

# A REVISED CHECKLIST OF THE TASMANIAN LICHEN FLORA

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## ABSTRACT

Kantvilas, Gintaras. A revised checklist of the Tasmanian lichen flora. *Muelleria* 8(2): 155–175 (1994). — A total of 762 taxa of lichens and lichenicolous fungi in 210 genera are recorded from Tasmania and its offshore islands. A revised list of names of taxa deleted from the census is provided. Seventeen species represent new records for Tasmania.

## INTRODUCTION

Ongoing research on the lichen flora of Tasmania and nearby regions has led to the description of many new taxa, the clarification of many others and the discovery of numerous previously unrecorded species. This increase in knowledge of the island's flora and the growing interest in its conservation status has hastened the need for a revision of the previous checklist of Tasmanian lichens (Kantvilas 1989).

The present paper lists 762 taxa in 210 genera, including 33 taxa whose Tasmanian distribution is confined to the Bass Strait Islands. A further 97 names, mainly synonyms or misidentifications, are deleted from the Tasmanian census.

Literature pertaining to Tasmanian lichens (see also McCarthy 1992) was reviewed briefly by Wetmore (1963) and subsequently by Kantvilas (1989). Since that time, new taxa from Tasmania have been described in the genera *Arthonia* (Kantvilas & Vězda 1992, Wedin 1993a), *Arthothelium* (Kantvilas & Vězda 1992), *Austropeltum* (Henssen *et al.* 1992), *Bactrospora* (Egea & Torrente 1993), *Canoparmelia* (Elix 1993), *Chiodecton* (Thor 1990), *Dibaeis* (Gierl & Kalb 1993), *Diploicia* (Elix *et al.* 1988), *Gyalideopsis* (Kantvilas & Vězda 1992), *Hypogymnia* (Elix & Jenkins 1989), *Laurera* (McCarthy & Kantvilas 1993a), *Lecanactis* (Kantvilas & Vězda 1992), *Leptogium* (Verdon 1990), *Micarea* (Coppins & Kantvilas 1990), *Menegazzia* (James & Galloway 1992), *Neofuscelia* (Kantvilas & Elix 1992), *Pannaria* and *Parmeliella* (Jørgensen & Galloway 1992), *Pertusaria* (Kantvilas 1990b, Archer 1991a, Archer & Elix 1992), *Porina* (McCarthy 1990, 1993b, McCarthy & Kantvilas 1993b), *Roccellinastrum* (Kantvilas 1990a), *Sphaerophorus* (Kantvilas & Wedin 1992), *Thelenella* (Mayrhofer & McCarthy 1991), *Siphulastrum* (Jørgensen & Galloway 1992), *Siphulella* (Kantvilas *et al.* 1992), *Usnea* (Stevens 1992), *Verrucaria* (McCarthy 1991a) and *Xanthoparmelia* (Elix 1993).

Regional or world monographs with relevance to Tasmania have been completed for *Bactrospora* (Egea & Torrente 1993), *Endocarpon* (McCarthy 1991b), *Fuscoderma* (Jørgensen & Galloway 1989), *Leprolooma* (Laundon 1989), *Lithographa* and *Rimularia* (Hertel & Rambold 1990), *Degelia* (Jørgensen & James 1990), *Rimelia* (Hale & Fletcher 1990), *Rimeliella* (Kurokawa 1991), *Toninia* (Timdal 1991) and *Xanthoparmelia* (Hale 1990).

Nomenclatural changes and revisions of taxa occurring in Tasmania have also occurred in the genera *Bacidia* (Kantvilas 1993, Kantvilas & Jarman 1993), *Cladonia* (Ahti *et al.* 1990), *Cladina* (Ruoss & Ahti 1989), *Hafellia* (Sheard 1992), *Pertusaria* (Archer 1991b, Archer & Elix 1992), *Pyrrhospora* (Kalb & Hafellner 1992), *Microthelia* (Hawksworth 1985a), *Pyrgillus* (Aptroot 1991) and *Usnea* (Rogers & Stevens 1988). In addition, taxa previously placed in the genus *Sphaerophorus* have been assigned to *Bunodophoron* or *Leifidium* (Wedin 1993b).

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New records from Tasmania have been published by McCarthy (1991c, 1993a, 1993b), Kantvilas & Jarman (1991, 1993), Kantvilas (1991), Vězda (1992), Kantvilas & Elix (1992), Kantvilas & James (1991), Kantvilas & Thor (1993), Hertel (1987, 1989, 1990), Verdon (1990, 1992), Archer (1989, 1991b, 1991c, 1992a), James & Galloway (1992) and Jørgensen & Galloway (1992).

This checklist also includes some non-lichenised fungi which have been associated with the lichens taxonomically or ecologically, for example *Biatoropsis*, *Cornutispora*, *Dactylospora*, *Globosphaeria*, *Lichenothelia*, *Plectocarpon*, *Polycoccum*, *Rhynchomeliola*, *Stromatopogon* and members of the Caliciales. Contributions in these groups have been published by Triebel (1989), Henssen & Kantvilas (1985), Hawksworth (1985b, 1990), Gierl & Kalb (1993) and Diederich (1992).

The following taxa are recorded for Tasmania for the first time in the present paper (see Appendix 1):

*Arthroraphis grisea* Th. Fr., *Biatoropsis usnearum* Räsänen, *Buellia punctata* (Hoffm.) Massal., *Candelariella xanthostigmoides* (Müll.Arg.) R.W.Rogers, *Cladonia subsubulata* Nyl., *Collema fasciculare* var. *microcarpum* (Müll.Arg.) Degelius, *Massalongia carnosa* (Dickson) Körber, *Omphalina umbellifera* (L. ex Fr.) Quélet, *Pannaria subimmixta* Knight, *Rinodina pyrina* (Ach.) Arn., *Sphaerophorus tibellii* Wedin, *Usnea confusa* Asahina, *U. nidulifera* Motyka, *U. oncodes* Stirton, *U. pycnoclada* Vainio, *U. subeciliata* (Motyka) Swinsc. & Krog and *U. undulata* Stirton.

These are based on the author's collections, collections of other lichenologists, including A.Aptroot, the late G.C.Bratt and H.Mayrhofer, studies of herbarium material, and the unpublished revisionary work of G.N.Stevens.

## METHODS

As with the previous census (Kantvilas 1989), names based on a type specimen from Tasmania are indicated in **bold** type. Those whose known Tasmanian distribution is confined to the Bass Strait islands and which have not been recorded from the Tasmanian 'mainland' are enclosed in square brackets. Non-lichenised fungi are preceded by an asterisk. Names which are based on uncertain, mainly nineteenth century literature records are followed by a (+).

The list of deleted names and justifications for the deletions includes names based on a Tasmanian type specimen, plus any names excluded since the list of Kantvilas (1989).

## CHECKLIST OF TASMANIAN LICHENS AND ALLIED FUNGI

- |   |   |
|---|---|
| <i>Acarospora citrina</i> (Taylor) Zahlbr. ex Rech.         | <i>Arthopyrenia anisoloba</i> Müll.Arg.                     |
| <b><i>A. tasmanica</i> Räsänen</b>                          | <i>Arthothelium ampliatum</i> (Knight & Mitten) Müll.Arg.   |
| <i>Alectoria nigricans</i> (Ach.) Nyl.                      | <i>A. interveniens</i> (Nyl.) Zahlbr.                       |
| <b><i>Arthonia apteropteridis</i> Kantvilas &amp; Vězda</b> | <i>A. macrothecium</i> (Fée) Massal. (+)                    |
| <i>A. cinereopruinosa</i> Schaeerer s.lat.                  | <b><i>A. subspectabile</i> Vězda &amp; Kantvilas</b>        |
| <i>A. cinnabarina</i> (DC.) Wallr. (+)                      | <i>Arthrorthaphis alpina</i> (Schaeerer) R. Sant.           |
| <i>A. ilicina</i> Taylor                                    | <i>A. citrinella</i> (Ach.) Poelt                           |
| <i>A. miserula</i> Nyl. (+)                                 | <i>A. grisea</i> Th. Fr.                                    |
| <i>A. pseudocyphellariae</i> Wedin                          | <b><i>Austroblastenia pauciseptata</i> (Shirley) Sipman</b> |
| <i>A. radiata</i> (Pers.) Ach. (+)                          | <i>A. pupa</i> Sipman                                       |
| <b><i>A. sagenidii</i> Vězda &amp; Kantvilas</b>            |   |
| <b><i>A. tasmanica</i> Kantvilas &amp; Vězda</b>            |   |

- Austropeltum glareosum* Henssen,  
Döring & Kantvilas
- Bacidia albidiplumbea* (J.D. Hook. &  
Taylor) Hellbom
- B. buchananii* (Stirton) Hellbom
- B. leucocarpa* Knight (+)
- B. vallatula* (Jatta) Kantvilas**
- Bactrospora arthonioides* Egea &  
Torrente
- Baeomyces heteromorphus* Nyl. ex  
Church. Bab. & Mitten**
- Bellemerea alpina* (Sommerf.) Clauz.  
& Roux
- \**Biatoropsis usnearum* Räsänen
- Blastenia carnella* (Nyl.) Müll.Arg. (+)
- B. pulcherrima* Müll.Arg.
- [*Buellia coniops* (Wahlenb. ex Ach.)  
Th.Fr.] (+)
- B. disciformis* (Fr.) Mudd
- B. levieri* Jatta**
- B. punctata* (Hoffm.) Massal.
- [*B. subalbula* (Nyl.) Müll.Arg.] (+)
- Bunodophoron australe* (Laurer)  
Massal.
- B. flaccidum* (Kantvilas & Wedin)  
Wedin**
- B. imshaugii* (Ohlsson) Wedin
- B. insigne* (Laurer) Wedin
- B. macrocarpum* (Ohlsson) Wedin
- B. murrayi* (Ohlsson) Wedin
- B. notatum* (Tibell) Wedin
- B. patagonicum* (Dodge) Wedin
- B. ramuliferum* (Lamb) Wedin
- B. scrobiculatum* (Church. Bab.)  
Wedin
- B. tibellii* (Wedin) Wedin
- Byssoloma subdiscordans* (Nyl.)  
P.James
- Calicium abietinum* Pers.
- C. adspersum* Pers. ssp. *australe* Tibell**
- C. glaucellum* Ach.
- C. salicinum* Pers.
- C. trabinellum* (Ach.) Ach.
- C. tricolor* F.Wilson
- C. victorianum* (F.Wilson) Tibell ssp.  
*victorianum*
- Caloplaca aurantiaca* (Lightf.) Th.Fr.  
f. *lignicola* (Nyl.) Th.Fr. (+)
- C. cerinella* (Nyl.) Flagey (+)
- C. chrysophthalma* Degelius (+)
- C. cinnabarina* (Ach.) Zahlbr. (+)
- C. citrina* (Hoffm.) Th.Fr. (+)
- C. cribrosa* (Hue) Zahlbr.**
- C. ferruginea* (Huds.) Th.Fr. (+)
- C. flavorubescens* (Huds.) Laundon  
(+)
- C. holocarpa* (Hoffm.) Wade (+)
- C. rugulosa* (Nyl.) Zahlbr. (+)
- C. saxicola* (Hoffm.) Nordin (+)
- C. sublobulata* (Nyl.) Zahlbr. (+)
- Candelaria concolor* (Dickson)  
B.Stein
- Candelariella xanthostigmoides*  
(Müll.Arg.) R.W.Rogers
- Canoparmelia norpruinata* Elix &  
Johnston
- [*C. whinrayi* Elix]**
- Carbonea vorticosa* (Flörke) Hertel
- Catapyrenium lachneum* (Ach.)  
R.Sant.
- Catillaria contristans* (Nyl.) Zahlbr.
- C. kelica* (Stirton) Zahlbr.
- C. pulverea* (Borrer) Lettau
- C. tasmanica* Räsänen**
- C. trachonoides* (Nyl.) Zahlbr. (+)
- C. umbratilis* Jatta**
- Catinaria laureri* (Hepp ex Th.Fr.)  
Degelius
- Cetraria aculeata* (Schreb.) Fr.
- C. australiensis* W.Weber ex  
Kärnefelt
- C. islandica* (L.) Ach. ssp. *antarctica*  
Kärnefelt
- Chaenotheca brachypoda* (Ach.) Tibell
- C. brunneola* (Ach.) Müll.Arg.
- C. carthusiae* (Harm.) Lettau
- C. chlorella* (Ach.) Müll.Arg.
- C. ferruginea* (Turn. ex Smith)  
Migula
- C. gracillima* (Vainio) Tibell
- C. hispidula* (Ach.) Zahlbr.
- C. stemonea* (Ach.) Müll.Arg.
- C. trichialis* (Ach.) Th.Fr.
- \**Chaenothecopsis debilis* (Turn. ex  
Borrer) Tibell
- \****C. haematopus* Tibell**
- \****C. nigra* Tibell**
- \**C. pusilla* (Ach.) A.Schmidt
- \**C. sagenidii* Tibell
- \**C. savonica* (Räsänen) Tibell
- \**C. tasmanica* Tibell**
- \**C. viridireagens* (Nádv.) A.Schmidt

