Tetramelas*. *Lichenologist* 37(6):491-498.
- Norman JE, Egger KN. Phylogeny of the genus *Plicaria* and its relationship to *Peziza* inferred from ribosomal DNA sequence analysis. *Mycologia*. 1996 Nov 1:986-95.
- Norman JM (1852) *Conatus praemissus redactionis novae generum nonnullorum lichenum in organis fructificationis vel sporis fundatae*. Copenhagen. 40 pp. Preprinted from *Nytt Mag Natur* 7(3).
- Norphanphoun C, Maharachchikumbura SSN, Daranagama A, Bulgakov TS, Bhat DJ, Bahkali AH, Hyde KD. 2015 – Towards a backbone tree for *Seimatosporium*, with *S. physocarpi* sp. nov. *Mycosphere* 6(3), 385–400.
- Norphanphoun C, Maharachchikumbura SSN, Daranagama A, Bulgakov TS, Bhat DJ, Bahkali AH, Hyde KD (2015) Towards a backbone tree for *Seimatosporium*, with *S. physocarpi* sp. nov. *Mycosphere* 6(3):385–400
- Norvell, L.L., 2010. Report of the nomenclature committee for fungi: 15. *Taxon*, 59(1), pp.291-293.
- Noser, J., Schneider, P., Rother, M. and Schmutz, H., 2011. Determination of six *Alternaria* toxins with UPLC-MS/MS and their occurrence in tomatoes and tomato products from the Swiss market. *Mycotoxin research*, 27(4), pp.265-271.
- Notov, A.A., 2014. Fruticose lichens: structural diversity, taxonomic characteristics and evolution. *Wulfenia*, 21, pp.21-31.
- Nouhra E, Urcelay C, Longo S, Tedersoo L. Ectomycorrhizal fungal communities associated to *Nothofagus* species in Northern Patagonia. *Mycorrhiza*. 2013 Aug 1;23(6):487-96.
- Nowicki, M., Nowakowska, M., Niezgoda, A. and Kozik, E., 2012. *Alternaria* black spot of crucifers: symptoms, importance of disease, and perspectives of resistance breeding. *Vegetable Crops Research Bulletin*, 76, pp.5-19.
- Ntui, V.O., Thirukkumaran, G., Azadi, P., Khan, R.S., Nakamura, I. and Mii, M., 2010. Stable integration and expression of wasabi defensin gene in “Egusi” melon (*Colocynthis citrullus* L.) confers resistance to *Fusarium* wilt and *Alternaria* leaf spot. *Plant cell reports*, 29(9), pp.943-954.
- Núñez-Zapata, J., P. K. Divakar, R. Del-Prado, P. Cubas, D. L. Hawksworth, A. Crespo 2011: Conundrums in species concepts: the discovery of a new cryptic species segregated from *Parmelina tiliacea* (Ascomycota: Parmeliaceae). *Lichenologist* 43(6), 603-616
- Nyati, S., Bhattacharya, D., Werth, S. and Honegger, R., 2013. Phylogenetic analysis of LSU and SSU rDNA group I introns of lichen photobionts associated with the genera *Xanthoria* and *Xanthomendoza* (Teloschistaceae, lichenized ascomycetes). *Journal of phycology*, 49(6), pp.1154-1166
- Nygren K, Strandberg R, Wallberg A, Nabholz B, Gustafsson T, García D, Cano J, Guarro J, Johannesson H. A comprehensive phylogeny of *Neurospora* reveals a link between reproductive mode and molecular evolution in fungi. *Molecular phylogenetics and evolution*. 2011 Jun 30;59(3):649-63.
- Nylander W (1860) *Syn Meth Lich* 1(2): 141-430.
- Nylander W (1867) Circa genus *Lichenum Dermatiscum*. *Bot. Zeitung* 25:133.
- Nylander W (1885) *Addenda nova ad Lichenographiam Europaeam*. *Continuatio quadragesima quarta*. *Flora* 68: 299.
- Nylander W (1888) *Lichenes Novae Zelandiae*: 1-156.
- Oberwinkler, F., Riess, K., Bauer, R. and Garnica, S., 2014. Morphology and molecules: the *Sebacinales*, a case study. *Mycological progress*, 13(3), pp.445-470.

- O'Connell,R.J., Thon,M.R., Hacquard,S., Amyotte,S.G., Kleemann,J., Torres,M.F., Damm,U., Buiate,E.A., Epstein,L., Alkan,N., Altmuller,J., Alvarado-Balderrama,L., Bauser,C.A., Becker,C., Birren,B.W., Chen,Z., Choi,J., Crouch,J.A., Duvick,J.P., Farman,M.A., Gan,P., Heiman,D., Henrissat,B., Howard,R.J., Kabbage,M., Koch,C., Kracher,B., Kubo,Y., Law,A.D., Lebrun,M.H., Lee,Y.H., Miyara,I., Moore,N., Neumann,U., Nordstrom,K., Panaccione,D.G., Panstruga,R., Place,M., Proctor,R.H., Prusky,D., Rech,G., Reinhardt,R., Rollins,J.A., Rounsley,S., Schardl,C.L., Schwartz,D.C., Shenoy,N., Shirasu,K., Sikkakolli,U.R., Stuber,K., Sukno,S.A., Sweigard,J.A., Takano,Y., Takahara,H., Trail,F., van der Does,H.C., Voll,L.M., Will,I., Young,S., Zeng,Q., Zhang,J.,Zhou,S., Dickman,M.B., Schulze-Lefert,P., van Themaat,E.V., Ma,L.J. and Vaillancourt,L.J. 2012 Lifestyle transitions in plant pathogenic Colletotrichum fungi deciphered by genome and transcriptome analyses. Nat. Genet.
- Oestergaard PR, Ernst S, Lynglev GB (2010) Process for making a milk-based protein hydrolysate. Google Patents of the genus Calonectria. Studies in Mycology 66: 31–69
- Ohenoja E, Wang Z, Townsend JP, Mitchel D, Voitk A 2010 Northern species of earth tongue genus Thuemenidium revisited, considering morphology, ecology and molecular phylogeny. Mycologia, 102(5), 1089–1095.
- Ohmura Y (2001) Taxonomic study of the genus Usnea (lichenized Ascomycetes) in Japan and Taiwan. J Hattori Bot Lab 90:1-96.
- Ohmura, Y., Frisch, A., Lendemer, J.C. and Nakanishi, M., 2016. Lichens of Mikura-jima Island, Izu Islands, Central Japan. Bull. Natl. Mus. Nat. Sci., Ser. B, 42(1), pp. 1–18
- Ohmura, Y., Thor, G., Frisch, A., Kashiwadani, H. and Moon, K.H., 2014. Increase of lichen diversity in the Imperial Palace Grounds, Tokyo, Japan. Memoirs of the National Museum of Nature and Science, 49.
- Okada,G., Jacobs,K., Kirisits,T., Louis-Seize,G.W., Seifert,K.A., Sugita,T., Takematsu,A. and Wingfield,M.J. (2000) Epitypification of Graphium penicillioides Corda, with comments on the phylogeny and taxonomy of graphium-like synnematosus fungi. Stud. Mycol. 45, 169-188
- Okane I, Nakagiri A, Ito T (2001) Surculiserius rugispora gen. et sp. nov., a new endophytic mitosporic fungus from leaves of Bruguiera gymnorrhiza. Mycoscience 42:115-122
- Olariaga, I; Vooren, N. Van; Carbone, M; Hansen, K. 2015. A monograph of Otidea (Pyronemataceae, Pezizomycetes). Persoonia. 35:166-229
- Oliveira MS, Malosso E, Barbosa MA, Araújo MA, Castañeda-Ruiz RF. Xylomyces acerosisporus sp. nov. from submerged leaves from Brazil. Mycotaxon. 2015 Oct 9;130(3):875-8.
- Oliveira MS, Malosso E, Castañeda-Ruiz RF. A new species and a new combination in Codinaea from Brazil. Mycotaxon. 2016 Jan 11;130(4):1045-9.
- Oliveira MS, Malosso E, Castañeda-Ruiz RF. A new species and a new combination in Codinaea from Brazil. Mycotaxon. 2016 Jan 11;130(4):1045-9.
- Oliveira, H., Santos, C., Paterson, R.R.M., Gusmão, N.B. and Lima, N., 2016. Fungi from a Groundwater-Fed Drinking Water Supply System in Brazil. International journal of environmental research and public health, 13(3), p.304.
- Onofri, S. 1984. A new species of the genus Flosculomyces. Mycotaxon. 19:385-388.
- Onofri, S., Pagano, S., Zucconi, L., & Tosi, S. (1999). *Friedmanniomyces endolithicus* (Fungi, Hyphomycetes), anam. - gen. and sp. nov. from Continental Antarctica. *Nova Hedwigia* 68, 175-181.
- Orange A. A new species of Petractis (*Ostropales* s. lat., lichenized Ascomycota) from Wales. The Lichenologist. 2009 May 1;41(03):213-21.

- Orange, A. 2009. Two parasitic species of *Placopyrenium* (Verrucariaceae) from freshwater habitats in North-west Europe. *Lichenologist* (Lond.) 41: 131-139
- Oset, M. and Kukwa, M., 2014. Typification of two *Stereocaulon* names (Lecanorales, Ascomycota). *Phytotaxa*, 181(3), pp.188-191.
- Oset, M., 2015. The lichen genus *Stereocaulon* (Schreb.) Hoffm. in Poland—a taxonomic and ecological study. *Monographiae Botanicae*, 104, pp.1-81.
- Osmundson TW, Robert VA, Schoch CL, Baker LJ, Smith A, Robich G, Mizzan L, Garbelotto MM. Filling gaps in biodiversity knowledge for macrofungi: contributions and assessment of an herbarium collection DNA barcode sequencing project. *PLoS one*. 2013 Apr 30;8(4):e62419.
- Ostropomycetidae (Lecanoromycetes. Fungal Divers. 73 (1), 239-258.**
- Ostry, V., 2008. *Alternaria* mycotoxins: an overview of chemical characterization, producers, toxicity, analysis and occurrence in foodstuffs. *World Mycotoxin Journal*, 1(2), pp.175-188.
- Otálora MAG, Wedin M (2013) *Collema fasciculare* belongs in Arctomiaceae. *Lichenologist* 45:295–304
- Otalora, M. A., Aragon, G., Martinez, I. and Wedin, M. 2013. Cardinal characters on a slippery slope - A re-evaluation of phylogeny, character evolution, and evolutionary rates in the jelly lichens (Collematataceae s. str) *Mol. Phylogenet. Evol.* 68 (2), 185-198.
- Otálora, M.A., Aragón, G., Molina, M.C., Martinez, I. and Lutzoni, F., 2010. Disentangling the *Collema-Leptogium* complex through a molecular phylogenetic study of the Collematataceae (Peltigerales, lichen-forming Ascomycota). *Mycologia*, 102(2), pp.279-290.
- Otálora, M.A., Jørgensen, P.M. and Wedin, M., 2014. A revised generic classification of the jelly lichens, Collematataceae. *Fungal diversity*, 64(1), pp.275-293.
- Ouda, S.M., 2014. Antifungal activity of silver and copper nanoparticles on two plant pathogens, *Alternaria alternata* and *Botrytis cinerea*. *Research Journal of Microbiology*, 9(1), p.34.
- Overy DP, Baymane P, Kerr RG, Bills GF (2014) An assessment of natural product discovery from marine (sensu strictu) and marine-derived fungi. *Mycology* 5:145–167
- Øvstedal & Gremmen, Australas. Lichenol., 67, 30, 2010
- Øvstedal DO, Gremmen NJM (2007) Additions and corrections to the lichen mycobiota of the subantarctic Prince Edward Islands. *Nova Hedwigia* 85(1-2): 249–257
- ØVSTEDAL DO. New species, combinations and records of lichenized fungi from the Falkland Islands (Islas Malvinas). *The Lichenologist*. 2012 Jul 1;44(04):483-500.
- Øvstedal, D., Tønsberg, T. and Elvebakk, A., 2009. The lichen flora of Svalbard. *Sommerfeltia*, 33, pp.3-393.
- Øvstedal, D.G. and Gremmen, N.J., 2010. New lichen species from Tristan da Cunha and Gough Island. *Folia Cryptogamica Estonica*, 47, pp.43-49.
- Øvstedal, D.O. and Gremmen, N.J., 2014. Additional lichen records from Subantarctica III. Marion Island. *Australasian Lichenology*, 74, pp.2-7.
- Øvstedal, D.O. and Gremmen, N.J.M., 2009. Additional lichen records from Subantarctica 1. The Kerguelen Islands. *Australasian Lichenology*, 64, pp.3-9.
- Øvstedal, D.O. and Lewis Smith, R.I., 2011. Four additional lichens from the Antarctic and South Georgia, including a new *Leciophysma* species. *Folia Cryptog. Estonica*, 48, pp.65-68.
- Øvstedal, D.O., 2012. New species, combinations and records of lichenized fungi from the Falkland Islands (Islas Malvinas). *The Lichenologist*, 44(04), pp.483-500.

- P. van den Boom & J. Etayo. 2014. New records of lichenicolous fungi and lichenicolous lichens from the Iberian Peninsula, with the description of five new species and one new genus. *Opuscula Philolichenum*. 13:44-79
- Pablo Alvarado^{1,*}, Julio Cabero, Gabriel Moreno Horcajada, Zoltán Bratek, Nicolas Van Vooren, Vasileios Kaounas, Giorgos Konstantinidis, Carlo Agnello, Zsolt Merényi, Matthew E. Smith, Alfredo Vizzini, James M. Trappe 2016 Phylogenetic overview of the genus *Genea* (Pezizales, Ascomycota) with an emphasis on European taxa. *Mycologia*
- Paciura, D.; de Beer, Z.W.; Jacobs, K.; Zhou, X.D.; Ye, H.; Wingfield, M.J. 2010. Eight new *Leptographium* species associated with tree-infesting bark beetles in China. *Persoonia*. 25:94-108
- Paciura, D.; Zhou, X.D.; De Beer, Z.W.; Jacobs, K.; Ye, H. (2010). Characterisation of synnematosus bark beetle-associated fungi from China, including *Graphium carbonarium* sp. nov.. *Fungal Diversity* 40: 75-88.
- Palmateer, A.J., Perez, J.M., Cating, R.A. and Ploetz, R.C. First report of tar spot on orange geiger (*Cordia sebestena*) caused by *Diatractium cordianum* in the US. *Plant Disease* 92(8) 1250.
- Palmer, B., 2014. Nitrogen content of lichens as an indicator of inversion-based deposition.
- Palmer, J.M., Lindner, D.L. and Volk, T.J. 2008 Ectomycorrhizal characterization of an American chestnut (*Castanea dentata*)-dominated community in Western Wisconsin. *Mycorrhiza* 19 (1), 27-36.
- Palmer, J.M., Lindner, D.L. and Volk, T.J. 2008 Ectomycorrhizal characterization of an American chestnut (*Castanea dentata*)-dominated community in Western Wisconsin. *Mycorrhiza* 19 (1), 27-36
- Palomares-Rius JE, Hirooka Y, Tsai IJ, Masuya H, Hino A, Kanzaki N, Jones JT, Kikuchi T. Distribution and evolution of glycoside hydrolase family 45 cellulases in nematodes and fungi. *BMC evolutionary biology*. 2014 Apr 1;14(1):1.
- PAN HQ, WANG HF, JIANG YL, ZHANG TY. Scopulariopsis: three new species and a key to species from soils in China. *Mycosystema*. 2014;33:1-6.
- Pan, H.Q.; Zhang, T.Y.; Kong, J.H. (2009). Notes on soil dematiaceous hyphomycetes from the Yellow River source area, China I. *Mycosystema* 28(1): 14-19.
- PANDE A. (2008) *Ascomycetes of Peninsular India*. Scientific Publishers, India, 584 pp.
- Pandey, S.P., Sharma, S., Chand, R., Shahi, P. and Joshi, A.K., 2008. Clonal variability and its relevance in generation of new pathotypes in the spot blotch pathogen, *Bipolaris sorokiniana*. *Current microbiology*, 56(1), pp.33-41.
- Pandit, G., 2015. Review of lichens of the high level Ferricretes and Mesas of the North Western Ghats, India. *Current Research in Environmental & Applied Mycology*, 5(3), pp.180-195.
- Pandit, G.S. and Sharma, B.O., 2012. New records in the lichen family Lobariaceae from the Western Ghats of India. *MYCOSPHERE*, 3(4), pp.430-435.
- Pandit, G.S., 2014. Lichens of the Mahabaleshwar Panchgani Ecosensitive zone (MPESZ), Maharashtra, India. *Journal of Threatened Taxa*, 6(5), pp.5784-5791.
- Pandit, R.J., Bhatt, V.D., Mukhopadhyaya, P.N., Joshi, C.G. and Kunjadia, A.P., 2014. Biochemical and molecular characterization of protease from *Arthrobotrys conoides* and *Duddingtonia flagrans*. *Int. J. Adv. Biotechnol. Res*, 5(3), pp.552-561.
- Pane, C., Celano, G., Vilecco, D. and Zaccardelli, M., 2012. Control of *Botrytis cinerea*, *Alternaria alternata* and *Pyrenochaeta lycopersici* on tomato with whey compost-tea applications. *Crop Protection*, 38, pp.80-86.

- Pang KL, Alias SA, Chiang MWL, Vrijmoed LLP, Jones EBG (2010) *Sedecimiella taiwanensis* gen. et sp. nov., a marine mangrove fungus in the Hypocreales (Hypocreomycetidae, Ascomycota). *Bot Mar* 53:493–498
- Pang KL, Chiang MWL, Vrijmoed LLP (2008) *Havispora longyearbyenensis* gen. et sp. nov.: an arctic marine fungus from Svalbard, Norway. *Mycologia* 100:291–295
- Pang KL, Chow RKK, Chan CW, Vrijmoed LLP (2011) Diversity and physiology of marine lignicolous fungi in Arctic waters: a preliminary account. *Polar Res* 30:1–5
- Pang KL, Guo SY, Alias SA, Hafellner J, Jones EBG (2014) A new species of marine *Dactylospora* and its phylogenetic affinities within the Eurotiomycetes, Ascomycota. *Bot Mar* 57:315–321
- Pang KL, Hyde KD, Alias SA, Suetrong S, Guoc SY, Idid R, Jones EBG (2013a) Dyfrolomycetaceae, a new family in the Dothideomycetes. *Cryptogamie Mycologie* 34:223–232
- Pang KL, Jheng JS (2012) checklist of marine fungi of Taiwan with a description of *Kitesporella keelungensis* gen. et sp. Nov. *Bot Mar* 55:459–466
- Pang KL, Jheng JS (2012b) *Pileomyces formosanus* gen. et sp. nov. (Halosphaeriaceae, Ascomycota) from a rocky shore of Taiwan. *Bot Stud* 53:535–539
- Pang KL, Jheng JS, Jones EBG (2011) Marine mangrove fungi of Taiwan. National Taiwan Ocean University Press. Keelung, Taiwan
- Pang KL, Jones EBG, Vrijmoed LLP (2008) Autecology of *Antennospora* (Ascomycota, Fungi) and its phylogeny. *Raff Bull Zool* 19:1–10
- Pang KL, Jones EBG, Vrijmoed LLP, Vikineswary S (2004) *Okeanomyces*, a new genus to accommodate *Halosphaeria cucullata* (Halosphaeriales, Ascomycota). *Bot J Linn Soc* 146:223–229
- Pang KL, Sharuddin SS, Alias SA, Nor NAM, Awaluddin HH (2010) Diversity and abundance of lignicolous marine fungi from the east and west coasts of Peninsular Malaysia and Sabah (Borneo Island). *Bot Mar* 53:515–523
- Pang KL, Vrijmoed LLP, Jones EBG (2013b) Genetic variation within the cosmopolitan aquatic fungus *Lignicola laevis* (Microascales, Ascomycota). *Org Divers Evol* 13:301–309
- Pang KL, Vrijmoed LLP, Kong RYC, Jones EBG (2003) Polyphyly of *Halosarpheia* (Halosphaeriales, Ascomycota): implications on the use of unfurling ascospore appendage as a systematic character. *Nova Hedw* 77:1–18
- Pang, K.L.; Abdel-Wahab, M.A.; Sivichai, S.; El-Sharouny, H.M.; Jones, E.B.G. 2002. Jahnulales (Dothideomycetes, Ascomycota): a new order of lignicolous freshwater ascomycetes. *Mycological Research*. 106(9):1031-1042.
- Pańka, D., Jeske, M. and Troczyński, M., 2013. Occurrence of *Neotyphodium* and *Epichloë* fungi in meadow fescue and red fescue in Poland and screening of endophyte isolates as potential biological control agents. *Acta Sci. Pol., Hortorum Cultus*, 12(4), pp.67-83.
- Panzer, K., Yilmaz, P., Weiss, M., Reich, L., Richter, M., Wiese, J., Schmaljohann, R., Labes, A., Imhoff, J.F., Glockner, F.O. and Reich, M. 2015 Identification of Habitat-Specific Biomes of Aquatic Fungal Communities Using a Comprehensive Nearly Full-Length 18S rRNA Dataset Enriched with Contextual Data. *PLoS ONE* 10 (7), E0134377
- Paoli, L., Munzi, S., Guttová, A., Senko, D., Sardella, G. and Loppi, S., 2015. Lichens as suitable indicators of the biological effects of atmospheric pollutants around a municipal solid waste incinerator (S Italy). *Ecological Indicators*, 52, pp.362-370.
- Papazi, A., Kastanaki, E., Pirintsos, S. and Kotzabasis, K., 2015. Lichen Symbiosis: Nature's High Yielding Machines for Induced Hydrogen Production. *PloS one*, 10(3), p.e0121325.

- Papong K, Lücking R, Thammathaworn A, Boonpragob K (2009a) Four new taxa of Chroodiscus (thelotremoid Graphidaceae) from Southeast Asia. *Bryologist* 112:152–163
- Papong K, Mangold A, Corush J, Lücking R, Lumbsch HT. (2009b) Phylogenetic position of the foliicolous genus Chroodiscus (Ostropales, Ascomycota) inferred from nuclear and mitochondrial ribosomal DNA sequences. *Fungal Divers* 38:147–153
- Papong, K. and Lumbsch, H.T., 2011. A taxonomic survey of Lecanora sensu stricto in Thailand (Lecanoraceae; Ascomycota). *The Lichenologist*, 43(04), pp.299-320.
- Papong, K., Boonpragob, K., Parnmen, S. and Lumbsch, H.T., 2013. Molecular phylogenetic studies on tropical species of Lecanora sensu stricto (Lecanoraceae, Ascomycota). *Nova Hedwigia*, 96(1-2), pp.1-13.
- Papong, K.; Boonpragob, K.; Mangold, A.; Divakar, P.K.; Lumbsch, H.T. (2010). Thelotremoid lichen species recently described from Thailand: a re-evaluation. *Lichenologist* 42(2): 131-137.
- Parada, R.Y., Sakuno, E., Mori, N., Oka, K., Egusa, M., Kodama, M. and Otani, H., 2008. *Alternaria brassicae* produces a host-specific protein toxin from germinating spores on host leaves. *Phytopathology*, 98(4), pp.458-463.
- Park JH, Cho SE, Hong SH, Choi IY, Shin HD. Sooty Mould on Hibiscus rosa-sinensis Caused by Leptoxyphium kurandae is Associated with Extrafloral Nectaries. *Journal of Phytopathology*. 2015 Dec 1;163(11-12):1027-30.
- Park MJ, Choi YJ, Hong SB, Shin HD. Genetic variability and mycohost association of Ampelomyces quisqualis isolates inferred from phylogenetic analyses of ITS rDNA and actin gene sequences. *Fungal Biology*. 2010 Mar 31;114(2):235-47.
- Park, M.J. and Shin, H.D., 2009. A new species of Pyricularia on Commelina communis. *Mycotaxon*, 108(1), pp.449-456.
- Park, M.S., Romanoski, C.E. and Pryor, B.M., 2008. A re-examination of the phylogenetic relationship between the causal agents of carrot black rot, *Alternaria radicina* and *A. carotiincultae*. *Mycologia*, 100(3), pp.511-527.
- Park, S.Y., Jeong, M.H., Wang, H.Y., Kim, J.A., Yu, N.H., Kim, S., Cheong, Y.H., Kang, S., Lee, Y.H. and Hur, J.S., 2013. Agrobacterium tumefaciens-mediated transformation of the lichen fungus, Umbilicaria muehlenbergii. *PloS one*, 8(12), p.e83896.
- Parnmen S, Lücking R, Lumbsch HT (2012) Phylogenetic classification at generic level in the absence of distinct phylogenetic patterns of phenotypical variation: a case study in Graphidaceae (Ascomycota). *PLoS One* 7(12):e51392
- Parnmen S, Rangsiruji A, Mongkolsuk P, Boonpragob K, Elix JA, Lumbsch HT (2010) Morphological disparity in Cladoniaceae: the foliose genus Heterodea evolved from fruticose Cladia species (Lecanorales, lichenized Ascomycota). *Taxon* 59:841–849.
- Parnmen, S, Lücking, R. & Lumbsch, H.T. 2012 Phylogenetic classification at generic level in the absence of distinct phylogenetic patterns of phenotypical variation: A case study in Graphidaceae (Ascomycota). *PLOS ONE* 12 e51392
- Parnmen, S./ Cáceres, M.E.S/ Lücking, R./ Lumbsch, H.T. 2013: Myriochapsa and Nitidochapsa, two new genera in Graphidaceae (Ascomycota: Ostropales) for chroodiscoid species in the Ocellularia clade. - *The Bryologist* 116(2): 127-133.
- Parsa, S.G., Moniri, M.H. and Asoodeh, A., 2013. A study on Tornabea scutellifera (Lichenized Ascomycete, Lecanorales) in northeastern Iran. *Journal of Applied and Natural Science*, 5(1), pp.148-152.
- Pärtel, K.; Pöldmaa, K. 2011. A new species of Hyphodiscus (Helotiales) on Stereum. *Mycotaxon*. 115:11-17

- Partridge EC, Baker W, Morgan-Jones G, Eicker A (1999) Notes on hyphomycetes. LXXV. New species of *Brachysporiella* and of the previously monotypic genus *Ityorhoptrum* on decorticated wood in Southern Africa. *Mycotaxon* 73:303–311
- Pasche, J.S. and Gudmestad, N.C., 2008. Prevalence, competitive fitness and impact of the F129L mutation in *Alternaria solani* from the United States. *Crop Protection*, 27(3), pp.427-435.
- Passo A, Calvelo S. *Pannaria byssoidea* (Pannariaceae), a new squamulose species from southern South America. *The Bryologist*. 2011;114(4):756-63.
- Pastirčáková K, Pastirčák M (2010) Two important ascomycetes and their anamorphs on twigs of *Betula pendula* in Slovakia. *Pol Bot J* 55(2): 373–380.
- Pastor, F.J. and Guarro, J., 2008. *Alternaria* infections: laboratory diagnosis and relevant clinical features. *Clinical Microbiology and Infection*, 14(8), pp.734-746.
- Patil SY, Patil VR, Nemade LC. Biodiversity of Freshwater Mitosporic Fungi from Dhule
- Paukov, A.G. and Teptina, A.Y., 2012. New records of lichens from Middle Urals, Russia. *Folia Cryptogamica Estonica*, 49, pp.39-43.
- Paul F. Cannon 1,2, Alan G. Buddie 1, Paul D. Bridge 1, Eigil de Neergaard 3, Mette Lübeck 4, Mohamed M. Askar 2012 *Lectera*, a new genus of the Plectosphaerellaceae for the legume pathogen *Volutella colletotrichoides*. *MycKeys* 3: 23-36.
- Paulus, B., Gadek, P. & Hyde, K.D. 2003. Two new species of *Dactylaria* (anamorphic fungi) from Australian rainforests and an update of species in *Dactylaria* sensu lato. *Fungal Diversity* 14: 143-156.
- Paz A, Lavoise C, Barrio L, Richard F, Moreau P-A. 2012. Propuesta de dos nuevas especies del género *Elaphomyces*, dos primeras citas para la Península Ibérica y una clave de identificación de las especies del género para Europa. *Bol Micol FAMCAL* 7:85–104.
- Pažoutová S, Kolařík M, Odvody GN, Frederickson DE, Olšovská J, Man P. A new species complex including *Claviceps fusiformis* and *Claviceps hirtella*. *Fungal*. 2008;504(31):95-110.
- Pažoutová S, Pešicová K, Chudíčková M, Šrůtka P, Kolařík M. Delimitation of cryptic species inside *Claviceps purpurea*. *Fungal biology*. 2015 Jan 31;119(1):7-26.
- Pazoutova, S.; Odvody, G.N.; Frederickson, D.E.; Chudickova, M.; Olsovska, J.; Kolarik, M. (2011). New *Claviceps* species from warm-season grasses. *Fungal Diversity* 49: 145-165
- Pazoutová, S.; Šrůtka, P.; Holusa, J.; Chudíčková, M.; Kubátová, A.; Kolarík, M. 2012. *Liberomyces* gen. nov. with two new species of endophytic coelomycetes from broadleaf trees. *Mycologia*. 104(1):198-210.
- Pazoutova, S., Šrůtka, P., Holusa, J., Chudickova, M. and Kolarik, M. 2010 The phylogenetic position of *Obolarina dryophila* (Xylariales) *Mycol. Prog.* 9 (4), 501-507.
- Pedras, M.S.C., Chumala, P.B., Jin, W., Islam, M.S. and Hauck, D.W., 2009. The phytopathogenic fungus *Alternaria brassicicola*: phytotoxin production and phytoalexin elicitation. *Phytochemistry*, 70(3), pp.394-402.
- PELÁEZ F., COLLADO J., PLATAS G., OVERY D.P., MARTÍN J., VICENTE F., GONZÁLEZ DEL VAL A., BASILIO A., DE LA CRUZ M., TORMO J.R., FILLOLA A., ARENAL F., VILLAREAL M., RUBIO V., BARAL H.O., GALAN R. & BILLS G.F. (2011) Phylogeny and intercontinental distribution of the pneumocandin-producing anamorphic fungus *Glarea lozoyensis*. *Mycology* 2(1): 1-17.
- Peña NI, Arambarri AM (1997) *Argentinomyces naviculisporis* gen. et sp. nov., a new lignicolous ascomycete from Mar del Plata, Argentina. *Mycotaxon* 65:331–338
- Penzig, AJO, Saccardo PA (1902) Diagnoses fungorum novorum in insula Java collectorum. Ser. III. *Malpighia* 15:201-260.

- Per M. Jørgensen, Stefan Ekman & Mats Wedin 2013 Proposal to conserve the name *Fuscopannaria* against *Moelleropsis* (lichenized Ascomycota). *TAXON* 62 (3) • June 2013: 629–630.
- Perdomo H, García D, Gené J, Cano J, Sutton DA, Summerbell R, Guarro J (2013) *Phialemoniopsis*, a new genus of Sordariomycetes, and new species of *Phialemonium* and *Lecythophora*. *Mycologia* 105(2):398–421
- Pereira, J.; Rogers, J.D.; Bezerra, J.L. (2010). New *Annulohypoxyton* species from Brazil. *Mycologia* 102(1): 248-252.
- Pereira-Carvalho RD, Inácio CA, Dianese JC. *Plurispermioopsis*: a new capnodiaceous genus from the Brazilian Cerrado. *Mycologia*. 2010 Sep 1:1163-6.
- Pereira-Carvalho, R.C.; Sepúlveda-Chavera, G.F.; Armando, E.A.S.; Inácio, C.A.; Dianese, J.C. (2009). An overlooked source of fungal diversity: novel hyphomycete genera on trichomes of cerrado plants. *Mycol. Res.* 113(2): 261-274.
- Perello, A., Moreno, M. and Sisterna, M., 2008. *Alternaria infectoria* species-group associated with black point of wheat in Argentina. *Plant Pathology*, 57(2), pp.379-379.
- PERERA RH, MAHARACHCHIKUMBURA SS, ARIYAWANSA H, BAHKALI AH, JONES EG, AL-SADI AM, HYDE KD, LIU ZY. Two new *Pseudohalonestria* species on beech cupules (*Fagus sylvatica*) and a new genus to accommodate *P. suthepensis*. *Phytotaxa*. 2016 Oct 7;278(2):115-31.
- PÉREZ-ORTEGA S, ETAYO J (2010) *Labrocarpon* gen. nov. for *Melaspilea canariensis* sp. nov. from South America. *The Lichenologist* 42:271–276
- Pérez-Ortega S, Etayo J, Elix JA, Crespo A. A new species of *Zwackhiomyces* (Xanthopyreniaceae, Ascomycota) growing on *Austroparmelina* from Australia. *Nova Hedwigia*. 2011 Nov 1;93(3-4):395-400.
- Pérez-Ortega S, Garrido-Benavent I, de Los Ríos A (2015) *Austrostigmatidium*, a new austral genus of lichenicolous fungi close to rock-inhabiting meristematic fungi in *Teratosphaeriaceae*. *Lichenologist* 47: 143–156
- Pérez-Ortega S, Suija A, Crespo A, de los Rios A (2014) Lichenicolous fungi of the genus *Abrothallus* (Dothideomycetes: Abrothallales ordo nov.) are sister to the predominantly aquatic *Jahnulales*. *Fungal Diversity* 64: 295–304.
- Pérez-Ortega S, Suija A, de los Rios A (2011) The connection between *Abrothallus* and its anamorph state *Vouauxiomyces* established by denaturing gradient gel electrophoresis (DGGE). *Lichenologist* 43: 277–279.
- Pérez-Ortega, S./Garrido-Benavent, I./ Grube, M./ Olmo, R./ de los Ríos, A. 2016: Hidden diversity of marine borderline lichens and a new order of fungi: *Collemopsidiales* (Dothideomyceta). - *Fungal Diversity* 80: 285-300.
- Pérez-Ortega, S.; Calatayud, V. (2009). *Lichenostigma epirupestre*, a new lichenicolous species on *Pertusariaceae* from Spain. *Mycotaxon* 107: 189-195.
- Pérez-Ortega, S.; Etayo, J. (2010). *Labrocarpon* gen. nov. for *Melaspilea canariensis*, with the description of *Buelliella protoparmeliopsis* sp. nov. from South America. *Lichenologist* 42(3): 271-276.
- Pérez-Ortega, S.; Spribille, T. (2009). Three new species of *Lichenopeltella* (Microthyriaceae, Ascomycota) from northwest North America. *Nova Hedwigia* 89(1-2): 219-228.
- Pérez-Pérez, R.E., Castillo-Campos, G. and da Silva Cáceres, M.E., 2015. Diversity of corticolous lichens in cloud forest remnants in La Cortadura, Coatepec, Veracruz, México in relation to phorophytes and habitat fragmentation. *Cryptogamie, Mycologie*, 36(1), pp.79-92.
- Pérez-vargas I, Etayo J, Hernández-padrón C (2013) New species of lichenicolous fungi from the Canary Islands. *Phytotaxa* 99(2):58–64.

- Perez-Vargas I, Hernández-Padrón C, De Paz PP, Van Den PP, Jørgensen PM. A new species in the lichen genus *Vahliella* from the Canary Islands, including a key to Vahliellaceae, Pannariaceae, and Coccocarpiaceae in Macaronesia.
- Pérez-Vargas, I., Padrón, C.H., de Paz, P., Pedro, L. and Elix, J.A., 2010. *Tephromela follmannii* (lichenized Ascomycota), a new species from the Canary Islands. *Mycotaxon*, 112(1), pp.9-14.
- Pérez-Vargas, I., Padrón, C.H., Pérez de Paz, P.L. and Elix, J.A., 2010. *Xanthoparmelia teydea*, a new brown *Xanthoparmelia* (Parmeliaceae) from the Canary Islands. *The Bryologist*, 113(1), pp.51-54.
- PERIĆ B, BARAL HO, PÄRTEL K. CENANGIOPSIS RAGHAVANII AND C. JUNIPERICOLA SPP. NOV.(CENANGIACEAE, HELOTIALES) COLLECTED IN MONTENEGRO, WITH REDESCRIPTION OF A RECENT COLLECTION OF C. QUERCICOLA. *Mycologia Montenegrina*. 2015 Jan 1;18.
- Perić B, LOBUGLLIO KF, Pfister DH. THE GENUS STROBILOSCYPHA: A NEW SPECIES AND AN UNRESOLVED PHYLOGENETIC PLACEMENT. *Mycologia Montenegrina*. 2013 Jan 1;16.
- Perić B, Van Vooren N, HEALY R, LAZAREVIĆ J. UNE TRICHOPHAEA RARE RÉCOLTÉE EN FRANCE ET AU MONTÉNÉGRO: T. FLAVOBRUNNEA COMB. NOV.(PEZIZALES). *Mycologia Montenegrina*. 2014 Jan 1(17).
- Perlmutter GB, Tucker SC, Plata ER, Cerc P, Lücking R (2015) *Melaspilea demissa* (Tuck.) Zahlbr. (lichenized Ascomycota) in eastern North America with a key to North American species of *Melaspilea* s. lat. *The Lichenologist* 47:167–182
- Perlmutter, G.B., 2013. Lichen Biotic Inventory of Turnipseed Preserve, North Carolina, USA. *Evansia*, 30(2), pp.1-10.
- Perlmutter, G.P., Lendemer, J.C., Guccion, J.C., Harris, R.C., Hodkinson, B.P., Kubilius, W.P., Lay, E.L.I.S.A.B.E.T.H. and Schaefer, H.P., 2012. A provisional survey of lichen diversity in south-central South Carolina, USA, from the 19th Tuckerman Lichen Workshop. *Opuscula Philolichenum*, 11, pp.104-119.
- Perry BA, Hansen K, Pfister DH. A phylogenetic overview of the family Pyronemataceae (Ascomycota, Pezizales). *Mycological research*. 2007 May 31;111(5):549-71.
- Peršoh, D., Weig, A.R. and Rambold, G., 2011. A transcriptome—targeting EcoChip for assessing functional mycodiversity. *Microarrays*, 1(1), pp.25-41.
- Persson, M., Falk, A. and Dixelius, C., 2009. Studies on the mechanism of resistance to *Bipolaris sorokiniana* in the barley lesion mimic mutant *bst1*. *Molecular plant pathology*, 10(5), pp.587-598.
- Persson, M., Rasmussen, M., Falk, A. and Dixelius, C., 2008. Barley mutants with enhanced level of resistance to Swedish isolates of *Bipolaris sorokiniana*, casual agent of spot blotch. *Plant Breeding*, 127(6), pp.639-643.
- Petäistö, R.L., Lilja, A.R.J.A. and Hantula, J., 2013. Artificial infection and development of snow mold fungus (*Phacidium infestans*) in container-grown Norway spruce seedlings. *Baltic For*, 19, pp.31-38.
- Petch, T., 1917. Additions to Ceylon fungi. *Annals of the Royal Botanic Gardens, Peradeniya* 6, pp.195–256.
- Péter G, Dlačny D, Price NP, Kurtzman CP. *Diddensiella caesifluorescens* gen. nov., sp. nov., a riboflavin-producing yeast species of the family Trichomonascaceae. *International journal of systematic and evolutionary microbiology*. 2012 Dec 1;62(12):3081-7.
- Péter G, Dlačny D, Tornai-Lehoczki J, Suzuki M, Kurtzman CP. *Spencermartinsiella europaea* gen. nov., sp. nov., a new member of the family Trichomonascaceae.

International journal of systematic and evolutionary microbiology. 2011 Apr 1;61(4):993-1000.

- Peter, M., Kohler, A., Ohm, R.A., Kuo, A., Krutzmann, J., Morin, E., Arend, M., Barry, K.W., Binder, M., Choi, C., Clum, A., Copeland, A., Grisel, N., Haridas, S., Kipfer, T., LaButti, K., Lindquist, E., Lipzen, A., Maire, R., Meier, B., Mihaltcheva, S., Molinier, V., Murat, C., Poggeler, S., Quandt, C.A., Sperisen, C., Tritt, A., Tisserant, E., Crous, P.W., Henrissat, B., Nehls, U., Egli, S., Spatafora, J.W., Grigoriev, I.V. and Martin, F.M. 2016 Ectomycorrhizal ecology is imprinted in the genome of the dominant symbiotic fungus *Cenococcum geophilum* Nat Commun 7, 12662.
- Petersen KRL, Koch J (1996) *Anisostagma rotundatum* gen. et sp. nov., a lignicolous marine ascomycetes from Svanmøllen Harbour in Denmark. Mycol Res 100:209–212
- Petersen R.H. 1962. Aquatic hyphomycetes from North America. I. Aleuriosporae (Part I), and key to the genera. *Mycologia* 54(2): 117-151.
- Petersen, K.R.L. (1997). Ultrastructural studies of the marine ascomycete *Groenhiella bivestia*. *Botanica Marina* 40: 71-75.
- Peterson KR1, Pfister DH 2010 Phylogeny of Cyttaria inferred from nuclear and mitochondrial sequence and morphological data. *Mycologia*. 2010 Nov-Dec;102(6):1398-416.
- Peterson, S.W., Jurjevic, Z., Bills, G.F., Stchigel, A.M., Guarro, J. and Vega, F.E. 2010 Genus *Hamigera*, six new species and multilocus DNA sequence based phylogeny. *Mycologia* 102 (4), 847-864.
- Pethybridge, S.J.; Jones, S.J.; Shivas, R.G.; Hay, F.S.; Wilson, C.R.; Groom, T. (2008). Tan spot: a new disease of pyrethrum caused by *Microsphaeropsis tanacetii* sp. nov.. *Pl. Path.* 57(6): 1058-1065
- Petrini LE, Petrini O. *Rosellinia* species (Xylariaceae) from South and Central America—An annotated list. *Kurtziana*. 2012;37:127-39.
- Peterson OV, Leong SL, Lantz H, Rice T, Dijksterhuis J, Houbraken J, Samson RA, Schnürer J. 2011. Phylogeny and intraspecific variation of the extreme xerophile, *Xeromyces bisporus*. *Fungal Biology* 115:1100–1111.
- Pfister DH, Slater C, Hansen K. Chorioactidaceae: a new family in the Pezizales (Ascomycota) with four genera. *Mycological research*. 2008 May 31;112(5):513-27.
- Pfister DH, Slater C, Hansen K. Chorioactidaceae: a new family in the Pezizales (Ascomycota) with four genera. *Mycological research*. 2008 May 31;112(5):513-27.
- Pfliegler W.P., Báthori F., Haelewaters D., Tartally A. 2016. Studies of Laboulbeniales on *Myrmica* ants (III): myrmecophilous arthropods as alternative hosts of *Rickia wasmannii*. *Parasite*. doi:10.1051/parasite/2016060
- Pfliegler, W. P.; Fekete, J.; Báthori, F. & Tartally, A. (2016) First Central European record of the fungus *Prolixandromyces triandrus* Santam., 1988 (Ascomycota: Laboulbeniales), a parasite of Veliid bugs (Heteroptera: Veliidae), with notes on its biology and DNA-barcoding. *Aquatic Insects* 37(3): 215-223.
- Phillips AJL, Alves A, Abdollahzadeh J, Slippers B, Wingfield MJ, et al. 2013 – The Botryosphaeriaceae: genera and species known from culture. *Studies in Mycology* 76, 51–167.
- Phillips AJL, Alves A, Pennycook SR, Johnston PR, Ramaley A, et al. 2008 – Resolving the phylogenetic and taxonomic status of dark-spored teleomorph genera in the Botryosphaeriaceae. *Persoonia* 21, 29–55.
- Phookamsak R, Liu JK, Manamgoda DS, Wanasinghe DN, Ariyawansa H, Mortimer PE, Chukeatirote E, McKenzie EH, Hyde KD. Epitypification of two bambusicolous fungi from Thailand. *Cryptogamie, Mycologie*. 2014 Sep;35(3):239-56.

