

New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. XV.

Paul Diederich¹, Damien Ertz², Marion Eichler³, Rainer Cezanne³, Pieter van den Boom⁴, Dries Van den Broeck² & Emmanuël Sérusiaux⁵

¹ Musée national d'histoire naturelle, 25 rue Munster, L-2160 Luxembourg, Luxembourg (paul.diederich@education.lu)

² Botanic Garden Meise, Department Bryophytes-Thallophytes, Domein van Bouchout, Nieuwelaan 38, B-1860 Meise, Belgium (damien.ertz@br.fgov.be; dries.vandenbroeck@br.fgov.be)

³ Kaupstraße 43, D-64289 Darmstadt, Germany (eichler-cezanne@t-online.de)

⁴ Araufa 16, NL-5691 JA Son, The Netherlands (pvdboom@kpnmail.nl)

⁵ Evolution and Conservation Biology Unit, University of Liège, Sart Tilman B22, B-4000 Liège, Belgium (e.serusiaux@ulg.ac.be)

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Abstract. Studies of mainly recent collections of lichens and lichenicolous fungi led to the addition of nine taxa to the flora of Belgium, Luxembourg and northern France: *Aphanopsis coenosa*, *Biatora efflorescens*, *Burgoa splendens*, *Caloplaca soralifera*, *Flavoplaca limonia*, *Phoma physcicola*, *Tremella wirthii*, *Usnea glabrescens* var. *glabrescens* and *Xanthomendoza oregana*. Seven additional species were reported in recent publications: *Caloplaca conversa* var. *fallax*, *Ceratobasidium bulbillifaciens*, *Hainesia brevihadoniae*, *H. longihadoniae*, *Punctelia reddenda*, *Oxneria hculica* and *Zwackhiomyces peltigerae*. New to Belgium: *Cornutispora ciliata*, *Polycoccum pulvinatum*, *Thelopsis rubella* and *Zwackhiomyces physcicola*; new to Luxembourg: *Bacidia carneoglaauca*, *Enchylium limosum*, *Lempholemma chalazanum*, *Lichenothelia convexa*, *Polycoccum slaptoniense*, *Rinodina pityrea* and *Thelenella muscorum*. Additional notes are given on some rare and threatened species. The following new combination is proposed: *Xanthomendoza hculica* (S. Y. Kondr.) Diederich (basionym *Oxneria hculica*).

1. Introduction

This paper continues the series of notes on the flora of lichens and lichenicolous fungi in Belgium, Luxembourg and northern France (Diederich & Sérusiaux 2000, Diederich et al. 2012). It further includes the most recent updates regarding nomenclature and taxonomy of the species present in our study area. In the enumeration of specimens, the abbreviation 'h' refers to the private herbarium of the collector. The term 'checklist' is used for the checklist of lichens and lichenicolous fungi in Belgium, Luxembourg and northern France (Diederich et al. 2014), and the term 'checklist area' is used for the area covered by that checklist.

2. Survey of other publications on the lichen flora and vegetation of the checklist area

Hellemans & Stappaerts (2012) reported the discovery of *Punctelia reddenda* (Stirt.) Krog in Flanders, where it grew on *Salix* in a wet forest; the species is new to our checklist area. Van den Broeck (2012c) collected *Arthonia didyma* and *A. ruana* as new to Flanders. Van den Broeck (2013a) discovered *Oxneria hculica* in Belgium (new to the checklist area), whilst De Wit & Van den Broeck (2014) reported *Melanelixia subargentea* as new to Flanders.

Van den Broeck et al. (2012) presented a report of a lichenological excursion to the

Ourthe valley in the Belgian Ardennes in 2010, during which the lichenicolous *Nectriopsis lecanodes* and *Sclerococcum sphaerale* were found as new to Belgium. Hellemans (2012) listed 16 species of lichens and lichenicolous fungi from a *Mespilus* tree in Flanders, Van den Broeck (2012a) 59 species in the nature reserve 'Molsbergen' near Lokeren, Van den Broeck (2012b) 86 species in the nature reserve 'De Maten' near Genk, Van den Broeck (2013b) 90 species in the nature reserve 'De Most' near Balen, Van den Broeck & Hellemans (2013) 62 species in the 'Kalmthoutse Heide', and De Beer & Van den Broeck (2013) 75 species from Haasop near Beveren.

Van den Broeck et al. (2013) published a report on two lichenological field meetings in Luxembourg, during which two species were found as new to the checklist area, *Caloplaca conversa* var. *fallax* and *Zwackhomyces peltigerae*.

Van den Broeck (2012d) published a detailed study of the epiphytic lichens and lichenicolous fungi from the Brussels area.

3. Taxonomical and nomenclatural changes

Verrucaria hydrophila Orange is a new species described for the rather common and widespread aquatic lichen previously called *V. hydrela* auct. or *V. denudata* Zsch. (Orange 2013). The species is not rare in Belgium (Mosan and Ard.) and Luxembourg (Ard.).

Diederich & van den Boom (2013) described two new species of *Hainesia* growing on *Cladonia*, *H. brevicladoniae* Diederich & van den Boom, known from Belgium and northern France, and *H. longicladoniae* Diederich & van den Boom, known from Luxembourg.

Diederich et al. (2014) describe a new lichen-associated bulbilliferous basidiomycete as *Ceratobasidium bulbillifaciens* Diederich & Lawrey. The species is known from several European countries, including Belgium and Luxembourg.

