

Lichenicolous Biota (Nos 151–180)

Josef HAFELLNER*

HAFELLNER Josef 2013: Lichenicolous Biota (Nos 151–180). – Fritschiana (Graz) 76: 47–68. - ISSN 1024-0306.

Abstract: The seventh fascicle (30 numbers) of the exsiccata “Lichenicolous Biota” is published. The issue contains material of 10 lichenized and 20 non-lichenized fungal taxa (26 ascomycetes, 2 basidiomycetes, 2 anamorphic fungi) [admixtures not counted]. It includes isotype material of *Gyalideopsis stereocaulicola* Etayo (no. 157), as well as paratype material of *Lecanora printzenii* Pérez-Ortega, Vivas & Hafellner (no. 176). Furthermore collections of the type species of the following genera are distributed: *Bachmanniomyces* (*B. uncialicola*), *Epicladonia* (*E. sandstedei*), *Epilichen* (*E. scabrosus*), *Lichenochora* (*L. obscuroides*, syn. *L. thallina*), *Phaeopyxis* (*P. punctum*), and *Telogalla* (*T. olivieri*). For *Lichen varians* Davies an illustration published together with the protologue is designated as the lectotype and an epitype is selected (no. 152 of this exsiccata fascicle).

*Institut für Pflanzenwissenschaften, Karl-Franzens-Universität Graz,
Holteigasse 6, A-8010 Graz, AUSTRIA.

e-mail: josef.hafellner@uni-graz.at

Introduction

The exsiccata “Lichenicolous Biota” is continued with fascicle 7 containing 30 numbers.

The exsiccata covers all lichenicolous biota, i.e., it is open not only to non-lichenized and lichenized fungi, but also to myxomycetes, bacteria, and even animals, whenever they cause a characteristic symptom on their host being a lichen (e.g., discoloration or galls). Consequently, the exsiccata contains both highly host-specific and plurivorous species, as long as the individuals clearly grow upon a lichen and the collection is homogeneous, so that identical duplicates can be prepared.

The five complete sets are sent to herbaria of the following regions: Central Europe (Graz [GZU]), Northern Europe (Uppsala [UPS]), Western Europe (Bruxelles [BR]), North America (New York [NY]), Australasia (Canberra [CANB]). Incomplete sets will preferably be distributed to Barcelona [BCN], Edinburgh [E], Saint Petersburg [LE], Munich [M], and Prague [PRM] (herbarium acronyms sec. HOLMGREN et al. 1990, continued and updated as electronic database by THIERS 2010, onwards and hosted at New York Botanical Garden <http://sciweb.nybg.org/science2/IndexHerbariorum.asp>). Also in the future it is planned to publish at least one fascicle per year, consisting of a variable number of decades.

The grid reference preceded by the abbreviation “GF” refers to the grid used by the project “Floristische Kartierung Mitteleuropas” (floristic mapping of Middle Europe, e.g. EHRENDORFER & HAMANN 1965).

For the 7th issue, I gratefully acknowledge the contribution of 2 collections by Paul Diederich and 1 collection each by Jana Kocourková, Walter Obermayer, the late Rolf Santesson (together with Anders Tehler & Göran Thor), and Jan Vondrák (together with Olga Merkulova). In fieldwork I received support by Angela Hafellner, Celia Hampton-Miller, Jani Marka, Lucia Muggia, Massimo Piccotto, Toby Spribille, and Mauro Tretiach. Jana Kocourková, Paul Diederich, Javier Etayo, and Jan Vondrák contributed to the scientific content of the fascicle by the identification of either lichenicolous fungi, hosts or by providing data published in the notes. Christian Scheuer, Walter Obermayer, and Helmut Mayrhofer are thanked for critically reading the manuscript.

I would be much obliged to colleagues who send material of lichenicolous biota for distribution in future fascicles. The collections should be divided up into at least 5 (up to 10) duplicates, preferably already prepared. Unprepared collections should be rich enough to obtain at least 5 duplicates.

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

151. *Arthonia stereocaulina* (Ohlert) R.Sant.

in Lichenicolous Fungi Sweden Norway: 18 (1993). – Bas.: *Arthonia nephromaria* var. *stereocaulina* Ohlert in Schrift. K. Physik.-ökon. Ges. Königsberg 11: 49 (1870). – Syn.: *Conida nephromaria* var. *stereocaulina* (Ohlert) Rehm in Rabenh. Krypt.-Fl., Pilze, 2. ed., 1(3): 425 (1890). – *Conida fuscopurpurea* f. *stereocaulina* (Ohlert) Keissl. in Rabenh. Krypt.-Fl., Pilze, 2. ed., 8: 80 (1930).

Host: *Stereocaulon alpinum* (thallus)

Europe, Switzerland: Kanton Bern, Western Alps, Urner Alps, area of Steigletscher (Steingletscher) (below Sustenpass) c. 20 km NE of the town Meiringen, Chüöbärgli, on slopes exposed to the N, 46°43'10"N / 08°25'45"E, elevation c. 2100 m alt., outcrops of siliceous rocks (granite, schist) in alpine vegetation, on soil.

Note 1: The type host of *Arthonia stereocaulina* is *Stereocaulon condensatum* (Santesson, l.c.).

Note 2: The original spelling of the epithet "*nephromaria*" was orthographically corrected to "*nephromaria*" by Santesson (l. c.) following ICBN 60.12.