- Phookamsak R, Liu JK, McKenzie EHC, Manamgoda DS et al. 2014. Revision of Phaeosphaeriaceae. *Fungal Diversity* 68, 159–238
- Phookamsak R, Norphanphoun C, Tanaka K, Dai DQ, Luo ZL, Liu JK, Su HY, Bhat DJ, Bahkali AH, Mortimer PE, Xu JC, Hyde KD (2015) *Astrosphaeriella*-like species; introducing Astrosphaeriellaceae and Pseudoastrosphaeriellaceae fam. nov. and *Astrosphaeriellopsis*, gen. nov. *Fungal Divers* 74:143–197
- Phookamsak, R.; Liu, J.K.; Chukeatirote, E.; McKenzie, E.H.C.; Hyde, K.D. 2013. Convergent evolution: Phylogeny and morphology of *Leptosphaerulina saccharicola* sp. nov. and *Pleosphaerulina oryzae* and relationships with *Pithomyces*. 34:303-319
- Phookamsaka R, Liu JK, Manamgoda DS, Wanasinghe DN, Ariyawansa HA, Mortimer PE, Chukeatirote E, McKenzie EHC, Hyde KD (2014) Epitypification of two bambusicolous fungi from Thailand. *Cryptogamie Mycologie* 35:239–256
- Phukhamsakda C, Ariyawansa HA, Phillips AJ, Wanasinghe DN, Bhat DJ, McKenzie EH, Singtripop C, Camporesi E, Hyde KD. 2016 Additions to Sporormiaceae: Introducing two novel genera, *Sparticola* and *Forliomyces*, from *Spartium*. *Cryptogamie, Mycologie*. 37 (1): 75-97.
- Phuwapraisirisan, P., Rangsang, J., Siripong, P. and Tip-pyang, S., 2009. New antitumour fungal metabolites from *Alternaria porri*. *Natural product research*, 23(12), pp.1063-1071.
- Pili,N.N., Franca,S.C., Kyndt,T., Makumba,B.A., Skilton,R., Hoefte,M., Mibey,R.K. and Gheysen,G. 2015 Analysis of fungal endophytes associated with rice roots from irrigated and upland ecosystems in Kenya. *Plant and Soil* 405, Issue 1, pp 371–380
- Pindaru, D.M., Tanase, C., Olariu, R.I. and Arsene, C., 2013. Chemical composition and ions concentration in *Xanthoria parietina* and *Phaeophyscia orbicularis* lichenised fungi species from Iasi, North-Eastern Romania. *Revista de Chimie*, 64(8), pp.807-814.
- Pinho DB, Honorato J, Nicoli A, Hora BT, Braganca CAD, Pereira OL (2012) Phylogenetic placement of the genus *Anhellia* and the description of *A. nectandrae* sp. nov. *Mycologia* 104: 1291–1298.
- Pinho, D.B.; Firmino, A.L.; Ferreira-Junior, W.G.; Pereira, O.L. 2013. New Meliolaceae from the Brazilian Atlantic Forest 2: species on host families Annonaceae, Cecropiaceae, Meliaceae, Piperaceae, Rubiaceae, Rutaceae and Tiliaceae. *Mycologia*. 105(3):697-711
- Pinho, D.B.; Firmino, A.L.; Pereira, O.L. 2010. *Hyphopolynema ingae* sp. nov., associated with leaf spot disease on *Inga edulis* in Brazil. *Mycotaxon*. 114:55-59
- Pino-Bodas, R., Martin, M.P. and Burgaz, A.R. 2012. *Cladonia subturgida* and *C. iberica* (Cladoniaceae) form a single, morphologically and chemically polymorphic species. *Mycol. Prog.* 11 (1), 269-278.
- Pinruan, U, Rungjindamai N, Sakayaroj J, Lumyong S, Hyde KD, Jones EBG (2010) *Baipadisphaeria* gen. nov., a freshwater ascomycete (Hypocreales, Sordariomycetes) from decaying palm leaves in Thailand. *Mycosphere* 1(1):53–63
- Pirnia, M., Zare, R., Zamanizadeh, H.R. and Khodaparast, A., 2012. New records of cercosporoid hyphomycetes from Iran. *Mycotaxon*, 120(1), pp.157-169.
- Pirozynski, K.A.; Shoemaker, R.A. 1971. Some Coelomycetes with appendaged conidia. *Canadian Journal of Botany*. 49(4):529-541.
- Pisani, T., Munzi, S., Paoli, L., Bačkor, M. and Loppi, S., 2011. Physiological effects of arsenic in the lichen *Xanthoria parietina* (L.) Th. Fr. *Chemosphere*, 82(7), pp.963-969.
- Pitt JI, Hocking AD. 2009. *Fungi and food spoilage*. Springer Science & Business Media, New York.
- Pitt JI, Lantz H, Pettersson OV, Leong SL. 2013. *Xerochrysium* gen. nov. and *Bettsia*, genera encompassing xerophilic species of *Chrysosporium*. *IMA Fungus* 4:229–241.

- Pitt JI, Lantz H, Pettersson OV, Leong SL. *Xerochrysum* gen. nov. and *Bettsia*, genera encompassing xerophilic species of *Chrysosporium*. *IMA fungus*. 2013 Dec 15;4(2):229-41.
- Pitt,W.M., Urbez-Torres,J.R. and Trouillas,F.P. 2014 *Munkovalsaria donacina* from grapevines and Desert Ash in Australia. *Mycosphere* 5 (5), 656-661
- Plata ER, Lücking R, Lumbsch HT 2012 A new classification for the family Graphidaceae (Ascomycota: Lecanoromycetes: Ostropales). *Fungal Diversity* 52(1): 107–121
- Plata, E.R. and Lücking, R., 2013. High diversity of Graphidaceae (lichenized Ascomycota: Ostropales) in Amazonian Perú. *Fungal Diversity*, 58(1), pp.13-32.
- Plata, E.R., Luecking, R., Sipman, H.J., Mangold, A., Klaus, K.A.L.B. and Lumbsch, H.T., 2010. A world-wide key to the thelotremoid Graphidaceae, excluding the Ocellularia-Myriotrema-Stegobolus clade. *The Lichenologist*, 42(02), pp.139-185.
- Platt JL, Spatafora JW (2000) Evolutionary relationships of nonsexual lichenized fungi: molecular phylogenetic hypotheses for the genera *Siphula* and *Thamnolia* from SSU and LSU rDNA. *Mycologia* 92: 475-487
- Plaza, C.M., de Torrec, L.E.D., Lückingf, R.K., Vizcayaa, M. and Medinaa, G.E., 2014. Antioxidant activity, total phenols and flavonoids of lichens from Venezuelan Andes. *Journal of Pharmacy & Pharmacognosy Research*, 2(5), pp.138-147.
- Poelt J, Hafellner J (1980) taxonomic affinities): *Apatoplaca*-genus novum *Teloschistacearum* (Lichenes). *Mitt Bot Staatssamml München* 16:503–528.
- Poengsungnoen,V;Manoch,L;Mongkolsuk,P;Kalb,K. 2014. New species of Graphidaceae from Loei Province, Thailand. *Phytotaxa*. 189(1):255-267.
- Pogány, M., von Rad, U., Grün, S., Dongó, A., Pintye, A., Simoneau, P., Bahnweg, G., Kiss, L., Barna, B. and Durner, J., 2009. Dual roles of reactive oxygen species and NADPH oxidase RBOHD in an *Arabidopsis-Alternaria* pathosystem. *Plant Physiology*, 151(3), pp.1459-1475.
- Polashock JJ, Caruso FL, Oudemans PV, McManus PS, Crouch JA (2009) The North American cranberry fruit rot fungal community: a systematic overview using morphological and phylogenetic affinities. *Plant Pathology* 58:1116-1127.
- Pöldmaa K, Larsson E, Kõljalg U. Phylogenetic relationships in *Hypomyces* and allied genera, with emphasis on species growing on wood-decaying homobasidiomycetes. *Canadian Journal of Botany*. 2000 Feb 20;77(12):1756-68.
- Pöldmaa K. 2011. Tropical species of *Cladobotryum* and *Hypomyces* producing red pigments. *Studies in Mycology* 68: 1-34.
- Poloni, A., Pessi, I.S., Frazzon, A.P.G. and Van Der Sand, S.T., 2009. Morphology, physiology, and virulence of *Bipolaris sorokiniana* isolates. *Current microbiology*, 59(3), pp.267-273.
- Poloni, A., Pessi, I.S., Frazzon, A.P.G. and Van Der Sand, S.T., 2009. Vegetative incompatibility among monoconidial isolates of *Bipolaris sorokiniana*. *Current microbiology*, 58(2), pp.153-158.
- Pons, N.; Sutton, B.C. 1988. *Cercospora* and similar fungi on yams (*Dioscorea* spp.). *Mycological Papers*. 160:1-78.
- Pose, G., Patriarca, A., Kyanko, V., Pardo, A. and Pinto, V.F., 2009. Effect of water activity and temperature on growth of *Alternaria alternata* on a synthetic tomato medium. *International journal of food microbiology*, 135(1), pp.60-63.
- Pose, G., Patriarca, A., Kyanko, V., Pardo, A. and Pinto, V.F., 2010. Water activity and temperature effects on mycotoxin production by *Alternaria alternata* on a synthetic tomato medium. *International journal of food microbiology*, 142(3), pp.348-353.

- Potenza, G., Fascetti, S., Ravera, S. and Puntillo, D., 2010. Lichens from sandy dune habitats on the Ionian Coast (Basilicata, southern Italy). *Cryptogamie Mycol*, 31, pp.59-65.
- Prabhugaonkar A, Bhat DJ. 2011 – New record of *Megacapitula villosa* and *Paradictyoarthrinium diffractum* from India. *Mycosphere* 2(4), 463–467.
- Prasher IB, Verma RK. *Neosporidesmium appendiculatus* sp. nov. from North–Western India. *Mycological Progress*. 2015 Oct 1;14(10):87.
- Prasher, I.B.; Verma, R.K. 2014. *Taeniolina echinata* sp. nov. from North India. *Kavaka*. 43:11-13
- Pratibha J, Bhat DJ, Prabhugaonkar A. 2016 Molecular phylogeny of *Speiropsis pedatospora*. *Mycosphere* 7 (5), 679-686
- Pratibha J, Nguyen HD, Mel'nik VA, Bhat DJ, White GP, Seifert KA. Lectotypification, epitypification, and molecular phylogeny of the synnematos hyphomycete *Pseudogliophragma indicum*, the second genus in the Wiesneriomycetaceae. *Mycoscience*. 2015 Jul 31;56(4):387-95.
- Pratibha J, Prabhugaonkar A, Hyde KD, Bhat DJ. Phylogenetic placement of *Bahusandhika*, *Cancellidium* and *Pseudoepicoccum* (asexual Ascomycota). *Phytotaxa*. 2014 Aug 20;176(1):68-80.
- Pratibha J, Prabhugaonkar A. (2015) Multi-gene phylogeny of *Pithomyces* with the sexual morph of *P. flavus* Berk. & Broome. *Phytotaxa* 218 (1):84–90
- Pratibha J, Prabhugaonkar A. (2015) Multi-gene phylogeny of *Pithomyces* with the sexual morph of *P. flavus* Berk. & Broome. *Phytotaxa* 218:84–90
- Pratibha J. 2013. *Jayarambhatia rhizophorae* gen. et sp. nov., an asexually reproducing fungus from Goa, India. *Mycotaxon*. 125:139-144
- Pratibha, J., Bhat, D.J. and Raghukumar, S. (2011). Four anamorphic fungi (with two new species) from forests of Western Ghats, India. *Mycotaxon* 117: 269-278.
- Pratibha, J.; Amandeep, K.; Shenoy, B.D.; Bhat, D.J. (2010). *Caliciopsis indica* sp. nov. from India. *Mycosphere* 1(1): 65-72
- Pratibha, J.; Raghukumar, S.; Bhat, D.J. (2009). New species of *Digitoramispora* and *Spondylocladiopsis* from the forests of Western Ghats, India. *Mycotaxon* 107: 383-390.
- Prelle, A., Spadaro, D., Garibaldi, A. and Gullino, M.L., 2013. A new method for detection of five *Alternaria* toxins in food matrices based on LC–APCI-MS. *Food chemistry*, 140(1), pp.161-167.
- Prieto M, Aragon G, Martinez I. The genus *Catapyrenium* s. lat. (Verrucariaceae) in the Iberian Peninsula and the Balearic Islands. *The Lichenologist*. 2010 Nov 1;42(06):637-84.
- Prieto M, Baloch E, Tehler M, Wedin M (2013) *Mazaedium* evolution in the Ascomycota (Fungi) and the classification of mazaediate groups of unclear relationship. *Cladistics* 29(3):296–308.
- Prieto M, Martínez I, Aragón G, Gueidan C, Lutzoni F. Molecular phylogeny of *Heteroplacidium*, *Placidium*, and related catapyrenioid genera (Verrucariaceae, lichen-forming Ascomycota). *American Journal of Botany*. 2012;99(1):23-35.
- Prieto M, Martinez I, Aragón G, Otálora MA, Lutzoni F. Phylogenetic study of *Catapyrenium* s. str. (Verrucariaceae, lichen-forming Ascomycota) and related genus *Placidopsis*. *Mycologia*. 2010 Mar 1;102(2):291-304.
- Prieto M, Wedin M (2016) Phylogeny, taxonomy and diversification events in the Caliciaceae. - *Fungal Diver*: .1-18.doi:10.1007/s13225-016-0372-y
- Prieto, M., Aragón, G., Martínez, I. and Genera, P., 2008. New records in the lichen family Verrucariaceae (Ascomycota) from Argentina. *Bol. Soc. Argent. Bot.* 43 (3-4): 205 - 210.

- Prieto, M., Baloch, E., Tehler, A. and Wedin, M. 2012. Mazaedium evolution in the Ascomycota (Fungi) and the classification of mazaediate groups of formerly unclear relationship Cladistics (In press).
- Prieto, M., Martínez, I., Aragón, G., Gueidan, C. and Lutzoni, F. 2012. Molecular phylogeny of *Heteroplacidium*, *Placidium*, and related catapyrenioid genera (Verrucariaceae, lichen-forming Ascomycota) *Am. J. Bot.* 99 (1), 23-35.
- Prieto, M., Martínez, I., Aragón, G., Gueidan, C. and Lutzoni, F., 2012. Molecular phylogeny of *Heteroplacidium*, *Placidium*, and related catapyrenioid genera (Verrucariaceae, lichen-forming Ascomycota). *American Journal of Botany*, 99(1), pp.23-35.
- Prieto, M., Martínez, I., Aragón, G., Otálora, M.A. and Lutzoni, F., 2010. Phylogenetic study of *Catapyrenium* s. str. (Verrucariaceae, lichen-forming Ascomycota) and related genus *Placidopsis*. *Mycologia*, 102(2), pp.291-304.
- Prieto, M., Westberg, M. and Schultz, M., 2015. New records of Lichinomycetes in Sweden and the Nordic countries.
- Prieto, M., Baloch, E., Tehler, A. and Wedin, M. 2012. Mazaedium evolution in the Ascomycota (Fungi) and the classification of mazaediate groups of formerly unclear relationship. *Cladistics* 1-13.
- Prihatini R, Boonyuen N, Sivichai S (2010) Phylogenetic evidence that two submerged-habitat fungal species, *Speiropsis pedatospora* and *Xylomyces chlamydosporus*, belong to the order Jahnulales insertae sedis Dothideomycetes. *Microbiology Indonesia* 2 (3)
- Printzen C (2014) A molecular phylogeny of the lichen genus *Biatora* including some morphologically similar species. *Lichenologist* 46:441–453
- Printzen C, Cezanne R, Eichler M, Lumbsch HT (2012) The genera *Aphanopsis* and *Steinia* represent basal lineages within Leotiomyceta. *Biblioth Lichenol* 108:177–186
- Printzen, C. 2007. New records of *Cheiromycina* species, a genus of lichenized hyphomycetes, with *C. reimeri* sp. nov. and a revised key to the species. *Nova Hedwigia*. 84(1-2):261-267.
- Printzen, C., 2010. Lichen systematics: the role of morphological and molecular data to reconstruct phylogenetic relationships. In *Progress in Botany* 71 (pp. 233-275). Springer Berlin Heidelberg.
- Printzen, C., Cezanne, R., Eichler, M. and Lumbsch, H. T. 2012. The genera *Aphanopsis* and *Steinia* represent basal lineages within Leotiomyceta *Bibl. Lichenol.* (2012) In press
- Printzen, C.; Spribille, T.; Tønsberg, T. (2008). *Myochroidea*, a new genus of corticolous, crustose lichens to accommodate the *Lecidea leprosula* group. *Lichenologist* 40(3): 195-207.
- Proksa B. 2010. *Talaromyces flavus* and its metabolites. *Chem Pap* 64:696–714.
- Puangsoombat, P., Sangwanit, U. and Marod, D., 2010. Diversity of soil fungi in different land use types in Tha Kum-Huai Raeng Forest Reserve, Trat Province. *Natural Sciences*, 44, pp.1162-1175.
- Pudhom K, Teerawatananond T. Rhytidenones A-F, spirobisanthralenes from rhytidhysteron sp. AS21B, an endophytic fungus. *J Nat Prod.* 2014;77(8):1962-6.
- Pundhir, P., Tuda, C., Vincentelli, C., Morlote, D. and Rivera, C., 2016. *Scolecobasidium granulomatous pneumonia and abscess—an emerging opportunistic fungal pathogen: a case report.* *International journal of STD & AIDS*, p.0956462416646688.
- Punithalingam E, Spooner BM 2011 A new fungicolous *Scolecobasidium* (hyphomycetes) and *Caducirostrum* gen. nov. (coelomycetes) from leaf litter in the UK and Italy. *Kew Bulletin* 66,(2) 309-324.
- Punithalingam E. 1969 – Studies on Sphaeropsidales in culture. *Mycological Papers* 119, 1–24.

- Punithalingam, E. 1981. New microfungi from cereals and grasses. III. *Nova Hedwigia*. 34(1-2):137-152.
- Punithalingam, E. 1981. New microfungi from cereals and grasses. II. *Nova Hedwigia*. 34(1-2):67-96.
- Punithalingam, E. and Spooner, B.M., 2011. A new fungicolous *Scolecobasidium* (hyphomycetes) and *Caducirostrum* gen. nov.(coelomycetes) from leaf litter in the UK and Italy. *Kew Bulletin*, 66(2), pp.309-324.
- Purvis, W., 2012. *Lichens. An Illustrated Guide to the British and Irish Species.* by Frank S. Dobson. Slough: The Richmond Publishing Co., 2011. 496 pp. Paperback: ISBN: 978 0 85546, 315 1.£ 35.00 plus postage (£ 5 UK,£ 10 overseas). Hardback: ISBN: 978 0 85546, 316 8.£ 50.00 plus postage (£ 5 UK,£ 10 overseas).
- PYKÄLÄ J, Myllys L. Three new species of *Atla* from calcareous rocks (Verrucariaceae, lichenized Ascomycota). *The Lichenologist*. 2016 Mar 1;48(2):111-20.
- Pykälä J, Stepanchikova IS, Himelbrant DE, Kuznetsova ES, Alexeeva NM. The lichen genera *Thelidium* and *Verrucaria* in the Leningrad Region (Russia). *Folia Cryptogamica Estonica*. 2012;49:45-57.
- QI ZHAO, TOLGOR B, YONGCHANG ZHAO, ZHULIANG YANG, KEVIN D. HYDE 2015 Species diversity within the *Helvella crispa* group (Ascomycota: Helvellaceae) in China. *Phytotaxa* 239(2):
- Qiao, M., Zhang, Y., Li, S.F., Baral, H.O., Weber, E., Su, H.Y., Xu, J.P., Zhang, K.Q. and Yu, Z.F., 2012. *Orbilbia blumenaviensis* and its *Arthrotrichum* anamorph. *Mycological progress*, 11(1), pp.255-262.
- Qin Yang, Xin-Lei Fan, Pedro W. Crous, Ying-Mei Liang, Cheng-Ming Tian 2015 *Cytospora* from *Ulmus pumila* in Northern China. *Mycological Progress* 14: 74.
- QI-RUI LI, JI-CHUAN KANG, & KEVIN D.HYDE 2015 A multiple gene genealogy reveals the phylogenetic placement of *Iodosphaeria tongrenensis* sp. nov. in Iodosphaeriaceae (Xylariales). *Phytotaxa* 234 (2): 121–132
- Qu, C.R., Yin, G.H., Zhao, G.Z, Cui B. K. & Liu, X.Z. 2014.Three new species of *Berkleasmium* (hyphomycetes) from China. *Nova Hedwigia* 98(1-2):151-161
- Quaedvlieg W, Groenewald JZ, de Jesús Yáñez-Morales M, Crous PW. (2012). DNA barcoding of *Mycosphaerella* species of quarantine importance to Europe. *Persoonia* 29: 101–115.
- Quaedvlieg W, Verkley GJM, Shin H-D, Barreto RW, Alfenas AC, Swart WJ, Groenewald JZ, Crous PW (2013) Sizing up *Septoria*. *Stud Mycol* 75: 307–390.
- Quaedvlieg, W., Binder, M., Groenewald, J. Z., Summerell, B. A., Carnegie, A. J., Burgess, T. I., & Crous, P. W. (2014). Introducing the Consolidated Species Concept to resolve species in the Teratosphaeriaceae. *Persoonia* 33, 1-40.
- Quandt CA, Kepler RM, Gams W, Araújo JP, Ban S, Evans HC, Hughes D, Humber R, Hywel-Jones N, Li Z, Luangsa-Ard JJ. Phylogenetic-based nomenclatural proposals for Ophiocordycipitaceae (Hypocreales) with new combinations in *Tolypocladium*. *IMA fungus*. 2014 Jun 1;5(1):121-34.
- Queloz V, Grünig CR, Berndt R, Kowalski T, Sieber TN, Holdenrieder O. Cryptic speciation in *Hymenoscyphus albidus*. *Forest Pathology*. 2011 Apr 1;41(2):133-42.
- QUIJADA L, BARAL H.O., JAÉN-MOLINA R., WEISS M., CAUJAPÉ-CASTELLS, COOPER J., JOHNSTON P. & BELTRÁN-TEJERA E. (2015) Exploring the phylogenetic and morphological relationships of disregarded genera in Helotiales s.l. XVII Congress of European Mycologist (21-25 September, Madeira, Portugal).

- Quijada L, Baral HO, Beltrán-Tejera E. New species of *Orbilina* (Orbiliales) from arid ecosystems of the Canary Islands (Spain). *Nova Hedwigia*. 2013 Feb 1;96(1-2):237-48.
- Quilhot, W., Cuellar, M., Diaz, R., Riquelme, F. and Rubio, C., 2010. Preliminary study of the lichen flora of Isla Mocha, southern Chile. *Gayana Botánica*, 67(2), pp.206-212.
- R. Lücking / Gutiérrez, M.C./ Moncada, B. 2016: *Neosergipea*, a new name for the lichen fungus *Sergipea*, with an updated phylogeny and notes on the genus *Dichosporidium* (lichenized Ascomycota: Arthoniales: Roccellaceae). - *The Lichenologist* 48(4): 269-273.
- R. Lücking, A.W. Archer & A. Aptroot. 2009. A world-wide key to the genus *Graphis* (Ostropales: Graphidaceae). *Lichenologist* 41: 363-452.
- R. Lücking, J.L. Chaves, H.J.M. Sipman, L. Umana & A. Aptroot. 2008. A first assessment of the Ticolichen biodiversity inventory in Costa Rica: The genus *Graphis*, with notes on the genus *Hemithecium* (Ascomycota: Ostropales: Graphidaceae). *Fieldiana, Botany, New series* 46: 1-140.
- R. Lücking, M.K. Johnston, A. Aptroot, E. Kraichak, J.C. Lendemer, K. Boonpragob, M.E.S. Cáceres, D. Ertz, L.I. Ferraro, Z.-F. Jia, K. Kalb, , A. Mangold, L. Manoch, J. A. Mercado-Díaz, B. Moncada, P. Mongkolsuk, K. Paping, S. Parnmen, R. Peláez, V. Poengsoengnoen, E. Rivas Plata, W. Saipunkaew, H.J.M. Sipman, J. Suttjaritturakan, D. Van den Broeck, M. von Konrat, G. Weerakoon & H.T. Lumbsch. 2014. One hundred and seventy five new species of Graphidaceae: closing the gap or a drop in the bucket? *Phytotaxa* 189: 7-38.
- Raggio J, Pintado A, Ascaso C, De La Torre R, De Los Rios A, Wierzchos J, Horneck G, Sancho LG. Whole lichen thalli survive exposure to space conditions: results of Lithopanspermia experiment with *Aspicilia fruticulosa*. *Astrobiology*. 2011 May 1;11(4):281-92.
- Raggio, J., Green, T.G.A., Crittenden, P.D., Pintado, A., Vivas, M., Pérez-Ortega, S., De los Ríos, A. and Sancho, L.G., 2012. Comparative ecophysiology of three *Placopsis* species, pioneer lichens in recently exposed Chilean glacial forelands. *Symbiosis*, 56(2), pp.55-66.
- Rainer J, De Hoog GS. Molecular taxonomy and ecology of *Pseudallescheria*, *Petriella* and *Scedosporium prolificans* (Microascaceae) containing opportunistic agents on humans. *Mycological research*. 2006 Feb 28;110(2):151-60.
- Raitviir, A. (2006) *Fungi Non Delineati Raro vel Haud Perspecte et Explorate Descripti aut Definite Picti*, 31: 57
- Raitviir, A. 2008. The Helotiales of the Magadan and Chukotka areas of the Russian Arctic. – *Sommerfeltia* 31: 179-190.
- Raja H, Miller A, Shearer C (2010a) Freshwater Ascomycetes: *Hyalorostratum brunneisporum*, a new genus and species in the Diaporthales (Sordariomycetidae, Sordariomycetes) from North America. *Mycosphere* 1 (4):275-288
- Raja H, Schoch C, Hustad V, Shearer C, Miller A Testing the phylogenetic utility of MCM7 in the Ascomycota *MycKeys*. 2011. 163-94
- Raja HA, Carter A, Platt HW, Shearer CA (2008a) Freshwater ascomycetes: *Jahnula apiospora* (Jahnulales, Dothideomycetes), a new species from Prince Edward Island, Canada. *Mycoscience* 49 (5):326-328. doi:Doi 10.1007/S10267-008-0428-2
- Raja HA, El-Elimat T, Oberlies NH, Shearer CA, Miller AN, Tanaka K, Hashimoto A, Fournier J (2015) *Minutisphaerales* (Dothideomycetes, Ascomycota): a new order of freshwater ascomycetes including a new family, *Minutisphaeraceae*, and two new species from North Carolina, USA. *Mycologia* 107 (4):845-862. doi:10.3852/15-013

- Raja HA, Ferrer A, Shearer CA (2009a) Freshwater ascomycetes: a new genus, *Ocala scalariformis* gen. et sp nov, and two new species, *Ayria nubispora* sp nov and *Rivulicola cygnea* sp nov. *Fungal Divers* 34:79-86
- Raja HA, Miller AN, Shearer CA (2008b) Freshwater ascomycetes: *Aquapoterium pinicola*, a new genus and species of Helotiales (Leotiomyces) from Florida. *Mycologia* 100 (1):141-148
- Raja HA, Miller AN, Shearer CA (2012) Freshwater ascomycetes: Natipusillaceae, a new family of tropical fungi, including *Natipusilla bellaspora* sp. nov. from the Peruvian Amazon. *Mycologia* 104 (2):569-573. doi:Doi 10.3852/11-150
- Raja HA, Oberlies NH, El-Elimat T, Miller AN, Zelski SE, Shearer CA (2013a) *Lindgomyces angustiascus*, (Lindgomycetaceae, Pleosporales, Dothideomycetes), a new lignicolous species from freshwater habitats in the USA. *Mycoscience* 54 (5):353-361. doi:10.1016/j.myc.2012.12.004
- Raja HA, Oberlies NH, Figueroa M, Tanaka K, Hirayama K, Hashimoto A, Miller AN, Zelski SE, Shearer CA (2013b) Freshwater ascomycetes: *Minutisphaera* (Dothideomycetes) revisited, including one new species from Japan. *Mycologia* 105 (4):959-976. doi:10.3852/12-313
- Raja HA, Oberlies NH, Tamam-El Elimat, Miller AN, Zelski SE, Shearer CA (2013) *Lindgomyces angustiascus*, (Lindgomycetaceae, Pleosporales, Dothideomycetes), a new lignicolous species from freshwater habitats in the USA. *Mycoscience* 54:353–361
- Raja HA, Schmit JP, Shearer CA (2009b) Latitudinal, habitat and substrate distribution patterns of freshwater ascomycetes in the Florida Peninsula. *Biodiversity and Conservation* 18 (2):419-455. doi:Doi 10.1007/S10531-008-9500-7
- Raja HA, Shearer CA (2008) Freshwater ascomycetes: new and noteworthy species from aquatic habitats in Florida. *Mycologia* 100 (3):467-489
- Raja HA, Shearer CA (2008) Freshwater ascomycetes: new and noteworthy species from aquatic habitats in Florida. *Mycologia* 100:467-489.
- Raja HA, Tanaka K, Hirayama K, Miller A, Shearer CA (2011) Freshwater Ascomycetes: Two new species of *Lindgomyces* (Lindgomycetaceae, Pleosporales, Dothideomycetes) from Japan and USA. *Mycologia* 103: 1421–1432
- Raja HA, Violi HA, Shearer CA (2010b) Freshwater ascomycetes: *Alascospora evergladensis*, a new genus and species from the Florida Everglades. *Mycologia* 102 (1):33-38. doi:10.3852/09-096
- Raja, H.A.; Ferrer, A.; Shearer, C.A.; Miller, A.N. (2010). Freshwater ascomycetes: *Wicklowia aquatica*, a new genus and species in the Pleosporales from Florida and Costa Rica. *Mycoscience* 51(3): 208-214
- Raja, H.A.; Shearer, C.A. 2008. Freshwater ascomycetes: new and noteworthy species from aquatic habitats in Florida. *Mycologia*. 100(3):467-489.
- Raja, H.A.; Stchigel, A.M.; Miller, A.N.; Crane, J.L.; Shearer, C.A. 2007. Hyphomycetes from the Great Smoky Mountains National Park, including three new species. *Fungal Diversity*. 26:271-286
- Raja,H., Schoch,C., Hustad,V., Shearer,C. and Miller,A. 2011 Testing the phylogenetic utility of MCM7 in the Ascomycota. *MycosKeys* 1, 63-94
- Rajakaruna, N., Knudsen, K., O'dell, R., Nathaniel, P., Olday, F.C. and Woolhouse, S., 2012. Investigation of the importance of rock chemistry for saxicolous lichen communities of the New Idria serpentinite mass, San Benito County, California, USA. *The Lichenologist*, 44(05), pp.695-714.

- Rajeshkumar KC, Crous PW, Groenewald JZ, Seifert KA. Resolving the phylogenetic placement of *Porobeltraniella* and allied genera in the Beltraniaceae. *Mycological Progress*. 2016:1-8.
- Rajeshkumar, K. C., and A. Y. Rossman. (2013) *Taiwanascus samuelsii* sp. nov., an addition to *Niessliaceae* from the Western Ghats, Kerala, India." *IMA fungus* 4(1): 1-4.
- Rajeshkumar, K.C. and Sharma, R., 2013. *Tamhinispora* a new genus belongs to family *Tubeufiaceae* from the Western Ghats, India based on morphology and phylogenetic analysis. *Mycosphere*, 4(2), pp.165-174.
- Rajeshkumar, K.C. and Singh, S.K., 2012. *Manoharachariella indica* sp. nov. from the Western Ghats, India. *Mycotaxon*, 120(1), pp. 43–48.
- Rajeshkumar, K.C., Kajale, S.C., Sutar, S.A. and Singh, S.K., 2013. *Ellisemia karadkensis* sp. nov. from southern Western Ghats, India. *Mycotaxon*, 121(1), pp. 181–186.
- Rajeshkumar, K.C., Singh, P.N., Yadav, L.S., Swami, S.V. and Singh, S.K., 2010. *Chaetospermum setosum* sp. nov., from the Western Ghats, India. *Mycotaxon*, 113(1), pp.397-404.
- Ram, T.J., 2014. New species and new records in Roccellaceae (Arthoniales) from the Andaman Islands, India. *Phytotaxa*, 177(3), pp.155-162.
- Rämä T, Mathiassen GH, Kausserud H. Marine fungi new to Norway, with an outlook to the overall diversity. *Agarica*. 2014;34:35-54.
- Ramaley, A.W. 1991. *Clypeispora* and its *Mycosphaerella* teleomorph. *Mycotaxon*. 40:13-22.
- Rambelli, A., 2011. Some Dematiaceous Hyphomycetes from Mediterranean maquis litters. *Flora Mediterranea*, 21, pp.5-204.
- Rambold G (1989) A monograph of the saxicolous lecideoid lichens of Australia (excl. Tasmania). *Bibl Lichenol* 34: 1-345.
- Ramos A.M., Cinto I.E., Tadic L.F. & Ranalli M.E. (2011). AFLP molecular characterizations of some *Saccobolus* species (Ascomycota, Pezizales).
- Randlane T, Thell A, Saag A (1995) New data about the genera *Cetrariopsis*, *Cetrelia* and *Nephromopsis* (Parmeliaceae, lichenized Ascomycotina). *Cryptog Bryol Lichenol* 16 (1):35–60
- Randlane, T., Saag, A., Thell, A. and Ahti, T., 2013. Third world list of cetrarioid lichens—in a new databased form, with amended phylogenetic and type information. *Cryptogamie, Mycologie*, 34(1), pp.79-94.
- RANDLANE, T.; SAAG, A.; THELL, A.; AHTI, T. (2013). Third world list of cetrarioid lichens – in a new databased form, with amended phylogenetic and type information.
- Randriamanantany, Z.A., Annesi-Maesano, I., Moreau, D., Raheison, C., Charpin, D., Kopferschmitt, C., Lavaud, F., Taytard, A., De Blay, F. and Caillaud, D., 2010. *Alternaria* sensitization and allergic rhinitis with or without asthma in the French Six Cities study. *Allergy*, 65(3), pp.368-375.
- Ranghoo, V.M., Hyde, K.D., Liew, E.C.Y and Spatafora, W. (1999). Family placement of *Ascotaiwania* and *Ascolacicola* based on DNA sequences from the large subunit rRNA gene. *Fungal Diversity* 2: 159-168.
- Rangsiruji, A., Boonpragob, K., Mongkolsuk, P., Sodamuk, M., Buaruang, K., Binchai, S., Lumbsch, H.T. and Parmen, S., 2016. Diversity and phylogenetic survey of cyanobacterial lichens (Collematineae, Ascomycota) in mangrove forests of eastern Thailand. *The Bryologist*, 119(2), pp.123-130.
- Ranjbar-Bahadori, S., Razzaghi-Abyaneh, M., Bayat, M., Eslami, A., Pirali, K., Shams-Ghahfarokhi, M. and Lotfollahzadeh, S., 2010. Studies on the effect of temperature, incubation time and in vivo gut passage on survival and nematophagous activity *Arthrotrichy oligospora* var. *oligospora* and *A. cladodes* var. *macroides*. *Global Veterinaria*, 4(2), pp.112-117.

- Ranković, B., Mišić, M. and Sukdolak, S., 2009. Antimicrobial activity of extracts of the lichens *Cladonia furcata*, *Parmelia caperata*, *Parmelia pertusa*, *Hypogymnia physodes* and *Umbilicaria polyphylla*. *Biologia*, 64(1), pp.53-58.
- Ranković, B.V., Kosanić, M.A. and Stanojković, T.A.. 2014. *Stereocaulon paschale* lichen as antioxidant, antimicrobial and anticancer agent. *Farmacina*, 62, pp.306-317.
- Rao, V.; Sutton, B.C. 1975. Synnematosus fungi I. *Kavaka*. 3:21-28.
- Rappaz F (1992) *Phomatospora berkeleyi*, *P. arenaria* and their *Sporothrix* anamorphs. *Mycotaxon* 45:323–330
- Rashmi Dubey and Neelima A. Moonambeth. 2013. *Custingophora ratnagiriensis* sp.nov. – A novel species of *Custingophora* from Konkan, Maharashtra, India. *NEBIO - An international Journal of Environment and Biodiversity*. 4 (6)(6):31-32.
- Rashmi Dubey and Neelima A. Moonambeth. 2014. *Vermiculariopsiella papaye* sp. nov.- A new species of *Vermiculariopsiella* from Western Ghats, India. *International Journal of Scientific Research*. 3(6):35-36
- Rashmi, S. and Rajkumar, H.G., 2015. First Report of Foliicolous Lichen Biota in South Karnataka-India. *Int. J. Curr. Microbiol. App. Sci*, 4(6), pp.250-256.
- Ravikumar DR, Vittal BPR (1991) A new species of *Bathyascus* from Indian mangroves. *Mycol Res* 95:370–371
- Réblová M (2014) *Sporoschismopsis angustata* sp. nov., a new holomorph species in the *Retiulascaceae* (Glomerellales), and a reappraisal of *Sporoschismopsis*. *Mycol Prog* 13:671–681.
- Réblová M, Bellojisia, 2008 a new sordariaceous genus for *Jobellisia rhynchostoma* and a description of *Jobellisiaceae* fam. nov. *Mycologia*. Nov 1;100(6):893-901.
- Reblova M, Fournier J, Hyde K.D. (2010). *Achroceratosphaeria*, a new ascomycete genus in the *Sordariomycetes*, and re-evaluation of *Ceratosphaeria incolorata*. *Fungal Diversity* 43: 75-84.
- Réblová M, Fournier J, Štěpánek V (2015) *Pisorisporiales*, a new order of aquatic and terrestrial fungi for *Achroceratosphaeria* and *Pisorisporium* gen. nov. in the *Sordariomycetes*. *Persoonia* 34:40–49
- Réblová M, Fournier J, Štěpánek V. 2016. Two new lineages of aquatic ascomycetes: *Atractospora* gen. nov. and *Rubellisphaeria* gen. et sp. nov., and a sexual morph of *Myrmecridium montsegurinum* sp. nov. *Mycological Progress*. 15:1-18
- Réblová M, Gams W, Seifert, K.A. 2011. *Monilochaetes* and allied genera of the *Glomerellales*, and a reconsideration of families in the *Microascales*. *Studies in Mycology*. 68:163-191
- Réblová M, Gams W. 2011. The new hyphomycete genera *Brachyalara* and *Infundichalara*, the similar *Exochalara* and species of '*Phialophora* sect. *Catenulatae*' (*Leotiomycetes*). *Fungal Diversity*. 46:67-86
- Réblová M, Hubka V, Thureborn O, Lundberg J, Sallstedt T, Wedin M, Ivarsson M. 2016 From the tunnels into the treetops: new lineages of black yeasts from biofilm in the Stockholm metro system and their relatives among ant-associated fungi in the *Chaetothyriales*. *PloS one*. Oct 12;11(10):e0163396.
- Réblová M, Jaklitsch W, Réblová K, Štěpánek V. 2015. Phylogenetic reconstruction of the *Calosphaeriales* and *Togniniales* using five genes and predicted RNA secondary structures of ITS, and *Flabellascus tenuirostris* gen. et sp. nov. *PloS ONE*. 10:1-46
- Réblová M, Miller AN, Rossman AY, Seifert KA, Crous PW, Hawksworth DL, Abdel-Wahab MA, Cannon PF, Daranagama DA, De Beer ZW, Huang SK, Hyde KD, Jayawardena R, Jaklitsch W, Jones EBG, Ju YM, Judith C, Maharachchikumbura SSN, Pang KL, Petrini LE, Raja HA, Romero AI, Shearer C, Senanayake IC,

- Voglmayr H, Weir BS, Wijayawardena NN. 2016 – Recommendations for competing sexual–asexually typified generic names in Sordariomycetes (except Diaporthales, Hypocreales, and Magnaporthales). *IMA Fungus*. 7, 131–153.
- Réblová M, Mostert L. 2007. *Romellia* is congeneric with *Togninia* and description of *Conidiotheca* gen. nov. for one species of this genus with polysporous asci. *Mycological Research*. 111(3):299-307.
- Réblová M, Réblová K, Štěpánek V. 2015 Molecular systematics of *Barbatosphaeria* (Sordariomycetes): multigene phylogeny and secondary ITS structure. *Persoonia: Molecular Phylogeny and Evolution of Fungi*. Dec;35:21.
- Réblová M, Seifert KA, Fournier J, Štěpánek V (2012) Phylogenetic classification of *Pleurothecium* and *Pleurotheciella* gen. nov. and its dactylaria-like anamorph (Sordariomycetes) based on nuclear ribosomal and protein-coding genes. *Mycologia* 104(6):1299–1314.
- Réblová M, Seifert KA, Fournier J, Štěpánek V. 2016 Newly recognised lineages of perithecial ascomycetes: the new orders Conioscyphales and Pleurotheciales. *Persoonia*;37:57-81.
- Réblová M, Seifert KA. Discovery of the teleomorph of the hyphomycete, *Sterigmatobotrys macrocarpa*, and epitypification of the genus to holomorphic status. *Studies in mycology*. 2011 Mar 31;68:193-202.
- Réblová M, Štěpánek V, Schumacher RK (2014) *Xylochrysis lucidagen.* et sp. nov., a new lignicolous ascomycete (Sordariomycetidae) with holoblastic conidiogenesis. *Mycologia* 106(3):564–572.
- Reblova M, Stepanek, V. (2009). New fungal genera, *Tectonidula* gen. nov. for *Calosphaeria*-like fungi with holoblastic-denticulate conidiogenesis and *Natantiella* gen. nov. for three species segregated from *Ceratostomella*. *Mycol. Res.* 113(9): 991-1002.
- Réblová M, Untereiner WA, Réblová K. 2013. Novel evolutionary lineages revealed in the Chaetothyriales (Fungi) based on multigene phylogenetic analyses and comparison of ITS secondary structures. *PloS ONE* 8:1–28.
- Réblová M, Winka K. Phylogeny of *Chaetosphaeria* and its anamorphs based on morphological and molecular data. *Mycologia*. 2000 Sep 1:939-54.
- Réblová M. 1996. — Two new *Capronia* species from the Czech Republic. *Czech Mycology*, 49 (2) : 77–83.
- Réblová M. Two taxonomic novelties in the Sordariomycetidae: *Ceratolenta caudata* gen. et sp. nov. and *Platytrachelon abietis* gen. et comb. nov. for *Ceratosphaeria abietis*. *Mycologia*. 2013 Mar 1;105(2):462-75.
- Réblová, M. 1999. Studies in *Chaetosphaeria* sensu lato II. *Coniobrevicolla* gen. & sp. nov. *Mycotaxon*. 70:421-429.
- Réblová, M. 2011. New insights into the systematics and phylogeny of the genus *Jattaea* and similar fungi of the Calosphaeriales. *Fungal Diversity*. 49:167-198
- Recio, M., del Mar Trigo, M., Docampo, S., Melgar, M., García-Sánchez, J., Bootello, L. and Cabezudo, B., 2012. Analysis of the predicting variables for daily and weekly fluctuations of two airborne fungal spores: *Alternaria* and *Cladosporium*. *International journal of biometeorology*, 56(6), pp.983-991.
- Reddy, M.A., Nayaka, S., Shankar, P.C., Reddy, S.R. and Rao, B.R.P., 2011. New distributional records and checklist of lichens for Andhra Pradesh, India. *Indian Forester*, 137(12), pp.1371-1376.
- Reeb V, Haugen P, Bhattacharya D, Lutzoni F. Evolution of *Pleopsidium* (Lichenized Ascomycota) S943 group I introns and the phylogeography of an intron-encoded putative homing endonuclease. *Journal of molecular evolution*. 2007 Mar 1;64(3):285-98.