Tehler et al. (2013) revised the genus *Dirina* at world-level. The only species present

in our checklist area is *Dirina massiliensis* Durieu & Mont. This species occurs either as a fertile morph, or a sterile and sorediate morph, rarely as a pycnidiate morph. Almost all specimens from our checklist area belong to the sterile, sorediate morph, previously called *Dirina stenhammari* (Sten.) Poelt & Follmann. One old, fertile specimen from the Ardennes (locality, collecting date and collector unknown) represents the only known ascoma-forming specimen from an inland locality.

Otálora et al. (2014) revised the generic classification of the jelly lichens (Collemataceae), resulting in a completely new generic taxonomy of the species previously included in *Collema* and *Leptogium*. The following taxa are known from our checklist area: *Blennothallia crispa* (Huds.) Otálora, P. M. Jørg. & Wedin, *Callome multipartita* (Sm.) Otálora, P. M. Jørg. & Wedin, *Collema flaccidum* (Ach.) Ach., *C. furfuraceum* (Arnold) Du Rietz, *Enchylium coccophorum* (Tuck.) Otálora, P. M. Jørg. & Wedin, *E. limosum* (Ach.) Otálora, P. M. Jørg. & Wedin, *E. polycarpon* (Hoffm.) Otálora, P. M. Jørg. & Wedin, *E. tenax* (Sw.) Gray, *Lathagrium auriforme* (With.) Otálora, P. M. Jørg. & Wedin, *L. cristatum* (L.) Otálora, P. M. Jørg. & Wedin, *L. dichotomum* (With.) Otálora, P. M. Jørg. & Wedin, *L. fuscovirens* (With.) Otálora, P. M. Jørg. & Wedin, *Leptogium cyanescens* (Rabenh.) Körb., *L. saturninum* (Dicks.) Nyl., *Pseudoleptogium diffractum* (Körb.) Müll. Arg., *Rostania quadrata* (Körb.) Trevis., *Scytinium aragonii* (Otálora) Otálora, P. M. Jørg. & Wedin, *S. biatorinum* (Nyl.) Otálora, P. M. Jørg. & Wedin, *S. fragile* (Taylor) Otálora, P. M. Jørg. & Wedin, *S. fragrans* (Sm.) Otálora, P. M. Jørg. & Wedin, *S. gelatinosum* (With.) Otálora, P. M. Jørg. & Wedin, *S. lichenoides* (L.) Otálora, P. M. Jørg. & Wedin, *S. magnussonii* (Degel & P. M. Jørg.) Otálora, P. M. Jørg. & Wedin, *S. massiliense* (Nyl.) Otálora, P. M. Jørg. & Wedin, *S. palmatum* (Huds.) Gray, *S. plicatile* (Ach.) Otálora, P. M. Jørg. & Wedin, *S. schraderi* (Bernh.) Otálora, P. M. Jørg. & Wedin, *S. subtile* (Schrad.) Otálora, P. M. Jørg. & Wedin, *S. tenuissimum* (Dicks.) Otálora, P. M. Jørg. & Wedin, *S. teretiusculum* (Wallr.) Otálora, P. M. Jørg. & Wedin and *S. turgidum* (Ach.) Otálora, P. M. Jørg. & Wedin.

Ertz et al. (2014) transferred *Opegrapha gyrocarpa*, *O. rufescens* and *Lecanactis dilleniana* to new genera, as *Gyrographa gyrocarpa* (Flot.) Ertz & Tehler, *Pseudoschismatomma rufescens* (Pers.) Ertz & Tehler and *Psoronactis dilleniana* (Ach.) Ertz & Tehler.

Bendiksby & Timdal (2013) revised the genus *Hypocenomyce*. Amongst the species known from our study area, *H. scalaris* stays in *Hypocenomyce* (it is the generic type), whilst *H. caradocensis* is moved to a new genus, as *Xylopsora caradocensis* (Nyl.) Bendiksby & Timdal.

Calatayud et al. (2013) revised the species of *Cercidospora* (lichenicolous ascomycetes) growing on *Lecanora* s. lat., *Rhizoplaca* and *Squamaria*. In addition to the two species that were already known from our study area (*C. epipolytropa* and *C. macrospora*), they examined a specimen from Belgium (Ardennes district on *Lecanora gisleriana*) that belongs to the new *C. stenotropae* Nav.-Ros. & Hafellner ad int.

Lücking (2012) proposed the new name *Graphis inustuloides* Lücking for the species previously called *Graphis britannica* auct., sensu Staiger or *Graphina anguina* auct. In our checklist area, this species is known only from northern France (Boulogne and Picardy districts).

Ekman & Svensson (2014) described the new genus *Brianaria* S. Ekman & M. Svensson for the *Micarea sylvicola* group. *Brianaria bauschiana* (Körb.) S. Ekman & M. Svensson, *B. lutulata* (Nyl.) S. Ekman & M. Svensson and *B. sylvicola* (Körb.) S. Ekman & M. Svensson are known from our checklist area.

Printzen (2014) studied the molecular phylogeny of *Biatora* s.lat. and transferred to this genus two former *Bacidia* species known from our checklist area: *Biatora beckhau-sii* (Körb.) Tuck. and *B. hemipolia* (Nyl.) S. Ekman & Printzen.