- Chiodecton colensoi* (Massal.) Müll.Arg.  
**C. flavovirens** Thor  
*C. montanum* Thor  
*Chroodiscus megalophthalmus* (Müll.Arg.) Vězda & Kantvilas  
*Chrysothrix candelaris* (L.) Laundon  
*Cladina aggregata* (Sw.) Nyl.  
**C. fuliginosa** Filson  
*C. inflata* (F.Wilson) D.Galloway  
*C. moniliformis* Kantvilas & Elix  
*C. retipora* (Labill.) Nyl.  
*C. schizophora* (Nyl.) Nyl.  
*C. sullivanii* (Müll.Arg.) Nyl.  
*Cladina confusa* (R.Sant.) Follm. & Ahti  
*C. mitis* (Sandst.) Hustich  
*C. tasmanica* (Ahti) Ahti  
*Cladonia angustata* Nyl.  
*C. bimberiensis* Archer  
*C. capitellata* (J.D.Hook. & Taylor) Church.Bab. var. *capitellata*  
*C. capitellata* var. *interhiascens* (Nyl.) Sandst.  
*C. capitellata* var. *squamatica* Archer  
*C. cervicornis* (Ach.) Flotow ssp. *verticillata* (Hoffm.) Ahti  
*C. chlorophaea* (Flörke) Sprengel  
*C. corniculata* Ahti & Kashiwadani  
*C. cornuta* (L.) Hoffm.  
*C. crispata* (Ach.) Flotow var. *cetrariiformis* (Delise) Vainio  
*C. cryptochlorophaea* Asahina  
*C. ecmocyna* Leighton  
*C. enantia* Nyl.  
*C. fimbriata* (L.) Fr.  
*C. floerkeana* (Fr.) Flörke  
*C. furcata* (Huds.) Schrader  
*C. gracilis* (L.) Willd. ssp. *tenerrima* Ahti  
*C. humilis* (With.) Laundon var. *humilis*  
*C. humilis* var. *bourgeanica* Archer  
*C. krempelhuberi* Vainio  
*C. kuringaiensis* Archer  
*C. macilenta* Hoffm.  
*C. merochlorophaea* Asahina  
*C. murrayi* W.Martin  
*C. neozelandica* Vainio  
*C. ochrochlora* Flörke  
*C. paeminosa* Archer  
*C. pertricosa* Krempelh.  
*C. pleurota* (Flörke) Schaeerer
- C. praetermissa* Archer var. *praetermissa*  
*C. praetermissa* var. *modesta* (Ahti & Krog) Kantvilas & Archer  
*C. pyxidata* (L.) Hoffm.  
*C. ramulosa* (With.) Laundon  
*C. rigida* (J.D.Hook. & Taylor) Hampe var. *rigida*  
*C. rigida* var. *acuta* (Taylor) Archer  
*C. sarmentosa* (J.D.Hook. & Taylor) Dodge  
*C. scabriuscula* (Delise) Leighton  
*C. southlandica* W.Martin  
*C. staufferi* des Abb.  
*C. subsulcata* Nyl.  
*C. sulcata* Archer var. *sulcata*  
*C. sulcata* var. *wilsonii* (Archer) Archer  
*C. tessellata* Ahti & Kashiwadani  
*C. ustulata* (J.D.Hook & Taylor) Leighton  
**C. weymouthii** F. Wilson ex Archer  
*Cliostomum griffithii* (Sm.) Coppins  
*Coccocarpia erythroxyli* (Sprengel) Swinsc. & Krog  
*C. palmicola* (Sprengel) Arvidsson & Galloway  
*Coccotrema cucurbitula* (Mont.) Müll. Arg.  
*C. porinopsis* (Nyl.) Imshaug ex Yoshimura  
*Coenogonium implexum* Nyl.  
*Collema coccophorum* Tuck.  
*C. crispum* (Huds.) Weber  
*C. durietzii* Degelius  
*C. fasciculare* (L.) Wigg. var. *fasciculare*  
*C. fasciculare* var. *colensoi* Church.Bab.  
*C. fasciculare* var. *microcarpum* (Müll. Arg.) Degelius  
*C. flaccidum* (Ach.) Ach.  
*C. glaucophthalmum* Nyl. var. *glaucophthalmum*  
*C. glaucophthalmum* var. *implicatum* (Nyl.) Degelius  
*C. laeve* J.D.Hook. & Taylor var. *laeve*  
*C. laeve* var. *senecionis* (F.Wilson) Degelius  
**C. leucocarpum** J.D.Hook. & Taylor  
*C. quadriloculare* F.Wilson var. *quadriloculare*

- C. quadriloculare var. tasmaniae**  
**F.Wilson**  
*C. subconveniens* Nyl.  
*C. subflaccidum* Degelius
- Conotremopsis weberiana** Vězda
- \*Cornutispora ciliata** Kalb
- Cystocoleus ebeneus* (Dillwyn)  
 Thwaites
- \*Dactylospora australis** Triebel &  
 Hertel
- Degelia duplomarginata* (P.James &  
 Henssen) Arvidsson & Galloway  
*D. durietzii* Arvidsson & Galloway  
*D. gayana* (Mont.) Arvidsson &  
 Galloway  
*D. novaezelandiae* (Dodge) Jørgensen  
 & Galloway  
*D. rosulata* Jørgensen & Galloway
- Dendriscocaulon dendriothamnodes*  
 Dughi in Galloway
- Dibaeis absoluta* (Tuck.) Kalb & Gierl  
*D. arcuata* (Stirton) Kalb & Gierl
- Dictyonema sericeum* (Sw.) Berkley
- Dimerella lutea* (Dickson) Trevisan
- Diploicia canescens* (Dickson) Massal.  
 ssp. *canescens*  
 [*D. canescens* ssp. *australisica* Elix &  
 Lumbsch]
- Diploschistes muscorum* (Scop.)  
 R.Sant. ssp. *bartlettii* Lumbsch  
*D. ocellatus* (Vill.) Norman  
*D. scruposus* (Schreber) Norman  
*D. sticticus* (Körber) Müll.Arg.  
 [*Diplotomma alboatrum* (Hoffm.)  
 Flotow (+)]
- Dirinaria picta* (Sw.) Clem. & Shear
- Endocarpon helmsianum* Müll.Arg.  
*E. simplicatum* (Nyl.) Nyl. var.  
*simplicatum*  
*E. simplicatum* var. *bisporum*  
 McCarthy
- Ephebe fruticosa* Henssen  
*E. lanata* (L.) Vainio
- Eremastrella crystallifera* (Taylor)  
 G.Schneider
- Erioderma sorediatum* Galloway &  
 Jørgensen
- [*Flavoparmelia euplecta* (Stirton)  
 Hale]  
*F. haysomii* (Dodge) Hale  
***F. rutidota* (J.D.Hook. & Taylor)** Hale  
 [*F. soredians* (Nyl.) Hale]  
*Fulglesia fulgens* (Sw.) Elenkin (+)  
*F. subbracteata* (Nyl.) Poelt (+)  
*Fuscidea absolodes* (Nyl.) Hertel &  
 Wirth
- Fuscoderma amphibolum* (Knight)  
 Jørgensen & Galloway  
*F. limbatum* Jørgensen & Galloway
- \*Globosphaeria jamesii** D.Hawksw.
- Graphina subvelata* (Stirton) Zahlbr.
- Graphis angustata* Eschw. (+)  
*G. insidiosa* (Knight & Mitten)  
 J.D.Hook.  
*G. librata* Knight
- Gyalecta jenensis* (Batsch) Zahlbr. (+)
- Gyalidea hyalinescens* (Nyl.) Vězda
- Gyalideopsis graminicola*** Vězda &  
 Kantvilas
- Haematomma infuscum* (Stirton)  
 R.W. Rogers
- H. sorediatum* R.W.Rogers
- Hafellia dissia* (Stirton)** Mayrhofer &  
 Sheard
- Heterodea muelleri* (Hampe) Nyl.
- Heterodermia comosa* (Eschw.) Follm.  
 & Redon (+)  
 [*H. hypoleuca* (Ach.) Trevisan (+)]  
 [*H. japonica* (Sato) Swinsc. & Krog (+)]  
*H. microphylla* (Kurok.) Swinsc. &  
 Krog
- H. obscurata* (Nyl.) Trevisan  
*H. speciosa* (Wulf.) Trevisan (+)
- Hymenelia lacustris* (With.) M.Choisy
- Hyperphyscia adglutinata* (Flörke)  
 Mayrhofer & Poelt
- Hypocenomyce australis* Timdal  
*H. foveata* Timdal
- Hypogymnia billardierei* (Mont.)**  
 Filson
- H. enteromorphoides* Elix  
*H. kosciouskoensis* Elix  
*H. lugubris* (Pers.) Krog var. *lugubris*