26. VIII. 2006

leg. J. Hafellner (77449), det. J. Hafellner

distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

152. *Arthonia varians* (Davies) Nyl. Epitype

in Lich. Scandinaviae: 260 (1861). – Bas.: *Lichen varians* Davies in Transact. Linn. Soc., Bot., 2: 284 (1794). – Syn.: *Celidium varians* (Davies) Arnold in Flora (Regensburg) 45: 313 (1862). – *Arthonia glaucomaria* Nyl. in Mem. Soc. Imp. Sci. Nat. Cherbourg 4: 98 (1856), non *Lecidea glaucomaria* Nyl. (1852) quid est *Phacographa glaucomaria* (Nyl.) Hafellner.

Host: *Lecanora bicincta* (apothecia)

Europe, Austria: Kärnten (Carinthia), Eastern Alps, Steirisches Randgebirge, Koralpe E above the town Wolfsberg, Steinschneider, gently inclined ridge exposed to the W below the broadcasting station, 46°47'48"N / 14°57'13"E, c. 1980 m alt., GF 9255/2; low outcrops of mineral-rich marble surrounded by alpine meadows, on inclined rock faces.

Note: The species has originally been described as a lichen with variably coloured apothecial discs. Nylander (l.c.) realized that it constitutes a 3-biont-system consisting of the bipartite *Lecanora rupicola* serving as the host lichen and a lichenicolous *Arthonia*, for long time treated under the synonymous name *A. glaucomaria* Nyl. *Lichen varians* is herewith lectotypified on the one hand on the lichenicolous fungus causing the glossy black discs, on the other hand on the illustration tab. 28, Fig. 3A accompanying the original description by Davies (l.c.) (lectotype designated here). Hafellner, Lichenicolous Biota no. 152 (specimen in GZU) is selected as the epitype for the lichenicolous fungus.

11. VI. 2009

leg. J. Hafellner (73519), det. J. Hafellner

distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

153. *Cercidospora lichenicola* (Zopf) Hafellner

in Herzogia 7(3–4): 360 (1987). – Bas.: *Leptosphaeria lichenicola* Zopf in Hedwigia 35: 358 (1896). – Syn.: *Metasphaeria lichenicola* (Zopf) Vouaux in Bull. Soc. Mycol. France 29: 102 (1913).

Host: *Solorina crocea* (thallus, apothecia)

Europe, Austria: Steiermark (Styria), Eastern Alps, Niedere Tauern, Wölzer Tauern, mountain chain c. 4 km W of the village Pusterwald, ridge between Steineck and Stubenberg, 47°17'40"N / 14°18'10"E, c. 2170 m alt., GF 8751/2; scattered boulders of garnet micaschist in open alpine vegetation on slope exposed to the N, on soil.

Note 1: *Solorina crocea* is the type host of *Cercidospora lichenicola*.

Note 2: The taxon is sometimes regarded as a heterotypic synonym of either *C. punctillata* (Nyl.) R.Sant. (type host is ?*Omphalina hudsoniana*) or *C. decolorella* (Nyl.) O.E.Erikss. & J.Z.Yue (type on senescent mosses). These taxa are regarded here as specifically different.

Note 3: *Solorina crocea* may additionally be infested by *Arthonia peltigerina* (Almq.) H.Olivier (as seen on specimen in GZU).

12. VIII. 2012

leg. J. Hafellner (80906), L. Muggia & A. Hafellner,
det. J. Hafellner

distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

154. *Corticifraga fuckelii* (Rehm) D.Hawksw. & R.Sant.

in Biblioth. Lichenol. 38: 125 (1990). – Bas.: *Phragmonaevia fuckelii* Rehm in Rabenh. Krypt.-Fl. 2. ed., 1(3): 166 (1888). – Syn.: *Peziza fuckelii* (Rehm) Sacc. in Syll. Fung. 8: 85 (1889).

Host: *Peltigera* spec. (thallus)

North America, U.S.A.: Alaska, Yukon-Koyukuk Census Area, Brooks Range, Endicott Mountains, valley of Middle Fork of Koyukuk River N of Wiseman, between Hammond Road and Trans Alaska Pipeline, 67°28'00"N / 150°03'00"W, c. 370 m alt.; boreal forest with dominant *Picea mariana* and understorey of *Betula glandulosa* over alluvial soils, on the mossy ground.

Note 1: The type host of *Corticifraga fuckelii* is a *Peltigera* not determined to species level.

Note 2: Isotypes of the species have been distributed in Fuckel, Fungi Rhen., Suppl. fasc. 6, no. 2069.

18. VIII. 2010

leg. J. Hafellner (80267), det. J. Hafellner
(excursion together with T. Spribille, L. Muggia and C. Hampton-Miller)

distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

155. *Endococcus stigma* (Körb.) Stizenb.

in Jahresber. St. Gall. Naturwiss. Ges. 1880/81: 516 (1882). – Bas.: *Tichothecium stigma* Körb. in Parerga Lichenol.: 468 (1865). – Syn.: *Discothecium stigma* (Körb.) Zopf in Nova Acta Leop.-Carol. Acad. 70(2): 127 (1897).

Host: *Acarospora* spec. (thallus)

Europe, Austria: Kärnten (Carinthia), Eastern Alps, Steirisches Randgebirge, Koralpe E above the town Wolfsberg, Seespitz, northern ridge towards the saddle to summit 2005, gentle slope exposed to NW descending into the cirque Großes Kar, 46°47'30"N / 14°58'47"E, c. 2030 m alt., GF 9255/2, area covered with small, loose slabs of „Plattengneis“ in open, alpine vegetation, on small slabs.

Note: The type host of *Endococcus stigma* was originally identified as *Lecidea lamprophora*. According to Triebel (Biblioth. Lichenol. 35: 226, 1989) it is more likely a sterile *Acarospora*.

11. X. 2008

leg. J. Hafellner (72644), det. J. Hafellner

distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

156. *Epicladonia sandstedei* (Zopf) D.Hawksw.

in Bull. Brit. Mus. Nat. Hist., Bot. ser. 9(1): 16 (1981). – Bas.: *Diplodina sandstedei* Zopf in Sandstede, Abh. Naturwiss. Ver. Bremen 18: 429 (1906).