Divakar et al. (2012) described the new genus *Montanelia* for the *Melanelia disjuncta* group and combined the following species known from our checklist area: *Montanelia disjuncta* (Erichsen) Divakar, A. Crespo, Wedin & Essl., *Montanelia panniformis* (Nyl.) Divakar, A. Crespo, Wedin & Essl.

and *Montanelia sorediata* (Ach.) Divakar, A. Crespo, Wedin & Essl.

Moncada et al. (2013) presented a molecular phylogeny of the Lobariaceae. Following their results, the three *Lobaria* s. lat. species known from our checklist area belong to distinct clades that can be recognized at generic level: *Lobaria pulmonaria* (L.) Hoffm., *Lobaria scrobiculata* (Scop.) Cromb. and *Ricasolia laetevirens* (Lightf.) Zahlbr.

The name *Anema tumidulum* P. M. Jørg., M. Schultz & Guttová has been validated by Jørgensen et al. (2013), who cited a French specimen from our checklist area.

Aptroot et al. (2014) show that *Strigula sychnogonoides* (Nitschke) R. C. Harris is closely related to *Absconditella* and must be excluded from *Strigula*, as *Geisleria sychnogonoides* Nitschke.

Fryday et al. (2014) describe the new genus *Bryolimbia* for species of the *Lecidea hypnorum* group. Two species are known from our checklist area: *Bryolimbia hypnorum* (Lib.) Fryday, Printzen & S. Ekman and *B. sanguineoatra* (Wulfen) Fryday, Printzen & S. Ekman.

Lendemer (2013) showed that the correct name of the common *Lepraria* species usually called *L. lobificans* auct. [non Nyl.] is *Lepraria finkii* (B. de Lesd.) R. C. Harris, whilst *L. lobificans* Nyl. refers to the species formerly called *L. santosii* Argüello & A. Crespo.

Ertz et al. (2014) showed that *Phaeosporobolus* is the asexual stage of *Lichenostigma*, and the following species are accepted from our checklist area: *Lichenostigma maureri* Hafellner (syn. *Phaeosporobolus usneae* D. Hawksw. & Hafellner), *L. alpinum* (R. Sant. Alstrup & D. Hawksw.) Ertz & Diederich and *L. chloroterae* (F. Berger & Brackel) Ertz & Diederich. *Lichenostigma rugosum* G. Thor is transferred to *Lichenothelia*, as *L. rugosa* (G. Thor) Ertz & Diederich. Species of *Lichenostigma* subgen. *Lichenogramma* are also closely related to *Lichenothelia*, but no new combinations are proposed, as more molecular data in this group are necessary.

Ekman et al. (2014) presented a revised generic classification of the Pannariaceae. Two species known from our checklist

area are concerned. *Moelleropsis nebulosa* is nested within *Fuscopannaria*, and *Moelleropsis* consequently becomes a synonym of that genus. No nomenclatural changes are introduced, however, pending a final decision on a proposal to conserve the younger *Fuscopannaria* against *Moelleropsis*. The new generic name *Pectenia* is introduced for the *Degelia plumbea* group, including the new combination *Pectenia plumbea* (Lightf.) P. M. Jørg., L. Lindblom, Wedin & S. Ekman.

Arup et al. (2013) presented a new taxonomy of Teloschistaceae, based on molecular phylogenetic results, recognizing a total of 39 genera. Roux (2014) regrets the missing correspondence between molecular results and morphological, anatomical and chemical characters, and considers that the splitting of *Caloplaca* in so many genera is premature. Nonetheless, we tentatively accept the new taxonomy proposed by Arup et al. (2013). The species of Teloschistaceae known from our checklist area, previously included in *Caloplaca*, *Fulgensia*, *Teloschistes* and *Xanthoria*, should consequently be named as: *Athallia cerinella* (Nyl.) Arup, Frödén & Söchting, *A. cerinelloides* (Erichsen) Arup, Frödén & Söchting, *A. holocarpa* (Hoffm.) Arup, Frödén & Söchting, *A. pyracea* (Ach.) Arup, Frödén & Söchting, *A. vitellinula* Arup, Frödén & Söchting, *Blastenia coralliza* (Arup & Åkelius) Arup, Frödén & Söchting, *B. crenularia* (With.) Arup, Frödén & Söchting, *B. ferruginea* (Huds.) Arup, Frödén & Söchting, *B. herbidella* (Hue) Servít, *Calogaya arnoldii* (Wedd.) Arup, Frödén & Söchting [subsp. *obliterata* has not yet been combined here], *C. biatorina* (A. Massal.) Arup, Frödén & Söchting, *C. decipiens* (Arnold) Arup, Frödén & Söchting, *C. pusilla* (A. Massal.) Arup, Frödén & Söchting, *Caloplaca cerina* (Hedw.) Th. Fr., *C. chlorina* (Flot.) Sandst., *C. stillicidiorum* (Vahl) Lyngé (= *C. cerina* var. *chloroleuca*), *Cerothallia luteoalba* (Turner) Arup, Frödén & Söchting, *Flavoplaca arcis* (Poelt & Vězda) Arup, Frödén & Söchting, *F. citrina* (Hoffm.) Arup, Frödén & Söchting, *F. coronata* (Körb.) Arup, Frödén & Söchting, *F. dichroa* Arup, Frödén & Söchting, *F. flavocitrina* Arup, Frödén & Söchting, *F. granulosa* Arup, Frödén & Söchting, *F. limonia* (Nimis & Poelt) Arup, Frödén & Söchting, *F. marina*