- H. lugubris* var. *compactior* (Zahlbr.)  
Elix  
*H. lugubris* var. *sublugubris*  
(Müll.Arg.) Elix  
*H. mundata* (Nyl.) Rassad.  
*H. pulchrilobata* (Bitter) Elix  
*H. pulverata* (Nyl.) Elix  
*H. subphysodes* (Krempelh.) Filson  
var. *subphysodes*  
*H. subphysodes* var. *austerodiooides*  
Elix  
*H. tasmanica* Elix  
*H. tubularis* (Taylor) Elix  
*H. turgidula* (Bitter) Elix  
*Hypotrachyna laevigata* (Sm.) Hale (+)  
*H. reducens* (Nyl.) Hale  
*H. revoluta* (Flörke) Hale  
*H. sinuosa* (Sm.) Hale  
*Imshaugia aleurites* (Ach.) S.F.Meyer  
*Knightiella splachnirima* (J.D.Hook.  
& Taylor) Gyelnik  
*Laurera robusta* McCarthy &  
Kantvilas  
*Lecanactis abietina* (Ach.) Körber  
*L. subfarinosa* (Knight) Hellbom (+)  
*L. subpremnea* Kantvilas & Vězda  
*Lecanora atrella* Jatta  
*L. austrooceana* Hertel & Leuckert  
*L. blanda* Nyl.  
*L. broccha* Nyl.  
*L. caesiorubella* Ach. (+)  
*L. carpinea* (L.) Vainio (+)  
*L. cenisia* Ach. (+)  
*L. crenulata* (Dickson) Hook.  
*L. lineolata* Müll.Arg. (+)  
*L. rupicola* (L.) Zahlbr.  
[*L. subcoarctata* (Knight) Hertel ]  
*L. subfusca* (L.) Ach. (+)  
[*L. varia* (Hoffm.) Ach. (+) ]  
*Lecidea aniptiza* Stirton f. *intersociella*  
Stirton  
*L. atromorio* Knight  
*L. canorufescens* Krempelh. (+)  
*L. cerarufa* Shirley  
*L. contigua* Fr. (+)  
*L. enteroleuca* Ach. (+)  
*L. flindersii* Crombie  
*L. hypersporella* Stirton  
*L. hypnorum* Libert (+)  
*L. immarginata* R.Br. ex Crombie  
*L. lapicida* (Ach.) Ach. var. *lapicida*  
*L. leptoloma* Müll.Arg. (+)  
*L. minutula* Müll.Arg. (+)  
*L. sarcogynoides* Körber  
*L. stuartii* Hampe  
*L. subnexa* Stirton  
*L. subtecta* Stirton  
*L. turgidula* Fr. (+)  
*Lecidella stigmata* (Ach.) Hertel &  
Leuckert  
*Leifidium tenerum* (Laurer) Wedin  
*Leioderma duplicatum* (Müll. Arg.)  
Galloway & Jørgensen  
*L. pycnophorum* Nyl.  
*L. sorediatum* Galloway & Jørgensen  
*Lepraria incana* (L.) Ach.  
*L. lobificans* Nyl.  
*Leprocaulon arbuscula* (Nyl.) Nyl.  
*L. microscopicum* (Vill.) Gams ex D.  
Hawkes.  
*Leproloma membranaceum* (Dickson)  
Vainio  
*L. vouauxii* (Hue) Laundon  
*Leptogium biloculare* F.Wilson  
*L. coralloideum* (Mey. & Flotow)  
Vainio  
*L. crispatellum* Nyl.  
*L. cyanescens* (Ach.) Körber  
*L. limbatum* F.Wilson  
*L. menziesii* (Sm. ex Ach.) Mont.  
*L. pecten* F.Wilson  
*L. philarheuma* F.Wilson  
*L. rogersii* Verdon  
*L. tasmanicum* F.Wilson  
*L. victorianum* F.Wilson  
*Leptotrema lepadodes* (Tuck.)  
Zahlbr. (+)  
*L. lepadodes* var. *endochrysoides*  
(Jatta) Zahlbr.  
[\**Lichenothelia solitarioides* Henssen]  
*Lichina confinis* (O.F. Müll.) Agardh  
*L. tasmanica* Henssen  
*Lithographa subantarctica* Hertel &  
Rambold  
*Lobaria scrobiculata* (Scop.) DC.  
*Lopadium biferum* (Nyl.) Zahlbr. (+)  
*L. disciforme* (Flotow) Poelt & Vězda  
*L. hepaticola* Döbbeler, Vězda & Poelt  
*Maronea constans* (Nyl.) Hepp  
*Massalongia carnosa* (Dickson)  
Körber

- Megalaria grossa* (Pers. ex Nyl.)  
Hafellner
- Megaloblastenia marginiflexa*  
(J.D.Hook. & Taylor) Sipman
- Megalospora campylospora* (Stirton)  
Sipman
- M. gompholoma* (Müll.Arg.) Sipman  
ssp. *fuscolineata* Sipman
- M. lopadiooides* Sipman**
- M. subtuberculosa* (Knight) Sipman
- Melampilidium metabolum* (Nyl.)  
Müll.Arg. (+)
- Melanelia piliferella* (Esslinger)  
Esslinger
- M. subglabra* (Räsänen) Esslinger
- Melaspilea circumserpens* Nyl.**
- M. gemella* (Eschw.) Nyl. (+)
- Menegazzia aeneofusca* (Müll.Arg.)  
R.Sant.
- M. caesiopruinosa* P.James**
- M. caliginosa* P.James & Galloway
- M. castanea* P.James & Galloway
- M. confusa* P.James**
- M. corrugata* P.James**
- M. elongata* P.James**
- M. eperforata* P.James & Galloway
- M. fertilis* P.James
- M. globulifera* R.Sant.
- M. inactiva* P.James & Kantvilas**
- M. kantvilasii* P.James**
- M. minuta* P.James & Kantvilas**
- M. myriotrema* (Müll.Arg.) P.James**
- M. neozelandica* (Zahlbr.) P.James**
- M. nothofagi* (Zahlbr.) P.James &  
Galloway
- M. platytrema* (Müll.Arg.) R.Sant.
- M. prototypica* P.James**
- M. subbullata* P.James & Kantvilas**
- M. subpertusa* P.James & Galloway
- M. testacea* P.James & Galloway
- M. ultralucens* P.James & Galloway
- M. weindorferi* (Zahlbr.) R.Sant.**
- Metus conglomeratus* (F.Wilson)  
Galloway
- Micarea austroternaria* Coppins &  
Kantvilas**
- M. flagellispora* Coppins & Kantvilas**
- M. isabellina* Coppins & Kantvilas**
- M. mutabilis* Coppins & Kantvilas**
- M. prasina* Fr.
- M. prasinella* (Jatta) Lamb**
- \**Microcalicium arenarium* (Hampe ex  
Massal.) Tibell
- \**M. conversum* Tibell
- Miltidea ceroplasta* (Church.Bab.)  
Galloway & Hafellner
- Multiclavula mucida* (Pers.)  
R.H.Petersen
- M. vernalis* (Schw.) R.H.Petersen
- \**Mycocalicium albonigrum* (Nyl.)  
Tibell
- \**M. subtile* (Pers.) Szatala
- \**M. victoriae* (Knight ex F.Wilson)  
Tibell
- Mycoporellum obscurum* (Pers.)  
A.L.Smith (+)
- [*Neofuscelia glabrans* (Nyl.) Esslinger]  
*N. imitatrix* (Taylor) Esslinger
- N. loxodella* (Esslinger) Esslinger**
- N. parviloba* (Esslinger) Esslinger
- N. pulla* (Ach.) Esslinger
- N. stygioides* (Nyl. ex Crombie)  
Esslinger
- N. subloxodella* Elix & Kantvilas**
- N. verrucella* (Esslinger) Esslinger
- Neophyllis melacarpa* (F.Wilson)  
F.Wilson
- Nephroma australe* Richard
- N. cellulosum* (Ach.) Ach. var.  
*cellulosum*
- N. cellulosum* var. *isidioferum*  
J.Murray
- N. rufum* (Church.Bab.) P.James
- Normandina pulchella* (Borrer) Nyl.
- Ochrolechia androgyna* (Hoffm.) Arn.
- O. frigida* (Sw.) Lynge
- O. pallescens* (L.) Massal. (+)
- O. parella* (L.) Massal. (+)
- O. weymouthii* Jatta**
- Omphalina umbellifera* (L. ex Fr.)  
Quélet
- Opegrapha agelaeina* Jatta**
- O. agelaeoides* Nyl.
- O. stellata* Knight
- O. viridis* Pers. ex Ach.
- Pannaria decipiens* Jørgensen &  
Galloway
- P. elixii* Jørgensen & Galloway
- P. fulvescens* (Mont.) Nyl.
- P. immixta* Nyl.

- P. subimmixta* Knight  
*Pannoparmelia angustata* (Pers. in Gaud.) Zahlbr.  
*P. wilsonii* (Räsänen) Galloway  
*Paraparmelia conranensis* (Elix) Elix & Johnston  
*P. lithophloides* (Kurok.) Elix & Johnston  
[*P. mongaensis* (Elix) Elix & Johnston]  
*Paraporpidia leptocarpa* (Church.Bab. & Mitten) Rambold & Hertel  
*Parmelia cunninghamii* Crombie  
*P. erumpens* Kurok.  
*P. protosulcata* Hale  
*P. salcrambiocarpa* Hale  
*P. signifera* Nyl.  
*P. sulcata* Taylor  
***P. tenuirima* J.D.Hook. & Taylor**  
*P testacea* Stirton  
*Parmeliella granulata* Lamb  
*P. ligulata* Jørgensen & Galloway  
*P. nigrocincta* (Mont.) Müll.Arg.  
*P. thysanota* (Stirton) Zahlbr.  
*Parmelina conlabrosa* (Hale) Elix & Johnston  
*P. labrosa* (Zahlbr.) Elix & Johnston  
***P. pseudorelicina* (Jatta) Kantvilas & Elix**  
*Parmelinopsis afrorevoluta* (Krog & Swinsc.) Elix & Hale  
*P. horrescens* (Taylor) Elix & Hale (+)  
*P. minarum* (Vainio) Elix & Hale  
*P. neodamaziana* (Elix & Johnston) Elix & Hale  
*P. spumosa* (Asahina) Elix & Hale (+)  
*P. subfatiscens* (Kurok.) Elix & Hale  
*Parmeliopsis ambigua* (Wulf.) Nyl.  
*Parmotrema chinense* (Osbeck) Hale & Ahti  
[*P. cristiferum* (Taylor) Hale ]  
*Peltigera canina* (L.) Willd.(+)  
*P. canina* f. *leucorrhiza* (Flörke) Flörke (+)  
***P. degenerii* Gyelnik f. *tasmaniae* Gyelnik**  
*P. didactyla* (With.) Laundon  
*P. dolichorhiza* (Nyl.) Nyl.  
*P. horizontalis* (Huds.) Baumg. (+)  
*P. membranacea* (Ach.) Nyl. (+)  
*P. polydactyla* (Neck.) Hoffm. (+)
- P. pusilla* (Fr.) Körber (+)  
*P. rufescens* (Weis) Humb. (+)  
*Peltula euploca* (Ach.) Poelt ex Ozenda & Clauz.  
*Pertusaria alpina* Hepp ex Ahles (+)  
[P. erythrella Müll.Arg.]  
*P. gibberosa* Müll.Arg.  
*P. gymnospora* Kantvilas  
*P. jamesii* Kantvilas  
[P. leioplacella Nyl.]  
*P. lophocarpa* Körber  
***P. norstictica* Archer**  
*P. novaezelandiae* Szatala  
***P. pertractata* Stirton**  
***P. pseudodactylina* Archer**  
[P. subdactylina Nyl.]  
[P. thiospoda Knight]  
*P. trimera* (Müll.Arg.) Archer  
*P. truncata* Krempelh.  
**[P. whinrayi Archer]**  
*P. xanthostoma* (Somm.) Fr.  
*Phaeographis australiensis* Müll.Arg.  
*P. exaltata* (Mont. & v.d. Bosch) Müll.Arg.  
*Phaeophyscia endococcinodes* (Poelt) Esslinger  
*P. orbicularis* (Neck.) Moberg  
*Phlyctis subuncinata* Stirton  
*Physcia adscendens* (Fr.) Oliver  
*P. aipolia* (Ehrh. ex Humb.) Fürnr. (+)  
[P. alba (Fée) Müll.Arg. (+)]  
*P. albata* (F.Wilson) Hale (+)  
[P. albicans (Pers.) Thomson (+)]  
*P. caesia* (Hoffm.) Fürnr.  
*P. clementei* (Sm.) Lynge  
*P. stellaris* (L.) Lynge  
[P. tribacia (Ach.) Nyl. (+)]  
*Physconia grisea* (Lam.) Poelt (+)  
*Physma chilense* Hue  
*Placopsis cribellans* (Nyl.) Räsänen  
*P. gelida* (L.) Lindsay  
*P. parellina* (Nyl.) Lamb  
*P. parellina* f. *microphylla* Lamb  
*P. perrugosa* (Nyl.) Nyl.  
*P. rhodocarpa* (Nyl.) Wetmore  
*P. trachyderma* (Krempelh.) P.James var. *clavifera* (Lamb) P.James  
*Placynthium nigrum* (Huds.) S.F.Gray  
***Platygrapha congerens* Nyl.**