Host: *Cladonia caespiticia* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Steirisches Randgebirge, Grazer Bergland, Raabklamm NW of the town Weiz, orographically left slopes SSW below the village Grillbichl, 47°13'10"N / 15°33'50"E, c. 550 m alt., GF 8759/3; talus of forest road running through a mixed forest, on soil.

Note: *Cladonia caespiticia* is the type host of *Epicladonia sandstedei*.

19. IX. 2009

leg. J. Hafellner (74798), det. J. Hafellner

distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

159. *Roselliniella microthelia* (Wallr.) Nik.Hoffm. & Hafellner

in Biblioth. Lichenol. 37: 93 (1990). – Bas.: *Verrucaria microthelia* Wallr. in Fl. Cryptog. Germ. 1: 309 (1831). – Syn.: *Physalospora microthelia* (Wallr.) G.Winter in Hedwigia 25: 23 (1886). – *Laestadia microthelia* (Wallr.) Vouaux in Bull. Soc. Mycol. France 28: 218 (1912). – *Guignardia microthelia* (Wallr.) Keissl. in Rabenh. Krypt.-Fl., 2. ed., 8: 344 (1930).

Host: *Trapelia placodioides* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Steirisches Randgebirge, Grazer Bergland, Raabklamm NW of the town Weiz, orographically left slopes SSW below the village Grillbichl, 47°13'10"N / 15°33'50"E, c. 550 m alt., GF 8759/3; talus of forest road running through a mixed forest, on pebbles of micaschist.

Note: No host is mentioned in the protologue of *Roselliniella microthelia*.

19. IX. 2009

leg. J. Hafellner (74796), det. J. Hafellner

distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

160. *Teloggalla olivieri* (Vouaux) Nik.Hoffm. & Hafellner

in Biblioth. Lichenol. 77: 109 (2000). – Bas.: *Laestadia olivieri* Vouaux in Bull. Soc. Mycol. France 28: 216 (1912) nomen novum for *Verrucaria xanthoriae* Wedd. f. *megaspora* H.Olivier in Princ. Paras. Lich. Fr. Suppl. 1: 14 (1907).

Host: *Xanthoria parietina* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Mürztaler Alpen, Kleinveitschtal NE of the village Veitsch, short NE of Proschenhofsiedlung, 47°35'20"N / 15°30'10"E, c. 695 m alt., GF 8459/1, row of trees along a fence between a meadow and a pasture, on branches of *Fraxinus excelsior*.

Note 1: *Xanthoria parietina* is the type host of *Teloggalla olivieri*.

Note 2: *Xanthoria parietina* may additionally be infested by *Xanthoriicola physciae* (Kalchbr.) D.Hawksw. (as seen on the specimen in GZU).

31. X. 2010

leg. J. Hafellner (76437) & L. Muggia, det. J. Hafellner

distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

161. ***Abrothallus cetrariae*** I.Kotte

in Centralbl. Bakt. Paras., 2. Abt., 24: 82 (1909).

Host: *Platismatia glauca* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Mürzsteger Alpen, Greithgraben N of the village Turnau, short N of the hunting lodge Greith, surroundings of the wayside shrine Barbarakreuz, 47°37'00"N / 15°20'30"E, c. 1020 m alt., GF 8358/3; mixed forest with dominant conifers close to the creek, bark of *Acer pseudoplatanus*.

Note 1: *Platismatia glauca* is the type host of *Abrothallus cetrariae*.

Note 2: In the distributed material the anamorphic state is dominant; but all duplicates with at least some ascomata present.

22. X. 2006 leg. J. Hafellner (81682) & L. Muggia, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

162. ***Abrothallus parmeliarum*** (Sommerf.) Nyl.

in Bull. Soc. Linn. Normandie, 2. sér., 3: 12 (1869). – Bas.: *Lecidea parmeliarum* („*parmeliarum*“) Sommerf. in Suppl. Flor. Lappon.: 176 (1826). – Syn.: *Buellia parmeliarum* (Sommerf.) Tuck. in Synopsis North American Lichens 2: 106 (1888). – *Buelliella parmeliarum* (Sommerf.) Fink in Lichen Fl. United States: 372 (1935).

Host: *Parmelia omphalodes* (thallus)

North America, U.S.A.: Alaska, Denali Borough, Alaska Range, 9.6 air km NE of Cantwell, base of Panorama Mountain, 63°27'55"N / 148°48'05"W, c. 680 m alt.; south-facing boulder scree of paleozoic greenstone between patches of *Alnus* spec., on boulders.

Note: Two species of *Parmelia* s. str. are mentioned in the protologue as host species, *Parmelia omphalodes* and *P. saxatilis*. A lectotype has not been designated so far.

24. VIII. 2010 leg. J. Hafellner (79981), det. J. Hafellner
(excursion together with T. Spribille, L. Muggia and C. Hampton-Miller)
distributed to: BR, CANB, GZU, LE, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

163. *Abrothallus tulasnei* M.S.Cole & D.Hawksw.

in Mycotaxon 77: 310 (2001).

Host: *Xanthoparmelia conspersa* (thallus, apothecia)

Europe, Czech Republic: Southern Moravia, Distr. Znojmo, Podyjí National Park, Vranov nad Dyjí, c. 1 km SE of the village Zadní Hamry, above Dyje River, 48°52'50.4"N / 15°50'07"E, c. 330 m alt., in shady NE-facing boulder scree, on gneiss boulders.

Note: The type host of *Abrothallus tulasnei* is *Xanthoparmelia stenophylla* (sub *X. somloensis*).