(Wedd.) Arup, Frödén & Söchting, *F. maritima* (B. de Lesd.) Arup, Frödén & Söchting, *F. microthallina* (Wedd.) Arup, Frödén & Söchting, *F. oasis* (A. Massal.) Arup, Frödén & Söchting, *F. polycarpa* (A. Massal.) Arup, Frödén & Söchting, *Gyalolechia flavorubescens* (Huds.) Söchting, Frödén & Arup, *G. flavovirescens* (Wulff) Söchting, Frödén & Arup, *G. fulgens* (Sw.) Söchting, Frödén & Arup, *Leproplaca chrysodeta* (Räs.) J. Laundon, *L. cirrochroa* (Ach.) Arup, Frödén & Söchting, *L. xantholyta* (Nyl.) Hue, *Polycauliona candelaria* (L.) Frödén, Arup & Söchting, *P. phlogina* (Ach.) Arup, Frödén & Söchting, *P. polycarpa* (Hoffm.) Frödén, Arup & Söchting, *P. ucrainica* (S. Y. Kondr.) Frödén, Arup & Söchting, *Pyrenodesmia alociza* (A. Massal.) Arnold, *P. chalybaea* (Fr.) A. Massal., *P. variabilis* (Pers.) A. Massal., *Rufoplaca arenaria* (Pers.) Arup, Frödén & Söchting, *R. subpallida* (H. Magn.) Arup, Frödén & Söchting, *Rusavskia elegans* (Link) S. Y. Kondr. & Kärnefelt, *Solataria chrysophthalma* (Degel.) Arup, Frödén & Söchting, *Teloschistes chrysophthalmus* (L.) Th. Fr., *Variospora aurantia* (Pers.) Arup, Frödén & Söchting, *V. dolomiticola* (Hue) Arup, Frödén & Söchting, *V. flavesrens* (Huds.) Arup, Frödén & Söchting, *V. thallicola* (Wedd.) Arup, Frödén & Söchting, *Xanthocarpia crenulatella* (Nyl.) Frödén, Arup & Söchting, *X. lactea* (A. Massal.) A. Massal., *X. marmorata* (Bagl.) Frödén, Arup & Söchting, *X. ochracea* (Schaer.) A. Massal. & De Not., *Xanthomendoza fallax* (Hepp) Söchting, Kärnefelt & S.Y. Kondr., *X. huculica* (S. Y. Kondr.) Diederich, *X. poeltii* (S.Y. Kondr. & Kärnefelt) Söchting, Kärnefelt & S.Y. Kondr., *Xanthoria calcicola* Oxner and *X. parietina* (L.) Th. Fr.

Six species belonging to *Pyrenodesmia* s. l. are provisionally kept in *Caloplaca*: *C. albolutescens*, *C. atroflava*, *C. demissa*, *C. erythrocarpa*, *C. soralifera* and *C. teicholyta*.

Several species have not yet been studied phylogenetically and are temporarily kept in *Caloplaca*: *C. brevilibata*, *Caloplaca conversa* var. *fallax*, *C. grimmiae*, *C. haemaitates*, *C. inconnexa*, *C. irrubescens*, *C. itiana*, *C. lucifuga*, *C. obscurella*, *C. ruderum*, *C. saxicola*, *C. ulcerosa* and *C. vacillans*.

Frisch et al. (2014) presented a new phylogeny of Arthoniales, focusing on crustose representatives. The following nomenclatural changes are necessary for the species known from our checklist area: *Alyxoria mougeotii* (A. Massal.) Ertz, Frisch & G. Thor (*Opegrapha mougeotii*), *Arthonia granitophila* Th. Fr. (*Melaspilea granitophila*), *Bryostigma muscigenum* (Th. Fr.) Frisch & G. Thor (*Arthonia muscigena*), *Coniocarpon cinnabarinum* DC (*Arthonia cinnabrina*) and *Pachnolepia pruinata* (Pers.) Frisch & G. Thor (*A. pruinata*).

4. New or interesting reports

Aphanopsis coenosa (Ach.) Coppins & P. James

Belgium, Ard.: S of Verviers, Spa, N side of village (G7.28), terricolous in old churchyard, 2014, *van den Boom* 51289 (h).

New to the checklist area.

Bacidia carneoglaauca (Nyl.) A. L. Smith

Luxembourg, Ard.: Ufer der Our südöstlich von Heinerscheid (J8.45), auf gelegentlich überspültem Silikatstein, 2014, *Cezanne & Eichler* 9419 (herb. Diederich; with *Bacidia trachona*).

This species was known from two Belgian localities in the Meuse and Ard. districts, always at water level by rivers (van den Boom et al. 1999). New to Luxembourg.

Bacidia friesiana (Hepp) Körb.

Belgium, Fl.: Heindonk (Willebroek), natural reserve Kleine Bergen (D4.16), on *Sambucus nigra*, 2012, *Van den Broeck* 5482 (BR). Brab.: Oudenaarde, bos 't Ename, Grootbos zuid (E3.21), on *S. nigra*, 2012, *Van den Broeck* 5476 (BR); Ganshoren, Koning Boudewijnpark, willow marsh (E4.14), on *S. nigra*, 2012, *Van den Broeck* 5480 (BR). Mosan: W of Dinant, WSW of Anhée, E of Sosoye, Le Marteau, near ruin of Château du Montaigle (H5.35), on *Sambucus*, 2007, *van den Boom* 37484 (h).

This rare species was previously known from only one locality in the Meuse district where it was also found on *Sambucus* (Ertz et al. 2008). The discovery of four new localities suggests that the species must be widespread and common in our study area, but overlooked.