- Reeb, V., Lutzoni, F. and Roux, C. 2004. Contribution of RPB2 to multilocus phylogenetic studies of the euascomycetes (Pezizomycotina, Fungi) with special emphasis on the lichen-forming Acarosporaceae and evolution of polyspory *Mol. Phylogenet. Evol.* 32 (3), 1036-1060.
- Reeleder RD (2007). *Rhexocercosporidium panacis* sp. nov., a new anamorphic species causing rusted root of ginseng (*Panax quinquefolius*). *Mycologia* 99: 91–98.
- Rehner, S.A.; Minnis, A.M.; Sung, G.H.; Luangsa-ard, J.J.; Devotto, L.; Humber, R.A. (2011). Phylogeny and systematics of the anamorphic, entomopathogenic genus *Beauveria*. *Mycologia* 103(5): 1055-1073.
- Ren F, Zhuang WY. A new species of the genus *Chlorencoelia* (Helotiales) from China. *Mycoscience*. 2014 May 31;55(3):227-30.
- Ren J, Zeng C, Jiang YL, Hyde KD, Wang Y (2013) A new Thai species of *Astrosphaeriella* (Dothideomycetes, Ascomycota) from submerged wood in freshwater. *Sydowia* 65:33–43
- Ren SC, Ma J, Ma LG, Zhang YD, Zhang XG. *Sativumoides* and *Cladosporiopsis*, two new genera of hyphomycetes from China. *Mycological progress*. 2012 May 1;11(2):443-8.
- Ren, J., Jie, C.Y., Zhou, Q.X., Li, X.H., Hyde, K.D., Jiang, Y.L., Zhang, T.Y. and Wang, Y., 2013. Molecular and morphological data reveal two new species of *Scolecobasidium*. *Mycoscience*, 54(6), pp.420-425.
- Ren, Q. and Li, S., 2013. New records of crustose lichens from China—1. *Mycotaxon*, 125(1), pp.65-67.
- Ren, S.C., Ma, J. and Zhang, X.G., 2012. Two new *Heteroconium* species and two other forest microfungi newly recorded from China. *Mycotaxon*, 119(1), pp.361-367.
- Ren, S.C., Ma, J. and Zhang, X.G., 2013. Two new *Ellisembia* species from Hainan and Yunnan, China. *Mycotaxon*, 122(1), pp.83–87.
- Renobales G, Aguirre B (1990) The nomenclature and systematic position of the genus *Encephalographa*. *Syst Ascomycetum* 8:87–92.
- RESL P, MAYRHOFER H, CLAYDEN SR, SPRIBILLE T, THOR G, TØNSBERG T, SHEARD JW. Morphological, chemical and species delimitation analyses provide new taxonomic insights into two groups of *Rinodina*. *The Lichenologist*. 2016;48(5):469-88.
- Resl P, Schneider K, Westberg M, Printzen C, Palice Z, Thor G, Fryday A, Mayrhofer H, Spribille T (2015) Diagnostics for a troubled backbone: testing topological hypotheses of trapelioid lichenized fungi in a large-scale phylogeny of *Ostropomycetidae* (Lecanoromycetes). *Fungal Divers*. 73(1): 239–258
- Resl, P., Clayden, S., Mayrhofer, H., Spribille, T., Thor, G., Tonsberg, T. and Sheard, J. W. 2016. Morphological, chemical and species delimitation analyses provide new taxonomic insights into two groups of *Rinodina* Unpublished 2 (bases 1 to 823) submitted (01-APR-2016).
- Reynolds, D.R. (1989). *Briania* gen. nov. and *Briania fruticetum* sp. nov.. *Pacific Sci.* 43(2): 161-165.
- Reynolds, D.R. (2010). Epifoliar fungi of Singapore. *Gdns' Bull. Singapore*, 61(2): 401-435.
- Richard, E., Damstra, E., Zakharov, E. V., Laberge, F., Collins, G. E., Blagoev, G. A., Grainge, G., Ansell, G., Meredith, G., Hogg, I., Mckeown, J., Topan, J., Bracey, J., Guenther, J., Sills-Gilligan, J., Addesi, J., Persi, J., Layton, K. K., D'Souza, K., Dorji, K., Grundy, K., Nghidinwa, K., Ronnenberg, K., Lee, K. M., Xie, L., Lu, L., Penev, L., Gonzalez, M., Rosati, M. E., Kekkonen, M., Kuzmina, M., Iskandar, M., Mutanen, M., Fatahi, M., Pentinsaari, M., Bauman, M., Nikolova, N., Ivanova, N. V., Jones, N., Weerasuriya, N., Monkhouse, N., Lavinia, P. D., Jannetta, P., Hanisch, P. E.,

- Mcmullin, R. T., Ojeda Flores, R., Mouttet, R., Vender, R., Labbee, R. N., Forsyth, R., Lauder, R., Dickson, R., Kroft, R., Miller, S. E., Macdonald, S., Panthi, S., Pedersen, S., Sobek-Swant, S., Naik, S., Lipinskaya, T., Eagalle, T., Decaens, T., Kosuth, T., Braukmann, T., Woodcock, T., Roslin, T., Zammit, T., Campbell, V., Dinca, V., Peneva, V., Hebert, P. D. and Dewaard, J. R. 2015. Biodiversity inventories in high gear: DNA barcoding facilitates arapid biotic survey of a temperate nature reserve Biodivers Data J 3, E6313.
- Richardson M. J. (2008). Records of Coprophilous Fungi from the Lesser Antilles and Puerto Rico. *Caribbean Journal of Science* 44(2):206-214. 2008.
- Rico VJ, Calatayud V, Giralt M (2003) *Buellia tesserata* and *Dimelaena radiata*, two closely related species. *Lichenologist* 35:117-124.
- Riddell, J., Jovan, S.A.R.A.H., Padgett, P. and Sweat, K., 2011. Tracking lichen community composition changes due to declining air quality over the last century: the Nash legacy in Southern California.
- Rifai, M.A. (2008). Another note on *Podoconis megasperma* Boedijn (Hyphomycetes). *Reinwardtia* 12(4): 277-279.
- Rikkinen J, Tuovila H, Beimforde C, Seyfullah L, Perrichot V, Schmidt AR. *Chaenothecopsis neocaledonica* sp. nov.: The first resinicolous mycocalicioid fungus from an araucarian conifer. *Phytotaxa*. 2014 Jun 20;173(1):49-60.
- Rincon-Espitia, A. and Mateus, N., 2013. Morphological and anatomical characterization of the genus *Stereocaulon hoffmann* (Lichenized ascomycetes) in Colombia. *Caldasia*, 35(2), pp.241-260.
- Rivas Plata E, Lücking R (2012) High diversity of Graphidaceae (lichenized Ascomycota: Ostropales) in Amazonian Perú. *Fungal Divers* 58:13–32
- Rivas Plata E, Lücking R, Lumbsch HT (2012) A new classification for the family Graphidaceae (Ascomycota: Lecanoromycetes: Ostropales). *Fungal Divers* 52:107–121
- Rivas Plata E, Lücking R, Sipman HJM, Mangold A, Kalb K, Lumbsch HT (2010) A world-wide key to the thelotremoid Graphidaceae, excluding the *Ocellularia*-*Myriotrema*-*Stegobolus* clade. *Lichenologist* 42:139–185
- Rivas Plata E, Parnmen S, Staiger B, Mangold A, Frisch A, Weerakoon G, Hernández MJE, Cáceres MES, Kalb K, Sipman HJM, Common RS, Nelsen MP, Lücking R, Lumbsch HT (2013) A molecular phylogeny of Graphidaceae (Ascomycota, Lecanoromycetes, Ostropales) including 428 species. *MycKeys* 6:55–94
- Rivas Plata et al. 2010a: E. Rivas Plata, R. Lücking, H. J. M. Sipman, A. Mangold, K. Kalb and H. T. Lumbsch 2010: A world-wide key to the thelotremoid Graphidaceae, excluding the *Ocellularia*-*Myriotrema*-*Stegobolus* clade. - *Lichenologist* 42(2): 139-185.
- Rivas Plata et al. 2010b: E. Rivas Plata, K. Kalb and A. Frisch 2010: *Wirthiotrema*: a new genus for the *Thelotrema glaucopallens* group (Ascomycota: Ostropales: thelotremoid Graphidaceae). - *Lichenologist* 42(2): 187-202.
- Rivas Plata et al. 2012a: Rivas Plata, E./ R. Lücking/ H. T. Lumbsch 2012: A new classification for the family Graphidaceae (Ascomycota: Lecanoromycetes: Ostropales). - *Fungal Diversity* 52: 107-121
- Rivas Plata et al. 2012b: Rivas Plata, E. , R. Lücking & H.T. Lumbsch, Molecular phylogeny and systematics of the *Ocellularia* clade (Ascomycota: Ostropales: Graphidaceae). *Taxon* 61(6): 1161-1179.
- Rivas Plata ET, Lücking R, Lümbusch HT, Chaves JL (2008) *Gyrotrema wirthii*, a new species of *Gyrotrema* (Ascomycota: Ostropales: Graphidaceae) from Costa Rica. *Sauteria*. 15:417–420.

- Rivera-Orduña FN, Suarez-Sanchez RA, Flores-Bustamante ZR, Gracida-Rodriguez JN, Flores-Cotera LB. Diversity of endophytic fungi of *Taxus globosa* (Mexican yew). *Fungal Diversity*. 2011 Mar 1;47(1):65-74.
- Rizzi, G. and Giordani, P., 2013. The ecology of the lichen genus *Xanthoparmelia* in Italy: an investigation throughout spatial scales. *Plant Biosystems-An International Journal Dealing with all Aspects of Plant Biology*, 147(1), pp.33-39.
- Rizzi, G., Incerti, G., Ginaldi, F., Kodnik, D., Viglione, S. and Giordani, P., 2011. A contribution to the lichen flora of Sardinia. *Mycotaxon*, 115, p.535.
- Robène-Soustrade I, Jouen E, Pastou D, Payet-Hoarau M, Goble T, Linderme D, Lefeuvre P, Calmès C, Reynaud B, Nibouche S, Costet L. Description and phylogenetic placement of *Beauveria hoplocheli* sp. nov. used in the biological control of the sugarcane white grub, *Hoplochelus marginalis*, on Reunion Island. *Mycologia*. 2015 Nov 1;107(6):1221-32.
- Rocha, F.B.; Barreto, R.W.; Bezerra, J.L.; Neto, J.A.A.M. (2010). Foliar mycobiota of *Coussapoa floccosa*, a highly threatened tree of the Brazilian Atlantic forest. *Mycologia* 102(6): 1240-1252.
- Rodriguez Flakus PR, Printzen C (2014) Molecular evidence for the occurrence of the lichen genus *Biatora* (Lecanorales, Ascomycota) in the Southern Hemisphere. *Phytotaxa* 172:271–279
- Rodríguez J, D; Kirschner, R; Piepenbring, M. 2015. New species and new records of Meliolaceae from Panama. *Fungal Diversity*. 70(1):73-84
- Rogers JD, Ju YM. The Xylariaceae of the Hawaiian Islands. *North American Fungi*. 2012 Jul 27;7:1-35.
- Rogers, P.C., Rogers, R.W., Hedrich, A.E. and Moss, P.T., 2015. Lichen Monitoring Delineates Biodiversity on a Great Barrier Reef Coral Cay. *Forests*, 6(5), pp.1557-1575.
- Rojas EI, Herre EA, Mejía LC, Arnold AE, Chaverri P, et al. 2008 – *Endomelanconiopsis*, a new anamorph genus in the Botryosphaeriaeae. *Mycologia* 100, 760–775.
- Romero AI, Carmarán CC, Lorenzo LE (1999) A new species of *Coniochaeta* with a key to the species known in Argentina. *Mycological research* 103:689-695.
- Romero AI, Robledo G, LoBuglio KF, Pfister DH. *Rickiella edulis* and its phylogenetic relationships within Sarcoscyphaceae. *Kurtziana*. 2012;37:79-89.
- Romón P, De Beer ZW, Fernández M, Díez J, Wingfield BD, Wingfield MJ. Ophiostomatoid fungi including two new fungal species associated with pine root-feeding beetles in northern Spain. *Antonie van Leeuwenhoek*. 2014 Dec 1;106(6):1167-84.
- Romón, P.; De Beer, Z.W.; Fernández, M.; Díez, J.; Wingfield, B.D.; Wingfield, M.J. 2014. Virulence of fungal species associated with pine root-feeding beetles in northern Spain, with the description of two new species. *Antonie van Leeuwenhoek*.
- Root, H.T. and McCune, B., 2012. Regional patterns of biological soil crust lichen species composition related to vegetation, soils, and climate in Oregon, USA. *Journal of Arid Environments*, 79, pp.93-100.
- Root, H.T., McCune, B. and Jovan, S., 2014. Lichen communities and species indicate climate thresholds in southeast and south-central Alaska, USA. *The Bryologist*, 117(3), pp.241-252.
- Root, H.T., McCune, M. and McCune, B., 2013. Wind farm potential is higher in prime habitat for uncommon soil crust lichens. *Ecological Processes*, 2(1), p.1.
- Root, H.T., Miller, J.E. and McCune, B., 2011. Biotic soil crust lichen diversity and conservation in shrub-steppe habitats of Oregon and Washington. *The Bryologist*, 114(4), pp.796-812.

- Ropars J, Cruaud C, Lacoste S, Dupont J. A taxonomic and ecological overview of cheese fungi. *International journal of food microbiology*. 2012 Apr 16;155(3):199-210.
- Ropars J, Cruaud C, Lacoste S, Dupont J. A taxonomic and ecological overview of cheese fungi. *International journal of food microbiology*. 2012 Apr 16;155(3):199-210.
- Rosentreter, R., Rai, H. and Upreti, D.K., 2014. Distribution ecology of soil crust lichens in India: a comparative assessment with global patterns. In *Terricolous lichens in India* (pp. 21-31). Springer New York.
- Rosenzweig, N., Olaya, G., Atallah, Z.K., Cleere, S., Stanger, C. and Stevenson, W.R., 2008. Monitoring and tracking changes in sensitivity to azoxystrobin fungicide in *Alternaria solani* in Wisconsin. *Plant Disease*, 92(4), pp.555-560.
- Rosling A, Cox F, Cruz-Martinez K, Ihrmark K, Grelet GA, Lindahl BD, Menkis A, James TY. Archaeorhizomycetes: unearthing an ancient class of ubiquitous soil fungi. *Science*. 2011 Aug 12;333(6044):876-9.
- Rosow, L., Jiang, J.X., Deuel, T., Lechpammer, M., Zamani, A.A., Milner, D.A., Folkerth, R., Marty, F.M. and Kesari, S., 2011. Cerebral phaeohyphomycosis caused by *Bipolaris spicifera* after heart transplantation. *Transplant Infectious Disease*, 13(4), pp.419-423.
- Rossi W, Bernardi M, Torres JA. New species of *Dimeromyces* from Ecuador. *Mycological progress*. 2015 Feb 1;14(2):5.
- Rossi W. & Leonardi M. (2012). New species of *Stigmatomyces* (Laboulbeniomyces) from Sierra Leone. *Plant Biosystems* iFirst article: 1-5.
- Rossi W. & Santamaría S. (2008). New Laboulbeniales parasitic on endogean ground beetles. *Mycologia* 100(4): 636-641.
- Rossi W. & Santamaría S. (2012) *Rodaucea*, a new genus of the Laboulbeniales. *Mycologia* 104:785–788, doi:10.3852/11-337
- Rossi W. & Weir A. (2011). New species of *Stigmatomyces* from Asia. *Mycologia* 103(1): 131-134.
- Rossi W., Bernardi M., Torres J.A. 2016. New species of *Laboulbenia* parasitic on leaf beetles. *Mycological Progress* 15: 1-7. doi:10.1007/s11557-015-1146-8
- Rossi W., Haelewaters D. & Pfister D. (2016) Fireworks under the microscope: a spectacular new species of *Zodiomyces* from the Thaxter collection. *Mycologia*
- Rossi W., Haelewaters D., Pfister D.H. 2016. Fireworks under the microscope: a spectacular new species of *Zodiomyces* from the Thaxter collection. *Mycologia* 108 (4): 709-715. doi:10.3852/15-148
- Rossi, W. & Bergonzo, E. (2008): New and Interesting Laboulbeniales from Brazil. *Aliso* 26(1): 1-8.
- Rossi, W. & Santamaria, S. (2008) *Cesariella*, a new genus of Laboulbeniales. *Mycological Research* 112(8): 917-920.
- Rossi, W. & Santamaría, S. (2015) New species of *Aporomyces*. *Turkish Journal of Botany* 39: 354-358.
- Rossi, W. & Weir, A. (2008) New Species of *Cucujomyces* (Laboulbeniales) on Chilean Leiodidae. *Aliso* 26(1): 9-14.
- Rossi, W. (2010). New Laboulbeniales (Ascomycota) parasitic on Staphylinidae from Ecuador. *Mycol. Progr.* 9(3): 407-415
- Rossi, W.; Ponziani, P.R. 2008. New Laboulbeniales (Ascomycotina) from French Guyana. *Cryptogamie Mycologie*. 29(1):3-9.
- Rossi, W.; Proano Castro, A.C. (2009). New species of *Rhachomyces* from Ecuador, one of which is dimorphic. *Mycologia* 101(5): 674-680.
- Rossi, W.; Santamaria, S. 2010. New species of *Diphymyces* (Laboulbeniales, Ascomycota). *Mycological Progress*. 9(4):597-601

- Rossi, W.; Weir, A. (2008). New species of *Cucujomyces* (Laboulbeniales) on Chilean Leiodidae. *Aliso* 26: 9-14.
- Rossmann A.Y., Farr D.F., Castlebury L.A. 2007. A review of the phylogeny and biology of the Diaporthales. *Mycoscience* 48: 135-144.
- Rossmann A.Y., Adams G.C., Cannon P.F., Castlebury L.A., Crous P.W., Gryzenhout M., Jaklitsch W.M., Mejia L.C., Stoykov D., Udayanga U., Voglmayr H., Walker D.M. (2015) Recommendations of generic names in Diaporthales competing for protection or use. *IMA Fungus* 6: 145–154.
- Rossmann A.Y., Aime M.C., Farr D.F., Castlebury L.A., Peterson K.R., Leahy R. The coelomycetous genera *Chaetomella* and *Pilidium* represent a newly discovered lineage of inoperculate discomycetes. *Mycological Progress*. 2004 Nov 1;3(4):275-90.
- Rossmann A.Y., Allen W.C., Braun U., Castlebury L.A., Chaverri P., Crous P.W., Hawksworth D.L., Hyde K.D., Johnston P., Lombard L., Romberg M., Samson R.A., Seifert K.A., Stone J.K., Udayanga D., White J.F. (2016) Overlooked competing asexual and sexually typified generic names of Ascomycota with recommendations for their use or protection. *IMA Fungus* 7: 285–304.
- Rossmann A.Y., Allen W.C., Castlebury L.A. 2016 New combinations of plant-associated fungi resulting from the change to one name for fungi. *IMA Fungus* 7(1): 1-7.
- Rossmann, A.Y., 2014. Lessons learned from moving to one scientific name for fungi. *IMA fungus*, 5(1), pp.81-89.
- Rossmann, A.Y., Manamgoda, D.S. and Hyde, K.D., 2013. (2233) Proposal to conserve the name *Bipolaris* against *Cochliobolus* (Ascomycota: Pleosporales: Pleosporaceae). *Taxon*, 62(6), pp.1331-1332.
- Rossmann, A.Y., Seifert, K.A., Samuels, G.J., Minnis, A.M., Schroers, H.J., Lombard, L., Crous, P.W., Pödlmaa, K., Cannon, P.F., Summerbell, R.C. and Geiser, D.M., 2013. Genera in Bionectriaceae, Hypocreaceae, and Nectriaceae (Hypocreales) proposed for acceptance or rejection. *IMA fungus*, 4(1), pp.41-51.
- Rossmann, A.Y.; Allen, W.C.; Castlebury, L.A. 2016. New combinations of plant-associated fungi resulting from the change to one name for fungi. *IMA Fungus*. 7:1-7.
- Rossmann, A.Y.; Allen, W.C.; Braun, U.; Castlebury, L.A.; Chaverri, P. et al. 2016. Overlooked competing asexual and sexually typified generic names of Ascomycota with recommendations for their use or protection. *IMA Fungus*. 7(2):289-308
- Rossmann, A., Melgar, J., Walker, D., Gonzales, A., Ramirez, T. and Rivera, J. 2012 First Report of *Dolabra nepheliae* Associated with Corky Bark Disease of Rambutan and Pulasan in Honduras. *Plant Dis.* 96 (5), 765.
- Rossmann, B., Müller, H., Smalla, K., Mpiira, S., Tumuhairwe, J.B., Staver, C. and Berg, G. 2012 Banana-associated microbial communities in Uganda are highly diverse but dominated by enterobacteriaceae. *Appl. Environ. Microbiol.* 78 (14), 4933-4941.
- Rotter, M., 2010. A preliminary list of the lichen flora of the San Francisco Presidio. *Bulletin of the California Lichen Society*, 17(1-2), pp.23-26.
- Rout, J., Singha, A.B. and Upreti, D.K., 2010. Pigment Profile and Chlorophyll Degradation of *Pyxine cocoes* lichen: A Comparative Study of the Different Degree of Disturbance in Cachar District, Assam. *Assam University Journal of Science and Technology*, 5(1), pp.85-88.
- Roux C, Gueidan C. Du novaj specioj de Verrucariaceae el Pyrénées-Orientales (Farncio): *Placocarpus melanophthalmosus* sp. nov. kaj *Placopyrenium breussii* sp. nov. *Bulletin de la Société Linnéenne de Provence* num. spec. 2011;14:163-76.
- Roux, C. (2009). *Naetrocymbe saxicola*, likeno kun *Trentepohlia*. *Bull. Soc. linn. Provence* 60: 127-142

- Rubini A, Belfiori B, Passeri V, Falini LB, Arcioni S, Riccioni C, Paolocci F. The AD-type ectomycorrhizas, one of the most common morphotypes present in truffle fields, result from fungi belonging to the *Trichophaea woolhopeia* species complex. *Mycorrhiza*. 2011 Jan 1;21(1):17-25.
- Rubio, C., Saavedra, M., Cuéllar, M., Díaz, R. and Quilhot, W., 2013. Epiphytic lichens of Conguillío National Park, southern Chile/Líquenes epífitos en el Parque Nacional Conguillío, sur de Chile. *Gayana. Botanica*, 70(1), p.66.
- Rubio, E.; Tabarés, M.; Martínez, M.A. 2011. *Marcelleina parvispora* (Ascomycota, Pezizales), a new *Marcelleina* species from Catalonia (Spain). *Revista Catalana de Micologia*. 32:31-35
- Rubio, E.; Tena, R.; Ormad, J.; Suárez, A. 2010. *Ruhlandiella reticulata* comb. nov. y *Ruhlandiella truncata* comb. nov. (Ascomycota, Pezizales) Nuevas combinaciones para dos raras especies semihípoceas, eucaliptícolas y pirófilas de origen austral: *Muciturbo reticulatus* y *Muciturbo truncatus*. *Revista Catalana de Micologia*. 32:23-30
- Ruibal R, Millanes AM, Hawksworth DL (2011) Molecular phylogenetic studies on the lichenicolous *Xanthoriicola physciae* reveal Antarctic rock-inhabiting fungi and *Piedraia* species among closest relatives in the *Teratosphaeriaceae*. *IMA Fungus* 2: 97-103.
- Ruibal, C., Gueidan, C., Selbmann, L., Gorbushina, A. A., Crous, P. W., Groenewald, J. Z., ... & Staley, J. T. (2009). Phylogeny of rock-inhabiting fungi related to *Dothideomycetes*. *Studies in Mycology* 64, 123-133.
- Ruibal, C., Platas, G., & Bills, G. F. (2005). Isolation and characterization of melanized fungi from limestone formations in Mallorca. *Mycological Progress* 4, 23-38.
- Ruibal, C., Platas, G., & Bills, G. F. (2008). High diversity and morphological convergence among melanised fungi from rock formations in the Central Mountain System of Spain. *Persoonia* 21, 93-110.
- Ruíz, R.F.C., Iturriaga, T., Abarca, G.H., Minter, D.W., Gené, J., Stadler, M., Saikawa, M. and Silvera-Simón, C., 2008. Notes on *Heteroconium* and a new species from Venezuela. *Mycotaxon*, 105, pp.175-184.
- Ruiz-González, M.X., Lauth, J., Leroy, C., Jauneau, A., Gryta, H., Jargeat, P., Dejean, A. and Orivel, J., 2013. An efficient protocol for isolating melanised chaetothyrialean anamorphic fungi associated with plant-ants. *Journal of basic microbiology*, 53(1), pp.98-100.
- Rungindamai N, Sakayaroj S, Somrithipol S, Plaingam N, Jones EBG (2012) Phylogeny of the appendaged coelomycete genera: *Pseudorobillarda*, *Robillarda*, and *Xepiculopsis* based on nuclear ribosomal DNA sequences. *Cryptogamie Mycologie* 33:319–332
- Rungjindamai, N., Sakayaroj, J., Plaingam, N., Somrithipol, S. and Jones, E.G., 2008. Putative basidiomycete teleomorphs and phylogenetic placement of the coelomycete genera: *Chaetospermum*, *Giulia* and *Mycotribulus* based on nu-rDNA sequences. *Mycological research*, 112(7), pp.802-810.
- Ryan B (1989) The genus *Cladidium* (lichenized Ascomycotina). *Mycotaxon* 34(2):697–712.
- S. Marincowitz, T.A. Duong, Z.W. De Beer, M.J. Wingfield. 2015. *Cornuvesica*: A little known mycophilic genus with a unique biology and unexpected new species. *Fungal Biology*. 119:615-630.
- S.H. Feuerstein, I.P.R. Cunha-Dias, A. Aptroot, S. Eliasaro & M.E.S. Cáceres. 2014. Three new *Diorygma* (Graphidaceae) species from Brazil, with a revised world key. *Lichenologist* 46: 753-761.

- Saag, A., Randlane, T., Saag, L., Thell, A. and Ahti, T., 2013. Third world list of cetrarioid lichens, a databased tool for documentation of nomenclatural data—lessons learned. *Taxon*, 62(3), pp.591-603.
- Saag, L., Mark, K., Saag, A. and Randlane, T., 2014. Species delimitation in the lichenized fungal genus *Vulpicida* (Parmeliaceae, Ascomycota) using gene concatenation and coalescent-based species tree approaches. *American journal of botany*, 101(12), pp.2169-2182.
- Sabirov, A., Hamilton, R.G., Jacobs, J.B., Hillman, D.E., Lebowitz, R.A. and Watts, J.D., 2008. Role of local immunoglobulin E specific for *Alternaria alternata* in the pathogenesis of nasal polyposis. *The Laryngoscope*, 118(1), pp.4-9.
- Saccardo, P.A., 1892. Supplementum universale, Pars II. Discomyceteae-hyphomyceteae. *Sylloge Fungorum*, 10, pp.1–964.
- Saccante M, Woods GL. 2010. Clinical and laboratory update on Blastomycosis. *Clin Microbiol Rev* 23:367–381.
- Saenz GS, Taylor JW (1999a). Phylogeny of the Erysiphales (powdery mildews) inferred from internal transcribed spacer (ITS) ribosomal DNA sequences. *Canadian Journal of Botany* 77: 150–169.
- Saha, D., Fetzner, R., Burkhardt, B., Podlech, J., Metzler, M., Dang, H., Lawrence, C. and Fischer, R., 2012. Identification of a polyketide synthase required for alternariol (AOH) and alternariol-9-methyl ether (AME) formation in *Alternaria alternata*. *PLoS One*, 7(7), p.e40564.
- Saha, S., Sarkar, J., Chattopadhyay, D., Patra, S., Chakraborty, A. and Acharya, K., 2010. Production of silver nanoparticles by a phytopathogenic fungus *Bipolaris nodulosa* and its antimicrobial activity. *Dig J Nanomater Biostruct*, 5(4), pp.887-895.
- Sakayaroj J, Pang KL, Jones EBG (2011) Multi-gene phylogeny of the Halosphaeriaceae: its ordinal status, relationships between genera and morphological character evolution. *Fungal Divers* 46:87–109.
- Sakayaroj J, Supaphon O, Jones EBG, Phongpaichit S (2011) Diversity of higher marine fungi at Hat Khanom-Mu Ko Thale Tai National Park, Southern Thailand. *Songklanakarin J. Sci. Technol.* 33(1):15–22
- Salgado-Salazar C, Rossman A, Samuels GJ, Capdet M, Chaverri P. Multigene phylogenetic analyses of the *Thelonectria coronata* and *T. veuillotiana* species complexes. *Mycologia*. 2012 Nov 1;104(6):1325-50.
- Salgado-Salazar, C; Rossman, A.M; Samuels, G.J; Hirooka, Y; Sanchez, R.M; Chaverri, P. 2014. Phylogeny and taxonomic revision of *Thelonectria discophora* (Ascomycota, Hypocreales, Nectriaceae) species complex. *Fungal Diversity*. 70(1):1-29.
- Salgado-Salazar, C; Rossman, A.Y; Chaverri, P. 2016. The genus *Thelonectria* (Nectriaceae, Hypocreales, Ascomycota) and closely related species with cylindrocarpon-like asexual states. *Fungal Diversity*. 80:411-455
- Salgüero, R., Borman, A.M., Herrtage, M., Benckekroun, G., Abbondati, E., Piola, V. and Vanhaesebrouck, A., 2013. *Rasamsonia argillacea* mycosis in a dog: first case in Europe. *Veterinary Record Case Reports*, 1(1), p.e101373.
- Samerpitak K, van den Ende BH, Stielow JB, Menken SB, de Hoog GS. Barcoding and species recognition of opportunistic pathogens in *Ochroconis* and *Verruconis*. *Fungal biology*. 2016 Feb 29;120(2):219-30.
- Samerpitak, K., Van der Linde, E., Choi, H.J., van den Ende, A.G., Machouart, M., Gueidan, C. and De Hoog, G.S., 2014. Taxonomy of *Ochroconis*, genus including opportunistic pathogens on humans and animals. *Fungal Diversity*, 65(1), pp.89-126.
- Samerpitak, K; Gerrits van den Ende, A.H.G; Menken, S.B.J; de Hoog, G.S. 2015. Three new species of the genus *Ochroconis*. *Mycopathologia*. 180(1):7-17

- Samerpitak, K., van der Linde, E., Choi, H.-J., Gerrits van den Ende, A.H.G., Machouart, M., Gueidan, C. and de Hoog, G.S. 2014 Taxonomy of *Ochroconis*, genus including opportunistic pathogens on humans and animals. *Fungal Divers.* 65, 89-126.
- Samón-Legrá E, Lavandera DE, González MC (2014) A Preliminary Checklist of Marine Fungi from Zapata Swamp Biosphere Reserve, South of Cuba. *Middle-East Journal of Scientific Research* 21:1771–1775
- Samson RA, Visagie CM, Houbraken J, Hong S-B, Hubka V, Klaassen CHW, Perrone G, Seifert KA, Susca A, Tanney JB, Varga J, Kocsubé S, Szigeti G, Yaguchi T, Frisvad JC. 2014. Phylogeny, identification and nomenclature of the genus *Aspergillus*. *Studies in Mycology* 78:141–173.
- Samson RA, Yilmaz N, Houbraken J, Spierenburg H, Seifert KA, Peterson SW, Varga J, Frisvad JC. Phylogeny and nomenclature of the genus *Talaromyces* and taxa accommodated in *Penicillium* subgenus *Biverticillium*. *Studies in Mycology*. 2011 Sep 30;70:159-83.
- Samson RA, Yilmaz N, Houbraken J, Spierenburg H, Seifert KA, Peterson SW, Varga J, Frisvad JC. 2011. Phylogeny and nomenclature of the genus *Talaromyces* and taxa accommodated in *Penicillium* subgenus *Biverticillium*. *Stud Mycol* 70:159–183.
- Samson, R.A.; Evans, H.C. 1982. *Clathroconium*, a new helicosporous hyphomycete genus from spiders. *Canadian Journal of Botany*. 60(8):1577-1580
- Samuels G.J. and M. E. Barr (1997) Notes on and additions to the *Niessliaceae* (*Hypocreales*). *Canadian Journal of Botany* 75:2165–2175
- Samuels, G.J.; Barr, M.E. 1997. Notes on and additions to the *Niessliaceae* (*Hypocreales*). *Canadian Journal of Botany*. 75(12):2165-2176.
- Samuels, G.J.; Müller, E.; Petrini, O. 1987. Studies on the *Amphisphaeriaceae* (sensu lato) 3. New species of *Monographella* and *Pestalosphaeria* and two new genera. *Mycotaxon*. 28(2):473-499.
- Sánchez RM, Giordano L, Anderson FE, Bianchinotti M. A new species of *Scopinella* from pampas grass in Argentina. *Mycotaxon*. 2013 Mar 4;122(1):265-70.
- Sánchez S, Gómez E, Martín M, De Miguel AM, Urban A, Barriuso J. Experiments on the life cycle and factors affecting reproduction of *Sphaerospora brunnea* provide evidence for rapid asexual propagation by conidiospores and for homothallism in an ectomycorrhizal competitor of cultivated truffle species. *Fungal Ecology*. 2014 Apr 30;8:59-65.
- Sánchez, F.J., Meeßen, J., ^a del Carmen Ruiz, M., Leopoldo, G., Ott, S., Vílchez, C., Horneck, G., Sadowsky, A. and de la Torre, R., 2014. UV-C tolerance of symbiotic *Trebouxia* sp. in the space-tested lichen species *Rhizocarpon geographicum* and *Circinaria gyrosa*: role of the hydration state and cortex/screening substances. *International Journal of Astrobiology*, 13(01), pp.1-18.
- Sanders, W.B. and de los Rios, A., 2016. Structure of foliicolous thalli of the Gomphillaceae in a south-western Florida lichen community. *The Lichenologist*, 48(04), pp.293-303.
- Sanders, W.B. and Lücking, R., 2015. Three new species of foliicolous Gomphillaceae (lichen-forming ascomycetes) from southern Florida. *The Bryologist*, 118(2), pp.170-177.
- Sanders, W.B./ de los Ríos, A. 2016: Structure of foliicolous thalli of the Gomphillaceae in a south-western Florida lichen community. - *The Lichenologist* 48(4): 293-303.
- Sanderson NA, Hawksworth DL, Aptroot A (2009) *Melaspilea* Nyl.. In: Smith CW, Aptroot A, Coppins BJ, Fletcher A, Gilbert OL, James PW, Wolseley PA (Eds). *The lichens of Great Britain and Ireland*. British Lichen Society, 576–579.

- Sandoval-Denis M, Gené J, Sutton DA, Wiederhold NP, Guarro J (2015) *Acrophialophora*, a poorly known fungus with clinical significance. *Journal of Clinical Microbiology* 53:1549–1555
- Sandoval-Denis M, Guarro J, Cano-Lira JF, Sutton DA, Wiederhold NP, de Hoog GS, Abbott SP, Decock C, Sigler L, Gené J. Phylogeny and taxonomic revision of Microascaceae with emphasis on synnematosus fungi. *Studies in Mycology*. 2016 Mar 31;83:193-233.
- Sandoval-Denis, M; Gené, J; Sutton, D.A; Cano-Lira, J.F; de Hoog, G.S; Decock, C.A; Wiederhold, N.P; Guarro, J. 2015. Redefining *Microascus*, *Scopulariopsis* and allied genera. *Persoonia*. 36:1-36
- SANDOVAL-LEIVA P., CARMARÁN C.C., PARK D., ROMERO A.I. & P.R. JOHNSTON (2014) *Vibrissaceae* fungi from the southern hemisphere, including *Chlorovibrissa chilensis* (Helotiales, incertae sedis) sp. nov. *Mycologia* 106(6): 1159-1167.
- Sang H, An T, Kim CS, Shin GS, Sung GH, Yu SH. 2013. Two novel *Talaromyces* species isolated from medicinal crops in Korea. *J Microbiol* 51:704–708.
- Sanjuan TI, Franco-Molano AE, Kepler RM, Spatafora JW, Tabima J, Vasco-Palacios AM, Restrepo S. Five new species of entomopathogenic fungi from the Amazon and evolution of neotropical *Ophiocordyceps*. *Fungal Biology*. 2015 Oct 31;119(10):901-16.
- SANOAMUANG N., JITJAK W., RODTONG S. & WHALLEY A. (2013) *Gelatinomyces siamensis* gen. sp. nov. (Ascomycota, Leotiomycetes incertae sedis) on bamboo in Thailand. *IMA FUNGUS* 4(1): 71–87.
- Santa Izabel, T.S., Cruz, A.C.R. and Gusmão, L.F.P., 2013. Conidial fungi from the semi-arid Caatinga biome of Brazil. *Ellisembiopsis* gen. nov., new variety of *Sporidesmiella* and some notes on *Sporidesmium* complex. *Mycosphere*, 4, pp.156–163.
- Santamaría S. 2008. Laboulbeniales on semiaquatic Heteroptera. A new species of *Triceromyces* (Ascomycota, Laboulbeniales) on *Microvelia* (Heteroptera, Veliidae) from Spain. *Aliso* 26: 15-21.
- Santamaría S., Enghoff H., & Reboleira A.S.P.S. (2014). Laboulbeniales on millipedes: *Diplopodomycetes* and *Troglomyces*. *Mycologia* 106 (5): 1027–1038
- Santamaría S., Enghoff H., & Reboleira A.S.P.S. (2016). Hidden biodiversity revealed by collections-based research—Laboulbeniales in millipedes: genus *Rickia*. *Phytotaxa* 243 (2): 101–127
- Santamaría S., Enghoff H., Reboleira A.S.P.S. 2016. Hidden biodiversity revealed by collections-based research—Laboulbeniales in millipedes: genus *Rickia*. *Phytotaxa* 243 (2): 101-127. doi:10.11646/phytotaxa.243.2.1
- Santamaría, S. 2006. New or interesting Laboulbeniales (Fungi, Ascomycota) from Spain, V. *Nova Hedwigia*. 82(3-4):349-363
- Santamaría, S.; Faille, A. (2009). New species of *Laboulbenia* and *Rhachomyces* (Laboulbeniales, Ascomycota), some of them polymorphic, parasitic on termiticolous ground beetles from tropical Africa. *Nova Hedwigia* 89(1-2): 97-120.
- Santamaría, S.; Enghoff, H.; Reboleira, A.S.P.S. 2014. Laboulbeniales on millipedes: the genera *Diplopodomycetes* and *Troglomyces*. *Mycologia*. 106(5):1027-1038.
- Santos MD, Fonseca ME, Boiteux LS, Dianese JC. First approach to molecular phylogeny within the genus *Phyllachora*. In *PHYTOPATHOLOGY* 2012 Jul 1 (Vol. 102, No. 7, pp. 105-105). 3340 PILOT KNOB ROAD, ST PAUL, MN 55121 USA: AMER PHYTOPATHOLOGICAL SOC.

- Santos-Flores C.J. & Betancourt-López C. 1997. Aquatic and waterborne hyphomycetes (Deuteromycotina) in streams of Puerto Rico (including records from other Neotropical locations). College of Arts and Sciences, University of Puerto Rico, Mayaguez
- Sanz-Ros AV, Müller MM, San Martín R, Diez JJ. Fungal endophytic communities on twigs of fast and slow growing Scots pine (*Pinus sylvestris* L.) in northern Spain. *Fungal Biology*. 2015 Oct 31;119(10):870-83.
- Saravanakumar, D., Ciavarella, A., Spadaro, D., Garibaldi, A. and Gullino, M.L., 2008. *Metschnikowia pulcherrima* strain MACH1 outcompetes *Botrytis cinerea*, *Alternaria alternata* and *Penicillium expansum* in apples through iron depletion. *Postharvest Biology and Technology*, 49(1), pp.121-128.
- Sarı and Tuzen (2010; biosorption), Karagöz et al. (2011; new species), Pisani et al. (2011; physiology), Aptroot and Aslan (2012; new records), Beck and Mayr (2012; physiology), Demiray et al. (2012; biomonitoring), Kirk et al. (2013; accepted as a valid genus), Kondratyuk et al. (2013; new species), Nyati et al. (2013; phylogeny), Motiejunaite and Grochowski (2014; new records), Joshi et al. (2015; checklist), Kaya et al. (2015; natural product), Anar et al. (2016; Antigenotoxic and Antioxidant study), molecular data unavailable for type species.
- Sarı, A. and Tuzen, M., 2010. Biosorption of As (III) and As (V) from aqueous solution by lichen (*Xanthoria parietina*) biomass. *Separation Science and Technology*, 45(4), pp.463-471.
- Sarkar, J., Ray, S., Chattopadhyay, D., Laskar, A. and Acharya, K., 2012. Mycogenesis of gold nanoparticles using a phytopathogen *Alternaria alternata*. *Bioprocess and biosystems engineering*, 35(4), pp.637-643.
- Sarma (2015) A dichotomous key to genera of marine fungi recorded on *Rhizophora* spp. *Indian Journal of Geo-Marine Sciences* 44:1–7
- Sarma VV, Hyde KD (2001) *Lanceispora phyllophila* sp. nov. on petioles of unknown dicotyledonous leaves in Singapore. *Mycoscience* 42:97-99
- Sarma VV, Raghukumar S (2013) Manglicolous fungi from Chorao mangroves, Goa, West coast of India: Observations on fungal species consortia. *Kavaka* 41: 18–22
- Sarma VV, Raghukumar S (2013) Manglicolous fungi from Chorao mangroves, Goa, West coast of India: Diversity and frequency of occurrence. *Nova Hedwigia* 97:533–542
- Sarma, V.V.; Hyde, K.D. 2001. Fungi from palms. XLVIII. *Curvatispora singaporensis* gen. et sp. nov. on *Livistona spinosa* from Singapore. *Nova Hedwigia*. 72:479-485.
- Sati, S.C.; Arya, P.; Belwal, M. (2009). *Tetracladium nainitalense* sp. nov., a root endophyte from Kumaun Himalaya, India. *Mycologia* 101(5): 692-695.
- Sato H., Ban, S.; Masuya, H.; Hosoya, T. (2010). Reassessment of type specimens of *Cordyceps* and its allies described by Dr Yosio Kobayasi preserved in the mycological herbarium of the National Museum of Nature and Science (TNS). Part 1: The genus *Torrubiella*. *Mycoscience* 51(2): 154-161
- Sato, H.; Ban, S.; Masuya, H.; Hosoya, T. (2010). Reassessment of type specimens of *Cordyceps* and its allies described by Dr Yosio Kobayasi, preserved in the National Museum of Nature and Science. Part 2: *Cordyceps* (*Elaphocordyceps*) on *Elaphomyces*. *Mycoscience* 51(5): 387-390
- Savić S, Tibell L, Gueidan C, Lutzoni F. Molecular phylogeny and systematics of *Polyblastia* (Verrucariaceae, Eurotiomycetes) and allied genera. *mycological research*. 2008 Nov 30;112(11):1307-18.
- Savić S, Tibell L. The lichen genus *Henrica* (verrucariaceae, eurotiomycetes) in northern europe. *Nordic Journal of Botany*. 2008 Aug 1;26(3-4):237-47.

- Savic, S.; Tibell, L. (2008). *Atla*, a new genus in the Verrucariaceae (Verrucariales). *Lichenologist* 40(4): 269-282.
- Savić, Sanja, and Leif Tibell. "Polyblastia in northern Europe and the adjacent Arctic." (2012): 1-69.
- Sbissi I, Neffati M, Boudabous A, Murat C, Gtari M. Phylogenetic affiliation of the desert truffles *Picoa juniperi* and *Picoa lefebvrei*. *Antonie van Leeuwenhoek*. 2010 Nov 1;98(4):429-36.
- Schatz S (1984) The life history, developmental morphology, and taxonomy of *Lautitia danica*, gen. nov., comb. nov. *Can J Bot* 62:28–32
- Schatz, S. 1985. *Adomia avicenniae*: a new ascomycetous genus from Red Sea and Australian mangroves. *Transactions of the British Mycological Society*. 84:555-559
- Scheuer C (1991) *Massarina tetraploa* sp. nov. the teleomorph of *Tetraploa aristata*. *Mycol Res* 95:126–128
- Scheuer, C. 1991. *Taphrophila* (Dothideales: Tubeufiaceae) and two species of *Tubeufia* with dark setae. *Mycol. Res.* 95 (7): 811-816
- Schmechel, D., Green, B.J., Blachere, F.M., Janotka, E. and Beezhold, D.H., 2008. Analytical bias of cross-reactive polyclonal antibodies for environmental immunoassays of *Alternaria alternata*. *Journal of Allergy and Clinical Immunology*, 121(3), pp.763-768.
- Schmidt V, Plenz B, Pfaff M, Pees M. Disseminated systemic mycosis in Veiled chameleons (*Chamaeleo calytratus*) caused by *Chamaeleomyces granulomatis*. *Veterinary microbiology*. 2012 Dec 28;161(1):145-52.
- Schmidt V. Fungal Infections in Reptiles—An Emerging Problem. *Journal of Exotic Pet Medicine*. 2015 Jul 31;24(3):267-75.
- Schmidt, I. 1969. *Corollospora intermedia* sp. nov., *Carbosphaerella leptosphaerioides* sp. nov., und *Crinigera maritima* nov. gen., sp. nov., drei neue marine Pilzarten von der Ostseeküste. *Natur und Naturschutz in Mecklenburg*. 7:5-14
- Schmidt, L.E., Deyrup, S.T., Baltrusaitis, J., Swenson, D.C., Wicklow, D.T. and Gloer, J.B. 2010 Hymenopsins A and B and a macrophorin analogue from a fungicolous Hymenopsis sp. *J. Nat. Prod.* 73 (3), 404-408.
- Schmitt I, Fankhauser JD, Sweeney K, Spribille T, Kalb K, Lumbsch T (2010) Gyalectoid Pertusaria species form a sister-clade to Coccotrema (Ostropomycetidae, Ascomycota) and comprise the new lichen genus Gyalectaria. *Mycology* 1(1): 75–83
- Schmitt, I., Otte, J., Parnmen, S., Sadowska-Deś, A., Luecking, R. and Lumbsch, T., 2012. A new circumscription of the genus *Varicellaria* (Pertusariales, Ascomycota). *MycKeys*, 4, p.23.
- Schmitt, I., Partida-Martinez, L.P., Winkler, R., Voigt, K., Einax, E., Dolz, F., Telle, S., Wostemeyer, J. and Hertweck, C. 2008 Evolution of host resistance in a toxin-producing bacterial-fungal alliance. *ISME J* 2 (6), 632-641.
- Schmull M, Miadlikowska J, Pelzer M, Stocker-Worgotter E, Hofstetter V, Fraker E, Hodkinson BP, Reeb V, Kukwa M, Lumbsch HT, Kauff F, Lutzoni F (2011) Phylogenetic affiliations of members of the heterogeneous lichen-forming fungi of the genus *Lecidea* sensu Zahlbruckner (Lecanoromycetes, Ascomycota). *Mycologia* 103(5): 983–1003
- Schneider K, Resl P, Westberg M, Spribille T. A new, highly effective primer pair to exclude algae when amplifying nuclear large ribosomal subunit (LSU) DNA from lichens. *The Lichenologist*. 2015 Jul 1;47(04):269-75.
- Schneider, K., Resl, P. and Spribille, T. 2016. Escape from the cryptic species trap: lichen evolution on both sides of a cyanobacterial acquisition event. *Mol. Ecol.* 25 (14), 3453-3468.