- \**Plectocarpon pseudosticta* (Fée) Fée
- Poeltiaria coromandelica* (Zahlbr.) Hertel & Rambold  
*P. corralensis* (Räsänen) Hertel  
*P. turgescens* (Körber) Hertel
- Polychidium contortum* Henssen
- \****Polycoccum jamesii* D.Hawkes.**
- Porina aptrootii* McCarthy**  
*P. chlorotica* (Ach.) Müll. Arg.  
***P. constrictospora* McCarthy & Kantvilas**  
*P. corrugata* Müll.Arg.  
***P. decrescens* McCarthy & Kantvilas**  
*P. elegantula* Müll.Arg.  
*P. guentheri* (Flotow) Zahlbr.  
*P. heterocarpa* McCarthy  
***P. hyperleptalea* McCarthy & Kantvilas**  
***P. kantvilasii* McCarthy**  
*P. leptalea* (Durieu & Mont.) A.L.Smith  
***P. sylvatica* McCarthy & Kantvilas**  
***P. tasmanica* McCarthy**  
[***P. whinrayi* McCarthy**]
- Porpidia albocaerulescens* (Wulff) Hertel & Knoph  
*P. crustulata* (Ach.) Hertel & Knoph
- Protoblastenia rupestris* (Scop.) Steiner
- Protoparmelia badia* (Hoffm.) Hafellner  
***P. petraeoides* (Nyl. ex Hue) Hertel**
- Pseudephebe pubescens* (L.) Choisy
- Pseudocyphellaria ardesiaca* Galloway  
*P. argyracea* (Delise) Vainio  
*P. aurata* (Sm.) Vainio  
***P. billardierei* (Delise) Räsänen**  
*P. colensoi* (Church.Bab.) Vainio  
*P. coronata* (Müll.Arg.) Malme  
*P. crocata* (L.) Vainio  
*P. dissimilis* (Nyl.) Galloway & P.James  
*P. faveolata* (Delise) Malme  
*P. glabra* (J.D.Hook. & Taylor) Dodge
- P. granulata* (Church.Bab.) Malme  
*P. insculpta* (Stizenb.) Galloway  
*P. intricata* (Delise) Vainio  
*P. multifida* (Nyl.) Galloway & P.James
- P. neglecta* (Müll.Arg.) Magnusson  
***P. rubella* (J.D.Hook. & Taylor)**  
**Galloway & P.James**
- Psilolechia clavulifera* (Nyl.) Coppins  
*P. lucida* (Ach.) Choisy  
***P. purpurascens* Coppins & Purvis**
- Psora decipiens* (Hedw.) Hoffm. (+)
- Psoroma allorhizum* (Nyl.) Hue (+)  
*P. asperellum* Nyl.  
*P. durietzii* P. James & Henssen  
*P. euphyllum* Nyl.  
*P. hypnorum* (Vahl) S.F. Gray var. *hypnorum*  
*P. hypnorum* var. *paleaceum* (Fr.) Rostrup  
*P. leprolomum* (Nyl.) Räsänen  
*P. microphyllizans* (Nyl.) Galloway  
*P. pallidum* Nyl. (+)  
*P. pholidotoides* (Nyl.) Trevis.  
*P. pholidotum* (Mont.) Müll.Arg. (+)  
***P. soccatum* R.Br.**  
*P. xanthomelanum* Nyl. (+)
- Psoromidium aleurooides* (Stirton) Galloway
- P. versicolor* (J.D.Hook. & Taylor) Galloway
- Punctelia borreri* (Sm.) Krog  
***P. subflava* (Taylor) Elix & Johnston**  
*P. subrudecta* (Nyl.) Krog
- Pycnothelia caliginosa* Galloway & P.James
- Pyrenocollema halodytes* (Nyl.) R.C.Harris
- Pyrenopsis tasmanica* Nyl.**
- Pyrenula chloroplaca* Shirley  
***P. galactina* (Shirley) Kantvilas**  
*P. marginata* J.D.Hook.  
*P. ravenellii* (Tuck.) R.C.Harris
- Pyrgillus indicus* (Krempelh.) Aptroot
- Pyrrhospora laeta* (Stirton) Hafellner**
- Pyxine nubila* Moberg
- Ramalea cochleata* Müll.Arg.
- Ramalina caespitella* G.N.Stevens**  
[*R. canariensis* Steiner]  
*R. celastri* (Sprengel) Krog & Swinsc.  
  ssp. *celastri*  
***R. celastri* ssp. *ovalis* (J.D.Hook. & Taylor) G.N.Stevens**

- R. fimbriata* Krog & Swinsc.  
*R. fissa* (Müll.Arg.) Vainio  
*R. glaucescens* Krempelh.  
*R. inflata* (J.D.Hook. & Taylor)  
     J.D.Hook. & Taylor ssp. *inflata*  
*R. inflata* ssp. *australis* G.N.Stevens  
*R. unilateralis* F.Wilson  
***R. whinrayi* G.N.Stevens**
- Ramalodium succulentum* Nyl.  
*Relicina limbata* (Laurer) Hale  
*R. subnigra* Elix & Johnston
- Rhizocarpon badioatrum* (Flörke ex Sprengel) Th. Fr. f. *atroalbum* (L.) Malme (+)  
*R. geographicum* (L.) DC.  
*R. petraeum* (Wulfen) Massal. (+)
- \****Rhynchomeliola lichenicola* Henssen & Kantvilas**
- Rimelia cetrata* (Ach.) Hale & Fletcher  
*R. reticulata* (Taylor) Hale & Fletcher  
*Rimeliella subcaperata* (Krempelh.) Kurokawa  
*Rimularia psephota* (Tuck.) Hertel & Rambold
- Rinodina asperata* (Shirley) Kantvilas**  
*R. bischoffii* (Hepp) Massal.
- R. brattii* Mayrhofer**  
*R. conradii* Körber  
*R. exigua* (Ach.) S.F.Gray (+)  
*R. gennarii* Bagl.  
*R. murrayii* Mayrhofer  
*R. occulta* (Körber) Sheard  
*R. peloleuca* (Nyl.) Müll.Arg.  
*R. procellarum* (Massal.) Mayrhofer  
*R. pyrina* (Ach.) Arn.  
*R. subcrustacea* (Müll.Arg.) Zahlbr.
- R. tasmanica* Mayrhofer**  
*R. thiomela* (Nyl.) Müll.Arg.
- [***Roccellina expectata* Tehler**]
- Roccellinastrum flavescens* Kantvilas**  
***R. lagarostrobi* Kantvilas**  
*R. neglectum* Henssen & Vobis  
*Sagenidium molle* Stirton
- Sarrameana tasmanica* Vězda & Kantvilas**
- Scoliosporum pruinatum* (P.James) Vězda
- Siphula complanata* (J.D.Hook. & Taylor) R.Sant.  
*S. decumbens* Nyl.  
***S. foliacea* D.Galloway**  
***S. fragilis* (J.D.Hook. & Taylor)**  
     J.Murray  
***S. jamesii* Kantvilas**
- Siphulastrum granulatum* Jørgensen & Galloway**  
*S. mammillatum* (J.D.Hook. & Taylor) Galloway
- Siphulella coralloidea* Kantvilas, Elix & James**
- \**Sphinctrina leucopoda* Nyl.  
\*i. *tubaiformis* Massal.
- Staurothele fissa* (Taylor) Zwackh
- Stephanocyclos henssenianus* Hertel
- Stereocaulon caespitosum* Redinger  
*S. corticatum* Nyl. var. *corticatum*  
*S. corticatum* var. *humile* (Müll.Arg.) Lamb  
*S. corticatum* var. *subcorticatum* (Räsänen) Lamb  
*S. gregarium* Redinger  
*S. ramulosum* (Sw.) Räuschel
- S. trachyphloeum* Lamb**  
*S. vesuvianum* Pers.
- Sticta damaecornis* (Sw.) Ach. (+)  
*S. fuliginosa* (Dickson) Ach.  
*S. limbata* (Sm.) Ach.  
*S. macrophylla* Delise (+)  
*S. querzicans* Delise (+)  
*S. stipitata* Knight  
*S. subcaperata* (Nyl.) Nyl. (+)  
*S. sublimbata* (Steiner) Swinsc. & Krog  
*S. sylvatica* (Huds.) Ach. (+)  
*S. weigellii* (Ach.) Vainio (+)
- \****Stromatopogon baldwinii* Zahlbr.**
- Synalissa cancellata* F. Wilson (+)
- Teloschistes chrysophthalmus* (L.) Th.Fr.  
[*T. flavicans* (Sw.) Norm.]  
*T. sieberianus* (Laurer) Hillm.
- T. spinosus* (J.D.Hook. & Taylor)**  
     J.Murray
- T. spinosus* f. *subteres* Filson  
*T. velifer* F.Wilson  
[*T. velifer* f. *nodulosa* (J.Murray) Filson ]