Biatora efflorescens (Hedl.) Räsänen

Luxembourg, Lorr.: Naturwaldreservat "Haard" südwestlich Dudelange, Nordrand (M8.54), on *Fagus sylvatica*, 2012, *Cezanne & Eichler* 8749 (herb. Diederich).

The specimen is small, but its identity leaves no doubt, as argopsin has been detected by thin-layer chromatography. New to the checklist area.

Burgoa splendens Diederich & Coppins

Belgium, Ard.: Herbeumont, rive droite de la Semois, Tombeau du chevalier (L6.25), on *Fagus*, 1992, *Sérusiaux* (LG); ibid., 2008, *Sérusiaux, Fischer & Killmann* (LG).

This species was described as a bulbilliferous basidiomycete overgrowing bark and corticolous bryophytes (Diederich & Lawrey 2007). Recent re-examination of several specimens led to the hypothesis that the species is lichenized and belongs to the Ascomycetes. Molecular data are needed to check this hypothesis. The species was previously known only from the British Isles, mainly in forests with a long historical continuity. Its discovery in the Belgian Ardennes is remarkable, as these forests harbor many species with an oceanic or atlantic distribution, such as *Gyalideopsis muscicola*, *Micarea pycnidiphora* or *Tylophoron hibernicum*, which are all very rare in our study area. New to the checklist area.

Caloplaca soralifera Vondrák & Hrouzek

Luxembourg, Lorr.: Hamm, rocher au-dessus du carrefour de la rue Godchaux (piste cyclable) avec la rue des Draperies (M8.26), sur une surface horizontale ensoleillée en grès, 1997, *Diederich* 13422 (h); Lorentzweiler, Roude Bam (L8.46), sur un mur en béton, 1997, *Diederich* 12476b (h).

This species belongs to *Pyrenodesmia* s. l., but is provisionally left in *Caloplaca* by Arup et al. (2013). New to the checklist area.

Cornutispora ciliata Kalb

Belgium, Ard.: S of Verviers, Spa, SE of village, near aerodrome, W of route de la Sauveniere (G8.21), on *Betula* in forest, on *Cladonia*, 2014, *van den Boom* 51285 (h).

Lichenicolous coelomycete, previously known from Luxembourg (van den Boom et al. 1996), new to Belgium.

Enchylium limosum (Ach.) Otálora, P. M. Jørg. & Wedin [= *Collema limosum* (Ach.) Ach.]
Luxembourg, Lorr.: WNW von Ahn, Géldebierg (M9.12), Wegrand, auf offener, lehmiger Erde, 2014, Cezanne-Eichler 9575 (herb. Diederich).

New to Luxembourg.

Flavoplaca limonia (Nimis & Poelt) Arup, Frödén & Söchtling [= *Caloplaca l.* Nimis & Poelt]

Belgium, Mar.: Au SW de Veurne, à l'ouest de Bulskamp, St. Gustaafmolen (D0.27), sur mortier entre les pierres d'un vieux moulin à vent, 2002, Diederich 15248 (h). Mosan: Aywaille, rive droite de l'Amblève, château d'Amblève (G7.24), bloc calcaire exposé, 1982, Malaise 82/152-198 (LG).

France, Mar.: Pas-de-Calais: Cap Gris Nez, à 400 m à l'W de la plage au N de Framzelle, rochers à mi-pente (E22.15), blocs de grès dans végétation herbacée, 2000, Diederich 14453 (h); N of Cran aux Oeufs, Pointe du Riden (E22.14), falaise maritime gréseuse, 10.1973, Sérusiaux 775 (LG); Cran aux Oeufs (E22.14), rocky seashore cliff with sandstone rock, 4.1983, Sérusiaux 4728, 4729 (LG). Pic.: Somme, à 6 km au NW d'Abbeville, Port-le-Grand, grande ferme fortifiée au centre du village (J22.17), sur un mur, 2001, Diederich 15409 (h). Lorr.: Meuse, Montmédy, citadelle (M6.48), sur un mur, 2004, Diederich 15984 (h).

New to the checklist area.

Lempholemma chalazanum (Ach.) B. de Lesd.

Luxembourg, Lorr.: Aufgelassenes Abbaugelände nordwestlich von Steinfort (L8.51), auf Erde, 2012, Cezanne-Eichler 8855 (herb. Diederich).

New to Luxembourg.

Lichenothelia convexa Henssen

Luxembourg, Lorr.: Lorentzweiler, Roude Bam (L8.46), sur un toit en schistes, 1988, Diederich 8890 (h); ibid., 2013, Diederich 17491 (h).

Non-lichenized ascomycete (usually studied by lichenologists and therefore included here), new to Luxembourg.

Phaeographis dendritica (Ach.) Müll. Arg.

Belgium, Brab.: Laplaigne (Brunehaut), Coupure de Laplaigne, old plantation of *Populus* (G2.25), on *Alnus glutinosa*, 2012, Van den Broeck 5308 (BR).

A remarkable and unexpected discovery of a species that had only once been published

from Belgium (Brab., near Mons), where it was considered as being extinct since 1900 (Diederich et al. 2014).

Phaeographis inusta (Ach.) Müll. Arg.

Belgium, Ard.: Herbeumont, dans la boucle de la Semois au sud du village, sur les deux rives (L6.25), sur *Carpinus* et *Fagus*, 2013, P. Diederich 17631 (h) & E. Sérusiaux.