- Schoch CL, Crous PW, Groenewald JZ, Boehm EWA, Burgess TI, Gruyter J, de Hoog GS, de Dixon LJ, Grube M, Gueidan C, Harada Y, Hatakeyama S, Hirayama K, Hosoya T, Huhndorf SM, Hyde KD, Jones EBG, Kohlmeyer J, Kruys A, Li YM, Lücking R, Lumbsch HT, Marvanová L, Mbatchou JS, McVay AH, Miller AN, Mugambi GK, Muggia L, Nelsen MP, Nelson P, Owensby CA, Phillips AJL, Phongpaichit S, Pointing SB, Pujade-Renaud V, Raja HA, Plata ER, Robbertse B, Ruibal C, Sakayaroj J, Sano T, Selbmann L, Shearer CA, Shirouzu T, Slippers B, Suetrong S, Tanaka K, Volkmann-Kohlmeyer B, Wingfield MJ, Wood AR, Woudenberg JHC, Yonezawa H, Zhang Y, Spatafora JW (2009) A class-wide phylogenetic assessment of Dothideomycetes. *Studies in Mycology* 64: 1–15
- Schoch CL, Shoemaker RA, Seifert KA, Hambleton S, Spatafora JW, Crous PW (2006) A multigene phylogeny of the Dothideomycetes using four nuclear loci. *Mycologia* 98: 1041–1052.
- Schoch, C.L.; Crous, P.W.; Groenewald, J.Z.; Boehm, E.W.A.; Burgess, T.I.; Gruyter, J. de; Hoog, G.S. de; Woudenberg, J.H.C. et al., 2009. A class-wide phylogenetic assessment of Dothideomycetes. *Studies in Mycology*. 64:1-15.
- Schröter, J. 1897. *Kryptogamen-Flora von Schlesien*. 3-2(10):385-500
- Schultz M, Büdel B (2002) Key to the genera of the Lichinaceae. *Lichenologist* 34(1):39–62.
- Schultz, M. and Moon, K.H., 2011. Notes on taxonomy and distribution of some critical cyanobacterial lichens from South Korea. *Nova Hedwigia*, 92(3-4), pp.479-486.
- Schultz, M., Zedda, L. and Rambold, G. 2009. New records of lichen taxa from Namibia and South Africa. *Bibliotheca Lichenologica*, 99, pp.315-334.
- SCHUMACHER J., REINBOLD J. & AIKATERINI D. (2015) The *Lachnellula* canker of *Abies alba* – a new disease phenomenon in the German Black Forest. *Jahrbuch der Baumpflege/Yearbook of Arboriculture*: 45-51.
- Schutz, M., 2009. Home/All Titles/The Bryologist/Spring 2009/pg (s) 221-227. *The Bryologist*, 112(1), pp.221-227.
- Schwendener S (1860) *Untersuchungen über den Flechtenthallus*. Ester Teil. Die Strauchartigen Flechten. Leipzig, Germany.
- Scott JA, Ewaze JO, Summerbell RC, Arocha-Rosete Y, Maharaj A, Guardiola Y, Saleh M, Wong B, Bogale M, O’Hara MJ, Untereiner WA. Multilocus DNA sequencing of the whiskey fungus reveals a continental-scale speciation pattern. *Persoonia*. 2016;37:13-20.
- Scythioria S.Y. Kondr., Kärnefelt, Elix, A. Thell & J.S. Hur 2014, *Lecanoromycetidae*, *Lecanoromycetes*, *Pezizomycotina*, three species, asexual morph, undetermined, molecular and culture data unavailable in mycobank site and no link so data unavailable.
- Seena S, Pascoal C, Marvanova L, Cassio F (2010) DNA barcoding of fungi: a case study using ITS sequences for identifying aquatic hyphomycete species. *Fungal Diversity* 44:77–87
- Seena, S., Duarte, S., Pascoal, C. & Cassio, F., 2012. Intraspecific variation of the aquatic fungus *Articulospora tetracladia*: an ubiquitous perspective. *PLoS One* 7(4). <http://dx.doi.org/10.1371/journal.pone.0035884>;
- Seephueak P, Phongpaichit S, Hyde KD, Petcharat V. Diversity of saprobic fungi on decaying rubber logs (*Hevea brasiliensis*). *Sydowia*. 2011a;63(2):249-82.
- Seephueak P, Phongpaichit S, Hyde KD, Petcharat V. Diversity of saprobic fungi on decaying branch litter of the rubber tree (*Hevea brasiliensis*). *Mycosphere*. 2011b; 2(4), 307–330

- Seifert KA, Gams W. The genera of Hyphomycetes – 2011 update. *Persoonia: Molecular Phylogeny and Evolution of Fungi*. 2011; 27:119-129. doi:10.3767/003158511X617435.
- Seifert KA, Hughes SJ, Boulay H, Louis-Seize G. Taxonomy, nomenclature and phylogeny of three cladospore-like hyphomycetes, *Sorocybe resiniae*, *Seifertia azaleae* and the *Hormoconis* anamorph of *Amorphotheca resiniae*. *Studies in Mycology*. 2007 Dec 31;58:235-45.
- Seifert KA, Morgan-Jones G, Gams W, Kendrick B. 2011. The genera of Hyphomycetes. CBS Biodiversity Series 9, CBS-KNAW Fungal Biodiversity Centre, Utrecht, The Netherlands.
- Seifert, K.A. (1987). *Charomyces*, a new genus of hyphomycetes with thallic-arthric conidia. *Can. J. Bot.* 65(2): 230-232.
- Seifert, K.A. 1985. Notes on some apocryphal genera of synnematal Hyphomycetes. *Transactions of the British Mycological Society*. 85(1):123-133.
- Seifert, K.A. 1999. *Conicomycetes nassensis*, a new synnematal fungus from the Nass River valley, British Columbia. *Mycotaxon*. 71:301-306.
- Selbmann L, Hoog GS de, Zucconi L, Isola D, Ruisi S, et al. 2008. Drought meets acid: three new genera in a dothidealean clade of extremotolerant fungi. *Studies in Mycology* 61: 1–20.
- Selbmann, L., Isola, D., Egidio, E., Zucconi, L., Gueidan, C., de Hoog, G.S., & Onofri, S. (2014). Mountain tips as reservoirs for new rock-fungal entities: *Saxomyces* gen. nov. and four new species from the Alps. *Fungal Diversity* 65, 167-182.
- Selbmann, L., de Hoog G.S., Mazzaglia, A., Friedmann, E.I., & Onofri, S. (2005). Fungi at the edge of life: cryptoendolithic black fungi from Antarctic deserts. *Studies in Mycology* 51, 1-32.
- Selbmann, L., de Hoog, G.S., Zucconi, L., Isola, D., Ruisi, S., Gerrits, van den Ende A.H.G., Ruibal, C., De Leo, F., Urzì, C., & Onofri, S. (2008). Drought meets acid: three new genera in a dothidealean clade of extremotolerant fungi. *Studies in Mycology* 61, 1-20.
- Selçuk F, Hüseyin E, Şahin A Cebeci CC 2014 –Hyphomycetous fungi in several forest ecosystems of Black sea provinces of Turkey. *Mycosphere* 5(2), 334–344.
- Selçuk, F. and Ekici, K., 2014. A new species of *Manoharachariella* (hyphomycetes) from Central Anatolia, Turkey. *Mycosphere*, 5(3), pp. 419–423.
- Selva SB. The calicioid lichens and fungi of the Acadian Forest Ecoregion of northeastern North America, I. New species and range extensions. *The Bryologist*. 2013 Aug 6;116(3):248-56.
- Senanayake IC, Al-Sadi AM, Bhat DJ, Camporesi E, Dissanayake AJ, Lumyong S, Maharachchikumbura SSN, Hyde KD (2016) Phomatosporales ord. nov. and Phomatosporaceae fam. nov., to accommodate *Lanspora*, *Phomatospora* and *Tenuimurus*, gen. nov. *Mycosphere*, 7(5): 628-641.
- Senanayake IC, Maharachchikumbura SS, Mortimer PE, Xu J, Bhat JD, Hyde KD. Phylogenetic studies on *Vialaeaceae* reveals a novel species, *Vialaea mangiferae*. *Sydowia*. 2014 Dec 19;66(2):203-16.
- Senanayake IC, Maharachchikumbura SSN, Hyde KD, Bhat JD, Jones EBG, McKenzie EHC, Dai DQ, Daranagama DA, Dayarathne MC, Goonasekara ID, Konta S, Li WJ, Shang QJ, Stadler M, Wijayawardene NN, Xiao YP, Norphanphoun C, Li QR, Liu XZ, Bahkali AH, Kang JC, Wang Y, Wen TC, Xu JC, Camporesi E. 2015 —Towards unraveling relationships in *Xylariomycetidae* (Sordariomycetes). *Fungal Diversity* 73, 73–144.
- Şenkardeşler, A., Duman, D.C., Lökös, L. and Ahti, T., 2016. *Cladonia trapezuntica* (Cladoniaceae, lichenized Ascomycota): a robust morphotype of *Pycnothelia*

- papillaria, a taxonomic study with conservational survey. Turkish Journal of Botany, 40(1), pp.104-111.
- Seo, C., Choi, Y.H., Ahn, J.S., Yim, J.H., Lee, H.K. and Oh, H., 2009. PTP1B inhibitory effects of tridepside and related metabolites isolated from the Antarctic lichen *Umbilicaria antarctica*. Journal of enzyme inhibition and medicinal chemistry, 24(5), pp.1133-1137.
- Seo, C., Sohn, J.H., Ahn, J.S., Yim, J.H., Lee, H.K. and Oh, H., 2009. Protein tyrosine phosphatase 1B inhibitory effects of depsidone and pseudodepsidone metabolites from the Antarctic lichen *Stereocaulon alpinum*. Bioorganic & medicinal chemistry letters, 19(10), pp.2801-2803.
- Seo, M.Y., Matsuda, Y., Nakashima, C. and Ito, S.I., 2012. Taxonomic reevaluation of *Raffaelea quercivora* isolates collected from mass mortality of oak trees in Japan. Mycoscience, 53(3), pp.211-219.
- Sepeć, K., Zalar, P. and Gunde-Cimerman, N., 2010. Low water activity induces the production of bioactive metabolites in halophilic and halotolerant fungi. Marine drugs, 9(1), pp.43-58.
- Serrato-Diaz LM, Rivera-Vargas LI, Goenaga R, Verkley GJM, FrenchMonar RD (2011) First report of *Lasmeniasp.* causing rachis necrosis, flower abortion, fruit rot, and leaf spots on rambutan in Puerto Rico. Plant Dis 95(10):1313
- Sert HB, Sümbül H, Sterflinger K. Two new species of *Capnobotryella* from historical monuments. Mycological Progress. 2011 Aug 1;10(3):333-9.
- Sert HB, Wuczkowski M, Sterflinger K. *Capnobotryella isiloglui*, a new rock-inhabiting fungus from Austria. Turkish Journal of Botany. 2012 Jul 17;36(4):401-7.
- Sert HB, Sümbül H, Sterflinger K (2007) Microcolonial fungi from antique marbles in Perge/Side/Termessos (Antalya/Turkey). Antonie Van Leeuwenhoek 91:217–227
- Sérusiaux E., Goffinet B., Miadlikowska J. and Vitikainen O. 2009. Taxonomy, phylogeny and biogeography of the lichen genus *Peltigera* in Papua New Guinea. - Fungal Diversity 38: 185-224.
- Sérusiaux, E., Van den Boom, P. and Ertz, D., 2010. A two-gene phylogeny shows the lichen genus *Niebla* (Lecanorales) is endemic to the New World and does not occur in Macaronesia nor in the Mediterranean basin. Fungal biology, 114(7), pp.528-537.
- Serussiaux, E.; Brand, A.M.; Fischer, E.; Killmann, D.; Boom, P.P.G. van den; Ertz, D. (2009). A new species of *Melanotopelia* (Graphidaceae) from Africa. Lichenologist 41(3): 243-247.
- Sérusiaux, E.; Diederich, P. 2005. *Lambinonia*, a new genus for *Melanconium strigulae*, a lichenicolous hyphomycete on foliicolous species of *Strigula*. The Lichenologist. 37(6):499-506
- Sethy, P.P., Pandit, G.S. and Sharma, B.O., 2012. Lichens on mangrove plants in Andaman Islands, India. Mycosphere, 3(4), pp.476-484.
- Severn-Ellis, A., Schoeman, M.H., Willemse, S., Sippel, A., Rees, J. and De Castro, M., 2012, April. Towards guava wilt disease resistance in South Africa. In III International Symposium on Guava and other Myrtaceae 959 (pp. 73-79).
- Seyedmousavi S, Guillot J, de Hoog GS. 2013. Phaeohyphomycoses, emerging opportunistic diseases in animals. Clinical Microbiology Reviews 26:19–34.
- Seyedmousavi S, Samerpitak K, Rijs AJ, Melchers WJ, Mouton JW, Verweij PE, de Hoog GS. Antifungal susceptibility patterns of opportunistic fungi in the genera *Verruconis* and *Ochroconis*. Antimicrobial agents and chemotherapy. 2014 Jun 1;58(6):3285-92.
- Sezer, O., Özgişi, K., Yaylaci, Ö.K., Öztürk, D., Koyuncu, O. and Savaroğlu, F., 2016. Contributions to Lichen Biota of Günyüzü (Eskişehir). Journal of Applied Biological Sciences, 10(1).

- Shabana, Y.M., Abdel-Fattah, G.M., Ismail, A.E. and Rashad, Y.M., 2008. Control of brown spot pathogen of rice (*Bipolaris oryzae*) using some phenolic antioxidants. *Brazilian Journal of Microbiology*, 39(3), pp.438-444.
- Shali, A., Ghasemi, S., Ahmadian, G., Ranjbar, G., Dehestani, A., Khalesi, N., Motallebi, E. and Vahed, M., 2010. *Bacillus pumilus* SG2 chitinases induced and regulated by chitin, show inhibitory activity against *Fusarium graminearum* and *Bipolaris sorokiniana*. *Phytoparasitica*, 38(2), pp.141-147.
- Sharma BO, Khadilkar P (2011) Two additional new species of *Carbacanthographis* from India. *Lichenologist* 43:293–297
- Sharma BO, Makhija U, Khadilkar P (2010) Two species of *Carbacanthographis* from India. *Lichenologist* 42:391–395
- Sharma R, Gräser Y, Singh SK. *Auxarthronopsis*, a new genus of Onygenales isolated from the vicinity of Bandhavgarh National park, India. *IMA fungus*. 2013 Jun 30;4(1):89-102.
- Sharma R, Sharma R, Crous PW (2015) *Matsushimomyces*, a new genus of keratinophilic fungi from soil in central India. *IMA FUNGUS* 6:337–343
- Sheard, J.W., 2010. The Lichen Genus *Rinodina* (Ach.) Gray (Lecanoromycetidae, Physciaceae) in North America, North of Mexico. NRC Research Press.
- Sheard, J.W., Knudsen, K., Mayrhofer, H. and Morse, C.A., 2011. Three new species of *Rinodina* (Physciaceae) and a new record from North America. *The Bryologist*, 114(3), pp.453-465.
- Shearer BL and Crane CE (2014) Host range of the stem canker pathogen *Luteocirrhus shearii* mainly limited to *Banksia*. *Australasian Plant Pathology* Volume 43, Issue 3, pp 257–266
- Shearer CA, Crane JL (1985) *Aquadiscula appendiculata*, a new genus and species of Discomycetes from leaves submerged in a freshwater swamp. *Mycologia*, 441-446.
- Shearer CA, Miller M (1977) Fungi of the Chesapeake Bay and its tributaries V. *Aniptodera chesapeakeensis* gen. et sp. nov. *Mycologia* 69:887–898
- Shearer CA, Pang KL, Suetrong S, Raja HA (2014) Phylogeny of the Dothideomycetes and other classes of freshwater fissitunicate Ascomycota. In: Jones EBG, Hyde KD and Pang KL (eds.) *Freshwater fungi and Fungal-like Organisms*. DE GRUYTER 25–45
- Shearer CA, Raja HA (2016) Freshwater Ascomycetes and their anamorphs. Accessed August 1, 2016
- Shearer CA, Raja HA, Miller AN, Nelson P, Tanaka K, Hirayama K, Marvanova L, Hyde KD, Zhang Y (2009) The molecular phylogeny of freshwater Dothideomycetes. *Stud Mycol* 64:145–153.
- Shearer CA, Zelski SE, Raja HA, Schmit JP, Miller AN, Janovec JP (2015) Distributional patterns of freshwater ascomycetes communities along an Andes to Amazon elevational gradient in Peru. *Biodiversity and Conservation* 24 (8):1877-1897. doi:10.1007/s10531-015-0911-y
- Sheik, M.A., Raina, A.K. and Upreti, D.K., 2009. Lichen flora of Surinsar-Mansar wildlife sanctuary, J & K. *J Appl Nat Sci*, 1(1), pp.79-81.
- Sheikh, M.A., Raina, A.K. and Upreti, D.K., 2016. Lichens—enshrouding the bare rocks in pappad area of Samba district, Jammu & Kashmir. *International Journal of Current Research and Review*, 8(10), pp.29-32.
- Shen W, Mao H, Huang Q, Dong J (2015) Benzenediol lactones: a class of fungal metabolites with diverse structural features and biological activities. *European Journal of Medicinal Chemistry* 97:747–777

- Shenoy BD, Jeewon R, Wang H, Amandeep K, Ho WH, Bhat DJ, Crous PW, Hyde KD. Sequence data reveals phylogenetic affinities of fungal anamorphs Bahusutrabeeja, Diplococcium, Natarajania, Paliphora, Polyschema, Rattania and Spadicoides. *Fungal Diversity*. 2010 Oct 1;44(1):161-9.
- Shenoy BD, Jeewon R, Wu WP, Bhat DJ, Hyde KD. Ribosomal and RPB2 DNA sequence analyses suggest that Sporidesmium and morphologically similar genera are polyphyletic. *Mycological research*. 2006 Aug 31;110(8):916-28.
- Sherwood MA (1977) The ostropalean fungi. *Mycotaxon* 5:1-277.
- Sherwood-Pike, MA (1987) The Ostropalean Fungi III: the Odontotremataceae. *Mycotaxon* 28:137-177.
- Shi A, Mmbaga M (2005). Analysis of powdery mildew pathogen in maple. *Phytopathology* 95: 964.
- Shi A, Mmbaga M (2006). Identification of a powdery mildew pathogen in maple. *SNA Research Conference* 51: 219-223.
- Shi, D., Lu, G., Mei, H., de Hoog, G.S., Samerpitak, K., Deng, S., Shen, Y. and Liu, W., 2016. Subcutaneous infection by *Ochroconis mirabilis* in an immunocompetent patient. *Medical mycology case reports*, 11, pp.44-47.
- Shi, G.K.; Luo, J.T.; Hou, C.L. (2010). [Species of the Rhytismataceae on *Pinus armandii*]. *Mycosystema* 29(2): 159-163.
- Shirouzu T, Hirose D, Tokumasu S, To-Anun C, Maekawa N. Host affinity and phylogenetic position of a new anamorphic fungus *Beltraniella botryospora* from living and fallen leaves of evergreen oaks. *Fungal Diversity*. 2010 Jul 1;43(1):85-92.
- Shivarov VV, Stoykov DY. New records of pyrenocarpous lichenized fungi from Bulgaria. *Mycotaxon*. 2013 Jan 9;121(1):133-8.
- Shivas, R.G.; Grice, K.R.E.; Young, A.J. (2010) [2011]. *Ramichloridium* spp. on *Musa* in northern Queensland: introducing *Ramichloridium ducassei* sp. nov. on leaf streaks of *Ducasse* banana. *Australas. Pl. Path.* 40(1): 61-65
- Shoemaker RA (1984) Canadian and some extralimital *Leptosphaeria* species. *Can J Bot* 62:2688-2729
- Shoemaker RA, Hambleton S (2002). Fungi Canadenses No. 344: *Rhexocercosporidium carotae*. *Canadian Journal of Plant Pathology* 24: 359-362.
- Shoemaker RA, Malloch D, Hambleton S, Liu M. A new *Vestigium* on *Abies balsamea*. *North American Fungi*. 2013 May 23;8:1-6.
- Shrestha, G. and St. Clair, L.L., 2009. The lichen flora of southwestern Colorado. *Evansia*, 26(3), pp.102-123.
- Shukla, P., Upreti, D.K., Nayaka, S. and Tiwari, P., 2014. Natural dyes from Himalayan lichens. *Indian J Tradit Knowl*, 13(1), pp.195-201.
- Shukla, V. and Upreti, D.K., 2009. Polycyclic aromatic hydrocarbon (PAH) accumulation in lichen, *Phaeophyscia hispidula* of DehraDun City, Garhwal Himalayas. *Environmental monitoring and assessment*, 149(1-4), pp.1-7.
- Shukla, V., Kumari, R., Patel, D.K. and Upreti, D.K., 2016. Characterization of the diversity of mycosporine-like amino acids in lichens from high altitude region of Himalaya. *Amino acids*, 48(1), pp.129-136.
- Shukla, V., Patel, D.K., Upreti, D.K., Yunus, M. and Prasad, S., 2013. A comparison of metallic contents in lichen *Pyxine subcinerea*, its substratum and soil. *International Journal of Environmental Science and Technology*, 10(1), pp.37-46.
- Shukla, V., Upreti, D.K. and Bajpai, R., 2014. Lichen Diversity in Different Lichenogeographical Regions of India. In *Lichens to Biomonitor the Environment* (pp. 61-96). Springer India.

- Shukla, V., Upreti, D.K. and Patel, D.K., 2012. Physiological attributes of lichen, *Phaeophyscia hispidula* in heavy metal rich sites of Dehra Dun, India. *Journal of Environmental Biology*, 33(6), p.1051.
- Sieber, T.N. and Kowalski, T. 1993 The anamorphs of *Grovesiella abieticola*. *Mycologia* 85 (4), 653-659.
- Siegel, D., Merkel, S., Koch, M. and Nehls, I., 2010. Quantification of the *Alternaria* mycotoxin tenuazonic acid in beer. *Food chemistry*, 120(3), pp.902-906.
- Siegel, D., Rasenko, T., Koch, M. and Nehls, I., 2009. Determination of the *Alternaria* mycotoxin tenuazonic acid in cereals by high-performance liquid chromatography–electrospray ionization ion-trap multistage mass spectrometry after derivatization with 2, 4-dinitrophenylhydrazine. *Journal of Chromatography A*, 1216(21), pp.4582-4588.
- Siemens JA, Zwiazek JJ. Root hydraulic properties and growth of balsam poplar (*Populus balsamifera*) mycorrhizal with *Hebeloma crustuliniforme* and *Wilcoxina mikolae* var. *mikolae*. *Mycorrhiza*. 2008 Oct 1;18(8):393-401.
- Sigler L, Gibas CF, Kokotovic B, Bertelsen MF. Disseminated mycosis in veiled chameleons (*Chamaeleo calyptratus*) caused by *Chamaeleomyces granulomatis*, a new fungus related to *Paecilomyces viridis*. *Journal of clinical microbiology*. 2010 Sep 1;48(9):3182-92.
- Sigler L, Hambleton S, Paré JA. Molecular characterization of reptile pathogens currently known as members of the *Chrysosporium* anamorph of *Nannizziopsis vriesii* complex and relationship with some human-associated isolates. *Journal of clinical microbiology*. 2013 Oct 1;51(10):3338-57.
- Sigler L, Sutton DA, Gibas CFC, Summerbell RC, Noel RK, Iwen PC. 2010. *Phialosimplex*, a new anamorphic genus associated with infections in dogs and having phylogenetic affinity to the *Trichocomaceae*. *Medical Mycology* 48:335–345.
- Sigler, L., & Carmichael, J.W. (1974). A new acidophilic *Scytalidium*. *Canadian Journal of Microbiology* 20, 267-268.
- Silber J, Ohlendorf B, Labes A, Erhard A, Imhoff JF (2013) *Calcarides* A–E, Antibacterial Macrocyclic and Linear Polyesters from a *Calcarisporium* Strain. *Marine Drugs* 11: 3309–3323; doi:10.3390/md11093309
- Siles, J.A., Gonzalez-Menendez, V., Platas, G., Sampedro, I., Garcia-Romera, I. and Bills, G.F. (unpublished). Effects of 'alpeorujó' transformed by *Corioliopsis rigida* on the distribution and dynamics of a culturable fungal soil community. <https://www.ncbi.nlm.nih.gov/nuccore/KC427055.1>
- Silva CR, Castañeda-Ruiz RF, Gusmão P, Fernando L. *Anacraspedodidymum*, a new genus from submerged wood in Brazil. *Mycotaxon*. 2014 Aug 21;128(1):11-5.
- Silva, B.F., Carrijo-Mauad, J.R., Braga, F.R., Campos, A.K., Araújo, J.V. and Amarante, A.F., 2010. Efficacy of *Duddingtonia flagrans* and *Arthrobotrys robusta* in controlling sheep parasitic gastroenteritis. *Parasitology research*, 106(6), pp.1343-1350.
- Silva, C. R.; Gusmão L. F. P.; Castañeda-Ruiz R. F. 2015. Two new conidial fungi from Chapada Diamantina, Brazil. *Mycotaxon*. 130(2):437-443
- Glejdura S, Kučera V, Lizoň P, Kunca V. *Pseudoplectania lignicola* sp. nov. described from central Europe. *Mycotaxon*. 2015 Apr 22;130(1):1-0.
- Silva, G.B., Lustosa, D.C., Nechet, K.L., Conceição, C.S., Silva, J.F., Rego, M.J. and Pantoja, M.B., 2011, June. Diversity of plant pathogenic fungi associated with native Amazon forest species. *Phytopathology* Vol. 101, No. 6, pp. S166-S167
- Silva, M. da; Pinho, D.B.; Pereira, O.L.; Fernandes, F.M. & Barreto, R.W. 2016. Naming Potentially Endangered Parasites: Foliicolous Mycobiota of *Dimorphandra wilsonii*, a highly threatened Brazilian tree species. *PLoS ONE* 11(2): e0147895. doi:10.1371/journal.pone.0147895

- SILVANSILVA S.S. GUSMÃO L.F.P & CASTAÑEDA-RUIZ R.F.3. 2015. Conidial fungi on *Araucaria angustifolia*: a new species of *Trichoconis* and new records from Brazil. *Mycotaxon*. 130:1051-1059
- Silvera-Simon, C.; Mena-Portales, J.; Gene, J.; Cano, J.F.; Guarro, J. (2009). *Repetophragma calongeei* [sic] sp. nov. and other interesting dematiaceous hyphomycetes from the north of Spain. *An. Jard. bot. Madr.* 66(S1): 33-39.
- Silvério, Michelline L.; Cavalcanti, Maria Auxiliadora Q.; Bezerra, José L. 2011 First record of *Leptomeliola uvariae* for South America. *Mycotaxon*, Volume 116: 1-5.
- Simmons, D.R. 2011. Phylogeny of *Powellomycetaceae* fam. nov. and description of *Geranomyces variabilis* gen. et comb. nov. *Mycologia*. 103(6):1411-1420
- Simmons, D.R.; Longcore, J.E. 2012. *Thoreauomyces* gen. nov., *Fimicolochytrium* gen. nov. and additional species in *Geranomyces*. *Mycologia*. 104(5):1229-1243
- Simmons, D.R.; De Beer, Z.W; Huang, Y.T; Bateman, C; Campbell, A.S; Dreaden, T.J; Li, Y; Ploetz, R.C; Black, A; Li, H.F; Chen, C.Y; Wingfield, M.J; Hulcr, J. 2016. New *Raffaelea* species (Ophiostomatales) from the USA and Taiwan associated with ambrosia beetles and plant hosts. *IMA Fungus*. 7(2):265-273
- Simon UK, Groenewald JZ, Crous PW. *Cymadothea trifolii*, an obligate biotrophic leaf parasite of *Trifolium*, belongs to *Mycosphaerellaceae* as shown by nuclear ribosomal DNA analyses. *Persoonia-Molecular Phylogeny and Evolution of Fungi*. 2009 Jun 30;22(1):49-55.
- Sinclair, R.C.; Eicker, A.; Morgan-Jones, G. 1983. *Conicomycetes*, a unique synnematosus Hyphomycete genus from South Africa. *Mycologia*. 75(6):1100-1103.
- Singh SM, Singh PN, Singh SK, Sharma PK. Pigment, fatty acid and extracellular enzyme analysis of a fungal strain *Thelebolus microsporus* from Larsemann Hills, Antarctica. *Polar Record*. 2014;50(01):31-6.
- Singh, G., Dal Grande, F., Divakar, P.K., Otte, J., Leavitt, S.D., Szczepanska, K., Crespo, A., Rico, V.J., Aptroot, A., Caceres, M.E., Lumbsch, H.T. and Schmitt, I. 2015. Coalescent-based species delimitation approach uncovers high cryptic diversity in the cosmopolitan lichen-forming fungal genus *Protoparmelia* (Lecanorales, Ascomycota). *PLoS ONE* 10 (5), E0124625
- Singh, G., Divakar, P.K., Dal Grande, F., Otte, J., Parnmen, S., Wedin, M., Crespo, A., Lumbsch, H.T. & Schmitt, I. (2013). The sister-group relationships of the largest family of lichenized fungi, *Parmeliaceae* (Lecanorales, Ascomycota). *Fungal Biology* 117: 715-721.
- Singh, K.P. and Swarnalatha, G., 2011. A new species of *Schistophoron* from India. *The Lichenologist*, 43(03), pp.209-212.
- Singh, R., Ranjan, S., Nayaka, S., Pathre, U.V. and Shirke, P.A., 2013. Functional characteristics of a fruticose type of lichen, *Stereocaulon foliolosum* Nyl. in response to light and water stress. *Acta physiologiae plantarum*, 35(5), pp.1605-1615.
- Singh, S.K. And Singh, P.N., 2012. A New species of *Sarcinella* from India. *Indian Phytopathology*, 58(3), pp.341-342.
- Singh, S.K.; Gaikwad, V.P.; Waingankar, V.M. (2009). A new endophytic ascomycete from healthy leaves of *Pongamia pinnata* Merr.. *Indian Phytopath.* 62(1): 124-125.
- Singh, S.M. and Ravindra, R., 2013. Impact of Climate Change on Lichen and Moss Communities in Ny-Ålesund, Arctic: Some Preliminary Observations. In *Earth System Processes and Disaster Management* (pp. 93-100). Springer Berlin Heidelberg.
- Singh, S.M., Pereira, N. and Ravindra, R., 2010. Adaptive mechanisms for stress tolerance in Antarctic plants. *Curr Sci*, 99, pp.334-340.
- Singh, U.B., Sahu, A., Sahu, N., Singh, B.P., Singh, R.K., Singh, D.P., Jaiswal, R.K., Sarma, B.K., Singh, H.B., Manna, M.C. and Rao, A.S., 2013. Can endophytic *Arthrotrichum*

- oligospora modulate accumulation of defence related biomolecules and induced systemic resistance in tomato (*Lycopersicon esculentum* Mill.) against root knot disease caused by *Meloidogyne incognita*. *Applied soil ecology*, 63, pp.45-56.
- Singh, U.B., Sahu, A., Singh, R.K., Singh, D.P., Meena, K.K., Srivastava, J.S. and Manna, M.C., 2012. Evaluation of biocontrol potential of *Arthrobotrys oligospora* against *Meloidogyne graminicola* and *Rhizoctonia solani* in Rice (*Oryza sativa* L.). *Biological Control*, 60(3), pp.262-270.
- Singtripop C, Camporesi E, Ariyawansa HA, Wanasinghe DN, Bahkall AH, Chomnunti, P, Boonmee S, Hyde KD. (2015) *Keissleriella dactylidis*, sp. nov., from *Dactylis glomerata* and its phylogenetic placement. *Science Asia* 41: 295–304
- SINGTRIPOP C, HONGSANUN S, LI J, DE SILVA NI, PHILLIPS AJ, JONES GE, BAHKALI AH, HYDE KD. *Chaetothyria mangiferae* sp. nov., a new species of *Chaetothyria*. *Phytotaxa*. 2016 Apr 5;255(1):21-33.
- Sinha, G.P. and Jagadeesh Ram, T.A.M., 2011. Lichen diversity in Sikkim. *Biodiversity of Sikkim. Exploring and Conserving a Global Hotspot*, pp.13-28.
- Sinha, R. and Chattopadhyay, S., 2011. Changes in the leaf proteome profile of *Mentha arvensis* in response to *Alternaria alternata* infection. *Journal of proteomics*, 74(3), pp.327-336.
- Sipiczki, M.; Pfliegler, W. P.; Safar, S. W. B.; Morais, P. B. & Rosa, C. A. (2016) *Metahyphopichia laotica* gen. nov., sp. nov., a novel polymorphic yeast related to *Hyphopichia*. *International Journal of Systematic and Evolutionary Microbiology* 66(7): 2550-2557.
- Sipman HJM (1980) Studies on Colombian cryptogams. X. The genus *Everniastrum* Hale and related taxa (Lichenes). *Proc Kon Ned Akad Wetensch, Ser C, Biol Med Sci* 83C:333–354.
- Sipman HJM 2014 New species of Graphidaceae from the Neotropics and Southeast Asia. *Phytotaxa* 189 (1): 289–311
- Sipman HJM, Lücking R, Aptroot A, Kalb K, Chaves JL, Umana L (2012) A first assessment of the Ticolichen biodiversity inventory in Costa Rica and adjacent areas: the thelotremoid Graphidaceae (Ascomycota: Ostropales). *Phytotaxa* 55:1–214
- Sipman, H.J. and Raus, T., 2015. Lichens and lichenicolous fungi from the island of Chios (Aegean Sea, Greece). *Herzogia*, 28(2), pp.496-519.
- Sipman, H.J., Lücking Robert., Aptroot, A., Chaves, J.L., Kalb, K. and Tenorio, L.U., 2012. A first assessment of the Ticolichen biodiversity inventory in Costa Rica and adjacent areas: the thelotremoid Graphidaceae (Ascomycota: Ostropales). *Phytotaxa*, 55(1), pp.1-214.
- Sir,E.B., Kuhnert,E., Lambert,C., Hladki,A.I., Romero,A.I. and Stadler,M. 2016 New species and reports of *Hypoxylon* from Argentina recognized by a polyphasic approach. *Mycol. Prog.* 15, 42
- Sittiporn Parnmen, Marcela E. S. Cáceres, Robert Lücking and H. Thorsten Lumbsch. 2013. *Myriochapsa* and *Nitidochapsa*, two new genera in Graphidaceae (Ascomycota: Ostropales) for chroodiscoid species in the *Ocellularia* clade. *The Bryologist*. 116:127-133
- Sivakumar T (2013) A review on biodiversity of marine and mangrove fungi. *Int. J. Curr. Res. Aca. Rev.* 1:26–44
- Sivanesan A, Hsieh WH (1989) *Kentingia* and *Setocampanula*, two new genera. *Mycological Research* 93:83–90.
- Sivanesan A, Shivas RG (2002) New species from each of the pyrenomycete genera *Hyponectria*, *Physalospora* and *Trichosphaeria* from Queensland, Australia. *Fungal Divers* 9:169-174.

- Sivanesan, A. 1984. Teleomorphs of *Clasterosporium anomalum* and *C. cyperi*. Transactions of the British Mycological Society. 83(4):710-718
- Sivanesan, A. and H. S. Chang. (1997) "A lignicolous ascomycete, *Taiwanascus tetrasporus* gen. et sp. nov., and a new family *Taiwanascaceae*." *Mycological research* 101: 176-178.
- Sivanesan, A.; Sutton, B.C. 1985. Microfungi on *Xanthorrhoea*. Transactions of the British Mycological Society. 85(2):239-255.
- Sivanesan, A.; Vánky, K. 2002. *Brobdingnagia eucalypticola* sp. nov. and *Phyllachora neolitsea* sp. nov., two new phyllachoraceous ascomycetes from Australia. *Fungal Diversity*. 11:145-149
- Sivichai S, Boonyuen N (2010) *Jahnula morakotii* sp. nov. and *J. appendiculata* from a peat swamp in Thailand. *Mycotaxon* 112 (1):475-481
- Sivichai S, Boonyuen N. *Jahnula morakotii* sp. nov. and *J. appendiculata* from a peat swamp in Thailand. *Mycotaxon*. 2010 May 1;112(1):475-81.
- Sivichai S, Sri-Indrasutdhi V, Jones E (2011) *Jahnula aquatica* and its anamorph *Xylomyces chlamydosporus* on submerged wood in Thailand. *Mycotaxon* 116 (1):137-142
- Six DL, Stone WD, de Beer ZW, Woolfolk SW (2009) *Ambrosiella beaveri* sp. nov., associated with an exotic ambrosia beetle, *Xylosandrus mutilatus* (Coleoptera: Curculionidae, Scolytinae), in Mississippi, USA. *Antonie van Leeuwenhoek* 96:17–29
- Skjøth, C.A., Sommer, J., Frederiksen, L. and Gosewinkel Karlson, U., 2012. Crop harvest in Denmark and Central Europe contributes to the local load of airborne *Alternaria* spore concentrations in Copenhagen. *Atmos Chem Phys*, 12(22), pp.11107-11123.
- Slippers B, Boissin E, Phillips AJL, Groenewald JZ, Wingfield MJ et al (2013) Phylogenetic lineages in the Botryosphaerales: A systematic and evolutionary framework. *Stud Mycol* 76:31–49
- Small, K.W., Chan, C.K., Silva-Garcia, R. and Walsh, T.J., 2014. Onset of an outbreak of *Bipolaris hawaiiensis* fungal endophthalmitis after intravitreal injections of triamcinolone. *Ophthalmology*, 121(4), pp.952-958.
- Smith G. 1961. *Polypaecilum* gen. nov. Transactions of the British Mycological Society 44:437–440.
- Smith ME, Henkel TW, Catherine Aime M, Fremier AK, Vilgalys R. Ectomycorrhizal fungal diversity and community structure on three co-occurring leguminous canopy tree species in a Neotropical rainforest. *New Phytologist*. 2011 Nov 1;192(3):699-712.
- Smith, A.L.; Ramsbottom, J. 1913 (1914). New or rare microfungi. Transactions of the British Mycological Society, 4(2), pp.318-330
- Smith, J.A., Mount, L., Mayfield III, A.E., Bates, C.A., Lamborn, W.A. and Fraedrich, S.W., 2009. First report of laurel wilt disease caused by *Raffaelea lauricola* on camphor in Florida and Georgia. *Plant Disease*, 93(2), pp.198-198.
- Smith, M.E. 2007. NATS truffle and truffle-like fungi 15: *Genea balsleyi* sp. nov. (Pyronemataceae) a new hypogeous ascomycete from New Jersey. *Mycotaxon*. 99:239-244
- Smith, M.E., Douhan, G.W. and Rizzo, D.M. 2007 Ectomycorrhizal community structure in a xeric *Quercus* woodland based on rDNA sequence analysis of sporocarps and pooled roots. *New Phytol*. 174 (4), 847-863.
- Snelgrove, R.J., Gregory, L.G., Peiró, T., Akthar, S., Campbell, G.A., Walker, S.A. and Lloyd, C.M., 2014. *Alternaria*-derived serine protease activity drives IL-33-mediated asthma exacerbations. *Journal of Allergy and Clinical Immunology*, 134(3), pp.583-592.

- Soares, D.J.; Barreto, R.W. 2008. Fungal pathogens of the invasive riparian weed *Hedychium coronarium* from Brazil and their potential for biological control. *Fungal Diversity*. 28:85-96
- Sobreira PN, Aptroot A, da Silva Cáceres ME. A world key to species of the genus *Bactrospora* (Roccellaceae) with a new species from Brazil. *The Lichenologist*. 2015 Mar 1;47(02):131-6.
- Søchting, U, Garrido-Benavent I, Seppelt R, Castello M, Pérez-Ortega S, De los Ríos Murillo A, Sancho LG, Frödén P, Arup U (2014) *Charcotiana* and *Amundsenia*, two new genera in Teloschistaceae (lichenized Ascomycota, subfamily Xanthorioideae) hosting two new species from continental Antarctica, and *Austroplaca frigida*, a new name for a continental Antarctic species. *The Lichenologist* 46(6):763–782.
- Sogonov MV, Castlebury LA, Rossman AY, Mejía LC, White JF, Jr (2008). Leaf-inhabiting genera of the Gnomoniaceae, Diaporthales. *Studies in Mycology* 62: 1–79.
- Sohrabi M, Leavitt, S.D., HALICI, M.G., SHRESTHA, G. and STENROOS, S., 2013a. *Teuvoa*, a new lichen genus in Megasporaceae (Ascomycota: Pertusariales), including *Teuvoa junipericola* sp. nov. *The Lichenologist*, 45(03), pp.347-360.
- Sohrabi M, Myllys L, Stenroos S. Successful DNA sequencing of a 75 year-old herbarium specimen of *Aspicilia aschabadensis* (J. Steiner) Mereschk. *The Lichenologist*. 2010 Sep 1;42(05):626-8.
- Sohrabi M, Stenroos S, Myllys L, Søchting U, Ahti T, Hyvönen J (2013) Phylogeny and taxonomy of the "manna lichens". *Mycol Progress* 12:231–269.
- Sohrabi, M., Sipman, H., Toghranegar, Z. and Nejadstari, T., 2010. A contribution to the lichenized mycota of Zanjan province, Iran. *Iranian Journal of Botany*, 16, pp.125-129.
- Solé M, Cano J, Guarro J. Molecular taxonomy of *Amauroascus*, *Auxarthron* and other related genera of the Onygenales. *Mycol. Res.* 2002;106:388-96.
- Solheim H, Torp TB, Hietala AM. Characterization of the ascomycetes *Therrya fuckelii* and *T. pini* fruiting on Scots pine branches in Nordic countries. *Mycological progress*. 2013 Feb 1;12(1):37-44.
- Somrithipol S, Jones EBG (2006) *Calcarisporium phaeopodium* sp. nov., a new hyphomycete from Thailand. *Sydowia* 58:133–140
- Somrithipol, S.; Sudhom, N.; Tippawan, S.; Jones, E.B.G. 2007. A new species of *Falcocladium* with turbinate vesicles from Thailand. *Sydowia*. 59(1):148-153.
- Song, W., Ma, X., Tan, H. and Zhou, J., 2011. Abscisic acid enhances resistance to *Alternaria solani* in tomato seedlings. *Plant Physiology and Biochemistry*, 49(7), pp.693-700.
- Soni, K., Pyasi, A., Tiwari, P. And Verma, R., 2011. Black Mildew of neem seedlings: a new disease record from India. *Indian J. Trop. Biodiv*, 19(1&2), pp.133-136.
- Sousa FM, Morais PB, Lachance MA, Rosa CA. *Hagleromyces* gen. nov., a yeast genus in the Saccharomycetaceae, and description of *Hagleromyces aurorensis* sp. nov., isolated from water tanks of bromeliads. *International journal of systematic and evolutionary microbiology*. 2014 Aug 1;64(8):2915-8.
- Sousa, R.S., Rodrigues, F.Á., Schurt, D.A., Souza, N.F.A. and Cruz, M.F.A., 2013. Cytological aspects of the infection process of *Pyricularia oryzae* on leaves of wheat plants supplied with silicon. *Tropical Plant Pathology*, 38(6), pp.472-477.
- Sparris, L.B. (2009). *Synarthothelium*, a new genus in the Arthoniaceae with a thalline exciple, similar to *Synarthonia*. *Bibliothca Lichenol.* 99: 373-382.
- Spatafora JW, Quandt CA, Kepler RM, Sung GH, Shrestha B, Hywel-Jones NL, Luangsa-ard JJ. New 1F1N species combinations in Ophiocordycipitaceae (Hypocreales). *IMA fungus*. 2015 Dec 1;6(2):357-62.