4. IX. 1998 leg. J. Kocourková (8210), det. J. Kocourková
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

164. *Bachmanniomyces uncialicola* (Zopf) D.Hawksw.

in Bull. Brit. Mus. (Nat. Hist.) Bot. 9(1): 11 (1981). – Bas.: *Phyllosticta uncialicola* Zopf in Hedwigia 35: 324 (1896). – Syn.: *Phoma uncialicola* (Zopf) Vouaux, Bull. Soc. Mycol. France 30: 198 (1914).

Host: *Cladonia uncialis* (thallus)

North America, U.S.A.: Alaska, Yukon-Koyukuk Census Area, Brooks Range, Endicott Mountains, Midnight Dome, lowermost NE-facing slope above secondary dirt road at entrance of valley of Hammond River, 67°28'50"N / 150°02'40"W, c. 420 m alt.; moss-covered boulder-bed in stand of *Betula neoalaskana*, in deep moss layer.

Note 1: *Cladonia uncialis* is the type host of *Bachmanniomyces uncialicola*.

Note 2: In the protologue no type is mentioned. A neotype ("lectotype") has been selected by Hawksworth (l.c.).

18. VIII. 2010 leg. J. Hafellner (79918), det. J. Hafellner
(excursion together with T. Spribille, L. Muggia and C. Hampton-Miller)
distributed to: BR, CANB, GZU, LE, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

165. ***Dacampia engeliana*** (Saut.) A.Massal.

in Geneac. Lich.: 22 (1854) (as "*Dacampia Engeli*am"). – Bas.: *Sagedia engeliana* Saut. in Bot. Centralbl. 20: 406 (1846). – Syn.: *Xenosphaeria engeliana* (Saut.) Trevis. in Conspectus Verruc.: 18 (1860). – *Pleospora engeliana* (Saut.) G.Winter in Rabenh. Krypt.-Fl., 2. ed., 1(2): 493 (1885). – *Polyblastia engeliana* (Saut.) H.Olivier in Bull. Acad. Geogr. Bot. 16: 258 (1906).

Host: *Solorina saccata* (thallus)

Europe, Liechtenstein: Eastern Alps, Rätikon, mountain ridge between Augstenberg and Nospitz, SSW above the village Malbun, S above Vaduzer Täli, 47°05'20"N / 09°36'15"E, c. 2060 m alt., small cliffs of calcareous rock in alpine vegetation, on soil exposed to the N.

Note 1: The species was originally described as a lichen, not recognizing the fungus forming perithecioid ascomata being lichenicolous on a *Solorina* thallus.

Note 2: In accordance with the common use the name is herewith typified on the fungal component forming perithecioid ascomata.

27. VIII. 2008

leg. J. Hafellner (72868), det. J. Hafellner

distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

166. ***Phaeopyxis punctum*** (A.Massal.) Rambold, Triebel & Coppins

in Rambold & Triebel, Notes Roy. Bot. Garden Edinburgh 46: 384 (1990). – Bas.: *Nesolechia punctum* A.Massal. in Sched. Crit. Lich. Exs. Italiae 5: 96 (1856). – Syn.: *Lecidea punctum* (A.Massal.) Jatta in Syll. Lich. Ital.: 353 (1900).

Host: *Cladonia digitata* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Gurktaler Alpen, E-facing slopes of Grebenzen, 6.1 km SSW of the village Neumarkt, 1.6 km S of Pöllau, between the farmhouse Fuchs and the area called "Königreich", 47°01'28"N / 14°23'15"E, c. 1200 m alt.; coniferous forest, on strongly rotten wood of a stump.

Note 1: In the protologue the host is only given to genus level (*Cladonia*).

Note 2: An isotype has been restudied by Rambold & Triebel (l.c.), but the host species is not indicated either.

11. VIII. 2010

leg. W. Obermayer (11995), det. J. Hafellner

distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

167. *Sagediopsis fissurisedens* Hafellner

in Herzogia 9(3–4): 757 (1993).

Host: *Aspilidea myrinii* (thallus)

Europe, Austria: Kärnten (Carinthia), Eastern Alps, Steirisches Randgebirge, Koralpe, ca. 11.5 km NE above the village St. Paul im Lavanttal, Krakaberg SE of the Koralpenhaus, southern side of summit area, 46°46'50"N / 14°58'15"E, c. 2070 m alt., GF 9255/2, boulders and outcrops of a hard quartzitic schist, on inclined rock faces.

Note: *Aspilidea myrinii* is the type host of *Sagediopsis fissurisedens*.

2. VII. 2007 leg. J. Hafellner (68472), L. Muggia & A. Hafellner
det. J. Hafellner

distributed to: BR, CANB, GZU, M, NY, UPS

Hafellner J. 2012: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

168. *Tremella caloplacae* (Zahlbr.) Diederich

in Sérusiaux et al., Lejeunia 173: 31 (2003). – Bas.: *Lindauopsis caloplacae* Zahlbr. in Ber. Deutsch. Bot. Ges. 24: 145 (1906).

Host: *Xanthoria parietina* (apothecia)

Europe, Luxembourg: SSW of Belvaux, Kiemreech, 49°29'57"N / 5°53'38"E, c. 370–390 m alt., IFBL M8.51.21; ancient mining area, on twigs of *Salix caprea*.

Note: The type host of *Tremella caloplacae* is *Caloplaca aurantia*.

8. IX. 2012 leg. P. Diederich (17473), det. P. Diederich

distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

169. *Tremella lobariacearum* Diederich & M.S.Christ.

in Diederich, Biblioth. Lichenol. 61: 103 (1996).