A very rare species that was previously known from a single Belgian locality, also in the Ardennes (van den Boom et al. 1999).

Phaeophyscia chloantha (Ach.) Moberg [= *Physciella chloantha* (Ach.) Essl.]

Belgium, Brab.: Ganshoren, Koning Boudewijn-park, willow marsh (E4.14), on *Salix ×charferri*, 2012, D. Van den Broeck 5481 (BR).

The discovery of this species was completely unexpected, as it was considered as extinct in the study area since 1868 (Diederich et al. 2014). Recently three thalli were found in the Brussels Capital Region on an exposed branch of *Salix ×charferri*. In the field *Phaeophyscia chloantha* resembles *Physcia tenella*. It bears the same colour and abundant labiform soralia, but the marginal cilia are missing and the lobes are much broader. Moreover the cortex and medulla are K-. The lower surface of the thallus is whitish with sparse, simple to forked, whitish rhizines sometimes protruding beyond the margins. The species has a wide distribution since it is known from North America, Europe, Asia and East Africa, although it has never been reported from Great Britain, Ireland or the Netherlands.

Phoma physciicola Keissler

Luxembourg, Lorr.: A l'ouest de Steinfort, anciennes carrières, dans la réserve naturelle (L8.51), sur branches de *Salix caprea*, sur *Physcia aipolia*, 2012, Diederich 17482 (h).

France, Lorr.: Meuse, au SE de Montmédy, Marville, cimetière de St Hilaire (N7.11), sur branches de *Salix*, sur *Physcia aipolia*, 2013, Diederich 17724 (h)

Lichenicolous coelomycete, new to the checklist area.

Polycoccum pulvinatum (Eitner) R. Sant.

Belgium, Camp.: ESE of Lommel, S of Overpelt, Steenovenstraat, churchyard (C6.38), on

gravestones, on *Physcia caesia*, 2013, van den Boom 50084 (h); Baarle-Hertog, enclave-area, churchyard (B5.18), on gravestones, on *P. caesia*, 2014, van den Boom 50261 (h); Poppel, churchyard (B6.11), on gravestones, on *P. caesia*, 2014, van den Boom 50263 (h).

Lichenicolous ascomycete, new to Belgium.

***Polycoccum slaptoniense* D. Hawksw.**

Luxembourg, Lorr.: NW von Ahn, am Wegrand W von Kräzuet (M9.12), on *Xanthoria parietina*, 2014, Cezanne-Eichler 9590 (herb. Diederich).

Lichenicolous ascomycete, new to Luxembourg.

***Rinodina pityrea* Ropin & Mayrhofer**

Luxembourg, Lorr.: Strassen, Tossebierg, old sandstone quarry (M8.14), on *Sambucus*, 2014, Diederich 17753 (h).

New to Luxembourg.

***Thelenella muscorum* (Fr.) Vain. [= *Chromatochlamys m.* (Fr.) H. Mayrhofer & Poelt]**

Luxembourg, Lorr.: W von Moersdorf, Kalkschutthalde am 'Deiwelskopp' (L9.34), auf Moosen über Kalkblock, 2014, Cezanne-Eichler 9585 (h, herb. Diederich).

New to Luxembourg.

***Thelopsis rubella* Nyl.**

Belgium, Ard.: Rochefort, au SE de la ville, grottes de Lorette (J6.15), on *Tilia*, 2013, Ertz 18094 (BR)

A very rare corticolous lichen, mainly growing on old trees, previously known from one locality in Luxembourg and one in northern France (Eichler et al. 2010). New to Belgium.

***Tremella wirthii* Diederich**

Belgium, Ard.: Rochefort, au SE de la ville, grottes de Lorette (J6.15), on *Tilia*, on *Protoparmelia* sp., 2013, Ertz 18092 (BR)

Lichenicolous basidiomycete, new to the checklist area.

Usnea glabrescens* (Vain.) Räsänen var. *glabrescens

Luxembourg, Lorr.: SW of Dudelange, réserve forestière intégrale 'Haard' (M8.54), on *Fagus*, 2012, Eichler & Cezanne 8744 (hb Diederich).

New to the checklist area.

Usnea fulvoreagens (Räsänen) Räsänen, a rare species in south-eastern Belgium and Luxembourg, is now sometimes considered as a subspecies of *U. glabrescens*: *U. g. var. fulvoreagens* Räsänen (e.g., Wirth et al. 2013).

***Xanthomendoza huculica* (S. Y. Kondr.) Diederich comb. nov.**

Basionym: *Oxneria huculica* S. Y. Kondr., in Kondratyuk et al.: Diagnoses of new taxa, in Oksner: Flora lišajníkiv Ukrainsi y dvoch tomach, Tom 2, Vypusk 3: 435 (2010).

MycoBank MB809872

This species has recently been published as new for Belgium (Van den Broeck 2013a). As *Oxneria* S. Y. Kondr. & Kärnefelt is a synonym of *Xanthomendoza* S. Y. Kondr. & Kärnefelt (see Arup et al. 2013), the new combination is necessary.

***Xanthomendoza oregana* (Gyeln.) Søchting, Kärnefelt & S. Y. Kondr. [= *X. poeltii* (S. Y. Kondr. & Kärnefelt) Søchting, Kärnefelt & S.Y. Kondr.]**

All specimens from the checklist area previously published as *Xanthoria ulophyllodes* by Sérusiaux et al. (2003) proved to belong *X. oregana*, of which *X. poeltii* has recently been recognized as representing a younger synonym (Lindblom & Blom (2014)). *Xanthomendoza oregana* is new to the checklist area, whilst *Xanthoria ulophyllodes* has to be deleted from the checklist.