- Spatafora, J.W; Quandt, C.A; Kepler, R.M; Sung, G.H; Shrestha, B; Hywel-Jones, N.L; Luangsa-ard, J.J. 2015. New 1F1N Species Combinations in Ophiocordycipitaceae (Hypocreales). *IMA Fungus*. 6(2):357-362.
- Spatafora, J.W., Sung, G.H., Johnson, D., Hesse, C., O'Rourke, B., Serdani, M., Spotts, R., Lutzoni, F., Hofstetter, V., Miadlikowska, J., Reeb, V., Gueidan, C., Fraker, E., Lumbsch, T., Lücking, R., Schmitt, I., Hosaka, K., Aptroot, A., Roux, C., Miller, A.N., Geiser, D.M., Hafellner, J., Hestmark, G., Arnold, A.E., Budel, B., Rauhut, A., Hewitt, D., Untereiner, W.A., Cole, M.S., Scheidegger, C., Schultz, M., Sipman, H. and Schoch, C.L. 2006 A five-gene phylogeny of Pezizomycotina. *Mycologia* 98 (6), 1018-1028.
- Spegazzini C (1908) Fungi aliquot paulistani. *Revista del Museo de La Plata*. 15:7-48
- Spegazzini, C. 1910. *Mycetes Argentinienses (Series V)*. *Anales del Museo Nacional de Historia Natural Buenos Aires*. 20(13):329-467.
- Spencer, J.A. 1972. *Collecephalus hemerocalli*, the cause of daylily leaf-streak: morphology, taxonomy, and cultural characteristics. *Hemerocallis Journal*. 26(3):12-16
- Spooner, B.M. 1987. Helotiales of Australasia: Geoglossaceae, Orbiliaceae, Sclerotiniaceae, Hyaloscyphaceae. *Bibliotheca Mycologica*. 116:1-711.
- Spooren M. A new species of *Bloxamia* from freshwater in the Netherlands. *MYCOSPHERE*. 2014 Jan 1;5(2):346-9.
- Spribile T, Goffinet B, Klug B, Muggia L, Obermayer W, Mayrhofer H (2011) Molecular support for the recognition of the *Mycoblastus fucatus* group as the new genus *Violella* (Tephromelataceae, Lecanorales). *Lichenologist* 43:445-466
- Spribile T, Muggia L (2013) Expanded taxon sampling disentangles evolutionary relationships and reveals a new family in Peltigerales (Lecanoromycetidae, Ascomycota). *Fungal Divers* 58:171-184.
- Spribile, T., Björk, C.R., Ekman, S., Elix, J.A., Goward, T., Printzen, C., Tønsberg, T. and Wheeler, T., 2009. Contributions to an epiphytic lichen flora of northwest North America: I. Eight new species from British Columbia inland rain forests. *The Bryologist*, 112(1), pp.109-137.
- Spribile, T., Resl, P., Ahti, T., Perez-Ortega, S., Tonsberg, T., Mayrhofer, H. and Lumbsch, H.T. 2014. Molecular systematics of the wood-inhabiting, lichen-forming genus (Baeomycetales, Ostropomycetidae) with eight new species *Symb. Bot. Ups.* 37 (1), 1-87.
- Spribile, T., TØNSBERG, T., Stabentheiner, E. and Muggia, L., 2014. Reassessing evolutionary relationships in the filamentous cyanolichen genus *Spilonema* (Peltigerales, Lecanoromycetes). *The Lichenologist*, 46(03), pp.373-388.
- Spribile, T.; Pérez-Ortega, S.; Tønsberg, T.; Schirokauer, D. 2010. Lichens and lichenicolous fungi of the Klondike Gold Rush National Historic Park, Alaska, in a global biodiversity context. *The Bryologist*. 113(3):439-515.
- Sri-Indrasutdhi V, Tsui CKM, Chuaseeharonnachai C, Yamaguchi K, Suetrong S, Okane I, Nakagiri A, Boonyuen N. *Helicocentralis hyalina* gen. et sp. nov., an aero-aquatic Helicosporous fungus (Leotiomycetes, ascomycota) in thailand. *Mycol Prog.* 2015;14(10)
- Sri-Indrasutdhi, V., Boonyuen, N., Suetrong, S., Chuaseeharonnachai, C., Sivichai, S. & Jones, E.B.G. 2010. Wood-Inhabiting Freshwater Fungi From Thailand: *Ascothailandia grenadoidia* gen. et sp. nov., *Canalisporium grenadoidia* sp. nov. with a key to *Canalisporium* species (Sordariomycetes, Ascomycota). *Mycoscience* 51: 411-420
- Stadler M, Fournier J, Gardt S, Peršoh D (2010) The phylogenetic position of *Rhopalostroma* as inferred from a polythetic approach. *Persoonia* 25: 11-21.

- Stadler M, Fournier J.; Læssøe, T.; Chlebicki, A.; Lechat, C.; Flessa, F.; Rambold, G.; Peršoh, D. (2010). Chemotaxonomic and phylogenetic studies of *Thamnomyces* (Xylariaceae). *Mycoscience* 51(3): 189-207
- Stadler M, Fournier J.; Læssøe, T.; Decock, C.; Peršoh, D.; Rambold, G. (2010). *Ruwenzoria*, a new genus of the Xylariaceae from central Africa. *Mycol. Progr.* 9(2): 169-179.
- Stadler M, Kuhnert E, Peršoh D, Fournier J (2013) The Xylariaceae as model example for a unified nomenclature following the “One Fungus-One Name” (1F1N) concept, *Mycology* 4:1, 5-21
- Stadler M, Kuhnert E, Peršoh D, Fournier J (2013) The Xylariaceae as model example for a unified nomenclature following the “One fungus–one name” (1F1N) concept. *Mycol Int J Fungal Biol* 4:5–21
- Stadler M, Læssøe T, Fournier J, Decock C, Schmieschek B, Tichy HV, Peršoh D. A polyphasic taxonomy of *Daldinia* (Xylariaceae). *Studies in mycology*. 2014 Mar 31;77:1-43.
- Stamenković, S. and Cvijan, M., 2010. Determination of Airpolution Zones in Knjaževac (South Eastern Serbia) by using Epiphytic Lichens. *Biotechnology & Biotechnological Equipment*, 24(sup1), pp.278-283.
- Stamenković, S., Cvijan, M. and Arandjelović, M., 2010. Lichens as bioindicators of air quality in Dimitrovgrad (South-Eastern Serbia). *Archives of Biological Sciences (Serbia)*.
- Stehn, S.E., Walton, J.K., Nelson, P.R., Hampton-Miller, C.J. and Roland, C.A., 2015. A lichen species list for Denali National Park and Preserve, Alaska, with comments on several new and noteworthy records. *Evansia*, 32(4), pp.195-215.
- Steiner U, Leibner S, Schardl CL, Leuchtmann A, Leistner E (2011) *Periglandula*, a new fungal genus within the Clavicipitaceae and its association with Convolvulaceae. *Mycologia* 103(5):1133–1145.
- Steinmann, J., Dittmer, S., Houbraken, J., Buer, J. and Rath, P.M., 2016. In vitro activity of isavuconazole against *Rasamsonia* species. *Antimicrobial Agents and Chemotherapy*, 60(11), pp.6890-6891.
- Steinmann, J., Giraud, S., Schmidt, D., Sedlacek, L., Hamprecht, A., Houbraken, J., Meis, J.F., Bouchara, J.P., Buer, J. and Rath, P.M., 2014. Validation of a novel real-time PCR for detecting *Rasamsonia argillacea* species complex in respiratory secretions from cystic fibrosis patients. *New microbes and new infections*, 2(3), pp.72-78.
- Stenroos S, Hyvönen J, Myllys L, Thell A, Ahti T (2002) Phylogeny of the genus *Cladonia* s.lat. (Cladoniaceae, Ascomycetes) inferred from molecular, morphological, and chemical data. *Cladistics* 18:237–278.
- Stenroos S, Laukka T, Huhtinen S, Döbbeler P, Myllys L, Syrjänen K, Hyvönen J. Multiple origins of symbioses between ascomycetes and bryophytes suggested by a five-gene phylogeny. *Cladistics*. 2010 Jun 1;26(3):281-300.
- Stenroos S, Myllys L, Thell A, Hyvönen J (2002) Phylogenetic hypotheses: Cladoniaceae, Stereocaulaceae, Baeomycetaceae, and Icmadophilaceae revisited. *Mycol Progress* 1:267–282.
- Stenroos S, Stocker-Wörgötter E, Yoshimura I, Myllys L, Thell A, Hyvönen J (2003) Culture experiments and DNA sequence data confirm the identity of *Lobaria photomorphs*. *Canadian J Bot* 81:232-247.
- Stenroos, S., Huhtinen, S., Lesonen, A., Palice, Z. and Printzen, C., 2009. *Puttea*, gen. nov., erected for the enigmatic lichen *Lecidea margaritella*. *The Bryologist*, 112(3), pp.544-557.

- Stenroos, S., Laukka, T., Huhtinen, S., Dobbeler, P., Myllys, L., Syrjanen, K. and Hyvonen, J. 2010. Multiple origins of symbioses between ascomycetes and bryophytes suggested by a five-gene phylogeny. *Cladistics* 26 (3), 281-300.
- Stenroos, S., Arup, U., Sochting, U., Van den Boom, P., Lücking, R., Sipman, H.J. and Lutzoni, F. 2012. Implementing a cumulative supermatrix approach for a comprehensive phylogenetic study of the Teloschistales (Pezizomycotina, Ascomycota). *Mol. Phylogenet. Evol.* 63 (2), 374-387.
- Stepalska, D. and Wolek, J., 2009. Intradial periodicity of fungal spore concentrations (*Alternaria*, *Botrytis*, *Cladosporium*, *Didymella*, *Ganoderma*) in Cracow, Poland. *Aerobiologia*, 25(4), pp.333-340.
- Stepanchikova, I.S., Gagarina, L.V. and Kataeva, O.A., 2013. New and rare lichens and allied fungi from the Novgorod Region, Russia. *Folia Cryptogamica Estonica*, 50, pp.49-55.
- Stepanchikova, I.S., Himelbrant, D.E., Kukwa, M. and Kuznetsova, E.S., 2011. New records of lichens and allied fungi from the Leningrad Region, Russia. II. *Folia Cryptogamica Estonica*, 48, pp.85-94.
- Stephen R. Whitton, Eric H. C. McKenzie, Kevin D. Hyde 2012 Teleomorphic Microfungi Associated with Pandanaceae. *Fungal Diversity Research Series* pp 23-124
- Steven D. Leavitta, Pradeep K. Divakar, Yoshihito Ohmurad, Li-song Wange, Theodore L. Esslinger, H. Thorsten Lumbsch 2015 Who's getting around? Assessing species diversity and phylogeography in the widely distributed lichen-forming fungal genus *Montanelia* (Parmeliaceae, Ascomycota). *Molecular Phylogenetics and Evolution* 90, September 2015, Pages 85–96
- Stocker-Wörgötter E, Hager A, Elix JA (2009) Intraspecific chemical variation within the crustose lichen genus *Haematomma*: anthraquinone production in selected cultured mycobionts as a response to stress and nutrient supply. *Phytochemistry Reviews* 8(3): 561–569
- Stordeur, R., Cezanne, R., Eichler, M., Heinrich, D., Kison, H.U., Schiefelbein, U., Schönbrodt, M., Seelemann, A., Sipman, H.J., Thiemann, R. and Ungethüm, K., 2015. First records and noteworthy lichens and lichenicolous fungi from Saxony-Anhalt and the western part of the Harz National Park (Lower Saxony). *Herzogia*, 28(2), pp.654-678.
- Su H, Hyde KD, Maharachchikumbura SS, Ariyawansa HA, Luo Z, Promputtha I, Tian Q, Lin C, Shang Q, Zhao Y, Chai H. The families Distoseptisporaceae fam. nov., Kirschsteinioteliaceae, Sporormiaceae and Torulaceae, with new species from freshwater in Yunnan Province, China. *Fungal Diversity*. 2016 Sep 1;80(1):375-409.
- Su HongYan, Kevin D. Hyde Sajeewa S. N. Maharachchikumbura, Hiran A. Ariyawansa Luo ZongLong, Promputtha Itthayakorn, Qing Tian, ChuanGen Lin, QiuJu Shang, YongChang Zhao, HongMei Chai, XiaoYing Liu, Ali H. Bahkali, Jayarama D. Bhat, Eric H. C. McKenzie, DeQun Zhou 2016, The families Distoseptisporaceae fam. nov., Kirschsteinioteliaceae, Sporormiaceae and Torulaceae, with new species from freshwater in Yunnan Province, China *Fungal Diversity* 80 (1), 375–409
- Su KM, Xiong WP, Wang Y, Li SH, Xie R, Baima D. *Tuber bomiense*, a new truffle species from Tibet, China. *Mycotaxon*. 2014 Mar 14;126(1):127-32.
- Su L, Deng H, Niu YC. *Phialemoniopsis endophytica* sp. nov., a new species of endophytic fungi from *Luffa cylindrica* in Henan, China. *Mycological Progress*. 2016 May 1;15(5):1-7.
- Su YY, Cai L (2012) Polyphasic characterisation of three new *Phyllosticta* spp. *Persoonia* 28:76–84

- Su, C.M., Wang, S.W., Lee, T.H., Tzeng, W.P., Hsiao, C.J., Liu, S.C. and Tang, C.H., 2013. Trichodermin induces cell apoptosis through mitochondrial dysfunction and endoplasmic reticulum stress in human chondrosarcoma cells. *Toxicology and applied pharmacology*, 272(2), pp.335-344.
- Su, H., Liu, S., Li, Y., Cao, Y., Chen, M. and Yang, X., 2011. *Arthrotrys latispora*, a new nematode-trapping fungus from southwest China. *Mycotaxon*, 117(1), pp.29-36.
- Su, H.Y.; Zhang, Y.; Baral, H.-O.; Yang, X.Y.; Mo, M.H.; Cao, Y.H.; Chen, M.H.; Yu, Z.F. (2011). Four new species of Orbiliaceae from Yunnan, China. *Mycol. Progr.* 10(3): 373-381
- Su, Y.Y. and Cai, L., 2013. *Rasamsonia composticola*, a new thermophilic species isolated from compost in Yunnan, China. *Mycological progress*, 12(2), pp.213-221.
- Subramanian CV. 1972. The perfect states of *Aspergillus*. *Current Science* 41:755–761.
- Subramanian, C.V.; Chandrashekhara, K.V. 1977. *Dennisiopsis*, a new genus of discomycetes. *Kew Bulletin*. 31(3):639-644.
- Suetrong S, Boonyuen N, Pang K-, Ueapattanakit J, Klaysuban A, Sri-Indrasutdhi V, Sivichai S, Jones EBG. A taxonomic revision and phylogenetic reconstruction of the jahnulales (Dthideomycetes), and the new family manglicolaceae. *Fungal Diversity*. 2011;51:163-88
- Suetrong S, Boonyuen N, Pang KL, Ueapattanakit J, Klaysuban A, Sri-Indrasutdhi V, Sivichai S, Jones EBG (2011) A taxonomic revision and phylogenetic reconstruction of the Jahnulales (Dothideomycetes), and the new family Manglicolaceae. *Fungal Divers* 51:163-188
- Suetrong S, Hyde KD, Zhang Y, Bahkali AB, Jones EBG (2011b) *Trematosphaeriaceae* fam. nov. (Dothideomycetes, Ascomycota). *Cryptogamie, Mycologie* 32: 343–358
- Suetrong S, Klaysuban K, Sakayaroj J, Preedanon S, Ruang-Areerate P, Phongpaichi S, Pang KL, Jones EBG (2015) *Tirisporellaceae*, a new family in the order Diaporthales (Sordariomycetes, Ascomycota). *Cryptogamie, Mycologie* 36 (3):1–12
- Suetrong S, Rungareerate P, Nor NABM, Alias SA, Jones EBG, Pang KL (2016) *Bacusphaeria nypenthi* gen. et sp. nov. from the mangrove palm *Nypa fruticans*. *Botanica Marina* (In Press)
- Suetrong S, Rungjindamai N, Sommai S, Rung-Areerate P, Somrithipol S, Jones EBG (2014) *Wiesneriomyces* a new lineage of Dothideomycetes (Ascomycota) basal to Tubeufiales. *Phytotaxa* 176:283–297
- Suetrong S, Sakayaroj J, Phongpaichit S, Jones EBG (2010) Morphological and molecular characteristics of a poorly known marine ascomycete, *Manglicola guatemalensis* (Jahnulales: Pezizomycotina; Dothideomycetes, Incertae sedis): new lineage of marine ascomycetes. *Mycologia* 102:83–92
- Suetrong S, Schoch CL, Spatafora JW, Kohlmeyer J, Volkmann-Kohlmeyer B, Sakayaroj J, Phongpaichit S, Tanaka K, Hirayama K, Jones EBG (2009) Molecular systematics of the marine Dothideomycetes. *Stud Mycol* 64:155–173
- Suetrong, S., Boonyuen N, Pang K., Ueapattanakit J, Klaysuban A., Sri-Indrasutdhi V, Sivichai S, Jones EBG (2011) A taxonomic revision and phylogenetic reconstruction of the Jahnulales (Dothideomycetes), and the new family Manglicolaceae. *Fungal Divers* 51: 163-188
- Sugiyama M, Mikawa T. Phylogenetic analysis of the non-pathogenic genus *Spiromastix* (Onygenaceae) and related onygenalean taxa based on large subunit ribosomal DNA sequences. *Mycoscience*. 2001 Oct 1;42(5):413-21.
- Sugiyama M, Ohara A, Mikawa T (1999). Molecular phylogeny of onygenalean fungi based on small subunit ribosomal DNA (SSU rDNA) sequences. *Mycoscience* 40: 215–258.

- Sugui JA, Peterson SW, Figat A, Hansen B, Samson RA, Mellado E, Cuenca-Estrella M, Kwon-Chung KJ. 2014. Genetic relatedness versus biological compatibility between *Aspergillus fumigatus* and its sister species 52:3707–3721.
- Suh SO, Blackwell M. Molecular phylogeny of the cleistothecial fungi placed in Cephalothecaceae and Pseudeurotiaceae. *Mycologia*. 1999 Sep 1:836-48.
- Suh,S.-O. and Blackwell,M. 1999 Molecular phylogeny of the cleistothecial fungi placed in Cephalothecaceae and Pseudeurotiaceae. *Mycologia* 91 (5), 836-848
- Suh,S.-O. and Blackwell,M. 1999 Molecular phylogeny of the cleistothecial fungi placed in Cephalothecaceae and Pseudeurotiaceae. *Mycologia* 91 (5), 836-848.
- Suija A, de los Rios A, Pérez-Ortega S (2015) A molecular reappraisal of *Abrothallus* species growing on lichens of the order Peltigerales. *Phytotaxa* 195: 201–226.
- Suija A, Ertz D, Lawrey J D, Diederich P (2014) Multiple origin of the lichenicolous life habit in Helotiales, based on nuclear ribosomal sequences. *Fungal Diversity* 70: 55–72.
- Suija, A., Oja, E., Suu, A. and Marmor, L., 2015. New Estonian records: lichenized and lichenicolous fungi. *Folia Cryptogamica Estonica*, 52, pp.129-130.
- Sullivan,R.F., Bills,G.F., Hywel-Jones,N.L. and White,J.F. Jr. 2000 *Hyperdermium*: a new clavicipitalean genus for some tropical epibionts of dicotyledonous plants. *Mycologia* 92 (5), 908-918 (2000)
- Sultan A, Johnston PR, Park D, Robertson AW. Two new pathogenic ascomycetes in *Guignardia* and *Rosenscheldiella* on New Zealand's pygmy mistletoes (*Korthalsella*: Viscaceae). *Studies in Mycology*. 2011 Mar 31;68:237-47.
- Summerbell RC, Gueidan C, Schroers, H.-J.; Hoog, G.S. de; Starink, M.; Arocha Rosete, Y.; Guarro, J.; Scott, J.A. (2011). *Acremonium* phylogenetic overview and revision of *Gliomastix*, *Sarocladium*, and *Trichothecium*. *Stud. Mycol.* 68: 139-162.
- Summerell, B.A., Groenewald, J.Z., Carnegie, A., Summerbell, R.C. and Crous, P.W. (2006). *Eucalyptus* microfungi known from culture. 2. *Alysidiella*, *Fusculina* and *Phlogicylindrium* genera nova, with notes on some other poorly known taxa. *Fungal Diversity* 23: 323-350.
- Sun J-Z, Dong C-H, Liu X-Z, Liu J-K, Hyde KD (2016). *Calcarisporium cordycipiticola* sp. nov., an important fungal pathogen of *Cordyceps militaris*. *Phytotaxa* 268:135–144; doi: <http://dx.doi.org/10.11646/phytotaxa.268.2.4>
- Sun, B.D.; Chen, A.J.; Gao,W.W.; Zhou, Y.G. 2013. A new endophytic ascomycete associated with the medicinal plant, *Achyranthes bidentata* Blume (Amaranthaceae). *Pakistan Journal of Botany*. 45(1):319-323.
- Sun, X.; Guo, L.-D. 2007. Endophytic fungi VI. *Ciliophora quercus* sp. nov. from China. *Nova Hedwigia*. 85(3-4):403-406.
- Sun,X. and Guo,L.-D. 2010 *Micronematobotrys*, a new genus and its phylogenetic placement based on rDNA sequence analyses. *Mycol. Prog.* 9, 567-574
- Sundin R, Tehler A (1996) The genus *Dendrographa* (Roccellaceae). *The Bryologist* 99(1):19–31.
- Sung GH, Poinar GO, Spatafora JW. The oldest fossil evidence of animal parasitism by fungi supports a Cretaceous diversification of fungal–arthropod symbioses. *Molecular phylogenetics and evolution*. 2008 Nov 30;49(2):495-502.
- Sung GH, Shrestha B, Park KB, Han SK, Sung JM. Enhancing Effect of *Shimizuomyces paradoxus* on Seed Germination and Seedling Growth of Canola, Plant Growth of Cucumber, and Harvest of Tomato. *Mycobiology*. 2011 Mar 1;39(1):7-11.
- Sung GH, Shrestha B, Park KB, Sung JM. Cultural characteristics of *Shimizuomyces paradoxus* collected from Korea. *Mycobiology*. 2010 Sep 1;38(3):189-94.

- Suresh Kumar, G.; Manoharachary, C.; Kunwar, I.K. (2009). Bhadradiomyces, a new dematiaceous hyphomycetous genus from India. *Journal of Mycology and Plant Pathology* 39(2): 238-240
- Suto, Y. (2009). Three ascomycetes on leaves of evergreen Ilex trees from Japan: *Rhytisma ilicis-integrae* sp. nov., *R. ilicis-latifoliae*, and *R. ilicis-pedunculosae* sp. nov.. *Mycoscience* 50(5): 357-368
- SUTTON B.C (1963) Coelomycetes. II Neobarclaya, Mycohypallage, Bleptosporium and Cryptostictis. *Mycol. Pap.* 88 :1-50.
- Sutton BC (1973) Hyphomycetes from Manitoba and Saskatchewan. *Mycological Paper* 132:1-143
- Sutton BC (1980) The Coelomycetes: Fungi imperfecti with pycnidia, acervuli, and stromata. Commonwealth Mycological Institute, Kew
- Sutton, B.C. 1967. Two genera of the Sphaeropsidales and their relationships with *Diachorella*, *Strasseria* and *Plagiohabdus*. *Canadian Journal of Botany.* 45(8):1249-1263
- Sutton, B.C. 1969. Forest microfungi. I. *Ampulliferina persimplex* n. gen., n. sp. on leaves of labrador tea. *Canadian Journal of Botany.* 47(4):609-616.
- Sutton, B.C. 1973. Hyphomycetes from Manitoba and Saskatchewan, Canada. *Mycological Papers.* 132:1-143.
- Sutton, B.C. 1977. Nomenclature and taxonomy of *Shanoria*, *Placonema*, and *Neoplaconema* (Sphaeropsidales). *Kew Bulletin.* 31(3):461-464.
- Sutton, B.C. 1977. Some dematiaceous Hyphomycetes from Eucalyptus leaf litter. *Boletín de la Sociedad Argentina de Botánica.* 18(1-2):154-161.
- Sutton, B.C. 1978. New and interesting Hyphomycetes from Tampa, Florida. *Mycologia.* 70:784-801.
- Sutton, B.C. 1980. *Cryptocoryneopsis umbraculiformis* gen. et sp. nov. from Australia. *Transactions of the British Mycological Society.* 74(2):393-398.
- Sutton, B.C. 1983. Nomenclatural notes on Deuteromycetes. *Transactions of the British Mycological Society.* 81(2):407-407.
- Sutton, B.C. 1985. Notes on Deuteromycetes. *Sydowia.* 38:324-338.
- Sutton, B.C. 1986. Improvizations on conidial themes. *Transactions of the British Mycological Society.* 86(1):1-38.
- Sutton, B.C. 1991. Notes on Deuteromycetes III. *Sydowia.* 43(2):264-280
- Sutton, B.C. 1993. Mitosporic fungi from Malawi. *Mycological Papers.* 167:1-93
- Sutton, B.C., 1980. The Coelomycetes: fungi imperfecti with pycnidia, acervuli and stromata. Commonwealth Mycological Institute, Slough, England, pp. 696
- Sutton, B.C.; Alcorn, J.L. 1984. Additions to *Hyphopolynema* (Hyphomycetes). *Australian Journal of Botany.* 32(5):551-559
- Sutton, B.C.; Alcorn, J.L. 1985. Undescribed species of *Crinitospora* gen. nov., *Massariothea*, *Mycoleptodiscus* and *Neottiosporina* from Australia. *Transactions of the British Mycological Society.* 84:437-445.
- Sutton, B.C.; Crous, P.W. (1997). *Lecanostictopsis* gen. nov., and related leaf-spotting fungi on *Syzygium* species. *Mycol. Res.* 101(2): 215-225.
- Sutton, B.C.; Davison, E.M. 1983. Three stromatic Coelomycetes from western Australia. *Transactions of the British Mycological Society.* 81(2):291-301.
- Sutton, B.C.; Hodges, C.S. 1978. *Eucalyptus* microfungi: *Chaetendophragmiopsis* gen. nov. and other Hyphomycetes. *Nova Hedwigia.* 29:593-607.
- Sutton, B.C.; Hodges, C.S. 1981. *Eucalyptus* microfungi: *Cercosperma arnaudii* gen. et sp. nov. and *Ceratophorum mauiense* sp. nov. *Nova Hedwigia.* 35:793-803.

- Sutton, B.C.; Minter, D.W. 1988. *Omega coenobiticum* gen. et sp.nov., a new cupulate coelomycete on *Quercus* from Greece. *Transactions of the British Mycological Society*. 91(4):715-717.
- Sutton, B.C.; Mugnai, L.; Sanguineti, G. (1996). *Ciliochora calabrica* sp. nov. isolated from *Fagus sylvatica* in Italy. *Mycol. Res.* 100(4): 405-408.
- Sutton, B.C.; Muhr, L.E. 1986. *Cheiomycina flabelliformis* gen. et sp. nov. on *Picea* from Sweden. *Nordic Journal of Botany*. 6(6):831-836.
- Sutton, B.C.; Pascoe, I.G. (1989). Reassessment of *Peltosoma*, *Stigma* and *Batcheloromyces* and description of *Hyphothyrium* gen. nov.. *Mycol. Res.* 92(2): 210-222.
- Sutton, B.C.; Pascoe, I.G. 1987. *Argopericonia* and *Tryssglobulus*, new Hyphomycete genera from *Banksia* leaves. *Transactions of the British Mycological Society*. 88:41-46.
- Sutton, B.C.; Qaiser Abbas, S. 1986. *Aphanofalx irregularis* sp. nov. from Pakistan. *Transactions of the British Mycological Society*. 87:640-642.
- Sutton, B.C.; Rao, V.G.; Mhaskar, D.N. 1976. *Kendrickomyces* gen.nov. and *Waydora* nom.nov., two unusual stromatic Coelomycetes. *Transactions of the British Mycological Society*. 67(2):243-249
- Sutton, B.C.; Sankaran, K.V. 1991. New names for *Chaetospora* and its type species. *Mycological Research*. 95:768-768.
- Sutton, B.C.; Shamoun, S.F.; Crous, P.W. 1996. Two leaf pathogens of *Ribes* spp. in North America, *Quasiphloeospora saximontanensis* (Deighton) comb. nov. and *Phloeospora ribis* (J.J. Davis) comb. nov. *Mycological Research*. 100:979-983.
- Suzuki Y, Hatakeyama S, Harada Y, Tanaka K. *Polystigma fulvum*, a red leaf blotch pathogen on leaves of *Prunus* spp., has the *Polystigma pallescens* anamorph/andromorph. *Mycoscience*. 2008 Dec 1;49(6):395-8.
- Suzuki, F., Yamaguchi, J., Koba, A., Nakajima, T. and Arai, M., 2010. Changes in fungicide resistance frequency and population structure of *Pyricularia oryzae* after discontinuance of MBI-D fungicides. *Plant Disease*, 94(3), pp.329-334.
- Svensson, M., 2013. Occurrence patterns of dead wood and wood-dependent lichens in managed boreal forest landscapes (Vol. 2013, No. 84).
- Svensson, M., Dahlberg, A., Ranius, T. and Thor, G., 2013. Occurrence patterns of lichens on stumps in young managed forests. *PloS one*, 8(4), p.e62825.
- Svensson, M., Johansson, V., Dahlberg, A., Frisch, A., Thor, G. and Ranius, T., 2016. The relative importance of stand and dead wood types for wood-dependent lichens in managed boreal forests. *Fungal Ecology*, 20, pp.166-174.
- Swart, H.J. 1988. Australian leaf-inhabiting fungi. XXVI. Some noteworthy Coelomycetes on *Eucalyptus*. *Transactions of the British Mycological Society*. 90(1-2):279-291.
- Swart, H.J.; Griffiths, D.A. 1974. Australian leaf inhabiting fungi. VI. *Cooksonomyces banksiae* gen. et sp. nov. *Transactions of the British Mycological Society*. 63(1):151-155
- Swe, A., Jeewon, R., Pointing, S.B. and Hyde, K.D., 2008. Taxonomy and molecular phylogeny of *Arthrotrys mangrovispora*, a new marine nematode-trapping fungal species. *Botanica Marina*, 51(4), pp.331-338.
- Sweet M, Bulling M, Cerrano C. A novel sponge disease caused by a consortium of micro-organisms. *Coral Reefs*. 2015 Sep 1;34(3):871-83. 20;125(1):209-15.
- Swinscow, T.D.V. & Krog, H. (1981). The genus *Phyllopsora*, with a report on the East African species. *The Lichenologist* 13: 203-247.
- Szczepańska K, Daniel Pruchniewicz, Justyna Sołtysiak & Maria Kossowska 2015 Lichen-Forming Fungi of the Genus *Montanelia* in Poland and Their Potential Distribution in Central Europe. *Herzogia* 28(2):697-712.

- Szczepanska, K., 2015. New records of rare lichenicolous and lichen-forming fungi from volcanic rocks in SW Poland. *Acta Mycologica*, 50(1).
- T. L. Cech, K. Schwanda, M. Klosterhuber, L. Straßer and T. Kirisits 2016 *Eutypella* canker of maple: first report from Germany and situation in Austria. *Forest Pathology* Volume 46, Issue 4 336–340)
- Tabar, A.I., Lizaso, M.T., García, B.E., Gómez, B., Echechipía, S., Aldunate, M.T., Madariaga, B. and Martínez, A., 2008. Double-blind, placebo-controlled study of *Alternaria alternata* immunotherapy: Clinical efficacy and safety. *Pediatric Allergy and Immunology*, 19(1), pp.67-75.
- Taj-Aldeen SJ, Al-Ansari N, El Shafei S, Meis JF, Curfs-Breuker I, Theelen B, Boekhout T. Molecular Identification and Susceptibility of *Trichosporon* Species Isolated from Clinical Specimens in Qatar: Isolation of *Trichosporon dohaense* Taj-Aldeen, Meis & Boekhout sp. nov. *J. Clin. Microbiol.* 2009; 47:1791-1799. doi:10.1128/JCM.02222-08
- Takamatsu S (2004). Phylogeny and evolution of the powdery mildew fungi (Erysiphales, Ascomycota) inferred from nuclear ribosomal DNA sequences. *Mycoscience* 45: 147–157.
- Takamatsu S (2013) Origin and evolution of the powdery mildews (Ascomycota, Erysiphales). *Mycoscience* 54: 75–86.
- Takamatsu S (2014) Molecular phylogeny reveals phenotypic evolution of powdery mildews (Erysiphales, Ascomycota). *Journal of General Plant Pathology* 79: 218–226.
- Takamatsu S, Braun U, Limkaisang S (2005a). Phylogenetic relationship and generic affinity of *Uncinula septata* inferred from nuclear rDNA sequences. *Mycoscience* 46: 9–16.
- Takamatsu S, Havrylenko M, Wolcan SM, Matsuda S, Niinomi S (2008a). Molecular phylogeny and evolution of the genus *Neoerysiphe* (Erysiphaceae, Ascomycota). *Mycological Research* 112: 639–649.
- Takamatsu S, Hirata T, Sato Y (2000a). A parasitic transition from trees to herbs occurred at least two times in tribus *Cystothecae* (Erysiphaceae): Evidence from nuclear ribosomal DNA. *Mycological Research* 104: 1304–1311.
- Takamatsu S, Hirata T, Sato Y, Nomura Y (1999). Phylogenetic relationships of *Microsphaera* and *Erysiphe* sect. *Erysiphe* (powdery mildews) inferred from the rDNA ITS sequences. *Mycoscience* 40: 259–268.
- Takamatsu S, Inagaki M, Niinomi S, Khodaparast SA, Shin HD, Grigaliūnaitė B, Havrylenko M (2008b). Comprehensive molecular phylogenetic analysis and evolution of the genus *Phyllactinia* (Ascomycota: Erysiphales) and its allied genera. *Mycological Research* 112: 299–315.
- Takamatsu S, Ito (Arakawa) H, Shiroya Y, Kiss L, Heluta V (2015a). First comprehensive phylogenetic analysis of the genus *Erysiphe* (Erysiphales, Erysiphaceae) I. The *Microsphaera* lineage. *Mycologia* 107: 475–489.
- Takamatsu S, Ito T, Yamamoto H, Braun U (2008c). *Sawadaea nankinensis* comb. nov.: a powdery mildew fungus of *Acer buergeriana*. *Mycoscience* 49: 161–167.
- Takamatsu S, Kiss L, Heluta V (2015b). First comprehensive phylogenetic analysis of the genus *Erysiphe* (Erysiphales, Erysiphaceae) II: the *Uncinula* lineage. *Mycologia* 107: 903–914.
- Takamatsu S, Matsuda S, Grigaliūnaitė B 2013. Comprehensive phylogenetic analysis of the genus *Golovinomyces* (Ascomycota: Erysiphales) reveals close evolutionary relationships with host plants. *Mycologia* 105: 1135–1152.
- Takamatsu S, Niinomi S, Cabrera de Álvarez MG, Álvarez RE, Havrylenko M, Braun U (2005b). *Caespitotheca* gen. nov., an ancestral genus in the Erysiphales. *Mycological Research* 109: 903–911.

- Takamatsu S, Niinomi S, Harada M, Havrylenko M (2010b). Molecular phylogenetic analyses reveal a close coevolutionary relationship between Podosphaera (Erysiphales: Erysiphaceae) and its rosaceous hosts. *Persoonia* 24: 38–48.
- Takamatsu S, Siahaan SAS, Moreno-Rico O, Cabrera de Álvarez MG, Braun U (2016) Early evolution of endoparasitic group in powdery mildews: molecular phylogeny suggests missing link between Phyllactinia and Leveillula. *Mycologia* (<http://www.mycologia.org/content/early/2016/06/13/16-010.full.pdf+html>)
- Takamatsu S. Molecular phylogeny reveals phenotypic evolution of powdery mildews (Erysiphales, Ascomycota). *Journal of general plant pathology*. 2013 Jul 1;79(4):218-26.
- Takamatsu S., Matsuda S., Niinomi S, Havrylenko M. 2006. Molecular phylogeny supports a northern hemisphere origin of Golovinomyces (Ascomycota: Erysiphales). *Mycological Research* 110: 1093–1101.
- Talde, U.K., 1981. Aquatic deuteromycetous fungi from Purna and Dudhna Rivers. *Indian Journal of Mycology and Plant Pathology* 11, pp.288–290.
- tálora, M., Jørgensen, P., Wedin, M. (2014) A revised generic classification of the jelly lichens, Collemataceae.. *Fungal diversity* , 64:: 275-293.
- Tami R. McDonald Ester Gaya, François Lutzoni 2015 Twenty-five cultures of lichenizing fungi available for experimental studies on symbiotic systems *Symbiosis* 59, Issue 3, pp 165–171
- Tan YP, Madrid H, Crous PW, Shivas RG (2014) *Johncornia* gen. et. comb. nov., and nine new combinations in *Curvularia* based on molecular phylogenetic analysis. *Australasian Plant Pathology* 43: 589-603.
- Tan, X.M., Wang, C.L., Chen, J. and Guo, S.X., 2014. *Chaetospermum malipoense* sp. nov. from southwest China. *Mycotaxon*, 128(1), pp.159-164.
- Tanaka E. Specific in situ visualization of the pathogenic endophytic fungus *Aciculosporium* take, the cause of witches' broom in bamboo. *Applied and environmental microbiology*. 2009 Jul 15;75(14):4829-34.
- Tanaka K, Endo M, Hirayama K, Okane I, Hosoya T, Sato T (2011) Phylogeny of *Discosia* and *Seimatosporium*, and introduction of *Adisciso* and *Immersidiscosia* genera nova. *Persoonia* 26:85–98.
- Tanaka K, Harada Y (2005) *Bambusicolous* fungi in Japan (6): *Katumotoa*, a new genus of phaeosphaeriaceous ascomycetes. *Mycoscience* 46:313–318
- Tanaka K, Hirayama K, Yonezawa H, Hatakeyama S, Harada Y, Sano T, Shirouzu T, Hosoya T. (2009) Molecular taxonomy of bambusicolous fungi: *Tetraplospora* family, a new pleosporalean family with *Tetraploa*-like anamorphs. *Stud Mycol*. 64: 175–209
- Tanaka K, Hirayama K, Yonezawa H, Sato G, Toriyabe A, Kudo H, Hashimoto A, Matsumura M, Harada Y, Kurihara Y, Shirouzu T, Hosoya T (2015) Revision of the *Massarineae* (Pleosporales, Dothideomycetes). *Studies in Mycology* 82: 75–136.
- Tanaka K, Mel'nik VA, Kamiyama M, Hirayama K, Shirouzu T. Molecular phylogeny of two coelomycetous fungal genera with stellate conidia, *Prosthemia* and *Asterosporium*, on Fagales trees. *Botany*. 2010 Dec 20;88(12):1057-71.
- Tanaka K, Ooki Y, Hatakeyama S, Harada Y, Barr ME (2005) Pleosporales in Japan (5): *Pleomassaria*, *Asteromassaria*, and *Splanchnonema*. *Mycoscience* 46(4): 248–260.
- TANAKA, K.; HIRAYAMA, K.; IQBAL, S.H. (2011). *Massariosphaeria websteri* sp. nov. and several members of the Pleosporales noteworthy to Pakistan.
- Tang AM, Jeewon R, Hyde KD (2007) Phylogenetic relationships of *Nemania plumbea* sp. nov. and related taxa based on ribosomal ITS and RPB2 sequences. *Mycol Res* 111:392–402

- Tang, A.M., Jeewon, R. and Hyde, K.D. 2007 Phylogenetic utility of protein (RPB2, beta-tubulin) and ribosomal (LSU, SSU) gene sequences in the systematics of Sordariomycetes (Ascomycota, Fungi). *Antonie Van Leeuwenhoek* 91 (4), 327-349
- Tangthirasunun N, Silar P, Bhat DJ, Chukeatirote E, Wijayawardene DNNN, Maharachchikumbura SSN, Hyde KD (2014) Morphology and phylogeny of *Pseudorobillarda eucalypti* sp. nov., from Thailand. *Phytotaxa* 176:251–259
- Tangthirasunun, N., Silar, P., Bhat, D.J., Chukeatirote, E., Wikee, S., Maharachchikumbura, S.S., Hyde, K.D. and Wang, Y., 2014. Morphology and phylogeny of *Chaetospermum* (asexual coelomycetous Basidiomycota). *Phytopathology*, 175, pp.61-72.
- Tania Egea, Torrente & Sipman 1995, Arthoniomycetes, Arthoniales, two species, type species *Tania lanosa* Egea, Torrente & Sipman, asexual morph undetermined, lichenized, terrestrial, see Damien et al. (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; accepted as a valid genus), molecular data unavailable.
- Taney JB1, Douglas B2, Seifert KA 2016 Sexual and asexual states of some endophytic *Phialocephala* species of *Picea*. *Mycologia*. 108(2):255-80
- Taney, J.B. and Seifert, K.A., 2013. *Rasamsonia pulvericola* sp. nov., isolated from house dust. *IMA fungus*, 4(2), pp.205-212.
- Taney, J.B., Douglas, B. and Seifert, K.A 2016 Sexual and asexual states of some endophytic *Phialocephala* species of *Picea*. *Mycologia*
- Taole MM, Burgess TI, Gryzenhout M, Wingfield BD, Wingfield MJ. DNA sequence incongruence and inconsistent morphology obscure species boundaries in the *Teratosphaeria suttonii* species complex. *Mycoscience*. 2012 Jul 1;53(4):270-83.
- Tapper, S.L., Byrne, M., Yates, C.J., Keppel, G., Hopper, S.D., Van Niel, K., Schut, A.G., Mucina, L. and Wardell-Johnson, G.W., 2014. Prolonged isolation and persistence of a common endemic on granite outcrops in both mesic and semi-arid environments in south-western Australia. *Journal of Biogeography*, 41(11), pp.2032-2044.
- Tarasova, V., Androsova, V., Sonina, A. and Ahti, T., 2015. The lichens from the City of Petrozavodsk in the Herbarium of the Botanical Museum, University of Helsinki. *Folia Cryptogamica Estonica*, 52, pp.41-50.
- Tarasova, V.N., Sonina, A.V., Androsova, V.I. and Stepanchikova, I.S., 2016. The lichens of forest rocky communities of the hill Muroigora (Arkhangelsk Region, Northwest Russia). *Folia Cryptogamica Estonica*, 53, pp.111-121.
- Tarigan M, Roux J, Van Wyk M, Tjahjono B, Wingfield MJ. A new wilt and die-back disease of *Acacia mangium* associated with *Ceratocystis manginecans* and *C. acaciivora* sp. nov. in Indonesia. *South African Journal of Botany*. 2011 Apr 30;77(2):292-304.
- Tarnowski, T.L.B., Palmateer, A.J. and Crane, J.H., 2013. First report of fruit rot on *Hylocereus undatus* caused by *Bipolaris cactivora* in South Florida. *Australasian Plant Pathology*, 42, pp.437-440.
- Tassi, F., 1900. *Novae micromycetum species descriptae et iconibus illustratae*. *Bollettino del Laboratorio de Orto Botanico Reale Universita Siena* 3, pp.117–132.
- Taylor K, Andjic V, Barber PA, Hardy GE, Burgess TI. New species of *Teratosphaeria* associated with leaf diseases on *Corymbia calophylla* (Marri). *Mycological progress*. 2012 Feb 1;11(1):159-69.
- Tehler A (1990) A new approach to the phylogeny of euascomycetes with a cladistic outline of Arthoniales focussing on Roccellaceae. *Canadian J Bot* 68:2458–2492.
- Tehler A, Ertz D, Irestedt M (2013) The genus *Dirina* (Roccellaceae, Arthoniales) revisited. *The Lichenologist* 45(4):427–476.