Host: *Lobaria macaronesica* (thallus)

Europe, Azores: Pico, between Lajes do Pico and São Roque do Pico, Bosque da Junqueira, 1 km S of crossing with road going to the E, 38°27'56"N / 28°17'57"W, c. 650 m alt.; laurel forest, on *Vaccinium cylindraceum*.

Note: The type host of *Tremella lobariacearum* is *Lobaria pulmonaria*.

26. VII. 2010

leg. P. Diederich (17077), det. P. Diederich

distributed to: BR, CANB, GZU, LE, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

170. *Unguiculariopsis thallophila* (P.Karst.) W.Y.Zhuang

in Mycotaxon 32: 62 (1988). – Bas.: *Trochila thallophila* P.Karst. in Notiser Sällsk. Fauna Flora Fenn. 11: 246 (1870). – Syn.: *Pyrenopeziza thallophila* (P.Karst.) Sacc. in Syll. Fung. 8: 370 (1889). – *Mollisia thallophila* (P.Karst.) P.Karst. in Bidr. Känned. Finlands Nat. Folk 19: 205 (1871). – *Skyttea thallophila* (P.Karst.) Sherwood, D.Hawksw. & Coppins in Trans. Brit. Mycol. Soc. 75: 489 (1981).

Host: *Lecanora carpinea* (thallus, apothecia)

Europe, Austria: Steiermark (Styria), Eastern Alps, Nördliche Kalkalpen, Hochschwab-Gruppe, Seetal W of Seewiesen, c. 10 km NE of the village Aflenz, 47°37'15"N / 15°15'20"E, c. 930 m alt., GF 8357/4; row of trees along a fence surrounding a meadow, on branches in the lower canopy of *Fraxinus excelsior*.

Note: The type host of *Unguiculariopsis thallophila* is "*Lecanora subfusca*" but probably of the species of the "subfusca"-group was not critically determined.

20. VI. 2011

leg. J. Hafellner (78034), det. J. Hafellner

distributed to: BCN, BR, CANB, GZU, LE, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

171. *Caloplaca grimmiae* (Nyl.) H.Olivier

in Mém. Soc. Imp. Sci. Nat. Cherbourg 37: 119 (1909). – Bas.: *Lecanora grimmiae* Nyl. in Flora (Regensburg) 69: 97 (1886). – Syn.: *Placodium grimmiae* (Nyl.) Vain. in Természettudományi Füzetek 22: 297 (1899).

Host: *Candelariella vitellina* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Steirisches Randgebirge, Grazer Bergland, Steinkogel S above the village Gasen, c. 10 km W of the town Birkfeld, gentle slope exposed to the SE, small rocky hill with altitude notation 1356, 47°21'05"N / 15°34'15"E, c. 1350 m alt., GF 8659/1; subalpine pasture somewhat above the actual tree line, on boulders of greenschist.

Note 1: Lichenicolous growth is not mentioned in the protologue but was demonstrated for the holotype specimen by Poelt & Kalb (Flora (Jena) 176: 132, 1985). The type host of *Caloplaca grimmiae* is *Candelariella vitellina*.

Note 2: All specimens contain the lichenicolous fungus *Carbonea vitellinaria* (Nyl.) Hertel as admixture.

13. XI. 2010 leg. J. Hafellner (76517) & L. Muggia, det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

172. *Caloplaca oasis* (A.Massal.) Szatala

in Magyar Bot. Lapok 31:120 (1932). – Bas.: *Callophisma aurantiacum* var. *oasis* A. Massal. in Sched. Criticae Lich. Exs. Italiae: 134 (1856). – Syn.: *Caloplaca velana* var. *oasis* (A.Massal.) Zahlbr. in Catal. Lich. Univ. 7: 197 (1931). – *Placodium oasis* (A.Massal.) Szatala in Sydowia 14: 322 (1960).

Host: *Verrucaria* spec. (thallus)

Europe, Albania: Central Albania, Tiranë distr., on the mountain Dajt E above the town Tiranë, on the saddle Qafa e Qershisë E above the restaurant "Panorama", 41°22'25"N / 19°54'40"E, c. 1250 m alt.; scattered limestone outcrops in clearing of deciduous forest, on vertical rock faces.

Note: In the protologue only lichenicolous growth on crustose lichens is mentioned. In the comment Massalongo (l.c.: 135) indicates that the host frequently should be *Hymenelia coerulea* (sub *Hymenelia hiascens*). However this high altitude species is unlikely to occur in the surroundings of the two villages near Verona representing the syntype localities.

20. VIII. 2007 leg. J. Hafellner (71131), det. J. Hafellner
(excursion together with M. Tretiach, L. Muggia, M. Piccotto & J. Marka)
distributed to: BCN, BR, CANB, GZU, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

173. *Caloplaca polycarpa* (A.Massal.) Zahlbr.

in Österr. Bot. Z. 68: 317 (1919). – Bas.: *Callopisma aurantiacum* var. *polycarpum* A.Massal. in Symmicta Lichenol.: 31 (1850). – Syn.: *Callopisma polycarpum* (A.Massal.) A.Massal. in Sched. Criticae Lich. Exs. Italiae: 48 (1855). – *Gasparrinia polycarpa* (A.Massal.) Mérat in Bull. Soc. Bot. France 67: 196 (1920). – *Placodium polycarpum* (A.Massal.) Szatala in Ann. Hist.-Nat. Mus. Natl. Hung. 51:142 (1859).

Host: *Bagliettoa calciseda* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Steirisches Randgebirge, Grazer Bergland, Rote Wand c. 3 km E of the village Mixnitz, on the ridge facing SW along the upper edge of the cliffs exposed to the S, 47°19'45"N / 15°24'05"E, c. 1400 m alt., GF 8658/3; low outcrops of limestone, on inclined rock faces.