***Zwackhiomyces physciicola* Alstrup**

Belgium, Camp.: Lommel, SE of village, churchyard (C6.27), on concrete, on *Physcia caesia*, 2013, van den Boom 50077 (h).

The ascospores are longer than in the original description, c. 25 × 5.5–6 µm, versus 18–22 × 5.5–6.5 µm (Alstrup 1993). Lichenicolous ascomycete, new to Belgium.

References

- Alstrup, V., 1993. News on lichens and lichenicolous fungi from the Nordic countries. *Graphis Scripta* 5: 96–104.
Aptroot, A., S. Parnmen, R. Lücking, E. Baloch, P. Jungbluth, M. E. S. Cáceres & H. T. Lumbsch, 2014. Molecular phylogeny

- resolves a taxonomic misunderstanding and places *Geisleria* close to *Absconditella* s. str. (Ostropales: Stictidaceae). *Lichenologist* 46: 115–128.
- Arup, U., U. Søchting & P. Fröden, 2013. A new taxonomy of the family Teloschistaceae. *Nordic Journal of Botany* 31: 16–83.
- Bendiksby, M. & E. Timdal, 2013. Molecular phylogenetics and taxonomy of *Hypocenomyce* sensu lato (Ascomycotina: Lecanoromycetes): Extreme polyphyly and morphological/ecological convergence. *Taxon* 62: 940–956.
- Calatayud, V., P. Navarro-Rosinés & J. Hafellner, 2013. Contributions to a revision of *Cercidospora* (Dothideales), 2: Species on *Lecanora* s. l., *Rhizoplaca* and *Squamariina*. *Mycosphere* 4: 539–557.
- De Beer, D. & D. Van den Broeck, 2013. Kustvegetaties in de Waaslandhaven: bezoek aan Haasop te Beveren (25 mei 2013). *Muscillanea* 33: 37–45.
- De Wit, D. & D. Van den Broeck, 2014. *Melanelixia subargentifera*, nieuw voor Vlaanderen. *Dumortiera* 105: 29–32.
- Diederich, P. & J. Lawrey, 2007. New lichenicolous, muscicolous, corticolous and lignicolous taxa of *Burgoa* s. l. and *Marchandiomyces* s. l. (anamorphic Basidiomycota), a new genus for *Omphalina foliacea*, and a catalogue and a key to the non-lichenized, bulbilliferous basidiomycetes. *Mycological Progress* 6: 61–80.
- Diederich, P. & E. Sérusiaux, 2000. The lichens and lichenicolous fungi of Belgium and Luxembourg. An annotated checklist. Musée national d'histoire naturelle, Luxembourg. 207 pp.
- Diederich, P. & P. van den Boom, 2013. Two new lichenicolous species of *Hainesia* (sexual Ascomycetes) growing on *Cladonia*. *Bulletin de la Société des naturalistes luxembourgeois* 114: 59–63.
- Diederich, P., D. Ertz, M. Eichler, R. Cezanne, P. van den Boom, E. Fischer, D. Killmann, D. Van den Broeck & E. Sérusiaux, 2012. New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. XIV. *Bulletin de la Société des naturalistes luxembourgeois* 113: 95–115.
- Diederich, P., J. D. Lawrey, M. Capdet, S. Pereira, A. I. Romero, J. Etayo, A. Flakus, M. Sikaroodi & D. Ertz (2014) New lichen-associated bulbil-forming species of Cantharellales (Basidiomycetes). *Lichenologist* 46: 333–347.
- Diederich, P., D. Ertz, N. Stapper, E. Sérusiaux, D. Van den Broeck, P. van den Boom & C. Ries, 2014. The lichens and lichenicolous fungi of Belgium, Luxembourg and northern France. URL: <http://www.lichenology.info> [20.07.2014].
- Divakar, P. K., R. Del-Prado, H. T. Lumbsch, M. Wedin, T. L. Esslinger, S. D. Leavitt & A. Crespo, 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: 2014–2026.
- Eichler, M., R. Cezanne, P. Diederich, D. Ertz, D. Van den Broeck, P. van den Boom & E. Sérusiaux, 2010. New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. XIII. *Bulletin de la Société des naturalistes luxembourgeois* 111: 33–46.
- Ekman, S. & M. Svensson, 2014. *Brianaria* (Psoraceae), a new genus to accommodate the *Micarea sylvicola* group. *Lichenologist* 46: 285–294.
- Ekman, S., M. Wedin, L. Lindblom & P. M. Jørgensen, 2014. Extended phylogeny and a revised generic classification of the Pannariaceae (Peltigerales, Ascomycota). *Lichenologist* 46: 627–656.
- Ertz, D., P. Diederich, A. M. Brand, P. van den Boom & E. Sérusiaux, 2008. New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. XI. *Bulletin de la Société des Naturalistes luxembourgeois* 109: 35–51.
- Ertz, D., J. D. Lawrey, R. S. Common & P. Diederich, 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.
- Ertz, D., A. Tehler, M. Irestedt, A. Frisch, G. Thor & P. van den Boom, 2014. A large-scale phylogenetic revision of Roccellaceae (Arthoniales) reveals eight new genera. *Fungal Diversity*, DOI 10.1007/s13225-014-0286-5.
- Frisch, A., G. Thor, D. Ertz & M. Grube, 2014. The Arthoniales challenge: restructuring Arthoniaceae. *Taxon* 63: 727–744.
- Fryday, A. M., C. Printzen & S. Ekman, 2014. *Bryolimbia*, a new generic name for *Lecidea hypnorum* and closely related species. *Lichenologist* 46: 25–37.