- Tephromela atra* (Huds.) Hafellner  
*Thamnolia vermicularis* (Sw.) Ach.  
 var. *vermicularis*  
*T. vermicularis* var. *subuliformis*  
 (Ehrh.) Schaeerer
- Thelenella tasmanica* Mayrhofer & McCarthy**
- Thelidium papulare* (Fr.) Arnold  
*Thelotrema decorticans* Müll.Arg.  
*T. lepadinum* (Ach.) Ach.  
*T. subdenticulatum* (Zahlbr.)  
 G.Salisb.
- T. subgranulosum* Jatta**  
*T. sueicicum* (H.Magn.) P.James
- Thysanothecium hookeri* Mont. & Berk.  
*T. scutellatum* (Fr.) Galloway  
*Tomasellia ischnobella* (Nyl.) Keissl.  
*Toninia bullata* (Meyen & Flotow)  
 Zahlbr.
- Trapelia coarctata* (Sm.) M.Choisy  
*T. mooreana* (Carroll) P.James
- Trapeliopsis colensoi* (Church.Bab.)  
 G.Schneider  
*T. congregans* (Zahlbr.) Brako  
*T. flexuosa* (Fr.) Coppins & P.James  
*T. granulosa* (Hoffm.) Lumbsch
- Tremolecia atrata* (Ach.) Hertel  
*Tuckermannopsis chlorophylla*  
 (Willd.) Hale
- Turgidosculum complicatulum* (Nyl.)  
 J.Kohlmeyer & E.Kohlmeyer
- Tylothallia pahiensis* (Zahlbr.) Hertel & Kilias
- Umbilicaria cylindrica* (L.) Delise ex Duby  
*U. hyperborea* (Ach.) Hoffm.  
*U. polyphylla* (L.) Baumg.  
*U. propagulifera* (Vainio) Llano  
*U. subglabra* (Nyl.) Harm.
- Usnea acromelana* Stirton  
*U. angulata* Ach.  
*U. articulata* (L.) Hoffm.  
*U. baileyi* (Stirton) Zahlbr.  
*U. confusa* Asahina  
*U. inermis* Motyka  
*U. maculata* Stirton  
*U. molliuscula* Stirton
- U. nidulifera* Motyka  
*U. oncodes* Stirton  
*U. pycnoclada* Vainio  
*U. rubicunda* Stirton  
***U. scabrida* Taylor ssp. *tayloriana* Stevens**  
***U. spilota* Stirton**  
*U. subcapillaris* (Galloway)  
 F.J.Walker  
*U. subeciliata* (Motyka) Swinsc. & Krog  
*U. torulosa* (Müll.Arg.) Zahlbr.  
*U. undulata* Stirton  
*U. xanthopoga* Nyl.
- Verrucaria baldensis* Massal.  
 [*V. dufourii* DC.]  
*V. maura* Wahlenb. ex Ach.  
*V. microsporoides* Nyl.  
 [*V. muralis* Ach.]  
*V. striatula* Wahlenb.  
***V. subdiscreta* McCarthy**  
***V. tessellatuloidea* McCarthy**
- Vezdaea obscura* Döbbeler**
- Wawea fruticulosa* Henssen & Kantvilas**
- Xanthoparmelia alexandrensis* Elix & Johnston  
*X. amphixantha* (Müll.Arg.) Hale  
*X. amplexula* (Stirton) Elix & Johnston  
*X. antleriformis* (Elix) Elix & Johnston  
*X. arapilensis* (Elix & P.Armstr.) Filson  
*X. australasica* Galloway  
*X. austroconstrictans* Elix  
*X. bungendorensis* (Elix) Elix & Johnston  
*X. cheelii* (Gyelnik) Hale  
*X. congesta* (Kurok. & Filson) Elix & Johnston  
*X. cordillerana* (Gyelnik) Hale  
*X. dichotoma* (Müll.Arg.) Hale  
*X. digitiformis* (Elix & P.Armstr.) Filson  
*X. dissitifolia* Kurok. ex Elix & Johnston  
*X. elixii* Filson  
*X. exillima* (Elix) Elix & Johnston  
*X. filarszkyana* (Gyelnik) Hale  
*X. flaviscentireagens* (Gyelnik) Galloway  
*X. furcata* (Müll.Arg.) Hale

<i>X. glareosa</i> (Kurok. & Filson) Elix & Johnston	<i>X. pustuliza</i> (Elix) Elix & Johnston
<i>X. hybridiza</i> Elix & Johnston	[ <i>X. remanens</i> (Elix) Elix & Johnston]
[ <i>X. incerta</i> (Kurok. & Filson) Elix & Johnston]	<i>X. rubrireagens</i> (Gyelnik) Hale
<i>X. isidiigera</i> (Müll.Arg.) Elix & Johnston	<i>X. scabrosa</i> (Taylor) Hale
<i>X. isidiosa</i> (Müll.Arg.) Elix & Johnston	<i>X. streimannii</i> (Elix & P. Armstr.) Elix & Johnston
[ <i>X. lineola</i> (Berry) Hale]	<i>X. subnuda</i> (Kurok.) Hale
<i>X. mannumensis</i> (Elix) Elix & Johnston	<i>X. substrigosa</i> (Hale) Hale
<i>X. metaclystoides</i> (Kurok. & Filson) Elix & Johnston	<i>X. taractica</i> (Krempelh.) Hale
<i>X. mexicana</i> (Gyelnik) Hale	<i>X. tasmanica</i> (J.D.Hook. & Taylor) Hale
<i>X. mougeotina</i> (Nyl.) Galloway	
<i>X. multipartita</i> (R.Br.) Hale	
<i>X. neotinctina</i> (Elix) Elix & Johnston	
<i>X. notata</i> (Kurok.) Hale	
<i>X. phillipsiana</i> (Filson) Elix & Johnston	
<i>X. pseudohypoleia</i> (Elix) Elix & Johnston	
	<i>Xanthoria ligulata</i> (Körber) P.James
	<i>X. parietina</i> (L.) Th.Fr.
	<i>Zahlbrucknerella calcarea</i> (Herre) Herre

## DELETIONS

*Arthonia complanata* Fée. This record was based on a collection by W.A. Weymouth which has been redetermined as *Arthothelium ilicinum* (Taylor) P.James.

*Arthonia epipastoides* Leighton = *A. radiata* (Pers.) Ach.

*Arthonia multiformis* Shirley = *A. ilicina* Taylor

*Arthonia tumidula* (Ach.) Ach. = *A. cinnabarina* (DC.) Wallr.

*Arthopyrena sublittoralis* (Leighton) Arnold. This record refers to *Pyrenocollema halodytes* (Nyl.) R.C.Harris (A. Aptroot pers. comm.).

*Arthothelium ferax* Müll.Arg = *A. interveniens* (Nyl.) Zahlbr.

*Arthothelium ilicinum* (Taylor) P.James = *Arthonia ilicina* Taylor

*Bacidia luteola* (Schrader) Mudd. This name has been misapplied to *B. buchananii* (Stirton) Hellbom.

*Bacidia melasemoides* (Jatta) Zahlbr. = *B. alboplumbea* (J.D.Hook. & Taylor) Hellbom

*Bacidia millegrana* (Taylor) Zahlbr. The collection on which this record is based (see Bratt & Cashin 1976) has been redetermined as *B. alboplumbea* (J.D.Hook. & Taylor) Hellbom (Kantvilas 1993).

*Bacidia otagoensis* (Nyl.) Hellbom var. *tasmanica* (Jatta) Zahlbr. = *B. alboplumbea* (J.D.Hook. & Taylor) Hellbom

*Bacidia weymouthii* (Shirley) Zahlbr. = *B. alboplumbea* (J.D.Hook. & Taylor) Hellbom

*Bactrospora dryina* (Ach.) Massal. Not recorded for Tasmania by Egea & Torrente (1993). The species appears to be confined to Europe and North America.

*Baeomyces absolutus* Tuck. = *Dibaeis absoluta* (Tuck.) Kalb & Gierl

*Baeomyces arcuatus* Stirton = *Dibaeis arcuata* (Stirton) Kalb & Gierl

*Baeomyces squamariooides* Nyl. = *Knightiella splachnirima* (J.D. Hook. & Taylor) Gyelnik

*Biatora byssacea* Hampe. The type material of this taxon does not include any lichen (Kantvilas & Elix, unpublished data).

***Buellia polospora* (Leighton) Shirley var. *asperata* Shirley = *Rinodina asperata* (Shirley) Kantvilas**

*Candelariella reflexa* (Nyl.) Lettau. Refers to *C. xanthostigmoides* (Müll.Arg) R.W.Rogers in Australia (Filson 1992a).

*Catillaria grossulina* (Stirton) Zahlbr. Erroneously recorded from Tasmania. The species is known only from Stirton's type collection from Victoria.

*Catinaria grossa* (Pers. ex Nyl.) Vainio = *Megalaria grossa* (Pers. ex Nyl.) Hafellner

*Catinaria pulvrea* (Borrer) Vězda & Poelt = *Catillaria pulvrea* (Borrer) Lettau

*Cetraria chlorophylla* (Willd.) Vainio = *Tuckermannopsis chlorophylla* (Willd.) Hale

*Chaenotheca chrysocephala* (Turn. ex Ach.) Th.Fr. = *C. chlorella* (Ach.) Müll.Arg.

*Cladonia arbuscula* ssp. *stictica* Ruoss. In Australasia, this taxon is included in *Cladina mitis* (Archer 1992b) and is not accepted until an appropriate combination in the genus *Cladina* is made to accomodate stictic acid-containing populations.

***Cladonia coniodendroides* F.Wilson.** The type material of this taxon has not been located and hence its true identity remains unknown.

*Cladonia crispata* (Ach.) Flotow. Tasmanian specimens belong to *C. crispata* var. *cetrariiformis* (Delise) Vainio.

***Cladonia decurva* Taylor ex Church. Bab. & Mitten** = *C. scabriuscula* (Delise) Nyl. (A.W. Archer, pers. comm.).

*Cladonia subdigitata* Nyl. = *C. ustulata* (J.D.Hook & Taylor) Leighton (See Stenroos 1993).

*Clathroporina eminentior* (Nyl.) Müll. Arg. The Tasmanian record of this essentially tropical taxon is based on Mueller (1887). No authentic material can be located and the record appears to be erroneous (P.M.McCarthy pers. comm.).

*Coelocaulon aculeatum* (Schreb.) Link = *Cetraria aculeata* (Schreb.) Fr. See Kärnefelt et al. (1993).

*Collema implicatum* Nyl. Filson (1992b) offers no supporting discussion for his decision to treat this taxon at species rank. Accordingly, in this checklist, this lichen is retained as *C. glaucophthalmum* var. *implicatum* (Nyl.) Degelius after Degelius (1974).

*Crocynia gossipina* (Sw.) Massal. *Crocynia* is a mainly tropical genus (Hawkesworth et al. 1983) and this name has most probably been misapplied to a species of *Lepraria*.

*Cystocoleus niger* (Huds.) Hariot = *C. ebeneus* (Dillwyn) Thwaites

***Diploschistes subocellatus* (Nyl.) Zahlbr.** = *D. ocellatus* (Vill.) Norm. (H.T. Lumbsch, pers. comm.).

***Heterothecium pauciseptatum* Shirley** = *Austroblastenia pauciseptata* (Shirley) Sipman

*Graphis scripta* (L.) Ach. This name has been misapplied in Tasmania to *G. librata* Knight (Kantvilas & James 1991).

***Laurera megasperma* (Mont.) Zahlbr. var. *tasmanica* (Jatta) Zahlbr.** = *Pyrenula ravenellii* (Tuck.) R.C.Harris (McCarthy & Kantvilas 1993a).

***Lecania vallatula* Jatta** = *Bacidia vallatula* (Jatta) Kantvilas

*Lecidea coromandelica* Zahlbr. = *Poeltiaria coromandelica* (Zahlbr.) Rambold & Hertel

*Lecidea elabens* Fr. All Australian collections are referable to either *L. stuartii* Hampe or *L. subnexa* Stirton (G.Kantvilas & J.Elix, unpublished).

***Lecidea laeta* Stirton** = *Pyrrhospora laeta* (Stirton) Hafellner

***Lecidea lampra* Stirton** = *L. stuartii* Hampe (G.Kantvilas & J.Elix, unpublished).

***Lecidea leptocarpa* Nyl. ex Church.Bab. & Mitten** = *Paraporpidia leptocarpa* (Church.Bab. & Mitten) Rambold & Hertel

*Lecidea petraeoides* Nyl. ex Hue = *Protoparmelia petraeoides* (Nyl. ex Hue) Hertel

*Lecidella elaeochroma* (Ach.) Choisy. Erroneously recorded from Tasmania; specimens so named by Kantvilas (1989) are referable to an undescribed genus.

*Leioderma amphibolum* (Knight) Galloway & Jørgensen = *Fuscoderma amphibolum* (Knight) Jørgensen & Galloway

*Megalospora biclpea* (Shirley) Zahlbr. Type specimen lost (Kantvilas 1988) but this species is probably better referred to *Catillaria* or *Megalaria*.