Note: Lichenicolous growth is not mentioned in the protologue.

30. X. 2005

leg. J. Hafellner (64546), det. J. Hafellner

distributed to: BCN, BR, CANB, GZU, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

174. *Diploschistes muscorum* (Scop.) R.Sant.

in Hawksworth et al., Lichenologist 12(1): 106 (1980). – Bas.: *Lichen muscorum* Scop., Fl. Carniolica 2: 365 (1772). – Syn.: *Diploschistes scruposus* subsp. *muscorum* (Scop.) Clauzade & Cl.Roux in Bull. Soc. Bot. Centre-Ouest 7: 825 (1985).

Host: *Cladonia pyxidata* agg. (thallus)

North America, U.S.A.: Alaska, Yukon-Koyukuk Census Area, Brooks Range, Endicott Mountains, Sukakpak Mountain, foothills on the W side, 67°35'35"N / 149°46'00"W, c. 580 m alt.; boulders of calcareous sandstone in open boreal forest, on soil.

Note: Lichenicolous growth is not mentioned in the protologue.

21. VIII. 2010

leg. J. Hafellner (79970), det. J. Hafellner
(excursion together with T. Spribille, L. Muggia and C. Hampton-Miller)

distributed to: BR, CANB, GZU, LE, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

175. *Epilichen scabrosus* (Ach.) Clem.

in Gen. Fungi: 174 (1909). – Bas.: *Lecidea scabrosa* Ach. in Methodus Lich.: 48 (1803). – Syn.: *Buellia scabrosa* (Ach.) A.Massal. in Geneac. Lich.: 20 (1854). – *Karschia scabrosa* (Ach.) Rehm in Rabenh. Krypt.-Fl., Pilze, 2. ed., 1(3): 350 (1890). – *Catillaria scabrosa* (Ach.) Boistel in Nouv. Fl. Lich. 2: 197 (1903).

Host: *Baeomyces placophyllus* (thallus)

Europe, Austria: Salzburg, Eastern Alps, Pinzgau, Hohe Tauern, Glockner-Gruppe, northern slopes of Kitzsteinhorn, c. 0.5 km W of the Bundessportheim, 47°12'35"N / 12°41'10"E, c. 2450 m alt., GF 8742/3; open alpine vegetation over Ca-rich greenschist, on soil.

Note: The type host of *Epilichen scabrosus* is *Baeomyces rufus* (sub *B. rupestris*).

27. VIII. 1996

leg. J. Hafellner (37988), det. J. Hafellner

distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

**176. *Lecanora printzenii* Pérez-Ortega, Vivas & Hafellner
Paratype**

in Lumbsch et al., Phytotaxa 18: 76 (2011).

Host: *Umbilicaria* spec. (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Niedere Tauern, Seckauer Tauern, Großer Ringkogel NW of the town Knittelfeld, slopes exposed to the NE above of the Sundlsee, 47°19'30"N / 14°37'30"E, c. 2060 m alt., GF 8653/4; boulderfield and cliffs, gneiss, on vertical rock faces of cliffs exposed to the N.

Note: The type host of *Lecanora printzenii* is *Umbilicaria cylindrica*.

15. VIII. 2001

leg. J. Hafellner (75167), det. J. Hafellner

distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

177. *Lecidea verruca* Poelt

in Mitt. Bot. Staatssamml. München 4: 187 (1961).

Host: *Aspicilia simoensis* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Steirisches Randgebirge, Stubalpe, Ameringkogel massiv E of the village Obdach, Weißenstein mountain, on ridge exposed to the S above of Melcheben, E above the mountain hut Weißensteinhütte, 47°03'35"N / 14°48'05"E, c. 1900 m alt., GF 8954/2, stone-wall separating alpine pastures, on boulders of gneiss.

Note 1: The host remained undetermined when the species was described ("ein dünner grauer Thallus, der gut zu einer *Aspicilia*-Art gehören könnte"). But in the meantime it became evident that the species is restricted to *Aspicilia* species.

Note 2: Poelt (Plant Syst. Evol. 135: 81–87, 1980) concluded from extensive field observations that *Lecidea verruca* is a dioecious species.

3. IX. 2005 leg. J. Hafellner (65145) & A. Hafellner, det. J. Hafellner
distributed to: BR, CANB, GZU, M, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

178. *Ramboldia insidiosa* (Th.Fr.) Hafellner

in Hafellner & Türk, Carinthia II 185/105: 624 (1995). – Bas.: *Lecidea insidiosa* Th.Fr. in Bot. Notiser 1867: 153 (1867).

Host: *Lecanora varia* (thallus, apothecia)

Europe, Austria: Steiermark (Styria), Eastern Alps, Steirisches Randgebirge, Koralpe NE of the town Wolfsberg, Bärofen, summit area, shortly W of the summit cross, 46°53'25"N / 14°59'30"E, c. 1710 m alt., GF 9155/2; open subalpine coniferous forest, on wood of thick branches of a snag (*Larix decidua*).

Note: *Lecanora varia* is the type host of *Ramboldia insidiosa*. *Lecanora "subfusca"* is mentioned as further host in the protologue, but this needs confirmation.

25. VI. 2006 leg. J. Hafellner (70795) & L. Muggia, det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

179. *Rimularia insularis* (Nyl.) Rambold & Hertel

in Hertel, Lecideaceae exs. 8: 9 (1985). – Bas.: *Lecidea insularis* Nyl. in Bot. Notiser 1852: 177 (1852). – Syn.: *Lecidella insularis* (Nyl.) Körb. in Syst. Lich. Germaniae: 239 (1855).