- Hellemans, K., 2012. "Een doodgewone mispelboom", zei u? *Muscillanea* 32: 4–6.
- Hellemans, K. & H. Stappaerts, 2012. *Punctelia reddenda*, Gelobt stippelschildmos, een nieuw lichen voor Vlaanderen en België. Het verhaal van een ontdekking. *Muscillanea* 32: 7–9.
- Jørgensen, P. M., M. Schultz & A. Guttová, 2013. Validation of *Anema tumidulum* (Lichinaceae, lichenized Ascomycota), a widespread cyanophilic lichen. *Herzogia* 26: 1–7.
- Lendemer, J. C., 2013. A monograph of the crustose members of the genus *Lepraria* Ach. s. str. (Stereocaulaceae, lichenized Ascomycetes) in North America north of Mexico. *Opuscula Philolichenum* 12: 27–141.
- Lindblom, L. & H. H. Blom, 2014. *Xanthomendoza poeltii* is a synonym of *X. oregana* (Teloschistaceae, lichen-forming ascomycetes). *Lichenologist* 46: 829–832.
- Lücking, R. & B. McCune, 2012. *Graphis pergracilis* new to North America, and a new name for *Graphis britannica* sensu Staiger auct. *Evansia* 29(3): 77–84.
- Moncada, B., R. Lücking & L. Betancourt Macuase, 2013. Phylogeny of the Lobariaceae (lichenized Ascomycota: Peltigerales), with a reappraisal of the genus *Lobariella*. *Lichenologist* 45: 203–263.
- Orange, A., 2013. Four new species of *Verrucaria* (Verrucariaceae, lichenized Ascomycota) from freshwater habitats in Europe. *Lichenologist* 45: 305–322.
- Otalora, M. A. G., P. M. Jørgensen & M. Wedin, 2014. A revised generic classification of the jelly lichens, Collemataceae. *Fungal Diversity* 64: 275–293.
- Printzen, C., 2014. A molecular phylogeny of the lichen genus *Biatora* including some morphologically similar species. *Lichenologist* 46: 441–453.
- Roux, C. (et coll.), 2014. Catalogue des lichens et champignons lichénicoles de France métropolitaine. Ed. Henry des Abbayes, Fougères, 1525 pp.
- Sérusiaux, E., P. Diederich, D. Ertz & P. van den Boom, 2003. New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. IX. *Lejeunia* N. S. 173 : 1–48.
- Tehler, A., D. Ertz & M. Irestedt, 2013. The genus *Dirina* (Roccellaceae, Arthoniales) revisited. *Lichenologist* 45: 427–476.
- van den Boom, P., P. Diederich & E. Sérusiaux, 1996. Lichens et champignons lichénicoles nouveaux ou intéressants pour la flore de la Belgique et des régions voisines. VII. *Bulletin de la Société des Naturalistes luxembourgeois* 97: 81–92.
- van den Boom, P., E. Sérusiaux, P. Diederich, M. Brand, A. Aptroot & L. Spier, 1999. A lichenological excursion in May 1997 near Han-sur-Lesse and Saint-Hubert, with notes on rare or critical taxa of the flora of Belgium and Luxembourg. *Lejeunia* n. S. 158: 1–58.
- Van den Broeck, D., 2012a. Een lichenologische excursie naar de Molsbergen te Lokeren, 25 februari 2012. *Muscillanea* 32: 17–18.
- Van den Broeck, D., 2012b. Driemaal het natuurreservaat de Maten in de provincie Limburg. *Muscillanea* 32: 19–21.
- Van den Broeck, D., 2012c. Twee korstmossen met een *Trentepohlia*-photobiont nieuw gevonden in Vlaanderen (België). *Dumortiera* 101: 50.
- Van den Broeck, D., 2012d. Atlas van de epifytische korstmossen en de erop voorkomende lichenicole fungi van het Brussels Hoofdstedelijk Gewest. Onderzoek in opdracht van Leefmilieu Brussel – BIM, Nationale Plantentuin van België, 161 pp.
- Van den Broeck, D., 2013a. *Oxneria hculica*, nieuw voor de Belgische lichenenflora. *Dumortiera* 103: 54–55.
- Van den Broeck, D., 2013b. Een lichenologische excursie naar De Most te Balen. *Muscillanea* 33: 4–7.
- Van den Broeck, D., D. Ertz & P. Diederich, 2012. Lichenologisch verslag van de driedaagse in de vallei van de Ourthe (Provincie Luxembourg, België) in September 2010. *Muscillanea* 32: 10–16.
- Van den Broeck, D., P. Diederich & D. Ertz, 2013. Report on two lichenological field meetings in Luxembourg in 2011 and 2012. *Bulletin de la Société des naturalistes luxembourgeois* 114: 65–76.
- Van den Broeck, D. & K. Hellemans, 2013. Een lichenenexcursie naar een stukje van de Kalmthoutse Heide. *Muscillanea* 33: 8–11.
- Wirth, V., M. Hauck & M. Schultz, 2013. Die Flechten Deutschlands. Ulmer, Stuttgart, 2 vol., 1244 pp.