- Tehler A, Irestedt M. Parallel evolution of lichen growth forms in the family Roccellaceae (Arthoniales, Ascomycota). *Cladistics*. 2007 Oct 1;23(5):432-54.
- Tehler, A. Baloch, E., Tibell, L. and Wedin, M. 2009. The systematic position of *Schistophoron*. *Bibliotheca Lichenologica*, 99, pp.383-392.
- Tehler, A., 2011. *Roccella*, the Sonoran species reviewed. *Bibliotheca Lichenologica*, 106, pp.309-318.
- Tehler, A., 2012. Fruticose Roccellaceae. *The Bryologist*, 115(1), pp.210-214.
- Tehler, A., Irestedt, M. and Ertz, D. 2013. *Austroroccella*, a new fruticose genus in the family Roccellaceae. *Bryologist* 116 (2), 162-168.
- Tehler, A., Irestedt, M. and Ertz, D. 2013. *Austroroccella*, a new fruticose genus in the family Roccellaceae *Bryologist* 116 (2), 162-168
- Tehler, A., Irestedt, M., Bungartz, F. and Wedin, M., 2009. Evolution and reproduction modes in the *Roccella galapagoensis* aggregate (Roccellaceae, Arthoniales). *Taxon*, 58(2), pp.438-456.
- Tehler, A., Irestedt, M., Wedin, M. and Ertz, D. 2010. The Old World *Roccella* species outside Europe and Macaronesia: taxonomy, evolution and phylogeny *System. Biodivers.* 8 (2), 223-246.
- Telfer AC, Young MR, Quinn J, Perez K, Sobel CN, Sones JE, Levesque-Beaudin V, Derbyshire R, Fernandez-Triana J, Rougerie R, Thevanayagam A, Boskovic A, Borisenko AV, Cadel A, Brown A, Pages A, Castillo AH, Nicolai A, Glenn Mockford BM, Bukowski B, Wilson B, Trojahn B, Lacroix CA, Brimblecombe C, Hay C, Ho C, Steinke C, Warne CP, Garrido Cortes C, Engelking D, Wright D, Lijtmaer DA, Gascoigne D, Hernandez Martich D, Morningstar D, Neumann D, Steinke D, Marco DeBruin DD, Dobias D, Sears E, Richard E, Damstra E, Zakharov EV, Laberge F, Collins GE, Blagoev GA, Grainge G, Ansell G, Meredith G, Hogg I, McKeown J, Topan J, Bracey J, Guenther J, Sills-Gilligan J, Addesi J, Persi J, Layton KK, D'Souza K, Dorji K, Grundy K, Nghidinwa K, Ronnenberg K, Lee KM, Xie L, Lu L, Penev L, Gonzalez M, Rosati ME, Kekkonen M, Kuzmina M, Iskandar M, Mutanen M, Fatahi M, Pentinsaari M, Bauman M, Nikolova N, Ivanova NV, Jones N, Weerasuriya N, Monkhouse N, Lavinia PD, Jannetta P, Hanisch PE, McMullin RT, Ojeda Flores R, Mouttet R, Vender R, Labbee RN, Forsyth R, Lauder R, Dickson R, Kroft R, Miller SE, MacDonald S, Panthi S, Pedersen S, Sobek-Swant S, Naik S, Lipinskaya T, Eagalle T, Decaëns T, Kosuth T, Braukmann T, Woodcock T, Roslin T, Zammit T, Campbell V, Dinca V, Peneva V, Hebert PD, deWaard JR. 2015. Biodiversity inventories in high gear: DNA barcoding facilitates a rapid biotic survey of a temperate nature reserve. *Biodivers Data J.* 2015 Aug 30;(3):e6313. doi: 10.3897/BDJ.3.e6313. eCollection.
- Templeton, G.E., 2016. *Alternaria* toxins related to pathogenesis in plants. *Microbial toxins*, 8, pp.169-192.
- Tennakoon DS, Hyde KD, Wanasinghe DN, Bahkali AH, Camporesi E, Phookamsak R 2016 – Taxonomy and phylogenetic appraisal of *Montagnula jonesii* sp. nov. (*Didymosphaeriaceae*, *Pleosporales*) from Italy. *Mycosphere* 7(9): 1346–1356
- Teran, C.G., Downes, K. and Medows, M., 2014. Fatal *Bipolaris spicifera* infection in an immunosuppressed child. *BMJ case reports*, 2014, p.bcr2013009703.
- Thambugala KM, Ariyawansa HA, Li YM, Boonmee S et al. (2014) *Dothideales*. *Fungal Diversity* 68, 105-158
- Thambugala KM, Daranagama DA, Phillips AJ, Bulgakov TS, Bhat DJ, Camporesi E, Bahkali AH, Eungwanichayapant PD, Liu ZY, Hyde KD. *Microfungi on Tamarix*. *Fungal Diversity*. 2016:1-68.

- Thambugala KM, Fang YC, Camporesi E, Bahkali AH, Liu ZY, Hyde KD (2015a). *Pseudodidymosphaeria* gen. nov. in Massarinaceae. *Phytotaxa* 231(3): 271–282
- Thambugala KM, Hyde KD, Eungwanichayapant PD, Romero AI, Liu Z-. Additions to the genus rhytidhysterion in hysteriaceae. *Cryptogam Mycol.* 2016;37(1):99-116
- Thambugala KM, Hyde KD, Tanaka K, Tian Q, Wanasinghe DN, Ariyawansa HA, Jayasiri SC, Boonmee S, Camporesi E, Hashimoto A, Hirayama K, Schumacher RK, Promputtha I, Liu Z-Y (2015) Towards a natural classification and backbone tree for Lophiostomataceae, Floricolaceae, and Amorosiaceae fam. nov.. *Fungal Diversity* (2015) 74: 199–266.
- Thambugala KM, Singtripop C, Chunfang Y, Mckenzie EHC, Liu ZY, Chukeatirote E, Hyde KD (2014c) Towards a natural classification of Dothideomycetes 7: The genera *Allosoma*, *Austropleospora*, *Dangeardiella*, *Griggsia* and *Karschia* (Dothideomycetes incertae sdis). *Phytotaxa* 181:34–46
- Thambugala, K.M., Hyde, K.D., Tanaka, K., Tian, Q., Wanasinghe, D.N., Ariyawansa, H., Jayasiri, S.C., Boonmee, S., Camporesi, E., Hashimoto, A., Hirayama, K., Schumacher, R.K., Promputtha, I. & Liu, Z.Y. (2015b) Towards a natural classification and backbone tree for *Lophiostomataceae*, *Floricolaceae*, and *Amorosiaceae* fam. nov. *Fungal Divers.* 74(1): 199–266
- the genus *Cylindrocladiella*. *Mycological Progress* 11: 835–868
- The phylogenetic position of *Spathulospora* based on DNA sequences from dried herbarium material. *Mycol Res* 108:737-748
- Theissen F, Sydow H (1917) Synoptische Tafeln. *Annales Mycologici* 15: 389–491.
- Thell A (1995) Pycnoconidial types and their presence in cetrarioid lichens (Ascomycotina, Parmeliaceae). *Cryptog Bryol Lichenol* 16:247–256.
- Thell A, Crespo A, Divakar PK, Kärnefelt I, Leavitt SD, Lumbsch HT, Seaward MR. A review of the lichen family Parmeliaceae–history, phylogeny and current taxonomy. *Nordic Journal of Botany.* 2012 Dec 1;30(6):641-64.
- Thell A, Högnabba F, Elix JA, Feuerer T, Kärnefelt I, Myllys L, Randlane T, Saag A, Stenroos S, Ahti T, Seaward MRD (2009) Phylogeny of the cetrarioid core (Parmeliaceae) based on five genetic markers. *Lichenologist* 41:489–511
- Thell A, Stenroos S, Feuerer T, Kärnefelt I, Myllys L, Hyvönen J (2002) Phylogeny of cetrarioid lichens (Parmeliaceae) inferred from ITS and β -tubulin sequences, morphology, anatomy and secondary chemistry. *Mycol Progress* 1: 335–354
- Thell, A., Crespo, A., Divakar, P.K., Kärnefelt, I., Leavitt, S.D., Lumbsch, H.T. and Seaward, M.R., 2012. A review of the lichen family Parmeliaceae–history, phylogeny and current taxonomy. *Nordic Journal of Botany*, 30(6), pp.641-664.
- Thell, A., Hoegnabba, F., Elix, J.A., Feuerer, T., Kaernefelt, I., Myllys, L., Randlane, T., Saag, A., Stenroos, S., Ahti, T. and Seaward, M.R.D. 2009 Phylogeny of the cetrarioid core (Parmeliaceae) based on five genetic markers. *Lichenologist (Lond.)* 41 (5), 489-511 (2009)
- Thomas MA, Ryan DJ, Farnen KJF, Galloway DJ (2002) Observations on phylogenetic relationships within Lobariaceae Chevall. (Lecanorales, Ascomycota) in New Zealand, based on ITS-5.8s molecular sequence data. *Bibl Lichenol* 82:123-138.
- Thongkantha S, Jeewon R, Vijaykrishna D, Lumyong S, McKenzie EH, Hyde KD. Molecular phylogeny of Magnaporthaceae (Sordariomycetes) with a new species *Ophioceras chiangdaoense* from *Dracaena loureiroi* in Thailand. *Fungal Divers.* 2009 Jan 31;34:157-73
- Thor G (1990) The lichen genus *Chiodecton* and five allied genera. *Opera Bot* 103:1–92.

- Thüs H, Muggia L, Pérez-Ortega S, Favero-Longo SE, Joneson S, O'Brien H, Nelsen MP, Duque-Thüs R, Grube M, Friedl T, Brodie J. Revisiting photobiont diversity in the lichen family Verrucariaceae (Ascomycota). *European Journal of Phycology*. 2011 Nov 1;46(4):399-415.
- Thynne E, McDonald MC, Evans M, Wallwork H, Neate S, Solomon PS. Re-classification of the causal agent of white grain disorder on wheat as three separate species of *Eutiarosporella*. *Australasian Plant Pathology*. 2015 Sep 1;44(5):527-39.
- Tian Q, Liu JK, Hyde KD, Wanasinghe DN, Boonmee S, Jayasiri SC, Luo ZL, Taylor JE, Phillips AJ, Bhat DJ, Li WJ, Ariyawansa H, Thambugala KM, Jones EBG, Chomnunti P, Bahkali AH, Xu JC, Camporesi E (2015) Phylogenetic relationships and morphological reappraisal of Melanommataceae (Pleosporales). *Fungal Divers* 74:267–324
- TIAN, H.Z.; YANG, Z.; WANG, S.; HOU, C.L.; PIEPENBRING, M. (2013). A new species and phylogenetic data for *Nematococomyces*. *Botany* 91 (1), 592-596
- Tibell L (1980) The lichen genus *Chaenotheca* in the Northern Hemisphere. *Symb Bot Upsal* 23:1–65.
- Tibell L, Frisch A, Thor G. Additions to the calicioid flora of Japan and Korea, with the descriptions of two new species. In *Annales Botanici Fennici* 2014 Jun 11 (Vol. 51, No. 3, pp. 189-194).
- Tibell L, Frisch A, Thor G. Additions to the calicioid flora of Japan and Korea, with the descriptions of two new species. In *Annales Botanici Fennici* 2014 Jun 11 (Vol. 51, No. 3, pp. 189-194).
- Tibell S, Tibell L. Two new species of *Atla* (Verrucariaceae). *The Lichenologist*. 2015 Mar 1;47(02):93-8.
- Tibell, L. and Frisch, A., 2010. New data on crustose mazaediate lichens from tropical Africa. *Bibliotheca Lichenologica*, 104, pp.323-332.
- Tibell, L., 2014. *Umbilicaria crustulosa* on the Swedish West Coast. *Graphis Scripta*, 26, pp.51-53.
- Tibpromma S, BHAT J, Doilom M, Lumyong S, Nontachaiyapoom S, Yang JB, Hyde KD. Three new *Hermatomyces* species (Lophiotremataceae) on *Pandanus odorifer* from Southern Thailand. *Phytotaxa*. 2016 Sep 19;275(2):127-39.
- Timdal, E. (1984). The genus *Hypocenomyce* (Lecanorales, Lecideaceae), with special emphasis on Norwegian and Swedish species. *Nordic Journal of Botany* 4: 83–108.
- Timdal, E. (1992 [1991]). A monograph of the genus *Toninia* (Lecideaceae, Ascomycetes). *Opera Botanica* 110: 1-137.
- Timdal, E. (2007). *Romjularia*. In: T. H. Nash, III, C. Gries and F. Bungartz: *Lichen Flora of the Greater Sonoran Desert Region*. Volume 3. Lichens Unlimited, Arizona State University, Tempe, pp. 287-289.
- Timdal, E. (2008). Studies on *Eschatogonia* (Ramalinaceae) in Peru. *The Lichenologist* 40: 31-38.
- Timdal, E. (2010). *Porpidinia* (Porpidiaceae), a new genus for *Toninia tumidula*. *Bibliotheca Lichenologica* 104: 333-337.
- Tiwari CK, Jagrati P, Verma RK. A new and rare species of *Phlyctaeniella* from central India. *Mycosphere*. 2012 Jan 1;3(4):450-3.
- Tiwari, V. and Rai, A.N. (2009). New species of *Megalodochium* and *Monochaetia* from India. *Indian Phytopathology* 62 : 268-272.
- to manage annual ryegrass toxicity caused by *Rathayibacter toxicus*. *Plant Dis*. 90:229-232.

- To-anun C, Kom-un S, Sunawan A, Fangfuk W, Sato Y, Takamatsu S (2005). A new subgenus, *Microidium*, of *Oidium* (Erysiphaceae) on *Phyllanthus* spp. *Mycoscience* 46: 1–8.
- To-anun, C., Hidayat, I. and Meeboon, J., 2010. *Cercospora cristellae*, a new cercosporoid fungus associated with weed *Cristella parasitica* from Northern Thailand. *Journal of Agricultural Technology*, 6(2), pp.331-339.
- To-Anun, C., Hidayat, I. and Meeboon, J., 2011. Genus *Cercospora* in Thailand: taxonomy and phylogeny (with a dichotomous key to species). *Plant Pathology & Quarantine*, 1(1), pp.11-87.
- Tokizawa, M., Ohmura, Y., Moon, K. H. and Takeshita, S. 2015. *Sarcogyne endopetrophila* (Acarosporaceae, Lichenized Ascomycota), a New Species from Japan *Shokubutsu Kenkyu Zasshi* 90, 46-51.
- Tomaso-Peterson, M. and Balbalian, C.J., 2010. First report of *Bipolaris oryzae* causing leaf spot of switchgrass in Mississippi. *Plant Disease*, 94(5), pp.643-643.
- Tonouchi, A., 2010. Isolation and characterization of a novel facultative anaerobic filamentous fungus from Japanese rice field soil. *International journal of microbiology*, 2009.
- Tønnsberg T, Goward T (2001) *Sticta oroborealis* sp. nov. and other Pacific North American lichens forming dendriscoauloid cyanotypes. *Bryologist* 104(1):12-23.
- Tønnsberg, T., 2013. *Xylographa soralifera* (lichenized Ascomycetes) new to Switzerland. *Opera Bot*, 119, pp.1-61.
- Torriani SFF, Penselin D, Knogge W, Felder M, Taudion S, Platzer M, McDonald BA, Brunner PC 2014. Comparative analysis of mitochondrial genomes from closely related *Rhynchosporium* species reveals extensive intron invasion. *Fungal Genetics and Biology* 62: 34–42.
- Torta, L., Lo Piccolo, S., Piazza, G., Tomasello, A., Burruano, S., Colombo, P., Ottonello, D., Maida G, Pirrotta M, Tomasello A Calvo, S., 2015 *Lulwoana* sp., a dark septate endophyte in roots of *Posidonia oceanica* (L.) Delile. *Plant Biology* Volume 17, Issue 2 505–511.
- Traeger S, Altegoer F, Freitag M, Gabaldon T, Kempken F, Kumar A, Marcet-Houben M, Pöggeler S, Stajich JE, Nowrousian M. The genome and development-dependent transcriptomes of *Pyronema confluens*: a window into fungal evolution. *PLoS Genet*. 2013 Sep 19;9(9):e1003820.
- Trakunyingcharoen T, Lombard L, Groenewald JZ, Cheewangkoon R, To-Anun C, Crous PW. Caulicolous Botryosphaerales from Thailand. *Persoonia: Molecular Phylogeny and Evolution of Fungi*. 2015 Jun;34:87.
- Trakunyingcharoen T, Lombard L, Groenewald JZ, Cheewangkoon R, To-anun C, Alfenas AC, Crous PW. Mycoparasitic species of *Sphaerellopsis*, and allied lichenicolous and other genera. *IMA fungus*. 2014 Dec 18;5(2):391-414.
- Trappe MJ, Trappe JM, Bonito GM 2010 *Kalapuya brunnea* gen. & sp. nov. and its relationship to the other sequestrate genera in *Morchellaceae*. *Mycologia* 102 no. 5 1058-1065.
- Trappe, J. 2009 The hunted: commercially attractive truffles native to North America. In *Les champignons forestiers comestibles à potentiel commercial*. ÉDITEUR. Biopterre, ACCHF, Université Laval, CEF, RNC, 30 novembre et 1er décembre. pp. 1-5.
- Trappe, J.M.; Kovács, G.M.; Claridge, A.W. (2010). Comparative taxonomy of desert truffles of the Australian outback and the African Kalahari. *Mycol. Progr*. 9(1): 131-143

- Trappe, M.J., Trappe, J.M. and Bonito, G.M. 2010 *Kalapuya brunnea* gen. & sp. nov. and its relationship to the other sequestrate genera in Morchellaceae. *Mycologia* 102 (5), 1058-1065.
- Travadon R, Lawrence DP, Rooney-Latham S, Gubler WD, Wilcox WF, Rolshausen PE, Baumgartner K. *Cadophora* species associated with wood-decay of grapevine in North America. *Fungal biology*. 2015 Jan 31;119(1):53-66.
- Tretiach M, Modenesi P (1999) Critical notes on the lichen genus *Encephalographa* A. Massal. (?Hysteriaceae). *Nova Hedwigia* 68:527–544.
- Triebel D, Rambold G (1988) *Cecidonia* und *Phacopsis* (Lecanorales): zwei lichenicole Pilzgattungen mit cecidogenen Arten. *Nova Hedwigia* 47(3-4):279–309.
- Tripp EA, Lendemer JC, Harris RC (2010) Resolving the genus *Graphina* Müll. Arg. in North America: new species, new combinations, and treatments for *Acanthothecis*, *Carbacanthographis*, and *Diorgyma*. *Lichenologist* 42:55–71
- Tripp, E.A., 2015. Lichen Inventory of White Rocks Open Space (City of Boulder, Colorado). *Western North American Naturalist*, 75(3), pp.301-310.
- Trouillas FP, Pitt WM, Sosnowski MR, Huang R, Peduto F, Loschiavo A, Savocchia S, Scott ES, Gubler WD (2011) Taxonomy and DNA phylogeny of Diatrypaceae associated with *Vitis vinifera* and other woody plants in Australia. *Fungal Divers* 49:203–223.
- Trouillas, F.P.; Sosnowski, M.R.; Gubler, W.D. 2010. Two new species of Diatrypaceae from coastal wattle in Coorong National Park, South Australia. *Mycosphere*. 1(2):183-188.
- Trouillas, F.P; Peduto-Hand, F.; Inderbitzin, P. and Gubler, W.D. 2015. The genus *Cryptosphaeria* in the western United States: taxonomy, multi-locus phylogeny and a new species, *C. multicontinentalis*. *Mycologia*. *Mycologia* 107 (6):1304-1313
- Truong C, Divakar PK, Yahr R, Crespo A, Clerc P (2013) Testing the use of ITS rDNA and protein-coding genes in the generic and species delimitation of the lichen genus *Usnea* (Parmeliaceae, Ascomycota). *Mol Phylogenet Evol* 68:357-372.
- Tryblis Clem. 1931, Odontotremataceae, Ostropales, Lecanoromycetes, two species, type species *Tryblis arnoldii* (Rehm) Clem., asexual morph undetermined, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; accepted as a valid genus), molecular data unavailable
- Tsang CC, Chan JF, Ip PP, Ngan AH, Chen JH, Lau SK, Woo PC. Subcutaneous phaeohyphomycotic nodule due to *Phialemoniopsis hongkongensis* sp. nov. *Journal of clinical microbiology*. 2014 Sep 1;52(9):3280-9.
- Tsang CC, Hui TWS, Lee KC, Chen JHK, Ngan AHY, Tam EWT, Chan JFW, Wu AL, Cheung M, Tse BPH, Wu AKL, Lai CKC, Tsang DNC, Que TL, Lam CW, Yuen KY, Lau SKP, Woo PCY. 2016. Genetic diversity of *Aspergillus* species isolated from onychomycosis and *Aspergillus hongkongensis* sp. nov., with implications to antifungal susceptibility testing. *Diagnostic Microbiology and Infectious Disease* 84:125–134.
- Tsang CH, Chan JFW, Trendell-Smith NJ, Ngan AHY, Ling IWH, Lau SKP, Woo PCY (2014) Subcutaneous phaeohyphomycosis in a patient with Ig G4-related sclerosing disease caused by a novel ascomycete, *Hongkongmyces pedis* gen. et sp. nov.: first report of human infection associated with the family Lindgomycetaceae. *Med Mycol* 52:736–747
- Tsuge, T., Harimoto, Y., Akimitsu, K., Ohtani, K., Kodama, M., Akagi, Y., Egusa, M., Yamamoto, M. and Otani, H., 2013. Host-selective toxins produced by the plant pathogenic fungus *Alternaria alternata*. *FEMS Microbiology Reviews*, 37(1), pp.44-66.
- Tsui CK, Berbee ML. Transfer of two *Helicoma* species to *Troposporella* based on molecular and morphological data. *Mycoscience*. 2010 Mar 1;51(2):144-8.

- Tsui CK, Sivichai S, Berbee ML. Molecular systematics of *Helicoma*, *Helicomycetes* and *Helicosporium* and their teleomorphs inferred from rDNA sequences. *Mycologia*. 2006 Jan 1;98(1):94-104.
- Tsui CKM, Sivichai S, Rossman AY, Berbee ML (2007) *Tubeufia asiana*, the teleomorph of *Aquaphila albicans* in the Tubeufiaceae, Pleosporales, based on cultural and molecular data. *Mycologia* 99: 884–894.
- Tsui, C.K.M.; Hyde, K.D.; Hodgkiss, I.J. 1998. A new species of *Clohiesia* from Hong Kong. *Mycoscience*. 39(3):257-259
- Tsuneda A, Hambleton S, Currah RS. 2011. The anamorph genus *Knufia* and its phylogenetically allied species in *Coniosporium*, *Sarcinomyces* and *Phaeococcomyces*. *Botany* 89:523–536.
- Tsuneda, A.; Davey, M.L.; Tsuneda, I.; Currah, R.S. 2010. Two new dothideomycetous endoconidial genera from declining larch. *Botany*. 88:471-487
- Tsuneda, A; Davey, M.L; Tsuneda, I; Hudgins, A; Currah, R.S. 2011. *Endophoma*, a new didymellaceous endoconidial genus from bat-cave soil. *Mycologia*. 103(5):1146-1155
- Tsurykau, A. and Khramchankova, V., 2011. Lichens From Gomel Region: A Provisional Checklist. *Botanica Lithuanica*, 17(4).
- Tu, E.Y., 2009. *Alternaria* keratitis: clinical presentation and resolution with topical fluconazole or intrastromal voriconazole and topical caspofungin. *Cornea*, 28(1), pp.116-119.
- Tufan-Çetin, Ö. and Sümbül, H. 2011. Lichens of the Köprülü Canyon National Park in Turkey. *Mycotaxon*, 115, p.536.
- Tuovila H, Davey ML, Yan L, Huhtinen S, Rikkinen J. New resinicolous *Chaenothecopsis* species from China. *Mycologia*. 2014 Sep 1;106(5):989-1003.
- TUOVILA H, RIKKINEN J, HUHTINEN S. Nomenclatural corrections in calicioid fungi. *In* *Annales Botanici Fennici* 2003 (Vol. 40, No. 448).
- Tuovila, H. A. N. N. A., and P. Larsson. "Three resinicolous North American species of *Mycocaliciales* in Europe with a re-evaluation of *Chaenothecopsis oregana* Rikkinen." *Karstenia* 51 (2011): 37-49.
- Turk, A.Ö., 2014. Two New Records for the Lichen Flora of Turkey. 69-70.
- Tuzen, M., Sari, A., Mendil, D. and Soylak, M., 2009. Biosorptive removal of mercury (II) from aqueous solution using lichen (*Xanthoparmelia conspersa*) biomass: kinetic and equilibrium studies. *Journal of Hazardous Materials*, 169(1), pp.263-270.
- Twaroch, T.E., Focke, M., Fleischmann, K., Balic, N., Lupinek, C., Blatt, K., Ferrara, R., Mari, A., Ebner, C., Valent, P. and Spitzauer, S., 2012. Carrier-bound Alt a 1 peptides without allergenic activity for vaccination against *Alternaria alternata* allergy. *Clinical & Experimental Allergy*, 42(6), pp.966-975.
- Udagawa, S.; Uchiyama, S. (1999) [1998]. Three new hyphomycetes isolated from soil and feather debris. *Can. J. Bot.* 76(9): 1637-1646.
- Udagawa, S.; Uchiyama, S. 2000. *Acanthogymnomyces*, a new genus of gymnothecial Ascomycetes with setae and sulcate ascospores. *Mycotaxon*. 76:411-418.
- Udayanga D, Castlebury LA, Rossman A, Ekachai Chukeatirote, Hyde KD (2014b) Insights into the genus *Diaporthe*: Phylogenetic species delimitation in the *D. eres* species complex. *Fungal Diversity* 67:203–229.
- Uluguria Vezda 2004, Gomphillaceae, one species, type species *Uluguria permira* (Vezda) Vezda, see Lumbsch and Huhndorf (2010; outline), molecular data unavailable.
- UNTEREINER W. A. 2000. — *Capronia* and its anamorphs: exploring the value of morphological and molecular characters in the systematics of the Herpotrichiellaceae. *Studies in Mycology*, 45 : 141–149

- UNTEREINER W. A., GUEIDAN C., ORR M.-J. & DIEDERICH P. 2011. — The phylogenetic position of the lichenicolous ascomycete *Capronia peltigerae*. Fungal Diversity, 49 (1) : 225–233. W. A., GUEIDAN C., ORR M.-J. & DIEDERICH P. 2011. — The phylogenetic position of the lichenicolous ascomycete *Capronia peltigerae*. Fungal Diversity, 49 (1) : 225–233.
- Untereiner W.A., Bogale M., Carter A. et al. 2013. Molecular phylogeny of Boliniales (Sordariomycetes) with an assessment of the systematics of *Apiorhynchostoma*, *Endoxyla* and *Pseudovalsaria*. Mycologia 105: 564-588.
- Untereiner WA, Gueidan C, Orr M-J, Diederich P (2011) The phylogenetic position of the lichenicolous ascomycete *Capronia peltigerae*. Fungal Divers 49:225–233
- Untereiner WA, Scott JA, Naveau FA, Currah RS, Bachewich J. 2002. Phylogeny of *Ajellomyces*, *Polytolypa* and *Spiromastix* (Onygenaceae) inferred from rDNA sequence and non-molecular data. Stud Mycol 47:25–35.
- Untereiner, W.A; Bogale, M.; Carter, A; Platt, H.W. (Bud); Hanson,S.A; Læssøe, T; Stepanek, V; Reblova, M. 2013. Molecular phylogeny of Boliniales (Sordariomycetes) with an assessment of the systematics of *Apiorhynchostoma*, *Endoxyla* and *Pseudovalsaria*. Mycologia. 105(3):564-588.
- Uppadhyay, V., Ingle, K.K., Trivedi, S. and Upreti, D.K.2016. Diversity and distribution of lichens from the monuments of Gwalior division, Madhya Pradesh with special reference to rock porosity and lichen growth. Tropical Plant Research 3(2): 384–389.
- Upreti, D.K. and Patel, D.K., 2012. *Rinodina sophodes* (Ach.) Massal.: a bioaccumulator of polycyclic aromatic hydrocarbons (PAHs) in Kanpur City, India. Environmental monitoring and assessment, 184(1), pp.229-238.
- Upreti, D.K., Nayaka, S. and Joshi, Y., 2009. *Ramboldia amarkantakana* (Lecanoraceae, Ascomycota), a new lichen species from India. Mycotaxon, 107(1), pp.239-242.
- Urbanavichene, I., Urbanavichus, G., Mežaka, A. and Palice, Z., 2013. New records of lichens and lichenicolous fungi from the Southern Ural Mountains, Russia. II. *Folia Cryptogamica Estonica*, 50, pp.73-80.
- Urbanavichene, I.N. and Zapovednik, B., 2015. New and rare findings of lignicolous lichen species for the Southern Siberia from the Baikal nature reserve. *Turczaninowia*.
- Urbanavichus, G. and Ismailov, A., 2016. New records of lichens and lichenicolous fungi from Dagestan, Russia. *Folia Cryptogamica Estonica*, 53, pp.65-69.
- Urbanavichus, G. and Urbanavichene, I., 2011. New records of lichens and lichenicolous fungi from the Ural Mountains, Russia. *Folia Cryptogamica Estonica*, 48, pp.119-124.
- Urbanavichus, G. and Urbanavichene, I., 2015. New records of lichens and lichenicolous fungi from the NW Caucasus (Russia). *Herzogia*, 28(1), pp.185-192.
- Urbanavichus, G., Gabibova, A. and Ismailov, A., 2011. New records of lichens and lichenicolous fungi for Russia and the Caucasus. *Turkish Journal of Botany*, 35(3), pp.291-297.
- Usui E, Takashima Y, Narisawa K. 2016. *Cladophialophora inabaensis* sp. nov., a new species among the dark septate endophytes from a secondary forest in Tottori, Japan. *Microbes and Environments* 31:357–360.
- V.A. Mel'nik and D.B. Belomesyatseva, "Ojibwaya perpulchra, a new hyphomycete for mycobiota of Byelorussia", *MIKOL FITOP*, 35(1), 2001, pp. 40-42.
- Vaghefi N, Pethybridge SJ, Ford R, et al. (2012). *Stagonosporopsis* spp. associated with ray blight disease of Asteraceae. *Australasian Plant Pathology* 41: 675–686.
- Valadbeigi, T. 2014. Lichen flora of the Ilam province, South West Iran. *Mycotaxon*, 128, pp.248-55.
- Valadbeigi, T. and Sipman, H.J., 2010. New records of lichens and lichenicolous fungi from Iran and their biogeographical significance. *Mycotaxon*, 113(1), pp.191-194.

- Valadbeigi, T.; Brackel, W. von. 2011. Two new species of *Lichenostigma* (Lichenotheliaceae) from Iran. *Willdenowia*. 41:191-195.
- Valadbeigi, T.A.H.E.R.E.H., 2014. Lichen flora of the Ilam province, South West Iran. *Mycotaxon*, 128, pp.248-55.
- Valadbeigi, Tahereh; Sipman, Harrie J. M. 2010 New records of lichens and lichenicolous fungi from Iran and their biogeographical significance. *Mycotaxon*, 113. 191-194.
- van den Boom PI, Etayo JA. New records of lichenicolous fungi and lichenicolous lichens from the Iberian Peninsula, with the description of four new species and one new genus. *Opuscula Philolichenum*. 2014;13:44-79.
- van den Boom PP, Giralt M. Checklist and three new species of lichens and lichenicolous fungi of the Algarve (Portugal). *Sydowia*. 2012 Dec 31;64(2):149-207.
- van den Boom PP. Additions and notes to the checklist of lichens and lichenicolous fungi of Cape Verde. *Österreichische Zeitschrift für Pilzkunde*. 2012;21:5-16.
- van den Boom PPG (2009) New *Halecania* species (Catillariaceae) from Europe and South America. *The Bryologist* 112(4): 827–832
- van den Boom PPG, Brand AM 2008 New records of lichens, lichenicolous and allied fungi from Belgium and The Netherlands. *Sauteria* 15, 95-101.
- van den Boom, P. & Etayo, J. 2014. New records of lichenicolous fungi and lichenicolous lichens from the Iberian Peninsula, with the description of four new species and one new genus. *Opuscula Philolichenum*. 13:44-79.
- van den Boom, P.P. and Sipman, H.J., 2016. Foliicolous lichens from Suriname and Guyana: new records and three new species. *Folia Cryptogamica Estonica*, 53, pp.101-110.
- Van den Boom, P.P.G. 2015. Lichens and lichenicolous fungi from graveyards of the area of Eindhoven (the Netherlands), with the description of two new species. *Annalen des Naturhistorischen Museums Wien. serie B* 117:245-276
- van den Boom,P.P.G. 2016. LICHENS AND LICHENICOLOUS FUNGI OF THE AZORES (PORTUGAL), COLLECTED ON SÃO MIGUEL AND TERCEIRA WITH THE DESCRIPTIONS OF SEVEN NEW SPECIES. *Acta Botanica Hungarica*. 58(1-2):199-222
- Van den Brink J, Facun K, De Vries M, Stielow JB. Thermophilic growth and enzymatic thermostability are polyphyletic traits within Chaetomiaceae. *Fungal biology*. 2015 Dec 31;119(12):1255-66.
- van den Brink J, Samson RA, Hagen F, Boekhout T, de Vries RP. 2012. Phylogeny of the industrial relevant, thermophilic genera *Myceliophthora* and *Corynascus*. *Fungal Diversity* 52:197–207.
- van den Brink,J., Facun,K., de Vries,M. and Stielow,J.B. 2015 Thermophilic growth and enzymatic thermostability are polyphyletic traits within Chaetomiaceae. *Fungal Biol* 119 (12), 1255-1266.
- Van den Broeck D, Diederich P, Ertz D. Report on two lichenological field meetings in Luxembourg in 2011 and 2012. *Bulletin de la Société des naturalistes luxembourgeois*. 2013;114:65-76.
- Van Den Broeck D, Luecking R, Damien ER. The foliicolous lichen biota of the Democratic Republic of the Congo, with the description of six new species. *The Lichenologist*. 2014 Mar 1;46(02):141-58.
- Van Vooren, N. (2009). Note sur *Smardaea ovalispora* comb. nov. (Pezizales). *Bull. Mycol. Bot. Dauphiné-Savoie* 49(no. 192): 23-38
- Van Vooren,N. 2014. Type-revision of *Lachnea velenovskyi*, a new species in the genus *Spooneromyces* (Pezizales). *Ascomycete*. 6(4):89-92

- Van Wyk M, Wingfield BD, Clegg PA, Wingfield MJ. *Ceratocystis larium* sp. nov., a new species from *Styrax benzoin* wounds associated with incense harvesting in Indonesia. *Persoonia*. 2009 Jun;22:75.
- van Wyk, M.; Wingfield, B.D.; Marin, M.; Wingfield, M.J. (2010). New *Ceratocystis* species infecting coffee, cacao, citrus and native trees in Colombia. *Fungal Diversity* 40: 103-117.
- Vandeputte P, Ghamrawi S, Rechenmann M, Iltis A, Giraud S, Fleury M, Thornton C, Delhaès L, Meyer W, Papon N, Bouchara JP. Draft genome sequence of the pathogenic fungus *Scedosporium apiospermum*. *Genome announcements*. 2014 Oct 30;2(5):e00988-14.
- Varga J, Samson RA, Frisvad JC. 2010a. Polyphasic taxonomy of *Aspergillus* section *Sparsi*. *IMA Fungus* 1:187–195.
- Varga J, Samson RA, Frisvad JC. 2010b. *Aspergillus* sect. *Aeni* sect. nov., a new section of the genus for *A. karnatakaensis* sp. nov. and some allied fungi. *IMA Fungus* 1:197–205.
- Varga,J., Due,M., Frisvad,J.C. and Samson,R.A. 2007 Taxonomic revision of *Aspergillus* section *Clavati* based on molecular, morphological and physiological data. *Stud. Mycol.* 59, 89-106.
- Vasilyeva L, Chernyshev A, Stephenson SL 2010 *Pyrenomycetes of the Russian Far East 4: family Nitschkiaceae (Coronophorales, Ascomycota)*. *Mycologia* 102 no. 1 233-247
- Vasilyeva LN, Stephenson SL. Notes on pyrenomycetous fungi in the Mountain Lake area of southwestern Virginia. *Mycosphere*. 2014 Jan 1;5(1):218-27.
- Vasilyeva, L. 1989. *Azbukinia* gen. nov. *Mycotaxon*. 35(2):395-397.
- Vasilyeva, L. 2001. *Pyrenomycetes of the Russian Far East - Additions and corrections. 1. Rossmania ukurunduensis* gen et sp. nov. *Mycoscience*. 42(4):399-401.
- Vasilyeva, L.N. 1993. *Chromendothia*, a new genus of the family *Hypocreaceae*. *Mikologiya i Fitopatologiya*. 27(4):1-7.
- Vasilyeva, L.N. 1998. *Nizshie Rasteniya, Griby i Mokhoobraznye Dalnego Vostoka Rossii*. 4:1-419.
- Vasilyeva, L.N. 2000. *Hysteriaceous fungi in the Russian Far East - III. Glonium and actidiographium*. *Mikologiya i Fitopatologiya*. 34(6):3-5.
- Vasilyeva, L.N. 2007. *Pyrenomycetes of the Russian Far East 2. Mollicamarops stellata* gen. et sp. nov. *Mycotaxon*. 99:159-162.
- Vasilyeva, L.N. 2010. New species of pyrenomycetes from eastern Russia: *Endoxylina rufula* (*Diatrypaceae*). *Mycosphere*. 1(2):163-166
- Vasilyeva, L.N.; Chernyshev, A.V.; Stephenson, S.L. 2010. *Pyrenomycetes of the Russian Far East 4. The family Nitschkiaceae (Coronophorales, Ascomycota)*. *Mycologia*. 102(1):233-247
- Vasilyeva, L.N.; Chernyshev, A.V.; Stephenson, S.L. 2012. *Neochaetosphaerella thaxteriospora* gen. et sp. nov. and *Tympanopsis texensis* sp. nov. (*Coronophorales, Ascomycota*) from Texas, USA. *Fungal Diversity*. 52(1):191-196.
- Vasilyeva, L.N.; Rossman, A.Y.; Farr, D.F. (2008) [2007]. New species of the *Diaporthales* from eastern Asia and eastern North America. *Mycologia* 99(6): 916-923
- Vasilyeva, L.N.; Rossman, A.Y.; Farr, D.F. 2007. New species of the *Diaporthales* from eastern Asia and eastern North America. *Mycologia*. 99(6):916-923.
- Vasilyeva, L.N.; Stephenson, S.L. (2010). Biogeographical patterns in pyrenomycetous fungi and their taxonomy. 1. The Grayan disjunction. *Mycotaxon* 114: 281-303.
- Vasilyeva, Larissa N.; Ma, Hai-xia; Stephenson, Steven L. 2016 Biogeography and taxonomy of pyrenomycetous fungi 3. The area around the Sea of Japan. *Mycotaxon*, Volume 126, October-December 2013, pp. 1-14.

- Vasilyeva, Larissa; Li, Yu; Stephenson, Steven 2009 Some pyrenomycetous fungi new to China. *Mycotaxon*, Volume 109, July-September 2009, pp. 415-428
- Vasilyeva L.N. 1983. A new genus of pyrenomycetes on *Dryas* L. *Novosti sistematiki nizschikh rasteniy* 20: 66-69.
- Vasilyeva L.N. 1983. On *Buergenerula thalictri* (Wint.) Müller. *Novosti sistematiki nizschikh rasteniy* 20: 70-72.
- Vasilyeva L.N. 1987. Pyrenomycetes and loculoascomycetes of the northern Far East. Leningrad: Nauka, 255 p.
- Vasilyeva L.N. 1989. *Azbukinia* gen. nov. *Mycotaxon* 35: 395-397.
- Vasilyeva L.N. 1993. *Chromendothia* – a new genus of the Hypocreaceae. *Mikologiya i fitopatologiya* 27: 1-7.
- Vasilyeva L.N. 1997. *Camarops pugillus* (Schw. : Fr.) Shear from the Russian Far East. *Mikologiya i fitopatologiya* 31: 5-7.
- Vasilyeva L.N. 1998. Pyrenomycetes and loculoascomycetes. Lower plants, fungi, and bryophytes of the Russian Far East. Vol. IV Nauka, Sankt-Petersburg, 419 p.
- Vasilyeva L.N. 2000. Hysteriaceous fungi in the Russian Far East. III. *Glonium* and *Actidiographium*. *Mikologiya i fitopatologiya* 34: 3-5.
- Vasilyeva L.N. 2001. Hysteriaceous fungi in the Russian Far East IV. *Glyphium*, *Lophium* and *Mytilinidion*. *Mikologiya i fitopatologiya* 35: 15-18.
- Vasilyeva L.N. 2001. Pyrenomycetes of the Russian Far East - Additions and corrections. 1. *Rossmania ukurunduensis* gen. et sp. nov. *Mycoscience* 42: 399-401.
- Vasilyeva L.N. 2007. Pyrenomycetes of the Russian Far East 2. *Mollicamarops stellata* gen. et sp. nov. *Mycotaxon* 99: 159-162.
- Vasilyeva L.N., Chernyshev A.V., Stephenson S.L. 2012. *Neochaetosphaerella thaxteriospora* gen. et sp. nov. and *Tympanopsis texensis* sp. nov. (Coronophorales, Ascomycota) from Texas, USA. *Fungal Diversity* 52: 191-196
- Vasilyeva L.N., Chernyshev A.V., Stephenson S.L., Hyde K.D. 2013. *Tortulomyces thailandicus* gen. et sp. nov. and *Nitschkia siamensis* sp. nov. (Coronophorales, Ascomycota) from northern Thailand. *Mycoscience* 54: 110-115.
- Vasilyeva L.N., Rossman A.Y., Farr D.F. 2007. New species of the Diaporthales from eastern Asia and eastern North America. *Mycologia* 99: 852-859
- Vasilyeva L.N., Stephenson S.L. 2007. *Cryptovalsaria* gen. nov. and its two new species from eastern Asia and south central North America. *Sydowia* 59: 154-160
- Vaupotič, T., Veranic, P., Petrovič, U., Gunde-Cimerman, N. and Plemenitaš, A., 2008. HMG-CoA reductase is regulated by environmental salinity and its activity is essential for halotolerance in halophilic fungi. *Studies in mycology*, 61, pp.61-66.
- Vazquez-Campos X, Kinsela AS, Waite TD, Collins RN, Neilan BA (2014) *Fodinomyces uranophilus* gen. nov. sp. nov. and *Coniochaeta fodinicola* sp. nov., two uranium mine-inhabiting Ascomycota fungi from northern Australia. *Mycologia* 106(6):1073-1089
- Vázquez-Campos, X.; Kinsela, A.S.; Waite, T.D.; Collins, R.N.; Neilan, B.A. 2014. *Fodinomyces uranophilus* gen. nov. sp. nov. and *Coniochaeta fodinicola* sp. nov., two uranium mine inhabiting Ascomycota fungi from northern Australia. *Mycologia*. 106(6):1073-1089.
- Velen. (1934) In: *Monogr. Discom. Bohem.* (Prague):89
- Véléz, H., Glassbrook, N.J. and Daub, M.E., 2008. Mannitol biosynthesis is required for plant pathogenicity by *Alternaria alternata*. *FEMS microbiology letters*, 285(1), pp.122-129.
- Velmalá S, Myllys L, Goward T, Holien H, Halonen P (2014) Taxonomy of Bryoria section *Implexae* (Parmeliaceae, Lecanoromycetes) in North America and Europe, based on chemical, morphological and molecular data. *Annales Botanici Fennici* 51: 345–371.

- Verkley GJM, Dukik K, Renfurm R, et al. (2014). Novel genera and species of coniothyrium-like fungi in Montagnulaceae (Ascomycota). *Persoonia* 32: 25–51
- Verkley GJM, Quaedvlieg W, Shin HD, Crous PW (2013) A new approach to species delimitation in *Septoria*. *Stud Mycol* 75:213–305
- Verkley GJM, Quaedvlieg W, Shin HD, Crous PW (2013) A new approach to species delimitation in *Septoria*. *Stud Mycol* 75:213–305
- Verkley, G.J.M.; Hofland-Zijlstra, J.D. 2010. *Rhizodermea veluwensis* gen. et sp. nov. *Persoonia*. 24:130-131
- Verma, R.K.; Sharma, N.; Soni, K.K.; Jamaluddin (2008) *Forest Fungi of Central India* 418 pp.+ incl. colour plates Lucknow: International Book Distributing Co.
- Verma,NK;Rai,AN. 2014. *Distocercospora indica*, a new dematiaceous hyphomycete from central India. *Mycotaxon*. 127:97-101.
- Vermeulen M, Gryzenhout M, Wingfield MJ, Roux J. Species delineation in the tree pathogen genus *Celoportha* (Cryphonectriaceae) in southern Africa. *Mycologia*. 2013 Mar 1;105(2):297-311.
- Vicente VA, Attili-Angelis D, Pie MR, Queiroz-Telles F, Cruz LM, Najafzadeh MJ, de Hoog GS, Zhao J, Pizzirani-Kleiner A. 2008. Environmental isolation of black yeast-like fungi involved in human infection. *Studies in Mycology* 61:137–144.
- Vicente VA, Oréelis-Ribeiro R, Najafzadeh MJ, Sun J, Guerra RS, Miesch S, Ostrensky A, Meis JF, Klaassen CH, de Hoog GS, Boeger WA. 2012. Black yeast-like fungi associated with lethargic crab disease (LCD) in the mangrove-land crab, *Ucides cordatus* (Ocypodidae). *Veterinary Microbiology* 158:109–122.
- Vicol, I., 2012. The sinstructure of epiphytic lichens within forests from the eastern part of Bucharest Municipality (Romania). *Botanica Serbica* (Serbia).
- Videira SIR, Groenewald JZ, Braun U, Shin HD, Crous PW (2016). All that glitters is not *Ramularia*. *Studies in Mycology* 83: 49–163.
- Videira SIR, Groenewald JZ, Nakashima C, Barreto R, Braun U, Crous PW. 2017. *Mycophaerellaceae* – chaos or clarity? *Studies in Mycology*: in prep.
- Vijaykrishna, D.; Jeewon, R.; Hyde, K.D. (2005). *Fusoidispora aquatica*: new freshwater ascomycete from Hong Kong based on morphology and phylogeny inferred from rDNA gene sequences. *Sydowia* 57(2): 267-280.
- Viljoen, C.D.; Wingfield, M.J.; Jacobs, K.; Wingfield, B.D. 2000. *Cornuvesica*, a new genus to accommodate *Ceratocystiopsis falcata*. *Mycological Research*. 104(3):365-367.
- Villalta, C.F.; Jacobson, D.J.; Taylor, J.W. (2009). Three new phylogenetic and biological *Neurospora* species: *N. hispaniola*, *N. metzenbergii* and *N. perkinsii*. *Mycologia* 101(6): 777-789.
- Visagie CM, Yilmaz N, Frisvad JC, Houbraken J, Seifert KA, Samson RA, Jacobs K. 2015. Five new *Talaromyces* species with ampulliform-like phialides and globose rough walled conidia resembling *T. verruculosus*. *Mycoscience* 56:486–502.
- Visagie CM, Yilmaz N, Renaud JB, Sumarah MW, Hubka V, Frisvad JC, Chen AJ, Meijer M, Seifert KA. 2017. A survey of xerophilic *Aspergillus* from indoor environments, including descriptions of two new section *Aspergillus* species producing eurotium-like sexual states. *MycKeys* 19:1–30.
- Vitoria NS, Cavalcanti MAQ, Hyde KD, Bezerra JL (2011) *Arecomyces* new to Brazil, including *A. attaleae* sp. nov. *Cryptogamie. Mycologie* 32:103–108.
- Vittal, B.; Dorai, M. 1986. *Civisubramania eucalypti* gen. et sp. nov. *Transactions of the British Mycological Society*. 87:482-485
- Voglmayr H & Yule CM (2006) *Polyancora globosa* gen. sp. nov., an aeroaquatic fungus from Malaysian peat swamp forests. *Mycological Research*, 110, 1242–1252.