*Megalospora tasmanica* (Jatta) Zahlbr. Sipman (1983) observed that the type specimen has acicular spores and is therefore not a *Megalospora*.

*Megalospora taylori* Dodge = *Megalospora gompholoma* ssp. *fuscolineata* Sipman

*Menegazzia bullata* (Stirton) Bitter. This material is now correctly included under *M. corrugata* P.James.

*Menegazzia circumsorediata* R.Sant. = *M. neozelandica* (Zahlbr.) P.James

*Menegazzia retipora* (Stirton) Bitter = *M. myriotrema* (Müll.Arg.) P.James

*Microthelia analtiza* (Stirton) Zahlbr. Incorrectly recorded from Tasmania by Zahlbruckner (1922). Hawksworth (1985a) states that this specimen is from New South Wales and is referable to the fungus, *Didymosphaeria futilis* (Berk. & Broome) Rehm.

*Pannaria mariana* (Fr.) Müll.Arg. This record appears to be very doubtful because the species is essentially tropical-subtropical and occurs in the rainforests of Queensland (Jørgensen & Galloway 1992). The alleged Tasmanian collection (in the Greville Herbarium, E) is attributed to the collector Henderson, a name not connected to any other Tasmanian lichen collections (Kantvilas 1983).

*Pannaria pezizoides* (Web.) Trevisan. Erroneously applied to specimens of *P. decipiens*.

*Pannaria rubiginosa* (Thunb. ex Ach.) Delise. The occurrence of this species in Australia is not supported by recent revisionary studies (e.g. Jørgensen & Galloway 1992).

*Parmelia concors* Krempelh. = *Parmotrema cristiferum* (Taylor) Hale

*Parmelia pseudorelicina* Jatta = *Parmelina pseudorelicina* (Jatta) Kantvilas & Elix

*Parmeliella microphylla* (Sw.) Müll.Arg. The occurrence of this species in Australia is not supported by the recent work of Jørgensen & Galloway (1992).

*Parmeliella rubiginascens* (Nyl.) Müll.Arg. = *P. thysanota* (Stirton) Zahlbr.

*Parmeliella subgranulata* Galloway & Jørgensen. The record of this species from King Island by Galloway & Jørgensen (1987) is incorrect and is based on a poorly developed specimen of *Pannaria elixii* (Jørgensen & Galloway 1992).

*Parmelina stevensiana* Elix & Johnston = *P. pseudorelicina* (Jatta) Kantvilas & Elix

*Parmentaria gregalis* (Knight) Müll.Arg. Refers to *Pyrenula ravenellii* (Tuck.) R.C.Harris in Tasmania (P.M.McCarthy pers. comm.).

*Parmotrema reticulatum* (Taylor) M.Choisy = *Rimelia reticulata* (Taylor) Hale & Fletcher

*Parmotrema subcaperatum* (Krempelh.) Hale = *Rimeliella subcaperata* (Krempelh.) Kurokawa

*Pertusaria aggregata* Müll.Arg. Not present in Tasmania (A.W.Archer, pers. comm.).

*Pertusaria commutata* Müll.Arg. Not present in Tasmania (A.W.Archer, pers. comm.).

*Pertusaria lacerans* Müll.Arg. Not present in Tasmania; Jatta's (1911) record refers to *P. novaezelandiae*.

- Pertusaria leucostoma* (Bernh.) Massal. Not present in Tasmania; all records are referable to *P. gibberosa* and related taxa.
- Pertusaria meridionalis* Müll.Arg. var. *xanthostoma* Müll.Arg. Records of this taxon now refer to *P. leioplacella* Nyl. (Archer & Elix 1992).
- Pertusaria ornatula* Müll.Arg. Not present in Tasmania (A.W. Archer, pers. comm.).
- Pertusaria paratropa* Müll.Arg. Not present in Tasmania (A.W. Archer, pers. comm.).
- Pertusaria superba* Zahlbr. = *P. lophocarpa* Körber
- Pertusaria trypetheliformis* Nyl. Not present in Tasmania (A.W. Archer, pers. comm.).
- Phyllopsora congregans* (Zahlbr.) Galloway = *Trapeliopsis congregans* (Zahlbr.) Brako
- Phyllopsora parvifolia* (Pers.) Müll.Arg. All Tasmanian specimens found under this name are *Neophyllis melacarpa* (F.Wilson) F.Wilson.
- Porina leptaleina* (Nyl.) Müll.Arg. Tasmanian collections are now referred to *P. hyperleptalea* McCarthy & Kantvilas (McCarthy & Kantvilas 1993b).
- Porina nucula* Ach. Tasmanian collections are now referred to *P. sylvatica* McCarthy & Kantvilas (McCarthy & Kantvilas 1993b).
- Pseudopyrenula galactina* Shirley = *Pyrenula galactina* (Shirley) Kantvilas**
- Psoroma hirsutulum* Nyl. ex Crombie. Not present in Tasmania (Jørgensen & Galloway 1992).
- Psoroma paleaceum* (Fr.) Nyl. = *P. hypnorum* var. *paleaceum* (Fr.) Rostrup
- Psoroma sphinctrinum* (Mont.) Nyl. Not present in Tasmania (Jørgensen & Galloway 1992).
- Pyrenula kunthii* (Fée) Fée = *P. marginata* J.D.Hook.
- Pyrgillocarpon indicum* (Krempelh.) Nádv. in Tibell = *Pyrgillus indicus* (Krempelh.) Aptroot
- Rinodina dissia* (Stirton) Mayrhofer = *Hafellia dissia* (Stirton) Mayrhofer & Sheard**
- Schismatomma congerens* (Nyl.) Zahlbr.** According to Tehler (1993), this taxon belongs in a genus of the Lecanorales and hence, for the time being, it is included herein under its basionym ***Platygrapha congerens* Nyl.**
- Siphulastrum triste* Müll.Arg. Not present in Tasmania (Jørgensen & Galloway 1992). Probably conspecific with or misapplied to *S. mamillatum*.
- Sphaerophorus flaccidus* Kantvilas & Wedin = *Bunodophoron flaccidum* (Kantvilas & Wedin) Wedin**
- Sphaerophorus imshaugii* Ohlsson = *Bunodophoron imshaugii* (Ohlsson) Wedin
- Sphaerophorus insignis* Laurer = *Bunodophoron insigne* (Laurer) Wedin
- Sphaerophorus macrocarpus* Ohlsson = *Bunodophoron macrocarpum* (Ohlsson) Wedin
- Sphaerophorus melanocarpus* (Sw.) DC. = *Bunodophoron australe* (Laurer) Massal.
- Sphaerophorus murrayi* Ohlsson = *Bunodophoron murrayi* (Ohlsson) Wedin
- Sphaerophorus notatus* Tibell = *Bunodophoron notatum* (Tibell) Wedin
- Sphaerophorus patagonicus* (Dodge) Ohlsson = *Bunodophoron patagonicum* (Dodge) Wedin
- Sphaerophorus ramulifer* Lamb = *Bunodophoron ramuliferum* (Lamb) Wedin
- Sphaerophorus scrobiculatus* (Church. Bab.) Sato = *Bunodophoron scrobiculatum* (Church. Bab.) Wedin
- Sphaerophorus tener* Laurer = *Lefidium tenerum* (Leurer) Wedin
- Sphaerophorus tibellii* Wedin = *Bunodophoron tibellii* (Wedin) Wedin
- Stereocaulon leptaleum* Nyl. = *S. corticatum* Nyl.**
- Stereocaulon macrocarpoides* Nyl. = *S. ramulosum* (Sw.) Räuschel**
- Toninia microlepis* (Müll.Arg.) Zahlbr. This taxon belongs in the genus *Buellia* (Timdal 1991).
- Usnea capillacea* Motyka = *U. articulata* (L.) Hoffm. (G.N.Stevens *in litt.*).

- Usnea ceratina* Ach. Not present in Tasmania (G.N.Stevens *in litt.*).  
*Usnea contexta* Motyka = *U. articulata* (L.) Hoffm. (G.N.Stevens *in litt.*)  
*Usnea hirta* (Müll.Arg.) Weber *emend.* Motyka. Not present in Tasmania (G.N.Stevens *in litt.*).  
*Usnea leprosa* Motyka. Not present in Tasmania (G.N.Stevens *in litt.*); misapplied to *U. oncodes*.  
*Usnea ramulosissima* Stevens & Rogers. Not present in Tasmania (Stevens 1992).  
*Usnea scabrida* Taylor. Refers to *U. scabrida* ssp. *tayloriana* Stevens in Tasmania.  
*Usnea tasmanica* (Müll.Arg.) Zahlbr. = *U. baileyi* (Stirton) Zahlbr.  
*Usnea torquescens* Stirton = *U. angulata* Ach. (G.N.Stevens *in litt.*).  
*Usnea trichodea* Ach. Not present in Tasmania (G.N.Stevens *in litt.*).  
*Xanthoparmelia adhaerens* (Nyl.) Hale. This name now belongs in the African genus *Karoowia* (Hale 1989). All Australian material is referable to *Xanthoparmelia xanthomelaena*.  
*Xanthoparmelia constrictans* (Nyl. ex Crombie) Hale. This species is confined to South Africa and all Australian records refer to *X. austroconstrictans* Elix (see Elix 1993).  
***Xanthoria spinosa* (J.D.Hook. & Taylor) Du Rietz = *Teloschistes spinosus* (J.D.Hook. & Taylor) J.Murray**  
***X. spinulosa* (Krempelh.) Hillm. = *Teloschistes spinosus* (J.D.Hook. & Taylor) J.Murray**

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#### REFERENCES

- Ahti, T., Stenroos, S., & Archer, A.W. (1990). Some species of *Cladonia* published by J.D. Hooker & T. Taylor from the Southern Hemisphere. *Muelleria* 7: 173–177.
- Aptroot, A. (1991). A monograph of the Pyrenulaceae (excluding *Anthracothecium* and *Pyrenula*) and the Requienellaceae, with notes on the Pleomassariaceae, the Trypetheliaceae and *Mycomicrothelia* (lichenized and non-lichenized Ascomycetes). *Bibliotheca Lichenologica* 44: 1–178.
- Archer, A.W. (1989). Additional lichen records from Australia. 5. *Pertusaria novaezelandiae* in Australia. *Australas. Lichenol. Newsletter* 25: 3.
- Archer, A.W. (1991a). New species and new reports of *Pertusaria* (lichenised Ascomycotina) from Australia and New Zealand with a key to the species in Australia. *Mycotaxon* 41: 223–269.
- Archer, A.W. (1991b). Synonymy and chemotaxonomy of Australian *Pertusaria* species (Lichens) based on Australian type specimens. *Telopea* 4: 165–184.
- Archer, A.W. (1991c). Additional lichen records from Australia. 9. *Pertusaria subdactylina* Nyl. *Australas. Lichenol. Newslet.* 29: 8.
- Archer, A.W. (1992a). Additional new species and new reports of *Pertusaria* (Lichenised Ascomycotina) from Australia. *Mycotaxon* 44: 13–20.
- Archer, A.W. (1992b). Cladoniaceae. *Flora of Australia* 54: 107–143.
- Archer, A.W. & Elix, J.A. (1992). Further new species and new reports of *Pertusaria* (Lichenised Ascomycotina) from Australia. *Mycotaxon* 45: 417–431.
- Bratt, G.C. & Cashin, J.A. (1976). Additions to the lichen flora of Tasmania II. *Pap. Proc. R. Soc. Tasm.* 110: 139–148.
- Coppins, B.J. & Kantvilas, G. (1990). Studies on *Micarea* in Australasia I. Four new species from Tasmania. *Lichenologist* 22: 277–288.
- Degelius, G. (1974). The lichen genus *Collema* with special reference to extra-European species. *Symb. Bot. Upsal.* 20: 1–215.
- Diederich, P. (1992). *Stromatopogon baldwinii* Zahlbr., a lichenicolous coelomycete with dimorphic conidia. *Lichenologist* 24: 371–375.
- Egea, J.M. & Torrente, P. (1993). The lichen genus *Bactrospora*. *Lichenologist* 25: 211–255.