Host: *Lecanora bicincta* (thallus)

Europe, Austria: Kärnten (Carinthia), Eastern Alps, Steirisches Randgebirge, Koralpe E of the town Wolfsberg, Burgstallofen, 46°48'35"N / 14°56'15"E, c. 1450 m alt., GF 9155/4; cliffs of eclogite-amphibolite surrounded by subalpine coniferous forest on slope exposed to the W, on inclined rock faces.

Note: The type host of *Rimularia insularis* is *Lecanora rupicola*.

29. VII. 2009

leg. J. Hafellner (74531), det. J. Hafellner

distributed to: BR, CANB, GZU, LE, M, NY, UPS

Hafellner J. 2013: Lichenicolous Biota (Nos 151–180). - Fritschiana 76: 47–68.

180. *Scutula dedicata* Triebel, Wedin & Rambold

in Symbolae Bot. Upsal. 32(1): 327 (1997).

Host: *Peltigera didactyla* (thallus, on both sides)

Europe, Czech Republic: Southern Bohemia, Jihočeský, foothills of Šumava Mountains, Prachatice, Husinec, Výrov, 49°03'00"N / 13°59'50"E, c. 500 m alt.; stony balk, on soil.

Note 1: *Peltigera didactyla* is the type host of *Scutula dedicata*.

Note 2: The distributed material contains only the anamorphic state ("*Karsteniomyces*"-state).

2. VI. 2010

leg. J. Vondrák (7853) & O. Merkulova, det. J. Vondrák

distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

References

- BRUMMITT R.K. 2001: World geographical scheme for recording plant distributions. Edition 2. Plant Taxonomic Database Standards No. 2, Edition 2, August 2001. Published for the International Working Group on Taxonomic Databases For Plant Sciences (TDWG) by the Hunt Institute for Botanical Documentation. - Pittsburgh: Carnegie Mellon University.
- EHRENDORFER F. & HAMANN U. 1965: Vorschläge zu einer floristischen Kartierung von Mitteleuropa. - *Berichte der deutschen botanischen Gesellschaft* 78(1): 35–50.
- HOLMGREN P.K., HOLMGREN, N.H. & BARNETT, L.C. (editors) 1990: *Index Herbariorum*. Part I. The herbaria of the world. 8th edition. - Bronx, New York: New York Botanical Garden for the International Association for Plant Taxonomy (Regnum Vegetabile 120).
- THIERS B. 2010 [continuously updated]: *Index Herbariorum: A global directory of public herbaria and associated staff*. New York Botanical Garden's Virtual Herbarium. - URL: <http://sweetgum.nybg.org/ih/> [visited 12. XII. 2013].

Bibliographic data of fascicles so far issued

- HAFELLNER J. 2007: Lichenicolous Biota (Nos 1–20). - *Fritschiana* (Graz) 60: 35–49. URL: <http://www-classic.uni-graz.at/botwww/journals/fritschiana/fritschiana-60/lichenicolous-biota-nos-1-20.pdf>
- HAFELLNER J. 2008: Lichenicolous Biota (Nos 21–60). - *Fritschiana* (Graz) 61: 1–28. URL: <http://www-classic.uni-graz.at/botwww/journals/fritschiana/fritschiana-61/hafellner-2008-lichenicolous-biota-21-to-60.pdf>
- HAFELLNER J. 2009: Lichenicolous Biota (Nos 61–80). - *Fritschiana* (Graz) 65: 33–46. URL: <http://www-classic.uni-graz.at/botwww/journals/fritschiana/fritschiana-65/lichenicolous-biota-nos-61-80.pdf>
- HAFELLNER J. 2010: Lichenicolous Biota (Nos 81–100). – *Fritschiana* (Graz) 67: 11–26. URL: <http://www-classic.uni-graz.at/botwww/journals/fritschiana/fritschiana-67/hafellner-2010-lichenicolous-biota-nos-81-100.pdf>
- HAFELLNER J. 2012: Lichenicolous Biota (Nos 101–120). – *Fritschiana* (Graz) 74: 1–17. URL: <http://www-classic.uni-graz.at/botwww/journals/fritschiana/fritschiana-74/hafellner-2012-lichenicolous-biota-nos-101-120.pdf>
- HAFELLNER J. 2012: Lichenicolous Biota (Nos 121–150). – *Fritschiana* (Graz) 74: 19–41. URL: <http://www-classic.uni-graz.at/botwww/journals/fritschiana/fritschiana-74/hafellner-2012-lichenicolous-biota-nos-121-150.pdf>

Taxon Synopsis:

Taxon	Exs. no.
Ascomycota	
Arthoniomycetes	
<i>Abrothallus cetrariae</i>	161
<i>Abrothallus parmeliarum</i>	162
<i>Abrothallus tulasnei</i>	163
<i>Arthonia stereocaulina</i>	151
<i>Arthonia varians</i>	152
Lecanoromycetes (incl. Ostropomycetidae)	
<i>Caloplaca grimmiae</i>	171
<i>Caloplaca oasis</i>	172
<i>Caloplaca polycarpa</i>	173
<i>Carbonea vitellinaria</i>	171
<i>Diploschistes muscorum</i>	174
<i>Epilichen scabrosus</i>	175
<i>Gyalideopsis stereocaulicola</i>	157
<i>Lecanora printzenii</i>	176
<i>Lecidea verruca</i>	177
<i>Ramboldia insidiosa</i>	178
<i>Rimularia insularis</i>	179
<i>Scutula dedicata</i>	180
Leotiomycetes	
<i>Corticifraga fuckelii</i>	154
<i>Phaeopyxis punctum</i>	166
<i>Unguiculariopsis thallophila</i>	170
Sordariomycetes (incl. Hypocreales, Sordariales)	
<i>Lichenochora obscuroides</i>	158
<i>Roselliniella microthelia</i>	159
Eurotiomycetes (incl. Verrucariales and Mycocaliciales)	
<i>Endococcus stigma</i>	155
<i>Telogalla olivieri</i>	160
Dothideomycetes	
<i>Cercidospora lichenicola</i>	153
<i>Dacampia engeliana</i>	165
<i>Sagediopsis fissurisedens</i>	167
Anamorphic Fungi (unclassified)	
Hyphomycetes	
Coelomycetes	
<i>Bachmanniomyces uncialicola</i>	164
<i>Epicladonia sandstedei</i>	156
Basidiomycota	
Agaricomycetes	
Pucciniomycetes	
Tremellomycetes	
<i>Tremella caloplacae</i>	168
<i>Tremella lobariacearum</i>	169