- Voglmayr H, Gardiennet A, Jaklitsch WM (2016) *Asterodiscus* and *Stigmatodiscus*, two new apothecial dothideomycete genera and the new order Stigmatodiscales. *Fungal Divers* DOI 10.1007/s13225-016-0356-y
- Voglmayr H, Jaklitsch WM (2011) Molecular data reveal high host specificity in the phylogenetically isolated genus *Massaria* (Ascomycota, Massariaceae). *Fungal Divers* 46:133–170
- Voglmayr H, Park MJ & Shin HD. (2011) *Spiroplana centripeta* gen. & sp. nov., a leaf parasite of *Philadelphus* and *Deutzia* with a remarkable aeroaquatic conidium morphology. *Mycotaxon* 116: 203–216.
- Voglmayr H., Jaklitsch W.M. 2014. *Stilbosporaceae* resurrected: generic reclassification and speciation. *Persoonia* 33: 61-82.
- Voglmayr, H. and Jaklitsch, W.M., 2014. *Stilbosporaceae* resurrected: generic reclassification and speciation. *Persoonia-Molecular Phylogeny and Evolution of Fungi*, 33(1), pp.61-82.
- Voglmayr, H. and Jaklitsch, W.M., 2014. *Stilbosporaceae* resurrected: generic reclassification and speciation. *Persoonia-Molecular Phylogeny and Evolution of Fungi*, 33(1), pp.61-82.
- Volkman-Kohlmeyer B, Kohlmeyer J (1992) *Corallicola nana* gen. & sp. nov. and other ascomycetes from coral reefs. *Mycotaxon* 64:417–424
- Von Reis, J.C., 2015. The effects of select herbicides on the biological soil crust in shrub steppe areas of the Columbia Basin, Washington (Doctoral dissertation, Washington State University).
- Vondrák J, (a1), Khodosovtsev A, Šoun J, Vondráková O (2012) Two new European species from the heterogeneous *Caloplaca holocarpa* group (Teloschistaceae). *Lichenologist* 44: 73–89
- Vondrák J, Frolov I, Davydov EA, Urbanavichene I, Chesnokov S, Zhdanov I, Muchnik E, Konoreva L, Himelbrant D, Tchabanenko S (2016) The extensive geographical range of several species of Teloschistaceae: evidence from Russia. *The Lichenologist* 48(3): 171–189
- Vondrák, J. and Liška, J., 2013. Lichens and lichenicolous fungi from the Retezat Mts and overlooked records for the checklist of Romanian lichens. *Herzogia*, 26(2), pp.293-305.
- Vondrak, J. and Malicek, J. Teloschistaceae of the localities Velka kotlina and Petrovy kameny in the Hruby Jesenik Mts Unpublished 2(bases 1 to 588) Vondrak, J. and Malicek, J. Submitted (20-OCT-2015)
- Voytsekhovich A, Dymytrova L, Nadyeina O. Photobiont composition of some taxa of the genera *Micarea* and *Placynthiella* (Lecanoromycetes, lichenized Ascomycota) from Ukraine. *Folia Cryptogamica Estonica*. 2011;48:135-48.
- Vu, A.L., Dee, M.M., Gualandi Jr, R.J., Huff, S., Zale, J., Gwinn, K.D. and Ownley, B.H., 2015. First report of leaf spot caused by *Bipolaris spicifera* on switchgrass in the United States. *Phytopathology*, 105(8), pp.1146-1154.
- Vu, A.L., Dee, M.M., Gwinn, K.D. and Ownley, B.H., 2011. First report of spot blotch and common root rot caused by *Bipolaris sorokiniana* on switchgrass in Tennessee. *Plant Disease*, 95(9), pp.1195-1195.
- Vujanovic, V.; Goh, Y.K. (2009). *Sphaerodes mycoparasitica* sp. nov., a new biotrophic mycoparasite on *Fusarium avenaceum*, *F. graminearum* and *F. oxysporum*. *Mycol. Res.* 113(10): 1172-1180.
- Vujanovic, V.; St-Arnaud, M.; Neumann, P.J.; Fortin, J.A. 1998. *Diarimella laurentidae* anam.: sp.nov. from Quebec. *Canadian Journal of Botany*. 76(12):2037-2041.

- W.H. Ko, Ching H. Yang, Mei J. Lin, Chi Y. Chen & Y.J. Tsou, *Botanical Studies*, 52(2), 200, 2011
- Walker DM, Castlebury LA, Rossman AY, Mejía LC, White JF. 2012 Phylogeny and taxonomy of *Ophiognomonia* (Gnomoniaceae, Diaporthales), including twenty-five new species in this highly diverse genus *Fungal Diversity* 57, (1) 85–147
- Walker DM, Lawrence BR, Wooten JA, Rossman AY, Castlebury LA. Five new species of the highly diverse genus *Plagiostoma* (Gnomoniaceae, Diaporthales) from Japan. *Mycological Progress*. 2014 Nov 1;13(4):1057-67.
- Wanasinghe DN, Jones EBG, Camporesi E, Dissanayake AJ, Kamolhan S, Mortimer PE, Xu J, Abd-Elsalam KA, Hyde KD. 2016 – Taxonomy and phylogeny of *Laburnicola* gen. nov. and *Paramassariosphaeria* gen. nov. (Didymosphaeriaceae, Massariaceae, Pleosporales). *Fungal Biology* 120, 1354–1373
- Wanasinghe DN, Jones EBG, Camporesi E, Mortimer PE, Xu J, Bahkali AH, Hyde KD (2015) The genus *Murispora*. *Cryptogamie Mycologie* 36:419–448
- Wanasinghe DN, Jones EBG, Camporesi E, Boonmee S, Karunarathna SC, Thines M, Mortimer PE, Xu J, Hyde KD (2014) *Dematiopleospora mariae* gen. sp. nov., from *Ononis Spinosa* in Italy. *Cryptogamie Mycologie* 35:105–117
- Wang H, Luo H, Li J, Bai Y, Huang H, Shi P, Fan Y, Yao B (2010) An alpha-galactosidase from an acidophilic *Bispora* sp. MEY-1 strain acts synergistically with beta-mannanase. *Bioresource Technology* 101:8376–8382. doi: 10.1016/j.biortech.2010.06.045
- Wang J, Xu S, Strongman DB. Two new Harpellales inhabiting the digestive tracts of midge larvae and other trichomycetes from Tianshan Mountains, China. *Mycologia*. 2010 Jan 1;102(1):135-41.
- Wang L, Groenewald M, Wang QM, Boekhout T. Reclassification of *Saccharomyces sinensis*, Proposal of *Yueomyces sinensis* gen. nov., comb. nov. within Saccharomycetaceae (Saccharomycetales, Saccharomycotina). *PloS one*. 2015 Sep 16;10(9):e0136987.
- Wang LS, McCune B. Contributions to the lichen flora of the Hengduan mountains, China 1. Genus *Pseudephebe* (lichenized Ascomycota, Parmeliaceae). *Mycotaxon*. 2010 Jul 1;113(1):431-7.
- Wang QM, Zhang YH, Wang B, Wang L. 2016. *Talaromyces neofusisporus* and *T. qii*, two new species of section *Talaromyces* isolated from plant leaves in Tibet, China. *Sci Rep* 6:18622.
- Wang S, Cannon P, Li ZJ, Hou CL. Multigene phylogenetic analysis detects cryptic species of *Trybliopsis* in China. *Mycologia*. 2014 Jan 1;106(1):95-104.
- Wang T.W., Haelewaters D., Pfister D.H. 2016. Long-hidden in Thaxter's treasure trove: *Laboulbenia camerunensis* sp. nov. parasitic on African Curculionidae. *Mycotaxon* 131 (3): 613-619.
- Wang X, Gao Q, Bao J. Transcriptional analysis of *Amorphotheca resinae* ZN1 on biological degradation of furfural and 5-hydroxymethylfurfural derived from lignocellulose pretreatment. *Biotechnology for biofuels*. 2015 Sep 4;8(1):1.
- Wang X, Huhtinen S, Hansen K. Multilocus phylogenetic and coalescent-based methods reveal dilemma in generic limits, cryptic species, and a prevalent intercontinental disjunct distribution in *Geopyxis* (Pyronemataceae s.l., Pezizomycetes). *Mycologia*. 2016 Oct 19:16-00.
- Wang X, Liu D, Li J, Harada H, Wang L. Lichen Flora on the Genera *Alectoria*, *Pseudephebe*, and *Sulcaria* (Lichenized Ascomycota, Parmeliaceae) from the Hengduan Mountains

- in China (4). In Proceedings of the 2012 International Conference on Applied Biotechnology (ICAB 2012) 2014 (pp. 1095-1105). Springer Berlin Heidelberg.
- Wang XY, Goffinet B, Liu D, Liang MM, Shi HX, Zhang YY, Zhang J, Wang LS (2015) Taxonomic study of the genus *Anzia* (Lecanorales, lichenized Ascomycota) from Hengduan Mountains, China. *Lichenologist* 47:99–115.
- Wang Y, Chen XR, Yang CD. A new *Stigmella* species associated with *Lycium* leaf spots in northwestern China. *Mycotaxon*. 2013 Mar 4;122(1):69-72.
- Wang YZ, Huang CL. A new species of *Urnula* (Sarcosomataceae, Pezizales) from Taiwan. *Nova Hedwigia*. 2015 Aug 1;101(1-2):49-55.
- Wang, C.J.K.; Sutton, B.C. 1982. New and rare lignicolous Hyphomycetes. *Mycologia*. 74:489-500.
- Wang, C.J.K.; Sutton, B.C. 1984. Two new synnematosous genera: *Chalarodendron* and *Paradidymobotryum*. *Mycologia*. 76(3):569-572.
- Wang, C.Y.; Mo, M.H.; Li, X.; Tian, B.Y.; Zhang, K.Q. 2007. Morphological characteristics and infection processes of nematophagous *Harposporium* with reference to two new species. *Fungal Diversity*. 26:287-304
- Wang, H.K., Hyde, K.D., Soyong, K. and Lin, F.C., 2008. Fungal diversity on fallen leaves of *Ficus* in northern Thailand. *Journal of Zhejiang University SCIENCE B*, 9(10), pp.835-841.
- Wang, J., Wang, R. and Yang, X.Y., 2013. Efficacy of an *Arthrobotrys oligospora* N mutant in nematode-trapping larvae after passage through the digestive tract of sheep. *Veterinary microbiology*, 161(3), pp.359-361.
- Wang, L.S., Wang, X.Y. and Lumbsch, H.T., 2013. Eight lecanoroid lichen species new to China. *Cryptogamie, Mycologie*, 34(4), pp.343-348.
- Wang, M.M.; Jin, L.T.; Jiang, C.X.; Hou, C.L. (2009). *Rhytisma huangshanense* sp. nov. described from morphological and molecular data. *Mycotaxon* 108: 73-82.
- Wang, Q.X., Yang, J.L., Qi, Q.Y., Bao, L., Yang, X.L., Liu, M.M., Huang, P., Zhang, L.X., Chen, J.L., Cai, L. and Liu, H.W., 2013. 3-Anhydro-6-hydroxy-ophiobolin A, a new sesterterpene inhibiting the growth of methicillin-resistant *Staphylococcus aureus* and inducing the cell death by apoptosis on K562, from the phytopathogenic fungus *Bipolaris oryzae*. *Bioorganic & medicinal chemistry letters*, 23(12), pp.3547-3550.
- WANG, R., YANG, X.Y. and HAN, H.B., 2008. Influence of amino acids on traps forming of nematode-trapping fungus-*Arthrobotrys oligospora* [J]. *Heilongjiang Animal Science and Veterinary Medicine*, 7, p.003.
- Wang, W., Wang, Y., Tao, H., Peng, X., Liu, P. and Zhu, W., 2009. Cerebrosides of the halotolerant fungus *Alternaria raphani* isolated from a sea salt field. *Journal of natural products*, 72(9), pp.1695-1698.
- Wang, W.; McGhee, D.; Gibas, C.F.C.; Tsuneda, A.; Currah, R.S. (2009). *Phialocephala urceolata*, sp. nov., from a commercial, water-soluble heparin solution. *Mycologia* 101(1): 136-141.
- Wang, X., Liu, D., Li, J., Harada, H. and Wang, L., 2014. Lichen Flora on the Genera *Alectoria*, *Pseudephebe*, and *Sulcaria* (Lichenized Ascomycota, Parmeliaceae) from the Hengduan Mountains in China (4). In Proceedings of the 2012 International Conference on Applied Biotechnology (ICAB 2012) (pp. 1095-1105). Springer Berlin Heidelberg.
- Wang, X.Y., Joshi, Y., Hur, J.S., Oh, S.O. and Wang, L.S., 2010. Taxonomic studies on the lichen flora of southwestern China (1). *Pilophorus yunnanensis* sp. nov.(Cladoniaceae). *The Bryologist*, 113(2), pp.345-349.

- Wang, X.Y., Joshi, Y., Oh, S.O., Jae-Seoun, H.U.R. and Wang, L.S., 2011a. *Pilophorus fruticosus* (Cladoniaceae), a new species from south-western China. *The Lichenologist*, 43(02), pp.137-140.
- Wang, X.Y., Wang, L.S., Kawakami, H. and Hur, S.J., 2011b. The genus *Pilophorus* (Lichenized Ascomycota, Cladoniaceae) from China. *菌物学报*, 30(6), pp.889-894.
- Wang, X.Y.; Gu,H.L.;Li,Q;Wang, L.H.; Lin,Y.R. 2014. A new species of *Coccomyces* with dimorphic paraphyses. *Mycotaxon*. 129(2):297-302
- Wang, Xiao-Hua; Xu, Li-Li; Jia, Ze-Feng 2015 The lichen genus *Leiorreuma* in China. *Mycotaxon*, Volume 130 (1): 247-251
- Wang, Y., Bao, Y., Shen, D., Feng, W., Yu, T., Zhang, J. and Zheng, X.D., 2008. Biocontrol of *Alternaria alternata* on cherry tomato fruit by use of marine yeast *Rhodospodium paludigenum* Fell & Tallman. *International Journal of Food Microbiology*, 123(3), pp.234-239.
- Wang, Y., Shao, J., Yao, S., Zhang, S., Yan, J., Wang, H. and Chen, Y., 2014. Study on the antithrombotic activity of *Umbilicaria esculenta* polysaccharide. *Carbohydrate polymers*, 105, pp.231-236.
- Wang, Y., Sun, L., Yi, S., Huang, Y., Lenaghan, S.C. and Zhang, M., 2013. Naturally occurring nanoparticles from *Arthrotrrys oligospora* as a potential immunostimulatory and antitumor agent. *Advanced Functional Materials*, 23(17), pp.2175-2184.
- Wang, Y., Yu, T., Li, Y., Cai, D., Liu, X., Lu, H. and Zheng, X.D., 2009. Postharvest biocontrol of *Alternaria alternata* in Chinese winter jujube by *Rhodospodium paludigenum*. *Journal of applied microbiology*, 107(5), pp.1492-1498.
- Wang, Yei-Zeng, Chun-Lin Huang, and Jia-Ling Wei. "Two new species of *Sarcoscypha* (*Sarcosyphaceae*, *Pezizales*) from Taiwan." *Phytotaxa* 245.2 (2016): 169-177.
- Wang,S., Kirschner,R., Wang,Y.-W. and Hou,C.-L. 2014 *Hypohelion* from China. *Mycol. Prog.* 13, 781-789.
- Wang,S., Taylor,J. and Hou,C.-L. 2013 Species of *Rhytismatales* on *Berberis* from China. *Mycol. Prog.* 12 (4), pp 629–635.
- Wang,Z., Binder,M. and Hibbett,D.S. 2005 Life history and systematics of the aquatic discomycete *Mitrula* (*Helotiales*, *Ascomycota*) based on cultural, morphological, and molecular studies. *Am. J. Bot.* 92 (9), 1565-1574
- Wanporn Khemmuk, Andrew D.W. Geering and Roger G. Shivas 2016 *Wongia* gen. nov. (*Papulosaceae*, *Sordariomycetes*), a new generic name for two root-infecting fungi from Australia. *IMA FUNGUS* · 7(2): 247–252
- Watanabe, T. 1992. *Hyphodiscosia radiculicola* sp. nov. from. Japan. *Mycologia*. 84(1):113-116.
- Waxman, K.D. and Bergstrom, G.C., 2015. First report of a leaf spot caused by *Bipolaris oryzae* on switchgrass in New York. *Current Research on Fungal Pathogens Associated with Rice*, 8, pp.482-501.
- Weber E (2002) The *Lecythophora-Coniochaeta* complex: I. Morphological studies on *Lecythophora* species isolated from *Picea abies*. *Nova Hedwigia* 74:159-185.
- Weber E, Görke C, Begerow D (2002) The *Lecythophora-Coniochaeta* complex: II. Molecular studies based on sequences of the large subunit of ribosomal DNA. *Nova Hedwigia* 74:187-200.
- Weber E, Görke C, Begerow D. The *Lecythophora-Coniochaeta* complex: II. Molecular studies based on sequences of the large subunit of ribosomal DNA. *Nova Hedwigia*. 2002 Feb 1;74(1-2):187-200.
- Weber, W.A., 2011. *Catalog of The Lichens of Colorado*.

- Wedén C, Larsson S, Burman R, Backlund A. The edible truffle *Choiromyces venosus* and its use in Sweden. *Acta Botanica Yunnanica*. 2009;31(S16):94-6.
- Wedin M, Jørgensen PM, Ekman S. Vahliellaceae, a new family of cyanobacterial lichens (Peltigerales, Ascomycetes). *The Lichenologist*. 2011;43(01):67-72.
- Wedin M, Wiklund E, Jørgensen PM, Ekman S (2009) Slippery when wet: phylogeny and character evolution in the gelatinous cyanobacterial lichens (Peltigerales, Ascomycetes). *Mol Phylogenet Evol* 53:862-871.
- Wedin, M., Högnabba, F. and Goward, T., 2009. A new species of *Sphaerophorus*, and a key to the family Sphaerophoraceae in western North America. *The Bryologist*, 112(2), pp.368-374.
- Wedin, M., Jørgensen, P.M. and Ekman, S., 2011. Vahliellaceae, a new family of cyanobacterial lichens (Peltigerales, Ascomycetes). *The Lichenologist*, 43(01), pp.67-72.
- Wedin, M., Wiklund, E., Jørgensen, P.M. and Ekman, S. 2009. Slippery when wet: phylogeny and character evolution in the gelatinous cyanobacterial lichens (Peltigerales, Ascomycetes) *Mol. Phylogenet. Evol.* 53 (3), 862-871.
- Wedin, M.; Jørgensen, P.M. 2011. Vahliellaceae, a new family of cyanobacterial lichens (Peltigerales, Ascomycetes). *The Lichenologist*. 43(1):67-72
- Wedin, M., Doring, H. and Mattsson, J.-E. 1999 A multi-gene study of the phylogenetic relationships of the family Parmeliaceae. *Mycol. Res.* 103 (9), 1185-1192
- Wedin, M., Wiklund, E., Jørgensen, P.M. and Ekman, S. 2009 Slippery when wet: phylogeny and character evolution in the gelatinous cyanobacterial lichens (Peltigerales, Ascomycetes). *Mol. Phylogenet. Evol.* 53 (3), 862-871
- Weerakoon, G. and Aptroot, A., 2016. Nine new lichen species and 64 new records from Sri Lanka. *Phytotaxa*, 280(2), pp.152-162.
- Weerakoon, G., Jayalal, U., Wijesundara, S., Karunaratne, V. and Lücking, R., 2015. Six new Graphidaceae (lichenized Ascomycota: Ostropales) from Horton Plains National Park, Sri Lanka. *Nova Hedwigia*, 101(1-2), pp.77-88.
- Weerakoon, G., Wijeyaratne, S.C., Wolseley, P.A., Plata, E.R., Lücking, R. and Lumbsch, H.T., 2012. Six new species of Graphidaceae from Sri Lanka. *The Bryologist*, 115(1), pp.74-83.
- Weerakoon, G., Wolseley, P.A., Arachchige, O., Eugenia da Silva Cáceres, M., Jayalal, U. and Aptroot, A., 2016. Eight new lichen species and 88 new records from Sri Lanka. *The Bryologist*, 119(2), pp.131-142.
- Węgrzyn, M., Wietrzyk, P., Adamska, E. and Nicia, P., 2015. New records of driftwood lichens in the Kaffiøyra Plain (NW Spitsbergen, Svalbard). *Polish Polar Research*, 36(2), pp.189-195.
- Wei J-C, Ahti T (2002) *Cetradonia*, a new genus in the new family Cetradoniaceae (Lecanorales, Ascomycota). *Lichenologist* 34(1):19–31.
- Wei, L.X., Zhang, H.X., Tan, J.L., Chu, Y.S., Li, N., Xue, H.X., Wang, Y.L., Niu, X.M., Zhang, Y. and Zhang, K.Q., 2011. *Arthrobotrisins A–C*, oligosporons from the nematode-trapping fungus *Arthrobotrys oligospora*. *Journal of natural products*, 74(6), pp.1526-1530.
- Weir, A. (2008) The Genus *Prolixandromyces* (Laboulbeniales) in the Old World. *Aliso* 26(1): 29-35.
- Wen TC, Xiao YP, Li WJ, Kang JC, Hyde KD. Systematic analyses of *Ophiocordyceps ramosissimum* sp. nov., a new species from a larvae of Hepialidae in China. *Phytotaxa*. 2014 Feb 28;161(3):227-34.

- Westberg M, Crewe AT, Purvis OW, Wedin M (2011) *Silobia*, a new genus for the *Acarospora smaragdula* complex (Ascomycota, Acarosporales) and a revision of the group in Sweden. *Lichenologist* 43:7–25
- Westberg M, Millanes AM, Knudsen K, Wedin M (2015) Phylogeny of the Acarosporaceae (Lecanoromycetes, Ascomycota, Fungi) and the evolution of carbonized ascomata. *Fungal Divers* 70:145–158
- Westberg, M. and Sohrabi, M., 2012. A conspectus of the lichen genus *Candelariella* (Candelariaceae, Ascomycota) in Southwest Asia with emphasis on Iran. *Nova Hedwigia*, 95(3-4), pp.531-546.
- Westberg, M., Arup, U., Berglund, T., Ekman, S. and Nordin, A., 2011. New and interesting records of lichens from Pältsan (Mt Bealccan) in northernmost Sweden.
- Westberg, M., Frödén, P. and Wedin, M., 2009. A monograph of the genus *Placomaronea* (Ascomycota, Candelariales). *The Lichenologist*, 41(05), pp.513-527.
- Westberg, M., Millanes, A.M., Knudsen, K. and Wedin, M., 2015. Phylogeny of the Acarosporaceae (Lecanoromycetes, Ascomycota, Fungi) and the evolution of carbonized ascomata. *Fungal diversity*, 73(1), pp.145-158.
- Westberg, M., Arup, U. and Karnefelt, I. 2007. Phylogenetic studies in the Candelariaceae (lichenized Ascomycota) based on nuclear ITS DNA sequence data. *Mycol. Res.* 111 (PT 11), 1277-1284.
- Wetmore, C.M., 2009. Lichens collected in the Big Horn Mountains, Wyoming. *Evansia*, 26(1), pp.10-14.
- Whalley, M.A.; Khalil, A.M.A.; Wei, T.Z.; Yao, Y.J.; Whalley, A.J.S. 2010. A new species of *Engleromyces* from China, a second species in the genus. *Mycotaxon*. 112:317-323
- Whitaker VM, Hokanson SC, Bradeen J 2007 Distribution of Rose Black Spot (*Diplocarpon rosae*) Genetic Diversity in Eastern North America Using Amplified Fragment Length Polymorphism and Implications for Resistance Screening. *J. AMER. SOC. HORT. SCI.* 132(4):534–540.
- White, J. F.; Bacon, C. W.; Hywel-Jones, N. L. & Spatafora J. W. (2003) *Clavicipitalean Fungi: Evolutionary Biology, Chemistry, Biocontrol And Cultural Impacts*. CRC Press, 640 pp.
- Whitton SR, McKenzie EH, Hyde KD. *Anamorphic fungi associated with Pandanaceae*. Springer Netherlands; 2012.
- Whitton SR, McKenzie EH, Hyde KD. *Teleomorphic microfungi associated with Pandanaceae*. In *Fungi Associated with Pandanaceae 2012* (pp. 23-124). Springer Netherlands.
- Whitton, S.R., McKenzie, E.H.C. & Hyde, K.D. 2012. Anamorphic fungi associated with Pandanaceae. In Whitton, S.R., E.H.C. McKenzie & K.D. Hyde: *Fungi associated with Pandanaceae*. *Fungal Divers. Res. Ser. (Hong Kong)* 21: 125–353
- Whitton, S.R.; McKenzie, E.H.C.; Hyde, K.D. 2000. Microfungi on the Pandanaceae: *Acrodictys*, with two new species. *Fungal Diversity*. 4:159-169
- Whitton, S.R.; McKenzie, E.H.C.; Hyde, K.D. 2001. Microfungi on the Pandanaceae: *Nakatopsis* gen. nov., a new hyphomycete genus from Malaysia. *Fungal Diversity*. 8:163-171.
- Wicklow DT, Rogers KD, Dowd PF, Gloer JB. Bioactive metabolites from *Stenocarpella maydis*, a stalk and ear rot pathogen of maize. *Fungal biology*. 2011 Feb 28;115(2):133-42.
- Wicklow, D.T., Joshi, B.K., Gamble, W.R., Gloer, J.B. and Dowd, P.F. 1998 Antifungal metabolites (monorden, monocillin IV, and cerebrosides) from *Humicola fuscoatra* traanen NRRL 22980, a mycoparasite of *Aspergillus flavus* sclerotia. *Appl. Environ. Microbiol.* 64 (11), 4482-4484

- Wieczorek, A. and Łysko, A., 2012. Lichen biota of the Wolin Island (Poland). *Biodiversity: Research and Conservation*, 25, pp.83-89.
- Wieschollek, D.; Helleman, S.; Baral, H.O.; Richter, T. 2011. *Roseodiscus formosus* spec. nov. ein Bryophiler Pionier mit falschem Namen. *Zeitschrift für Mykologie*. 77(2):161-174.
- Wiewióra, B., 2012. The effect of seed health of perennial ryegrass (*Lolium perenne* L.) on germination capacity. *Plant Breeding and Seed Science*, 65(1), pp.51-62.
- Wight, W.D., Kim, K.H., Lawrence, C.B. and Walton, J.D., 2009. Biosynthesis and role in virulence of the histone deacetylase inhibitor depudecin from *Alternaria brassicicola*. *Molecular plant-microbe interactions*, 22(10), pp.1258-1267.
- Wijayawardene DNN, McKenzie EHC & Hyde KD. (2012) Towards incorporating anamorphic fungi in a natural classification – checklist and notes for 2011. *Mycosphere* 3(2): 157–228.
- Wijayawardene et al. (2016) Phylogeny and taxonomy of dematiaceous coelomycetes. *Fungal Diversity* 77: 1–316.
- Wijayawardene NN, Camporesi E, Bhat DJ, Song, Y, Chethana KWT, Chukeatirote E, Wang Y, Hyde KD (2014a) Macrodiplodiopsis in Lophiostomataceae, Pleosporales. *Phytotaxa*. 176:192–200
- Wijayawardene NN, Crous PW, Kirk PM, Hawksworth DL, Boonmee S, Braun U, Dai DQ, D'souza MJ, Diederich P, Dissanayake A, Doilom M, Hongsanan S, Jones EBG, Groenewald JZ, Jayawardena R, Lawrey JD, Liu JK, Lücking R, Madrid H, Manamgoda DS, Muggia L, Nelsen MP, Phookamsak R, Suetrong S, Tanaka K, Thambugala KM, Wanasinghe DN, Wikee S, Zhang Y, Aptroot A, Ariyawansa HA, Bahkali AH, Bhat DJ, Gueidan C, Chomnunti P, De Hoog GS, Knudsen K, Li WJ, McKenzie EHC, Miller AN, Phillips AJL, Piątek M, Raja HA, Shivas RS, Slippers B, Taylor JE, Tian Q, Wang Y, Woudenberg JHC, Cai L, Jaklitsch WM, Hyde KD (2014) Naming and outline of Dothideomycetes–2014 including proposals for the protection or suppression of generic names. *Fungal Divers* 69:1–55
- Wijayawardene NN, Goonasekara ID, Camporesi E, Wang Y, An YL. 2016 – Two new *Seimatosporium* species from Italy. *Mycosphere* 7(2), 204–213.
- Wijayawardene NN, Hyde KD, Bhat DJ, Goonasekara ID, Nadeeshan D, Camporesi E, Schumacher RK, Wang Y. Additions to Brown Spored Coelomycetous Taxa in Massarinae, Pleosporales: Introducing *Phragmocamarosporium* gen. nov. and *Suttonomyces* gen. nov. *Cryptogamie, Mycologie*. 2015 Jul 13;36(2):213-24.
- Wijayawardene NN, Hyde KD, Wanasinghe DN, Papizadeh M, Goonasekara ID, Camporesi E, Bhat DJ, McKenzie EHC, Phillips AJL, Diederich P, Tanaka K, Li WJ, Tangthirasunun N, Phookamsak R, Dai DQ, Dissanayake AJ, Weerakoon G, Maharachchikumbura SSN, Hashimoto A, Matsumura M, Bahkali AH, Wang Y. 2016 – Taxonomy and phylogeny of dematiaceous coelomycetes. *Fungal Diversity* 77: 1–316.
- Wijayawardene, D.N.N., McKenzie, E.H.C. and Hyde, K.D., 2012. Towards incorporating anamorphic fungi in a natural classification–checklist and notes for 2011. *Mycosphere*, 3(2), pp.157-228.
- Wijayawardene, N.N., Hyde, K.D., Bhat, D.J., Goonasekara, I.D., Nadeeshan, D., Camporesi, E., Schumacher, R.K. and Wang, Y., 2015. Additions to Brown Spored Coelomycetous Taxa in Massarinae, Pleosporales: Introducing *Phragmocamarosporium* gen. nov. and *Suttonomyces* gen. nov. *Cryptogamie, Mycologie*, 36(2), pp.213-224.

- Wikee S, Lombard L, Crous PW, Nakashima C, Motohshi K, Chukeatirote E, Alias SA, McKenzie EHC, Hyde KD (2013a) *Phyllosticta capitalensis*, a widespread endophyte of plants. *Fungal Divers* 60:91–105
- Wikee S, Lombard L, Nakashima C, Motohashi K, Chukeatirote E, Cheewangkoon R, McKenzie EHC, Hyde KD, Crous PW (2013b) A phylogenetic re-evaluation of *Phyllosticta* (Botryosphaerales). *Stud Mycol* 76:1–29
- Wikee S, Udayanga D, Crous PW, Chukeatirote E, Mckenzie EHC, Bahkali AH, Dai DQ, Hyde KD (2011) *Phyllosticta*—an overview of current status of species recognition. *Fungal Divers* 51:43–61
- Wiklund, E. and Wedin, M. 2003 The phylogenetic relationships of the cyanobacterial lichens in the Lecanorales suborder Peltigerineae. *Cladistics* 19, 419-431 (2003)
- Williams, M., Rudolph, E., Schofield, E. and Prasher, D., 2012. 7. The Role of Lichens in the Structure, Productivity, and Mineral Cycling of the Wet Coastal. *Vegetation and Production Ecology of an Alaskan Arctic Tundra*, 29, p.185.
- Winka, K. and Eriksson, O.E. 2000 *Papulosa amerospora* accommodated in a new family (Papulosaceae, Sordariomycetes, Ascomycota) inferred from morphological and molecular data. *Mycoscience* 41, 97-103
- Wirth, V., Hauck, M., Brackel, W.V., Cezanne, R., de Bruyn, U., Dürhammer, O., Eichler, M., Gnüchtel, A., Litterski, B., Otte, V. and Schiefelbein, U., 2011. Checklist of lichens and lichenicolous fungi in Germany. Georg August University of Göttingen, Version, 2, p.19.
- Wiseman, M.S., Kim, Y.K., Dugan, F.M., Rogers, J.D. and Xiao, C.L., 2016. A New Postharvest Fruit Rot in Apple and Pear Caused by *Phacidium lacerum*. *Plant Disease*, 100(1), pp.32-39.
- Wolf FA (1949) Two unusual conidial fungi. *Mycologia*. 41:561–564
- Wolf, J., O'Neill, N.R., Rogers, C.A., Muilenberg, M.L. and Ziska, L.H., 2010. Elevated atmospheric carbon dioxide concentrations amplify *Alternaria alternata* sporulation and total antigen production. *Environmental health perspectives*, 118(9), p.1223.
- Wong, S.S.; Ngan, A.H.; Riggs, C.M.; Teng, J.L.; Choi, G.K.; Poon, R.W.; Hui, J.J.; Low F.J.; Luk, A.; Yuen, K.Y. 2011. Brittle tail syndrome is an emerging infection in horses caused by a keratinolytic fungus *Equicapillimyces hongkongensis* gen. nov., sp. nov. *Veterinary Microbiology*. 155:399-408
- Wongsawas, M., Wang, H.K., Hyde, K.D. & Lin, F.C. 2009. Two new hyphomycetes from submerged wood collected in China. *Sydowia* 61: 345–351
- Wood AR, Damm U, van der Linde EJ, Groenewald JZ, Cheewangkoon R, Crous PW. 2016. Finding the missing link: Resolving the *Coryneliomycetidae* within Eurotiomycetes. *Persoonia* 37:37–56.
- Woudenberg JH, Aveskamp MM, De Gruyter J, Spiers AG, Crous PW. Multiple *Didymella* teleomorphs are linked to the *Phoma clematidina* morphotype. *Persoonia-Molecular Phylogeny and Evolution of Fungi*. 2009 Jun 30;22(1):56-62.
- Woudenberg, J.H.C., Groenewald, J.Z., Binder, M. and Crous, P.W., 2013. *Alternaria* redefined. *Studies in Mycology*, 75, pp.171-212.
- Woudenberg, J.H.C., Truter, M., Groenewald, J.Z. and Crous, P.W., 2014. Large-spored *Alternaria* pathogens in section *Porri* disentangled. *Studies in mycology*, 79, pp.1-47.
- Wrzosek M, Dubiel G, Gorczak M, Pawłowska J, Tischer M, Bałazy S (2016) New insights on the phylogeny and biology of the fungal ant pathogen *Aegeritella*. *Journal of Invertebrate Pathology* 133:1–7
- Wu HX, Schoch CL, Boonmee S, Bahkali AH, Chomnunti P, Hyde KD (2011) A reappraisal of Microthyriaceae. *Fungal Diversity* 51:189–248

- Wu HX, Tian Q, Li WJ, Hyde KD (2014) A reappraisal of Microthyriaceae. *Phytotaxa* 176 (1):201-212
- Wu Y, Wang SJ, Meng YQ, Tang YP, Lin YR. *Terriera fici* sp. nov. on *Ficus vasculosa* from Hainan Province, China. *Mycotaxon*. 2015 Oct 1;130(4):1111-6.
- Wu YM, Xu JJ, Wang HF, Zhang TY. *Radulidium xigazense* sp. nov., *Rhinocladiella tibetensis* sp. nov., and three new records of *Ramichloridium* from China. *Mycotaxon*. 2013 Nov 20;125(1):123-30.
- Wu, D.K., Zhang, C.P., Zhu, C.Y., Wang, Y.L., Guo, L.L., Zhang, K.Q. and Niu, X.M., 2013. Metabolites from carnivorous fungus *Arthrobotrys entomopaga* and their functional roles in fungal predatory ability. *Journal of agricultural and food chemistry*, 61(17), pp.4108-4113.
- Wu, H.Y., Kim, D.G., Ryu, Y.H. and Zhou, X.B., 2012. *Arthrobotrys koreensis*, a new nematode-trapping species from Korea. *Sydowia*, 64(1), pp.129-136.
- Wu, W.-P.; Sutton, B.C.; Gange, A.C. 1997. Description of *Avesicladiella* gen. nov. (Hyphomycetes) for two undescribed leaf litter microfungi. *Mycoscience*. 38(1):11-15.
- Wu, W.P.; Zhuang, W.Y. 2005. *Sporidesmium*, *Endophragmiella* and related genera from China. :1-531.
- Wu, Y.-M.; Xu, J.-J.; Wang, H.-F.; Zhang, T.Y. 2013. *Geosmithia tibetensis* sp. nov. and new *Gibellulopsis* and *Scopulariopsis* records from Qinghai-Tibet. *Mycotaxon*. 125:59-64
- Wu, Y.M.; Zhang, T.Y. (2009). New species of *Phialosporostilbe* and *Pleurothecium* from soil. *Mycotaxon* 110: 1-4.
- Wu, Y.M.; Zhang, T.Y. (2010). Three new species of *Scytalidium* from soil. *Mycotaxon* 114: 205-210.
- Wu, Y-M; Xu, J-J; Wang, H-F; Zhang, T-Y. 2013. *Radulidium xigazense* sp. nov., *Rhinocladiella tibetensis* sp. nov., and three new records of *Ramichloridium* from China. *Mycotaxon*. 125:123-130.
- Wulandari NF, To-Anun C, Hyde KD, Duong LM, De Gruyter J, Meffert JP, Groenewald JZ, Crous PW. *Phyllosticta citriasiana* sp. nov., the cause of Citrus tan spot of *Citrus maxima* in Asia. *Fungal Diversity*. 2009 Jan 31;34(1):23-39.
- Wynns AA. 2015. Convergent evolution of highly reduced fruiting bodies in Pezizomycotina suggests key adaptations to the bee habitat. *BMC Evolutionary Biology* 15:145.
- Xanthoria (Fr.) Th. Fr. 1861, Teloschistaceae, Teloschistales, Lecanoromycetes, 156 species, 108 varieties, 67 forma species, six sub species, type species *Xanthoria parietina* (L.) Beltr., asexual morph undetermined, lichenized, terrestrial, see Aptroot et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline),
- Xia JW, Ma YR, Gao JM, Li Z, Zhang XG. *Codinaea jianfenglingensis* sp. nov. and new records from southern China. *Mycotaxon*. 2015 Oct 9;130(3):835-41.
- Xia JW, Ma YR, Gao JM, Zhang XG, Li Z. A new species of *Blastophragma* and three new records of other dematiaceous hyphomycetes from southern China. *Nova Hedwigia*. 2016 Feb 1;102(1-2):223-32.
- Xia, J.W., Ma, L.G., Ma, Y.R., Castañeda-Ruíz, R.F. and Zhang, X.G., 2013. *Corynesporopsis curvularioides* sp. nov. and new records of microfungi from southern China. *Cryptogamie, Mycologie*, 34(3), pp.281-288.
- Xia, J.W., Ma, L.G., Ruíz, R.F.C. and Zhang, X.G., 2014. *Minimelanolocus bicolorata* sp. nov., *Paradendryphiopsis elegans* sp. nov. and *Corynesporella bannaense* sp. nov. from southern China. *mycoscience*, 55(4), pp.299-307.
- Xia, J.W., Ma, Y.R. and Zhang, X.G., 2014. New species of *Corynesporopsis* and *Lylea* from China. *Sydowia*, 66(2), pp.241-248.

- Xia, J.W., Ma, Y.R. and Zhang, X.G., 2015. *Anungitea guangxiensis* and *Ellisembia longchiensis*, two new species from southern China. *Mycotaxon*, 130(1), pp. 41–46.
- Xia, J.W., Ma, Y.R., Gao, J.M., Zhang, X.G. and Li, Z., 2016. A new species of *Blastophragma* and three new records of other dematiaceous hyphomycetes from southern China. *Nova Hedwigia*, 102(1-2), pp.223-232.
- Xia, J.W., Ren, S.C., Ma, L.G. and Zhang, X.G., 2013. *Heteroconium bannaense* sp. nov. and a new record of the genus from China. *Mycotaxon*, 121(1), pp.413-417.
- Xia, J.W.; Ma, Y.R.; Zhang X.G. 2014. New species of *Corynesporopsis* and *Lylea* from China. *Sydowia*. 66 (2) :241-248
- Xiao N, Suzuki K, Nishimiya Y, Kondo H, Miura A, Tsuda S, Hoshino T. Comparison of functional properties of two fungal antifreeze proteins from *Antarctomyces psychrotrophicus* and *Typhula ishikariensis*. *FEBS journal*. 2010 Jan 1;277(2):394-403.
- Xie, J., Strobel, G.A., Mends, M.T., Hilmer, J., Nigg, J., Geary, B. 2013. manuscript. *Microbial Ecology*. 66:784-795.
- XIN-LEI FAN, KEVIN D. HYDE, QIN YANG, YING-MEI LIANG, RONG MA, CHENG-MING TIAN. 2015 Cytosporaspecies associated with canker disease of three anti-desertification plants in northwestern China. *Phytotaxa* 197 (4): 227–244.
- Xu D, Ondeyka J, Harris GH, Zink D, Kahn JN, Wang H, Bills G, Platas G, Wang W, Szewczak AA, Liberator P. Isolation, structure, and biological activities of fellutamides C and D from an undescribed *Metulocladosporiella* (Chaetothyriales) using the genome-wide *Candida albicans* fitness test. *Journal of natural products*. 2011 Jul 13;74(8):1721-30.
- Xu L, Ravnskov S, Larsen J, Nilsson RH, Nicolaisen M. Soil fungal community structure along a soil health gradient in pea fields examined using deep amplicon sequencing. *Soil Biology and Biochemistry*. 2012 Mar 31;46:26-32.
- Xu X, Zhang Y, Meng Q, Meng K, Zhang W, Zhou X, et al. (2013) Overexpression of a Fungal β -Mannanase from *Bispora* sp. MEY-1 in Maize Seeds and Enzyme Characterization. *PLoS ONE* 8(2): e56146. doi:10.1371/journal.pone.0056146
- Y. L. Zhang & T. Y. Zhang. 2014. Notes on soil dematiaceous hyphomycetes from Guangxi Province, China I . *Mycosystema*. 33:793-799.
- Y.B. Lee & Na YH, 2011 A New Species of the Genus *Euphoriomyces* (Laboulbeniales Ascomycotina) Collected in Korea. *Mycobiology*, 39(1), 59, 2011.
- Y.M. Wu & T.Y. Zhang. 2012. New species of *Humicola* and *Endophragmiella* from soil. *Mycotaxon*.
- Yacharoen S, Tian Q, Chomnunti P, Boonmee S, Chukeatirote E, Bhat JD, Hyde KD (2015) *Patellariaceae* revisited. *Mycosphere* 6(3): 290–326.
- Yadav, S.; Bhat, D.J. (2009). *Lomachashaka gomaya*, a new sporodochial hyphomycete from India. *Mycotaxon* 110: 357-361.
- Yadav, S.K.; Bhat, D.J. 2009. *Dimastigosporium yanense*, a new coprophilous fungus from the forests of Western Ghats in Karnataka State, India. *Mycotaxon*. 107:397-403
- Yago, J.I., Lin, C.H. and Chung, K.R., 2011. The SLT2 mitogen-activated protein kinase-mediated signalling pathway governs conidiation, morphogenesis, fungal virulence and production of toxin and melanin in the tangerine pathotype of *Alternaria alternata*. *Molecular plant pathology*, 12(7), pp.653-665.
- Yaguchi, T., Sano, A., Yarita, K., Suh, M.K., Nishimura, K. And Udagawa, S. 2006 A new species of *Cephalotheca* isolated from a Korean patient. *Mycotaxon* 96, 309-322
- Yamazaki A, Kawasaki H. *Lipomyces chichibuensis* sp. nov., isolated in Japan, and reidentification of the type strains of *Lipomyces kononenkoae* and *Lipomyces*

- spencermartinsiae. International journal of systematic and evolutionary microbiology. 2014 Aug 1;64(8):2566-72.
- Yamazaki A, Toyama K, Nakagiri A. A new acidophilic fungus *Teratosphaeria acidotherma* (Capnodiales, Ascomycota) from a hot spring. Mycoscience. 2010 Nov 1;51(6):443-55.
- Yang GZ, Lu J, Yu Z, Zhang K, Qiao M. *Uncispora sinensis*, a new species from China. Mycotaxon. 2011 Apr 1;116(1):171-4.
- Yang H, Ariyawansa HA, Wu HX, Hyde KD. The genus *Leptoxyphium* (Capnodiaceae) from China. Phytotaxa. 2014 Aug 20;176(1):174-83.
- Yang T, Groenewald JZ, Cheewangkoon R, Jami F, Abdollahzadeh J, Lombard L, Crous PW. Families, genera, and species of Botryosphaeriales. Fungal Biology. 2016 Nov 21.
- Yang, E.C., Yoon, H.S. and Saunders, G.W. 2014. Divergence time estimates and evolution of major lineages in the florideophyte red algae Unpublished, 2 (bases 1 to 797)
- Yang, H.L.; Sun, G.Y.; Batzer, J.C.; Crous, P.W.; Groenewald, J.Z.; Gleason, M.L. 2010. Novel fungal genera and species associated with the sooty blotch and flyspeck complex on apple in China and the United States. *Persoonia*. 24:29-37.
- Yang, J., Wang, L., Ji, X., Feng, Y., Li, X., Zou, C., Xu, J., Ren, Y., Mi, Q., Wu, J. and Liu, S., 2011. Genomic and proteomic analyses of the fungus *Arthrobotrys oligospora* provide insights into nematode-trap formation. *PLoS Pathog*, 7(9), p.e1002179.
- Yang, J., Yu, Y., Li, J., Zhu, W., Geng, Z., Jiang, D., Wang, Y. and Zhang, K.Q., 2013. Characterization and functional analyses of the chitinase-encoding genes in the nematode-trapping fungus *Arthrobotrys oligospora*. *Archives of microbiology*, 195(7), pp.453-462.
- Yang, S.L. and Chung, K.R., 2012. The NADPH oxidase-mediated production of hydrogen peroxide (H₂O₂) and resistance to oxidative stress in the necrotrophic pathogen *Alternaria alternata* of citrus. *Molecular plant pathology*, 13(8), pp.900-914.
- Yang, S.L., Lin, C.H. and Chung, K.R., 2009. Coordinate control of oxidative stress tolerance, vegetative growth, and fungal pathogenicity via the AP1 pathway in the rough lemon pathotype of *Alternaria alternata*. *Physiological and Molecular Plant Pathology*, 74(2), pp.100-110.
- Yang, Y., Chai, R. and He, Y., 2012. Early detection of rice blast (*Pyricularia*) at seedling stage in Nipponbare rice variety using near-infrared hyper-spectral image. *African Journal of Biotechnology*, 11(26), pp.6809-6817.
- Yanna; Hyde, K.D. (2002). New saprobic fungi on fronds of palms from northern Queensland, Australia. *Aust. Syst. Bot.* 15(6): 755-764.
- Yatsyna, A. and Motiejūnaitė, J., 2015. New And Noteworthy Lichens To Belarus. *Botanica Lithuanica*, 21(1), pp.57-63.
- Yatsyna, A., 2011. The first contribution to lichens, lichenicolous and allied fungi from Braslav Lakes National Park (NW Belarus). *Botanica Lithuanica*, 17(4).
- Yatsyna, A., 2014. Lichens from Manor Parks in Minsk Region (Belarus). *Botanica Lithuanica*, 20(2), pp.159-168.
- Yavuz, Y., Özdemir Türk, A. and Böcük, H., 2015. Epiphytic Lichen Diversity of the Sündiken Mountains (Eskisehir, Turkey). *Herzogia*, 28(2), pp.753-761.
- Yazawa, T., Kawahigashi, H., Matsumoto, T. and Mizuno, H., 2013. Simultaneous transcriptome analysis of *Sorghum* and *Bipolaris sorghicola* by using RNA-seq in combination with de novo transcriptome assembly. *PLoS One*, 8(4), p.e62460.
- Yazici, K., Elix, J.A. and Aslan, A., 2010. Some parmelioid lichens new to Turkey and Asia. *Mycotaxon*, 111(1), pp.489-494.