- Elix, J.A. (1993). New species in the lichen family Parmeliaceae (Ascomycotina) from Australia. *Mycotaxon* 47: 101–129.
- Elix, J.A., Jenkins, G.A. & Lumbsch, H.T. (1988). Chemical variation in the lichen genus *Diploicia* (Ascomycotina). *Mycotaxon* 33: 457–466.
- Elix, J.A. & Jenkins, G.A. (1989). New species and new records of *Hypogymnia* (Lichenized Ascomycotina). *Mycotaxon* 35: 469–476.
- Filson, R.B. (1992a). Candelariaceae. *Flora of Australia* 54: 97–101.
- Filson, R.B. (1992b). *Collema*. *Flora of Australia* 54: 161–173.
- Galloway, D.J. & Jørgensen, P.M. (1987). Studies in the lichen family Pannariaceae II. The genus *Leioderma* Nyl. *Lichenologist* 19: 345–400.
- Gierl, C. & Kalb, K. (1993). Die Flechtengattung *Dibaeis*. Eine Übersicht über die rosafrüchtigen Arten von *Baeomyces* sens. lat. nebst Anmerkungen zu *Phyllobaeis* gen. nov. *Herzogia* 9: 593–645.
- Hale, M.E. (1989). A monograph of the lichen genus *Karoowia* Hale (Ascomycotina: Parmeliaceae). *Mycotaxon* 35: 177–198.
- Hale, M.E. (1990). A synopsis of the lichen genus *Xanthoparmelia* (Vainio) Hale (Ascomycotina: Parmeliaceae). *Smithson. Contrib. Bot.* 74: 1–250.
- Hale, M.E. & Fletcher, A. (1990). *Rimelia* Hale & Fletcher, a new lichen genus (Ascomycotina: Parmeliaceae). *Bryologist* 93: 23–29.
- Hawksworth, D.L. (1985a). A redisposition of the species referred to the ascomycete genus *Microthelia*. *Bull. Brit. Mus. Nat. Hist. (Botany)* 14: 43–181.
- Hawksworth, D.L. (1985b). A new gall-forming *Polycoccum* on *Psoromidium versicolor* from Tasmania. *Lichenologist* 17: 298–300.
- Hawksworth, D.L. (1990). *Globosphaeria*, a remarkable new pyrenomycete on *Normandina* from Tasmania. *Lichenologist* 22: 301–305.
- Henssen, A. & Kantvilas, G. (1985). *Wawea fruticulosa*, a new genus and species from the Southern Hemisphere. *Lichenologist* 17: 85–97.
- Henssen, A., Döring, H. & Kantvilas, G. (1992). *Austropeltum glareosum* gen. et sp. nov., a new lichen from mountain plateaux in Tasmania and New Zealand. *Bot. Acta* 105: 457–467.
- Hertel, H. (1987). Bemerkenswerte Funde südhemisphärischer, saxicoler Arten der Sammelgattung *Lecidea*. *Mit. Bot. Staatssamm. München* 23: 321–340.
- Hertel, H. (1989). New records of lecideoid lichens from the Southern Hemisphere. *Mitt. Bot. Staatssamm. München* 28: 211–232.
- Hertel, H. (1990). Lecideaceae exsiccatae. Fascicle 12: 224, 236. München: Botanische Staatssammlung.
- Hertel, H. & Rambold, G. (1990). Zur Kenntnis der Familie Rimulariaceae (Lecanorales). *Bibliotheca Lichenologica* 38: 145–189.
- James, P.W. & Galloway, D.J. (1992). *Menegazzia*. *Flora of Australia* 54: 213–246.
- Jatta, A. (1911). Lichenes lecti in Tasmania a W. Weymouth. *Boll. Soc. bot. ital.* (1910): 253–260.
- Jørgensen, P.M. & Galloway, D.J. (1989). Studies in the lichen family Pannariaceae III. The genus *Fuscoderma* with additional notes and a revised key to *Leioderma*. *Lichenologist* 21: 295–301.
- Jørgensen, P.M. & Galloway, D.J. (1992). Pannariaceae. *Flora of Australia* 54: 246–293.
- Jørgensen, P.M. & James, P.W. (1990). Studies in the lichen family Pannariaceae IV. The genus *Degelia*. *Bibliotheca Lichenologica* 38: 253–276.
- Kalb, K. & Hafellner, J. (1992). Bemerkenswerte Flechten und lichenicole Pilze von der Insel Madeira. *Herzogia* 9: 45–102.
- Kantvilas, G. (1983). A brief history of lichenology in Tasmania. *Pap. Proc. R. Soc. Tasm.* 117: 41–51.
- Kantvilas, G. (1988). A re-examination of John Shirley's collection of Tasmanian lichens. *Pap. Proc. R. Soc. Tasm.* 122: 59–67.
- Kantvilas, G. (1989). A checklist of Tasmanian lichens. *Pap. Proc. R. Soc. Tasm.* 123: 67–85.
- Kantvilas, G. (1990a). The genus *Roccellinastrum* in Tasmania. *Lichenologist* 22: 79–86.
- Kantvilas, G. (1990b). The genus *Pertusaria* in Tasmanian rainforests. *Lichenologist* 22: 289–300.
- Kantvilas, G. (1991). Records of East African lichens in cool temperate Australia. *Nordic J. Bot.* 11: 369–373.
- Kantvilas, G. (1993). *Bacidia alboplumbea* (Lichenised Ascomycotina) and its taxonomic synonyms in Tasmania. *Muelleria* 8: 43–46.
- Kantvilas, G. & Elix, J.A. (1992). A new species and new records from the Tasmanian lichen flora. *Muelleria* 7: 507–517.
- Kantvilas, G., Elix, J.A. & James, P.W. (1992). *Siphulella*, a new lichen genus from southwest Tasmania. *Bryologist* 95: 186–191.
- Kantvilas, G. & James, P.W. (1991). Records of crustose lichens from Tasmanian rainforest. *Mycotaxon* 41: 271–286.
- Kantvilas, G. & Jarman, S.J. (1991). Lichens and bryophytes of the Tasmanian World Heritage Area. I. Mount Sprent. In: Banks, M.R. et al. (eds) *Aspects of Tasmanian Botany — A Tribute to Winifred Curtis*. Roy. Soc. Tasm.: Hobart. pp. 149–162.
- Kantvilas, G. & Jarman, S.J. (1992). The cryptogamic flora of an isolated rainforest fragment in Tasmania. *Bot. J. Linn. Soc.* 111: 211–228.
- Kantvilas, G. & Thor, G. (1993). The lichen genus *Chiodecton* in Tasmania. *Pap. Proc. R. Soc. Tasm.* 127 (in press).
- Kantvilas, G. & Vězda, A. (1992). Additions to the lichen flora of Tasmania. *Telopea* 4: 661–670.
- Kantvilas, G. & Wedin, M. (1992). A new species of *Sphaerophorus* (Caliciales) with a revised key to the genus in Tasmania. *Nova Hedwigia* 54: 493–502.

- Kärnefelt, I., Mattsson, J.-E., & Thell, A. (1993). The lichen genera *Arctocetraria*, *Cetraria* and *Cetariella* (Parmeliaceae) and their presumed evolutionary affinities. *Bryologist* 96: 394–404.
- Kurokawa, S. (1991). *Rimeliella*, a new lichen genus related to *Rimelia* of the Parmeliaceae. *Annals Tsukuba Bot. Gard.* 10: 1–14.
- Laundon, J.R. (1989). The species of *Leproloma* – the name for the *Lepraria membranacea* group. *Lichenologist* 21: 1–22.
- McCarthy, P.M. (1990). *Porina whinrayi*, a new lichen from Tasmania. *Lichenologist* 22: 195–197.
- McCarthy, P.M. (1991a). Notes on Australian Verrucariaceae (Lichenes) 2. *Muelleria* 7: 317–332.
- McCarthy, P.M. (1991b). The lichen genus *Endocarpon* Hedwig in Australia. *Lichenologist* 23: 27–52.
- McCarthy, P.M. (1991c). *Checklist of Australian Lichens*. Fourth Edn. (National Herbarium of Victoria: Melbourne.)
- McCarthy, P.M. (1992). *Bibliography of Australian Lichens: 1807–1991*. (National Herbarium of Victoria: Melbourne.)
- McCarthy, P.M. (1993a). New records of pyrenocarpous lichens from Australia. *Muelleria* 8: 31–36.
- McCarthy, P.M. (1993b). Saxicolous species of *Porina* Müll.Arg. (Trichotheliaceae) in the Southern Hemisphere. *Bibliotheca Lichenologica* 52: 1–134.
- McCarthy, P.M. & Kantvilas, G. (1993a). *Laurera robusta* (Trypetheliaceae), a new alpine lichen from Tasmania. *Lichenologist* 25: 51–55.
- McCarthy, P.M. & Kantvilas, G. (1993b). New and interesting species of *Porina*, mainly from Tasmanian rainforest. *Lichenologist* 25: 137–146.
- Mayrhofer, H. & McCarthy, P.M. (1991). Notes on the lichenized Ascomycete genus *Thelenella* Nyl. in Australia, Southern Africa and in the islands of the subantarctic and antarctic. *Muelleria* 7: 333–341.
- Mueller, F. von (1887). List of Australian lichens indicative of additional species or of unrecorded localities, from Dr J. Mueller's elucidations. *Vic. Nat.* 4: 88–95.
- Purvis, O.W., Coppins, B.J., Hawksworth, D.L., James, P.W. & Moore, D.M. (1992). The lichen flora of Great Britain and Ireland. (British Lichen Society: London.)
- Rogers, R.W. & Stevens, G.N. (1988). The *Usnea baileyi* complex (Parmeliaceae, Lichenised Ascomyces) in Australia. *Aust. Syst. Bot.* 1: 355–361.
- Ruoss, E. & Ahti, T. (1989). Systematics of some reindeer lichens (*Cladonia* subgen. *Cladina*) in the Southern Hemisphere. *Lichenologist* 21: 29–44.
- Sheard, J.W. (1992). The lichenized ascomycete genus *Hafellia* in North America. *Bryologist* 95: 79–87.
- Sipman, H.J.M. (1983). A monograph of the lichen family Megalosporaceae. *Bibliotheca lichenologica* 18: 1–241.
- Stenroos, S. (1988). The family Cladoniaceae in Melanesia. 3. *Cladonia* sections *Helopodium*, *Perviae* and *Cladonia*. *Ann. Bot. Fennici* 25: 117–148.
- Stenroos, S. (1993). Taxonomy and distribution of the lichen family Cladoniaceae in the Antarctic and peri-Antarctic regions. *Crypt. Bot.* 3: 310–344.
- Stevens, G.N. (1992). Variation in thallus morphology in response to climatic and geographical distribution in an *Usnea* complex. *Lichenologist* 24: 229–248.
- Tehler, A. (1993). The genus *Schismatomma* (Arthoniales, Euascomycetidae). *Opera Bot.* 118: 1–38.
- Thor, G. (1990). The lichen genus *Chiodescon* and five allied genera. *Opera Bot.* 103: 1–92.
- Timdal, E. (1991). A monograph of the genus *Toninia* (Lecideaceae, Ascomycetes). *Opera Bot.* 110: 1–137.
- Triebel, D. (1989). Lecideicole Ascomyceten. Eine Revision der obligat lichenicolen Ascomyceten auf lecideoiden Flechten. *Bibliotheca Lichenologica* 35: 1–278.
- Verdon, D. (1990). New Australasian species and records in the lichen genus *Leptogium* S.Gray (Lichenized Ascomycotina: Collemataceae). *Mycotaxon* 37: 413–440.
- Verdon, D. (1992). *Leptogium*. *Flora of Australia* 54: 173–192.
- Vézda, A. (1992). Lichens rariores exsiccati. *Fasciculus* 3: 25. Brno.
- Wedin, M. (1992). Taxonomic and distributional notes on the genus *Sphaerophorus* (Caliciales) in the Southern Hemisphere. *Lichenologist* 24: 119–132.
- Wedin, M. (1993a). *Arthonia pseudocyphellariae*, a new lichenicolous fungus from the Southern Hemisphere. *Lichenologist* 25: 301–303.
- Wedin, M. (1993b). A phylogenetic analysis of the lichen family Sphaerophoraceae (Caliciales); a new generic classification and notes on character evolution. *Plant Syst. Evol.* 187: 213–241.
- Wetmore, C.M. (1963). Catalogue of the lichens of Tasmania. *Rev. Bryol. et Lichénol.* 32: 223–264.
- Zahlbrückner, A. (1922) *Catalogus lichenum universalis*. Volume 1. (Borntraeger: Leipzig.)