Host Index:

Host taxon	Lichenicolous taxon	Exs. no.
<i>Acarospora</i> spec.	<i>Endococcus stigma</i>	155
<i>Aspicilia simoensis</i>	<i>Lecidea verruca</i>	177
<i>Aspilidea myrinii</i>	<i>Sagediopsis fissurisedens</i>	167
<i>Baeomyces placophyllus</i>	<i>Epilichen scabrosus</i>	175
<i>Bagliettoa calciseda</i>	<i>Caloplaca polycarpa</i>	173
<i>Candelariella vitellina</i>	<i>Caloplaca grimmiae</i>	171
<i>Candelariella vitellina</i>	<i>Carbonea vitellinaria</i>	171
<i>Cladonia caespiticia</i>	<i>Epicladonia sandstedei</i>	156
<i>Cladonia digitata</i>	<i>Phaeopyxis punctum</i>	166
<i>Cladonia pyxidata</i>	<i>Diploschistes muscorum</i>	174
<i>Cladonia uncialis</i>	<i>Bachmanniomyces uncialicola</i>	164
<i>Lecanora bicincta</i>	<i>Arthonia varians</i>	152
<i>Lecanora bicincta</i>	<i>Rimularia insularis</i>	179
<i>Lecanora carpinea</i>	<i>Unguiculariopsis thallophila</i>	170
<i>Lecanora varia</i>	<i>Ramboldia insidiosa</i>	178
<i>Lobaria macaronesica</i>	<i>Tremella lobariacearum</i>	169
<i>Parmelia omphalodes</i>	<i>Abrothallus parmeliarum</i>	162
<i>Peltigera didactyla</i>	<i>Scutula dedicata</i>	180
<i>Peltigera</i> spec.	<i>Corticifraga fuckelii</i>	154
<i>Phaeophyscia orbicularis</i>	<i>Lichenochora obscuroides</i>	158
<i>Platismatia glauca</i>	<i>Abrothallus cetrariae</i>	161
<i>Solorina crocea</i>	<i>Cercidospora lichenicola</i>	153
<i>Solorina saccata</i>	<i>Dacampia engeliana</i>	165
<i>Verrucaria</i> spec.	<i>Caloplaca oasis</i>	172
<i>Stereocaulon alpinum</i>	<i>Arthonia stereocaulina</i>	151
<i>Stereocaulon strictum</i>	<i>Gyalideopsis stereocaulicola</i>	157
<i>Trapelia placodioides</i>	<i>Roselliniella microthelia</i>	159
<i>Umbilicaria</i> spec.	<i>Lecanora printzenii</i>	176
<i>Xanthoparmelia conspersa</i>	<i>Abrothallus tulasnei</i>	163
<i>Xanthoria parietina</i>	<i>Telogalla olivieri</i>	160
<i>Xanthoria parietina</i>	<i>Tremella caloplacae</i>	168

Geographic Index:

BIOGEOGRAPHIC UNITS (see BRUMMITT 2001)

Country (or Archipelago)	Lichenicolous taxon	Exs. no.
1. EUROPE		
Albania	<i>Caloplaca oasis</i>	172
Austria	<i>Abrothallus cetrariae</i>	161
	<i>Arthonia varians</i>	152
	<i>Caloplaca grimmiae</i>	171
	<i>Caloplaca polycarpa</i>	173
	<i>Carbonea vitellinaria</i>	171
	<i>Cercidospora lichenicola</i>	153
	<i>Endococcus stigma</i>	154
	<i>Epicladonia sandstedei</i>	156
	<i>Epilichen scabrosus</i>	175
	<i>Lecanora printzenii</i>	176
	<i>Lecidea verruca</i>	177
	<i>Lichenochora obscuroides</i>	158
	<i>Phaeopyxis punctum</i>	166
	<i>Ramboldia insidiosa</i>	178
	<i>Rimularia insularis</i>	179
	<i>Roselliniella microthelia</i>	159
	<i>Sagediopsis fissurisedens</i>	167
	<i>Telogalla olivieri</i>	160
	<i>Unguiculariopsis thallophila</i>	170
Azores	<i>Tremella lobariacearum</i>	169
Czech Republic	<i>Abrothallus tulasnei</i>	163
	<i>Scutula dedicata</i>	180
Liechtenstein	<i>Dacampia engeliana</i>	165
Luxembourg	<i>Tremella caloplacae</i>	168
Portugal (see under Europe Azores)		
Switzerland	<i>Arthonia stereocaulina</i>	151
2. AFRICA		
3. ASIA TEMPERATE		
4. ASIA TROPICAL		
5. AUSTRALASIA		
6. PACIFIC		

7. NORTHERN AMERICA

U.S.A.

<i>Abrothallus parmeliarum</i>	162
<i>Bachmanniomyces uncialicola</i>	164
<i>Corticifraga fuckelii</i>	154
<i>Diploschistes muscorum</i>	175

8. SOUTHERN AMERICA

Peru

<i>Gyalideopsis stereocaulicola</i>	157
---	-----

9. ANTARCTIC