- Yazici, Kenan; Aslan, Ali 2016 *Merismatium*, *Porpidia* and *Protoparmelia* spp. new for Turkey and Asia. *Mycotaxon*, Volume 131 (2), 337-343.
- Yeshitela K, Fischer E, Killmann D (2009) *Aspidothelium hirsutum* (Thelenellaceae) and *Caprettia goderei* (Monoblastiaceae), two new species of foliicolous lichens from Ethiopia and Kenya. *The Bryologist* 112(4):850-855.
- Yeshitela, K.; Fischer, E.; Killmann, D.; Serusiaux, E. (2009). *Aspidothelium hirsutum* (Thelenellaceae) and *Caprettia goderei* (Monoblastiaceae), two new species of foliicolous lichens from Ethiopia and Kenya. *Bryologist* 112(4): 850-855
- Ygren, K., Strandberg, R., Wallberg, A., Nabholz, B., Gustafsson, T., Garcia, D., Cano, J., Guarro, J. and Johannesson, H. 2011 A comprehensive phylogeny of *Neurospora* reveals a link between reproductive mode and molecular evolution in fungi. *Mol. Phylogenet. Evol.* 59 (3), 649-663
- Yilmaz N, Houbraken J, Hoekstra ES, Frisvad JC, Visagie CM, Samson RA. 2012. delimitation and characterisation of *Talaromyces purpurogenus* and related species. *Persoonia* 29:39–54.
- Yilmaz N, López-Quintero CA, Vasco-Palacios AM, Frisvad JC, Theelen B, Boekhout T, Samson RA, Houbraken J. 2016a. Four novel *Talaromyces* species isolated from leaf litter from Colombian Amazon rain forests. *Mycol Progress* 15:1041–1056.
- Yilmaz N, Visagie CM, Frisvad JC, Houbraken J, Jacobs K, Samson RA. 2016b. Taxonomic re-evaluation of species in *Talaromyces* section *Islandici*, using a polyphasic approach. *Persoonia* 36:37–56.
- Yilmaz N, Visagie CM, Houbraken J, Frisvad JC, Samson RA. 2014. Polyphasic taxonomy of the genus *Talaromyces*. *Stud Mycol* 78:175–341.
- Yin, M.; Duong, T.A.; Wingfield, M.J.; Zhou, X.; De Beer, Z.W. 2015. Taxonomy and phylogeny of the *Leptographium procerum* complex, including *Leptographium sinense* sp. nov. and *Leptographium longiconidiophorum* sp. nov. *Antonie van Leeuwenhoek*. 107(2):547-563
- Yogesh Joshi, Xin Yu Wang, Thi Thuy Nguyen, Young Jin Koh and Jae-Seoun Hur 2010 Notes on the Existence of *Leucodecton desquamescens* (Thelotremoid Graphidaceae) in South Korea. *Mycobiology*. 2010 Jun;38(2):149-152.
- Yonezawa, H.; Tanaka, K. (2008). A second species of *Neoheteroceras* and additional characters of the genus.. *Mycoscience* 49(2): 152-154: Mycological Society of Japan.
- Yong-Bo Lee, Young-Hee Na, 1 In-Hoa Jang, 2 Chae-Kyu Lim, 3 and Young-Ki Yang 2007 Notes on Three Species of the Genus *Euphoriomyces* (Laboulbeniales) from Korea *Mycobiology*. 35(1): 1–5.
- Yoshiaki, K.O.N. and Ohmura, Y., 2014. Regeneration of *Pseudocyphellaria aurata* transplanted on a tree in Japan. *The Lichenologist*, 46(06), pp.833-836.
- Yoshimura I (2002) *Lobariella*. In: Nash TH III, Ryan BD, Gries C, Bungartz F (eds) *Lichen Flora of the Greater Sonoran Desert Region. I. Lichens Unlimited*, Arizona State University, Tempe, Arizona, pp. 270-272.
- Yoshimura, I (1998) *Vainio* and *Lobaria*, old and modern concepts. In: Marcelli MP, Ahti T (eds) *Recollecting Edvard August Vainio*. CETESB - Companhia de Tecnologia de Saneamento Ambiental, Estado de Sao Paulo, Sao Paulo, Brazil, pp. 85-94.
- Yu ZF, Qiao M, Zhang Y, Qin L, Zhang KQ. *Pseudotripoconidium*, a new anamorph genus connected to *Orbilbia*. *Mycologia*. 2011 Jan 1;103(1):164-73.
- Yuan Qing, Shu-hong Li, Liu Cheng-yi Liu, Lin Li, Mei Yang, Yun Wang, Xiao-lei Zhang, Lin-Yong Zheng. 2015. *Tuber xanthomonospora*, the fourth *Paradoxa*-like new species from China. *Mycotaxon*. 130:61-68
- Yuan ZL, Lin FC, Zhang CL, Kubicek CP (2010) A new species of *Harpophora* (Magnaporthaceae) recovered from healthy wild rice (*Oryza granulata*) roots,

- representing a novel member of a beneficial dark septate endophyte. *FEMS Microbiol Lett.* 307:94–101.
- Yuan, L., Zhao, P.J., Ma, J., Li, G.H. and Shen, Y.M., 2008. Tricycloalternarenes A–E: five new mixed terpenoids from the endophytic fungal strain *Alternaria alternata* Ly83. *Helvetica Chimica Acta*, 91(8), pp.1588-1594.
- Yuan, Z.Q.; Mohammed, C. (1997). Two new coelomycetes with appendaged conidia on stems of eucalypts from Australia. *Mycol. Res.* 101(12): 1531-1534.
- Yue-Ming WU^{a,b}, Jun-Jie XU^{a,c}, Jin-Hua KONG^a & Tian-Yu ZHANG^{a,b*}. 2014. New species of *Graphium* and *Periconia* from China. *Mycotaxon.* 129(2):397-401.
- YueMing, W. and TianYu, Z., 2008. Soil dematiaceous hyphomycetes from Dahingganling Mountain Range, Inner Mongolia, China I. *Mycosystema*, 27(1), pp.5-15.
- Yuho Andoa, Hayato Masuyab, Keiichi Motohashic, Riikka Linnakoskid, Yuichi Yamaoka 2016 Phylogenetic relationship of Japanese isolates belonging to the *Grosmannia piceiperda* complex (Ophiostomatales). *Mycoscience* Volume 57, Issue 2, March 2016, Pages 123–135
- Yu-liang WA, Abdulla A, Abbas A. Anzina, a Lichen Genus New to China. *Arid Zone Research.* 2012;1:029.
- Yun HY, Rossman AY. *Tubakia seoraksanensis*, a new species from Korea. *Mycotaxon.* 2011 Jan 1;115(1):369-73.
- Yusuke Takashima, Kazuhiko Narisawa²), Iman Hidayat³), Gayuh Rahayu¹) 2014 First Report on Fungal Symbionts of Lycopodiaceae Root from Mount Gede Pangrango National Park Indonesia. *Journal of Developments in Sustainable Agriculture* 9 (2014) No. 2 p. 81-88
- Z. Wilhelm de Beer, K.A. Seifert, M.J. Wingfield. 2013. A nomenclator for ophiostomatoid genera and species in the Ophiostomatales and Microascales. *CBS Biodiversity Series.* 12:245-322
- Z.F. Yu & K.Q. Zhang, *Journal of Microbiology*, 47(3), 266, 2009
- Zainuddin N, Alias SA, Lee CW, Ebel N, Othman NA, Mukhtar MR, Awang K (2010) Antimicrobial activities of marine fungi from Malaysia. *Bot Mar* 53:507–513
- Zainuddin N, Alias SA, Lee CW, Ebel R, Othman NA, Mukhtar MR, Awang K(2010) Antimicrobial activities of marine fungi from Malaysia. *Botanica Marina* 53:507–513
- Zambare, V.P. and Christopher, L.P., 2012. Biopharmaceutical potential of lichens. *Pharmaceutical biology*, 50(6), pp.778-798
- Zarabska, D.. and Rosadzinski, S., 2011. New records of the lichen species *Pycnothelia papillaria* in Poland in the context of threats to species. *Roczniki Akademii Rolniczej w Poznaniu. Botanika-Steciana*, 15.
- Zare R, Gams W. More white verticillium-like anamorphs with erect conidiophores. *Mycological Progress.* 2016 Oct 1;15(10-11):993-1030.
- Zare, R.; Asgaria, B.; Gams, W. 2010. The species of *Coniolarrella* (Xylariales). *Mycologia.* 102(6):1383-1388.
- Zedda, L. and Rambold, G., 2011. Lichens and their importance for the monitoring of environmental changes in southern Africa.
- Zelski SE, Raja HA, Miller AN, Bar bosa FR, Gusmão LFP, Shearer CA. 2011 – *Longicollum biappendiculatum* gen. et sp. nov., a new freshwater ascomycete from the Neotropics. *Mycosphere* 2(5), 539–545.
- ZELSKI, S.E.; RAJA, H.A.; MILLER, A.N.; SHEARER, C.A. (2011). *Chaetorostrum quincemilensis*, gen. et sp. nov., a new freshwater ascomycete and its *Taeniolella*-like anamorph from Peru. *Mycosphaere* 5(2): 593-600.

- Zelski, S.E.; Raja, H.A.; Miller, A.N.; Shearer, C.A. 2104. *Conioscypha peruviana* sp. nov., its phylogenetic placement based on 28S rRNA gene, and a report of *Conioscypha gracilis* from Peru. *Mycoscience*. 56:319-325.
- Zeng JS, de Hoog GS. 2008. *Exophiala spinifera* and its allies: diagnostics from morphology to DNA barcoding. *Med Mycol* 46:193–208.
- Zeng, Z.Q.; Zhuang W.Y. 2013. Four new taxa of *Ilyonectria* and *Thelonectria* (Nectriaceae) revealed by morphology and combined ITS and β -tubulin sequence data. *Phytotaxa*. 85(1):15-25
- ZENG, Z.Q.; ZHUANG, W.Y. (2013). A new combination of *Allantonectria* (Hypocreales). *Mycosystema* 32(2): 294
- Zhang, Y.; Yang Y.; Zhang, X.D.; Cui, B.K.; He, S.H.; Fournier J. 2014. *Helicascus gallicus* sp. nov., a new freshwater pleosporalean ascomycete from France. *Phytotaxa*. 183:183-192
- Zhang B-C, Minter DW. 2011. *Elaphomyces spinoreticulatus* sp. nov., with notes on Canadian species of *Elaphomyces*. *Can J Bot* 67:909–914.
- Zhang H, Hyde KD, Abdel-Wahab MA, Abdel-Aziz FA, Ariyawansa HA, KoKo TW, Zhao RL, Alias SA, Bahkali AH, Zhou DQ (2013) A modern concept for *Helicascus* with a *Pleurophomopsis*-like asexual state. *Sydowia*: 65:147–166
- Zhang H, Hyde KD, McKenzie EHC, Bahkali AH, Zhou D (2012) Sequence data reveals phylogenetic affinities of *Acrocalymma aquatica* sp. nov., *Aquasubmersa mircensis* gen. et sp. nov. and *Clohesyomyces aquaticus* (Freshwater coelomycetes). *Cryptogam Mycol* 33:333–346
- Zhang H, Hyde KD, Zhao Y, McKenzie EH, Zhou D (2014) Freshwater ascomycetes: *Lophiostoma vaginatispora* comb. nov. (Dothideomycetes, Pleosporales, Lophiostomaceae) based on morphological and molecular data. *Phytotaxa* 176(1):184–191
- Zhang H, Hyde KH, Abdel-wahab MA, Abdel-Aziz FA, Ariyawansa H, Ko Ko TW, Zhao RL, Alias SA, Bahkali AH, Zhou D (2013) A modern concept for *Helicascus* with a *Pleurophomopsis*-like asexual state. *Sydowia* 65:147–166
- Zhang H, Jones GEB, Zhou D, Bahkalf AH, Hyde KD. Checklist of freshwater fungi in thailand. *Cryptogam Mycol* . 2011;32(2):199-217.
- Zhang J, Zhou Y, Dou Z, Fournier J, Zhang Y (2015) *Helicascus unilocularis* sp. nov., a new freshwater pleosporalean ascomycete from the Caribbean area. *Mycol Progress* 14: 47.
- Zhang JF, Liu JK, Hyde KD, Liu YX, Bahkali AH, Liu Z (2016) *Ligninsphaeria jonesii* gen. et. sp. nov., a remarkable bamboo inhabiting ascomycete. *Phytotaxa* 247:109–117
- Zhang K, Ma LG, Ma J, Castañeda-Ruiz RF. *Xiuguozhangia*, a new genus of microfungi to accommodate five *Piricaudiopsis* species. *Mycotaxon*. 2014 Aug 21;128(1):131-5.
- Zhang M, Koko TW, Hyde KD (2011a) Towards a monograph of Dothideomycetes: Studies on Diademaceae. *Cryptogam Mycol* 32:115–126
- Zhang N., Castlebury L.A., Miller A.N., Huhndorf S.M., Schoch C.L., Seifert K.A., Rossman A.Y., Rogers J.D., Kohlmeyer J., Volkmann-Kohlmeyer B., Sung G-H. (2006). An overview of the systematics of the Sordariomycetes based on a four-gene phylogeny. *Mycologia*, 98(6), 2006, pp. 1076–1087.
- Zhang Y, Crous PW, Schoch CL and Hyde KD (2012) Pleosporales. *Fungal Divers* 53:1–221
- Zhang Y, Fournier J, Crous PW, Pointing SB, Hyde KD (2009) Phylogenetic and morphological assessment of two new species of *Amniculicola* and their allies (Pleosporales). *Persoonia* 23:48–54

- Zhang Y, Fournier J, Phookamsak R, Bahkali AH and Hyde KD. (2013). Halotthiaceae fam. nov (Pleosporales) accommodates the new genus *Phaeoseptum* and several other aquatic genera. *Mycologia* 105(3): 603-609
- Zhang Y, Fournier J, Pointing SB, Hyde KD (2008) Are *Melanomma pulvis-pyrius* and *Trematosphaeria pertusa* congeneric? *Fungal Divers* 33:47–60
- Zhang Y, Jeewon R, Fournier J, Hyde KD (2008) Multi-gene phylogeny and morphotaxonomy of *Amniculicola lignicola*: a novel freshwater fungus from France and its relationships to the Pleosporales. *Mycol Res* 112:1186–94
- Zhang Y, Jeewon R, Fournier J, Hyde KD (2008) Multi-gene phylogeny and morphotaxonomy of *Amniculicola lignicola*: a novel freshwater fungus from France and its relationships to the Pleosporales. *Mycoklogical Research* 112: 1186–1194.
- Zhang Y, Liu F, Wu W, Cai L (2015) A phylogenetic assessment and taxonomic revision of the thermotolerant hyphomycete genera *Acrophialophora* and *Taifanglania*. *Mycologia* 107:768–779
- Zhang Y, Schoch CL, Fournier J, Crous PW, De Gruyter J, Woudenberg JH, Hirayama K, Tanaka K, Pointing SB, Spatafora JW, Hyde KD. Multi-locus phylogeny of Pleosporales: a taxonomic, ecological and evolutionary re-evaluation. *Studies in Mycology*. 2009 Dec 31;64:85-102.
- Zhang Y, Schoch CL, Fournier J, Crous PW, De Gruyter J, Woudenberg JHC, Hirayama K, Tanaka K, Pointing SB, Hyde KD (2009b) Multi-locus phylogeny of the Pleosporales: a taxonomic, ecological and evolutionary re-evaluation. *Stud Mycol* 64:85–102
- Zhang Y, Wang HK, Fournier J, Crous PW, Pointing SB, Hyde KD (2009b) Towards a phylogenetic clarification of *Lophiostoma* / *Massarina* and morphologically similar genera in the Pleosporales. *Fungal Diversity* 38:225–251
- Zhang Y, Yang YJ, Zhang X, Cui B, He S, Fournier J (2014) *Helicascus gallicus* sp. nov., a new freshwater pleosporalean ascomycete from France. *Phytotaxa* 183:183–192
- Zhang Y, Yu ZF, Baral HO, Mo MH, Zhang KQ. New species and records of *Orbilia* (Orbiliaceae, Ascomycota) from China. *Fungal Divers*. 2009 May 31;36:141-53.
- Zhang Y, Zhang X, Fournier J, Chen J, Hyde KD (2014) *Lindgomyces griseosporus*, a new aquatic ascomycete from Europe including new records. *Mycoscience* 55 (1):43-48. doi:10.1016/j.myc.2013.05.003
- Zhang Y., Crous P.W., Schoch C.L., Hyde K.D. 2012. *Pleosporales*. *Fungal Diversity* 53: 1-221.
- Zhang Y., Schoch C.L., Fournier J., Crous P.W., Gruyter J. de, Woudenberg J.H.C., Hirayama K., Tanaka K., Pointing S.B., Spatafora J.W. & Hyde K.D. (2009). Multi-locus phylogeny of Pleosporales: a taxonomic, ecological and evolutionary re-evaluation. *Studies in Mycology* 64: 85–102. 2009. doi:10.3114/sim.2009.64.04.
- Zhang YD, Ma J, Ma LG, Zhang XG. *Parablastocatena tetracerae* gen. et sp. nov. and *Corynesporella licualae* sp. nov. from Hainan, China. *Mycoscience*. 2012 Sep 1;53(5):381-5.
- Zhang YD, Ma J, Ma LG, Zhang XG. Two new species of *Taeniolina* from southern China. *Mycological progress*. 2012 Feb 1;11(1):71-4.
- Zhang, H. 2013. Classification of Freshwater Dothideomycetes and Anamorphic Fungi in Northern Thailand. Kunming university of science and technology. PhD Dissertation.
- Zhang, H., Zhang, X., Qi, Y.X., Pu, J.J., Lv, Y.C. And Xie, Y.X., 2010. A New Leaf Spot Disease of Banana Caused by *Pyricularia angulata*. *Journal of Tropical Organisms*, 2, p.012.

- Zhang, H.; Hyde, K.D.; Abdel-Wahab, M.A.; Abdel-Aziz, F.A.; Ko-Ko, T.W.; Zhao, R.L.; Bahkali, A.H.; Zhou, D.Q. 2013. Morphological and molecular characterization of the genus *Helicascus* with a description of a new species. *Persoonia*. 65:147-166
- Zhang, H.X., Tan, J.L., Wei, L.X., Wang, Y.L., Zhang, C.P., Wu, D.K., Zhu, C.Y., Zhang, Y., Zhang, K.Q. and Niu, X.M., 2012. Morphology regulatory metabolites from *Arthrotrrys oligospora*. *Journal of natural products*, 75(7), pp.1419-1423.
- Zhang, H.X., Wang, L.S., Du, Z.Z. and Hua, Y., 2012. Comparative Analyses on Chemical Composition of *Sulcaria sulcata* and *Sulcaria sulcata* f. *vulpinoides*. *Journal of Southwest Forestry University*, 2, p.025.
- Zhang, J.Z. and Li, M.J., 2009. A new species of *Bipolaris* from the halophyte *Sesuvium portulacastrum* in Guangdong Province, China. *Mycotaxon*, 109(1), pp.289-300.
- Zhang, K., Ma, J., Ma, L.G. & Zhang, X.G. 2009a. A new species of *Berkleasmium* from Chongqing, China. *Mycotaxon* 108: 5–7
- Zhang, N., Zhao, S. and Shen, Q., 2011. A six-gene phylogeny reveals the evolution of mode of infection in the rice blast fungus and allied species. *Mycologia*, 103(6), pp.1267-1276.
- Zhang, Q., Guo, W.J., Fu, C.L., Ma, S. and Zhu, M.Q., 2013. Chemical Constituents from an Endophyte, *Cercospora* sp. *Chemistry of Natural Compounds*, 49(1), pp.117-118.
- Zhang, R.; Yang, H.L.; Sun, G.Y.; Li, H.Y.; Zhuang, J.L.; Zhai, X.R.; Gleason, M.L. (2009). *Strelitziana mali*, a new species causing sooty blotch on apple fruit. *Mycotaxon* 110: 477-485.
- Zhang, W.; Deng, H.; Zhang, T.Y. 2012. three new species of dematiaceous hyphomycetes from soil. *Mycosystema*. 31:1-7
- Zhang, X., Xu, G., Tang, H., Li, Y. and Liu, C., 2017. Development of Loop-Mediated Isothermal Amplification (LAMP) Assay for the Rapid Detection of *Alternaria alternata*. *Journal of AOAC International*, 100(1), pp.99-103.
- Zhang, Y., Crous PW, Schoch CL, Bahkali AH, Guo LD, Hyde KD (2011). A molecular, morphological and ecological re-appraisal of *Venturiales* – a new order of *Dothideomycetes*. *Fungal Diversity* 51: 249–277.
- Zhang, Y., Qiao, M., Weber, E., Baral, H.O., Hagedorn, G., Zhang, K. and Yu, Z., 2010. *Arthrotrrys scaphoides* from China and Europe with a phylogenetic analysis including the type strain. *Mycotaxon*, 111(1), pp.291-300.
- Zhang, Y., Qiao, M., Xu, J., Cao, Y., Zhang, K.Q. and Yu, Z.F., 2013. Genetic diversity and recombination in natural populations of the nematode-trapping fungus *Arthrotrrys oligospora* from China. *Ecology and evolution*, 3(2), pp.312-325.
- Zhang, Y., Yu, Z.F., Xu, J. and Zhang, K.Q., 2011. Divergence and dispersal of the nematode-trapping fungus *Arthrotrrys oligospora* from China. *Environmental microbiology reports*, 3(6), pp.763-773.
- Zhang, Y.; Fournier, J.; Bahkar, A.H.; Hyde, K.D. 2011. *Inflatospora*, a novel lignicolous genus of *Pleosporales* from France. *Sydowia*. 62:287-295.
- Zhang, Y.D., Ma, J., Ma, L.G. and Castañeda-Ruíz, R., 2012. A new species of *Corynespora* and two new records from southern China. *Cryptogamie, Mycologie*, 33(1), pp.99-104.
- Zhang, Y.D., Ma, J., Ma, L.G. and Zhang, X.G., 2010. A new species of *Heteroconium* from Fujian, China. *Mycotaxon*, 114(1), pp.315-318.
- Zhang, Y.D., Ma, J., Ma, L.G. and Zhang, X.G., 2012. *Parablastocatena tetracerae* gen. et sp. nov. and *Corynespora licualae* sp. nov. from Hainan, China. *Mycoscience*, 53(5), pp.381-385.

- Zhang, Y.D., Ma, J., Ma, L.G., Castañeda-Ruíz R.F. & Zhang, X.G. 2011. New species and record of *Pseudoacrodictys* from China. *Mycol. Progress* 10: 261–265
- Zhang, Y.D.; Ma, J.; Ma, L.G.; Castañeda-Ruíz, R.F.; Zhang, X.G. 2011. New species of *Phaeodactylium* and *Neosporidesmium* from China. *Sydowia*. 63(1):125-130
- Zhang, Y.D.; Ma, J.; Ma, L.G.; Zhang, X.G. 2010. Taxonomic studies of *Dactylella* from Fujian, China. *Mycotaxon*. 114:259-261.
- Zhang, Y.D.; Ma, J.; Ma, L.G.; Zhang, X.G. 2010. Two new species of *Kylindria* from Fujian, China. *Mycotaxon*. 114:367-371.
- Zhang, Z., Liu, X., Wang, X., Zhou, M., Zhou, X., Ye, X. and Wei, X., 2012. An R2R3 MYB transcription factor in wheat, TaPIMP1, mediates host resistance to *Bipolaris sorokiniana* and drought stresses through regulation of defense- and stress-related genes. *New Phytologist*, 196(4), pp.1155-1170.
- Zhang, L., Zhou, Z., Guo, Q., Fokkens, L., Miskei, M., Pócsi, I., Zhang, W., Chen, M., Wang, L., Sun, Y., Donzelli, B.G., Gibson, D.M., Nelson, D.R., Luo, J.G., Rep, M., Liu, H., Yang, S., Wang, J., Krasnoff, S.B., Xu, Y., Molnar, I. and Lin, M. 2016 Insights into Adaptations to a Near-Obligate Nematode Endoparasitic Lifestyle from the Finished Genome of *Drechmeria coniospora*. *Sci Rep* 6, 23122
- Zhang, N., Castlebury, L.A., Miller, A.N., Huhndorf, S.M., Schoch, C.L., Seifert, K.A., Rossman, A.Y., Rogers, J.D., Kohlmeyer, J., Volkmann-Kohlmeyer, B. and Sung, G.H. 2006 An overview of the systematics of the Sordariomycetes based on a four-gene phylogeny *Mycologia* 98 (6), 1076-1087
- Zhao G, Liu X, Xie X, Cao A. Saprobiic dematiaceous hyphomycetes from shennongjia region, china. *Nova Hedwigia*. 2009;88(1-2):217-27.
- Zhao G, Yu P, Liu X. *Cancellidium* and *Canalisporium* (hyphomycetes) from China. *Nova Hedwigia*. 2013 Feb 1;96(1-2):221-36.
- Zhao P, Luo J, Zhuang WY. Practice towards DNA barcoding of the nectriaceous fungi. *Fungal Diversity*. 2011 Jan 1;46(1):183-91.
- Zhao X, Leavitt SD, Zhao ZT, Zhang LL, Arup U, Grube M, Pérez-Ortega S, Printzen C, Śliwa L, Kraichak E, Divakar PK, Crespo A, Lumbsch HT (2016) Towards a revised generic classification of lecanoroid lichens (Lecanoraceae, Ascomycota) based on molecular, morphological and chemical evidence. *Fungal Divers* 78:293–304
- Zhao Y-J, Hosoya T, Shirouzu T, Kakishima M, Yamaoka Y (2013) *Lambertella pyrolae* (Rutstroemiaceae, Ascomycota), a new species from Japan. *Phytotaxa* 136:54-60.
- Zhao, G.Z., Cao, A.X., Zhang, T.Y. & Liu, X.Z. 2011. *Acrodictys* (Hyphomycetes) and allied genera from China. *Mycol. Progress* 10: 67–83
- Zhao, G.Z., Tian, Y.H. & Liu, X.Z. 2009b. *Ramoacrodictys*, a new hyphomycete genus for one species previously accommodated in *Acrodictys*. *Sydowia* 61: 353-359
- Zhao, G.Z.; Liu, X.Z.; Wu, W.P. 2007. Helicosporous fungi in China. *Fungal Diversity*. 26:313-524
- Zhao, X., Leavitt, S.D., Zhao, Z.T., Zhang, L.L., Arup, U., Grube, M., Pérez-Ortega, S., Printzen, C., Śliwa, L., Kraichak, E. and Divakar, P.K., 2016. Towards a revised generic classification of lecanoroid lichens (Lecanoraceae, Ascomycota) based on molecular, morphological and chemical evidence. *Fungal Diversity*, 78(1), pp.293-304.
- Zhao, X., Wang, Y., Zhao, Y., Huang, Y., Zhang, K.Q. and Yang, J., 2014. Malate synthase gene AoMls in the nematode-trapping fungus *Arthrobotrys oligospora* contributes to conidiation, trap formation, and pathogenicity. *Applied microbiology and biotechnology*, 98(6), pp.2555-2563.

- Zhdanov, I., 2009. Interesting records of lichens on the coast of Baydaratskaya Bay (Yamal-Nenets Autonomous District, Russia). *Folia Cryptogamica Estonica*, 46, pp.79-82.
- Zheng HD, Zhuang WY. A new species of *Roseodiscus* (Ascomycota, Fungi) from tropical China. *Phytotaxa*. 2013 Jun 5;105(2):51-7.
- Zheng HD, Zhuang WY. *Hymenoscyphus albidoides* sp. nov. and *H. pseudoalbidus* from China. *Mycological progress*. 2014 Aug 1;13(3):625-38.
- Zheng, C.J., Shao, C.L., Guo, Z.Y., Chen, J.F., Deng, D.S., Yang, K.L., Chen, Y.Y., Fu, X.M., She, Z.G., Lin, Y.C. and Wang, C.Y., 2012. Bioactive hydroanthraquinones and anthraquinone dimers from a soft coral-derived *Alternaria* sp. fungus. *Journal of natural products*, 75(2), pp.189-197.
- Zhi-Jie Li, Ning Cao, Hui-Fen Chen, J. E. Taylor, Cheng-Lin Hou 2014 New species and new records of Rhytismataceae from Japan. *Mycological Progress* 13 (3), 951–958.
- Zhou D, Hyde KD, Lu BS. 2000 - *Striatodecospora* gen. nov. from bamboo in Hong Kong. *Mycotaxon* 76, 141-147
- Zhou F, Wang XY, Zhang L, Lin YR. *Terriera angularis* sp. nov. on *Illicium simonsii* from China. *Mycotaxon*. 2013 Mar 4;122(1):355-9.
- Zhou Y, Gong G, Zhang S, Liu N, Wang J, Li P, Yu X (2014) A new species of the genus *Trematosphaeria* from China. *Mycol Prog* 13(1):33–43
- Zhou, X.D.; Jacobs, K.; Kirisits, T.; Chhetri, D.B.; Wingfield, M.J. 2008. *Leptographium bhutanense* sp. nov., associated with the root collar weevil *Hylobitelus chenakupdorjii* on *Pinus wallichiana* in Bhutan. *Persoonia*. 21:1-8
- Zhu XF, Pan Y, Chen LJ, Duan YX, Wang YY. First Report of Leaf Spot of Soybean Caused by *Aristastoma guttulorum* in China. *Plant Disease*. 2012 Nov;96(11):1694-.
- Zhu XQ, Niu CW, Chen XY, Guo LY. *Monilinia* Species Associated with Brown Rot of Cultivated Apple and Pear Fruit in China. *Plant Disease*. 2016 Nov;100(11):2240-50.
- Zhuang WY (1996) The genus *Lambertella* and *Lanzia* (Sclerotiniaceae) in China. *Mycosystema* 8-9:15-38.
- Zhuang WY, Luo J, Zhao P. Two new species of *Acervus* (Pezizales) with a key to species of the genus. *Mycologia*. 2011 Mar 1;103(2):400-6.
- Zhuang, W.Y. (2009). The genus *Sowerbyella* (Pezizales) in China. *Mycotaxon* 109: 233-237.
- Zhuang, W.Y. (2010). Taxonomic assessment of some pyronemataceous fungi from China. *Mycotaxon* 112: 31-46.
- ZHUANG, W.Y. (2013). The genus *Scutellinia* (Pyronemataceae) from China with a key to the known species of the country. *Mycosystema* 32(3): 432
- Zhuang, W.Y.; Yang, Z.L. (2008) [2007]. Some pezizalean fungi from alpine areas of southwestern China. *Mycologia Montenegrina* 10: 235-249
- Zhurbenko 2012 *Lichenologist*, 44(2), 147-177, 2012
- Zhurbenko M, Dillman K. *Polycoccum hymeniicola* comb. nov.(Dacampiaceae) and other interesting lichenicolous fungi from southeastern Alaska. *The Bryologist*. 2010 Jun;113(2):260-6.
- Zhurbenko M.P. (2010). New and interesting lichenicolous fungi from Eurasia. II. *Mycosphere* 1(3): 213-222.
- Zhurbenko M.P. 2013. Lichenicolous fungi and some allied lichens from the Canadian Arctic. *Opuscula Philolichenum*. 12:180-197
- Zhurbenko M.P., Etayo J., Fedrowitz K., Thor G. 2015. Miscellaneous reports of lichenicolous fungi from Argentina including the new species *Didymellopsis nephromatis*. *Opuscula Philolichenum*. 14:82-89

- Zhurbenko MP, Braun U. *Ameroconium cladoniae* gen. et sp. nov. and *Phoma psoromatis* sp. nov., new anamorphic lichenicolous fungi from the Holarctic. *The Lichenologist*. 2013 Sep 1;45(05):583-91.
- Zhurbenko MP, Braun U. *Cecidiomyces*, a new subantarctic lichenicolous hyphomycete genus. *The Lichenologist*. 2012 Nov 1;44(06):801-6.
- Zhurbenko MP, Himelbrant DE, Kuznetsova ES, Stepanchikova IS. Lichenicolous fungi from the Kamchatka Peninsula, Russia. *The Bryologist*. 2012 Aug 7;115(2):295-312.
- Zhurbenko MP, Kukwa M, Oset M. *Roselliniella stereocaulorum* (Sordariales, Ascomycota), a new lichenicolous fungus from the Holarctic. *Mycotaxon*. 2009 Jul 1;109(1):323-8.
- Zhurbenko MP, Otte V (2012) Lichenicolous fungi from the Caucasus: new records and a first synopsis. *Herzogia* 25: 235–244.
- Zhurbenko MP, Pino-Bodas R. New lichenicolous fungi growing on *Cladia* in New Zealand. *The Lichenologist*. 2015 Nov 1;47(06):395-402.
- Zhurbenko MP, Zhdanov IS (2013) *Melaspilea galligena* sp. nov. and some other lichenicolous fungi from Russia. *Folia Cryptog. Estonica, Fasc. 50*:89–99
- Zhurbenko, M. 2007. *Corticifraga santessonii* and *C. chugachiana* (Lecanoromycetes, Ascomycota), new species of lichenicolous fungi from the Holarctic. *The Lichenologist*. 39(3):221-226.
- Zhurbenko, M. and Dillman, K., 2010. *Polycoccum hymeniicola* comb. nov.(Dacampiaceae) and other interesting lichenicolous fungi from southeastern Alaska. *The Bryologist*, 113(2), pp.260-266.
- Zhurbenko, M. P., Heuchert, B. & Braun, U. (2015): *Talpapellis solorinae* sp. nov. and an updated key to the species of *Talpapellis* and *Verrucocladosporium*. *Phytotaxa* 234(2): 191-194. *Mycoscience* 51: 123–133.
- Zhurbenko, M.P. (2008). *Lichenochora thorii* (Phyllachorales), a new lichenicolous ascomycete from Europe. *Nova Hedwigia* 87(3-4): 509-512.
- Zhurbenko, M.P. (2009). Lichenicolous fungi and some lichens from the Holarctic. *Opuscula Philolichenum* 6: 87-120.
- Zhurbenko, M.P. (2010). Lichenicolous fungi and lichens growing on *Stereocaulon* from the Holarctic, with a key to the known species. *Opuscula Philolichenum* 8: 9-39
- Zhurbenko, M.P. 2009. Lichenicolous fungi and lichens from the Holarctic. Part II. *Opuscula Philolichenum*. 7:121-186.
- Zhurbenko, M.P. 2011. Lichenicolous fungi growing on *Thamnomia*, mainly from the Holarctic, with a worldwide key to the known species. *The Lichenologist*. 44:147-177
- Zhurbenko, M.P. and Pino-Bodas, R., 2015. New lichenicolous fungi growing on *Cladia* in New Zealand. *The Lichenologist*, 47(06), pp.395-402.
- Zhurbenko, M.P. and Tugi, E.W., 2013. Some noteworthy lichenicolous fungi from Khabarovsk Territory of Russia. *Mycosphere*, 4(1), pp.46-51.
- Zhurbenko, M.P. and Zhdanov, I.S., 2013. *Melaspilea galligena* sp. nov. and some other lichenicolous fungi from Russia. *Folia Cryptogamica Estonica*, 50, pp.89-99.
- Zhurbenko, M.P., 2013. A first list of lichenicolous fungi from India. forest.
- Zhurbenko, M.P.; Himelbrant, D.E.; Kuznetsova, E.S.; Stepanchikova, I.S. 2012. Lichenicolous fungi from the Kamchatka Peninsula, Russia. *The Bryologist*. 115(2):295-312.
- Zhurbenko, M.P.; Braun, U.; Heuchert, B.; Kobzeva, A.A. 2015. Three new lichenicolous hyphomycetes from Asia. *Herzogia*. 28(2) Teil 1:584-598
- Zitouni-Haouar FE, Alvarado P, Sbissi I, Boudabous A, Fortas Z, Moreno G, Manjón JL, Gtari M. Contrasted Genetic Diversity, Relevance of Climate and Host Plants, and

- Comments on the Taxonomic Problems of the Genus *Picoa* (Pyronemataceae, Pezizales). *PloS one*. 2015 Sep 21;10(9):e0138513.
- Zogg H 1962. Die Hysteriaceae s. str. und Lophiaceae, unter besonderer Berücksichtigung der mitteleuropäischen Formen. Beiträge zur Kryptogamenflora der Schweiz, Band 11, 1–190.
- Zou,S., Li,Q. and Kong,L. 2011 Additional gene data and increased sampling give new insights into the phylogenetic relationships of Neogastropoda, within the caenogastropod phylogenetic framework. *Mol Phylogenet Evol*. 61(2):425-35.
- Zuccaro A, Summerbell RC, Gams W, Schroers HJ, Mitchell JI. A new *Acremonium* species associated with *Fucus* spp., and its affinity with a phylogenetically distinct marine *Emericellopsis* clade. *Stud Mycol*. 2004 Jan 1;50:283-97.
- Zupančič J, Novak Babič M, Zalar P, Gunde-Cimerman N. 2016. The black yeast *Exophiala dermatitidis* and other selected opportunistic human pathogens spread from dishwashers to kitchens. *PLoS One* 11:e0148166.
- Korolyova O.V. (2015). Coprophilous microfungi of the genus *Sporormiella* Ellis & Everh. from Ukraine. *Science and Education; a New Dimension. Natural and Technical Sciences*, III(8), Issue: 73, 2015.
- 井上正鉄 and 神田啓史, 2009. Distribution Patterns of Japanese Lecideoid Lichens Occurring in Subalpine or Alpine Regions, with Special Reference to the Taxa being Distributed in both Japan and Svalbard.
- Buaruang K, Scharnagl K, Divakar PK, Leavitt SD, Crespo A, Nash III TH, Manoch L, Lücking R, Lumbsch HT (2015) Molecular data support *Pseudoparmelia* as a distinct lineage related to *Relicina* and *Relicinopsis* (Ascomycota, Lecanorales). *Lichenologist* 47:43-49
- Zhao X, Leavitt SD, Zhao ZT, Zhang LL, Arup U, Grube M, Perez-Ortega S, Printzen C, Sliwa L, Lumbsch HT (2015) Towards a revised generic classification of lecanoroid lichens (Lecanoraceae, Ascomycota) based on molecular, morphological and chemical evidence. *Fungal Diversity* 78:293-304
- Lumbsch HT, Parnmen S, Rangsiruji A, Elix JA (2010) Phenotypic disparity and adaptive radiation in the genus *Cladia* (Lecanorales, Ascomycota). *Australian Systematic Botany* 23:239-247
- Kirika P, Divakar PK, Crespo A, Leavitt SD, Mugambi GK, Gatheri GW, Lumbsch HT (2016) Polyphyly of the genus *Canoparmelia* - another example of incongruence between phenotype-based classification and molecular phylogeny within lichenized Ascomycota (Parmeliaceae). *Phytotaxa* 289:36-48
- CASTANEDA-RUIZ, R.F.; HEREDIA, G.; ARIAS-MOTA, R.M.; STADLER, M.; SAIKAWA, M.; MCKENZIE, E.H.C. (2012). Two new fungi from Mexico: *Anaseptoidium* gen. nov. and *Cylindrosyndrium sosae* sp. nov..
- Silva SS, Gusmão LF. Conidial fungi from the semi-arid Caatinga Biome of Brazil. A new species of *Dictyochoeta*. *Mycosphere*. 2013 Jan 1;4(4):701-5.
- Kruys Á, Huhndorf SM, Miller AN. Coprophilous contributions to the phylogeny of *Lasiosphaeriaceae* and allied taxa within *Sordariales* (Ascomycota, Fungi). *Fungal diversity*. 2015 Jan 1;70(1):101-13.
- de Almeida DA, Gusmão LF, Miller AN. Taxonomy and molecular phylogeny of *Diatrypaceae* (Ascomycota, Xylariales) species from the Brazilian semi-arid region, including four new species. *Mycological Progress*. 2016 Jun 1;15(6):1-27.
- Dubey, R.K.; Rai, A.N.; Shrivastava, S.; Verma, N.K. (2011). Two new records of hyphomycetes from India. *Indian Phytopath.* 64(4): 390-391.
- Goh TK, Lee LL, Teo KC. A new coprophilous *Gilmaniella* species from Malaysia. *Mycotaxon*. 2013 Nov 20;125(1):234-40.

- Yu H, Duan J, Wang B, Jiang X. The function of snodprot in the cerato-platanin family from *Dactylellina cionopaga* in nematophagous fungi. *Bioscience, biotechnology, and biochemistry*. 2012 Oct 23;76(10):1835-42.
- Hanying Y, Wei X, Xingxi G. Development of a transformation method for the nematophagous fungus *Dactylellina cionopaga*. *African Journal of Biotechnology*. 2012;11(14):3370-8.
- Wu HY, Kim DG, Zhou XB. First report of an unrecorded nematode-trapping fungus species *Dactylellina candidum* in Korea. *African Journal of Microbiology Research*. 2012 Jan 9;6(1):203-5.