## APPENDIX 1 — NEW RECORDS FOR TASMANIA

### 1. *Arthrorhaphis grisea* Th.Fr.

This species occurs on the thallus of *Baeomyces heteromorphus* and is recognised by its black lecideine apothecia to c. 0.5 mm wide and by its multiseptate, acicular spores, 50–70 × 2–2.5 µm.

SPECIMENS EXAMINED: Tasmania — Hartz Mountains, on plateau, 800 m a.s.l., 9 Aug. 1981, G.Kantvilas 522/81 (HO, BM); McPartlan Pass, 360 m a.s.l., 8 Mar. 1991, G.Kantvilas 82/91 (HO, GZU); Lake Osborne Track, 9 Aug. 1981, P.W.James s.n. (HO, BM).

## 2. *Biatoropsis usnearum* Räsänen

This widely distributed gall-forming lichenicolous fungus occurs on the thallus of species of *Usnea*.

SPECIMEN EXAMINED: Tasmania — Brady's Sugarloaf, 980 m a.s.l., on thallus of *Usnea torulosa*, growing on dolerite outcrops in eucalypt forest, 11 Jan. 1992, G.Kantvilas 90/92 (HO).

## 3. *Buellia punctata* (Hoffm.) Massal.

SPECIMEN EXAMINED: Tasmania — between Shelly Point and Buxton Point, south of Swansea, on driftwood on coastal rocks, 18 Feb. 1985, H.Mayrhofer 9641 & H.Hertel (GZU).

## 4. *Candelariella xanthostigmoides* (Müll.Arg.) R.W.Rogers

Referred to in previous Tasmanian literature as *C. reflexa* (Nyl.) Lettau and recognised by its granular, corticolous thallus and eight-spored ascospores (see Filson 1992a). The species is common in dry sclerophyll forest.

SELECTED SPECIMENS EXAMINED: Tasmania — Carr Villa Cemetery, Launceston, 80 m a.s.l., 6 Feb. 1992, A.V.Ratkowsky s.n. (HO); Hummocky Hills, 200–470 m a.s.l., A.V.Ratkowsky s.n. (HO); Brown Mountain Road, Campania, 220 m a.s.l. 16 Aug. 1981, G.Kantvilas & P.W.James 742/81 (HO, BM); Hunting Grounds, c. 4.5 km west of Dysart, 400 m a.s.l., 7 Aug. 1981, G.Kantvilas & P.W.James 461/81 (HO, BM).

## 5. *Cladonia subsulcata* Nyl.

This species name is used herein to accommodate *C. crispata*-type specimens containing thamnolic acid with additional barbatic acid in their apothecia. Archer (1992b) includes such material within *C. crispata* var. *cetrariiformis*. However, that taxon contains squamatic acid as the major chemical constituent (Stenroos 1988). In Tasmania at least, the two chemical races show subtle morphological differences and, pending further study, each is treated as a distinct taxon. *C. subsulcata* is common in Tasmania in wet heathland, sedgeland and forest, and occurs on peat, soil or, occasionally, on wood. It ranges from lowland to alpine altitudes. In some earlier literature it was also referred to as *C. aueri* Räsänen.

SELECTED SPECIMENS EXAMINED: Tasmania — Mt Dial, 480 m a.s.l., 25 May 1991, G.Kantvilas 239/91 (HO); Mt Wedge, 1140 m a.s.l., 17 Oct. 1981, G.Kantvilas 859/81 (HO, BM); Twilight Tarn, 1000 m a.s.l., 9 Mar. 1980, G.Kantvilas 5/80 (HO, BM); Pelion Plains, 890 m a.s.l., 11 Mar. 1992, G.Kantvilas 255/92 (HO); Jane River Track, c. 1 km north of Loddon River, 520 m a.s.l., 1 Feb. 1986, G.Kantvilas 29/86 (HO, NSW).

## 6. *Collema fasciculare* var. *microcarpum* (Müll. Arg.) Degelius

Recognised by its pulvinate thallus with abundant, granular to wart-like isidia, minute apothecia to c. 0.3 mm diam., and acicular spores to 170 µm long (see Degelius 1974 for full description), this species is common in wet scrub at the margins of rainforest.

SELECTED SPECIMENS EXAMINED: Tasmania — North-East Ridge Track to Mt Anne, 12 Dec. 1982, G.Kantvilas 295/82 (HO); Mt Dundas Track, 460 m a.s.l., 14 Dec. 1988, G.Kantvilas 540/88 (HO); Junction Creek, 260 m a.s.l., 14 Dec. 1984, G.Kantvilas 723/84 (HO).

## 7. *Massalongia carnosia* (Dickson) Körber

This bipolar species resembles a species of *Parmeliella* but is distinguished by its small reddish brown thallus and septate spores [see Galloway (1985) and Purvis et al. (1992)] for full descriptions. It is rare in Tasmania where it occurs amongst mosses on rocks in alpine woodland.

SPECIMEN EXAMINED: Tasmania — Ouse River near Liawenee Canal, 1080 m a.s.l., 26 May 1983, G.Kantvilas 67/83 (HO).

#### **8. *Omphalina umbellifera* (L. ex Fr.) Quélet**

See Lumbsch & Ewers (1992) for a brief discussion of this lichenised basidiomycete in Australia. The species has a granular *Botrydina*-type thallus and has been frequently illustrated in handbooks of fungi under the synonym, *O. ericetorum* (Fr.) M.Lange.

SPECIMEN EXAMINED: Tasmania — Sumac Road, Spur 2, south of Arthur River, 170 m a.s.l., on rotting log of *Nothofagus cunninghamii* in rainforest, 30 Jan. 1992, G.Kantvilas, B.Fuhrer & J.Jarman 86/92 (HO).

#### **9. *Pannaria subimmixta* Knight**

Known also from eastern Australia and New Zealand, this species is locally common in the drier south-eastern parts of Tasmania where it occurs on sandstone outcrops in dry sclerophyll forest (see Jørgensen & Galloway 1992 full description).

SPECIMENS EXAMINED: Tasmania — Grass Tree Hill, 400 m a.s.l., 29 Sep. 1981, G.Kantvilas 1009/81 (HO); Hunting Grounds at Dysart, 400 m a.s.l., 7 Aug. 1981, G.Kantvilas & P.James 467/81 (BM, HO); Levendale, 360 m a.s.l., 1 Aug. 1981, G.Kantvilas 445/81 (BM, HO).

#### **10. *Rinodina pyrina* (Ach.) Arn.**

This species occurs very abundantly on a variety of exotic trees and shrubs in parks and gardens.

SPECIMENS EXAMINED: Tasmania — The Cascades, Hobart, 120 m a.s.l., on *Malus* and *Ficus* in garden, 13 Aug. 1989, G.Kantvilas 208/89, 209/89 (HO); same locality, on *Salix babylonica* in pasture, 17 Apr. 1990, G.Kantvilas 180/90 (HO).

#### **11. *Sphaerophorus tibellii* Wedin**

For a summary of diagnostic characters of this rare species, see Kantvilas & Wedin (1992) (under 'species A') and Wedin (1992).

SPECIMEN EXAMINED: Tasmania — Arve Loop, near Geeveston, 360 m a.s.l., 3 May 1981, G.Kantvilas 271/81 (HO).

#### **12. *Usnea confusa* Asahina**

SPECIMENS EXAMINED: Tasmania — Balts Spur, Tasman Peninsula, 7 Jan. 1983, G.Kantvilas 11/83 (HO); Newmans Creek, 16 Mar. 1891, W.A.Weymouth 12 p.p. (HO).

#### **13. *Usnea nidulifera* Motyka**

SPECIMENS EXAMINED: Tasmania — Cape Sorell, June 1974, M.Gilbert (HO); Sumac Road, Spur 2, south of Arthur River, 170 m a.s.l., 24 Nov. 1980, G.Kantvilas 668/80 (HO).

#### **14. *Usnea oncodes* Stirton**

This appears to be one of the most common and frequently collected species of *Usnea* from wet forests; it contains usnic and salazinic acids.

SPECIMENS EXAMINED: Tasmania — Lake Fenton, 1000 m a.s.l., 26 Mar. 1980, G. Kantvilas 59/80 (BM, COLO, HO); Port Davey, 19 Mar. 1980, S.J.Jarman 61/80 (HO, BM); Tiger Road, Florentine Valley, 550 m a.s.l., 6 Sep. 1980, G.Kantvilas 362/80 (HO, BM).

#### **15. *Usnea pycnoclada* Vainio**

SPECIMEN EXAMINED: Tasmania — Calverts Lagoon, 31 Aug. 1980, G. Kantvilas 339/80 p.p. (HO).

#### **16. *Usnea subeciliata* (Motyka) Swinsc. & Krog**

SPECIMENS EXAMINED: Tasmania — Diddleum Plains, 640 m a.s.l., 3 Nov. 1980, G. Kantvilas 534/80 (HO, BM); Julius River, 120 m a.s.l., 26 Nov. 1980,

*G.Kantvilas* 696/80 (HO, BM); Trevallyn State Recreation Area, 200 m a.s.l., 12 Feb. 1992, A.V.Ratkowsky s.n. (HO).

**17 *Usnea undulata* Stirton**

SPECIMENS EXAMINED: Tasmania — Julius River, 120 m a.s.l., 26 Nov. 1980, *G.Kantvilas* 695/80 (HO, BM); Telopea Road near Ben Nevis, 870 m a.s.l., 5 Nov. 1980, *G.Kantvilas* 549/80 B (HO); Mount Barrow Chalet, 600 m a.s.l., 30 Jan. 1965, G.C.Bratt & M.H.Bratt 3224 (HO).

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