

Lichenicolous Biota (Nos 21–60)

Josef HAFELLNER*

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Abstract: The second fascicle (40 numbers) of the exsiccata 'Lichenicolous Biota' is published. The issue contains material of 10 lichenized and 30 non-lichenized fungal taxa (30 ascomycetes, 3 basidiomycetes, 3 anamorphic fungi). Beside others, the fascicle includes some of the more common fungi infesting species of the lichenized genera *Aspilidea*, *Baeomyces*, *Lobaria* or *Sporastatia*, as well as the lichenicolous *Rimularia* species occurring in Central Europe.

Zusammenfassung: Der zweite Faszikel (40 Nummern) des Exsikkates 'Lichenicolous Biota' wird veröffentlicht. Die Ausgabe enthält Proben von 10 lichenisierten und 30 nicht-lichenisierten Taxa (30 Ascomyceten, 3 Basidiomyceten, 3 anamorphe Pilze). Der Faszikel enthält unter anderen einige der häufigeren Pilze, die Arten der Flechtengattungen *Aspilidea*, *Baeomyces*, *Lobaria* oder *Sporastatia* befallen, sowie die lichenicolen *Rimularia*-Arten, welche in Zentraleuropa vorkommen.

*Institut für Pflanzenwissenschaften, Karl-Franzens-Universität, Holteigasse 6, A-8010 Graz, AUSTRIA, e-mail: josef.hafellner@uni-graz.at

Introduction

As already explained in the introduction to the first fascicle, the exsiccata 'Lichenicolous Biota' covers all lichenicolous biota. It is open to non-lichenized and lichenized fungi, but also to myxomycetes, bacteria, and even animals, whenever they cause a characteristic symptom on their host (e.g. discoloration or galls). Consequently, the exsiccata contains both highly host-specific and plurivorous species, or even only facultatively lichenicolous ones, as long as the individuals clearly grow upon a lichen and the collection is homogeneous, so that identical duplicates can be prepared.

The first three decades of the present fascicle concentrate on non-lichenized lichenicolous fungi whereas the fourth decade is confined to lichenicolous lichens.

For this fascicle special efforts have been made to include several of the more common lichenicolous fungi invading *Lobaria* species (no. 35 *Nectriopsis lecanodes*, no. 41 *Pronectria fissuriprodiens*, no. 39 *Plectocarpon lichenum*, nos 30 and 49 *Tremella lobariacearum*). Furthermore the two most common species growing upon taxa of the genus *Sporastatia* (no. 40 *Polycoccum sporastatiae*,

no. 58 *Rhizocarpon pusillum*), the two common lichenicolous taxa upon *Aspilidea myrinii* (no. 42 *Sagediopsis fissurisedens*, no. 55 *Protoparmelia phaeonesos*), four of the more common lichenicolous taxa upon *Baeomyces* species (no. 22 *Arthrorhaphis grisea*, no. 47 *Thelocarpon lichenicola*, no. 50 *Arthrorhaphis citrinella*, no. 52 *Epilichen scabrosus*) as well as the two common lichenicolous *Rimularia*-species occurring in Europe (no. 59 *Rimularia furvella*, no. 60 *Rimularia insularis*).

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], Leningrad [LE], Munich [M], and Prague [PRM] (herbarium acronyms sec. HOLMGREN & HOLMGREN 1998, onwards: Index Herbariorum. New York Botanical Garden. <http://sciweb.nybg.org/science2/IndexHerbariorum.asp>). It is planned to publish the next fascicle within one year.

For the second issue, I gratefully acknowledge the contribution of seven collections by Paul Diederich and Damien Ertz and one by Hector S. Osorio, and the help during fieldwork by Peter van den Boom, Angela Hafellner, Jolanta Miadlikowska, Lucia Muggia, Pier Luigi Nimis, Edith Schreiner, Nell Stevens, Mauro Tretiach, and Mikhail Zhurbenko. Paul Diederich and John Elix contributed to the scientific content of the fascicle by the identification of either lichenicolous fungi or hosts. Christian Scheuer and Walter Obermayer are thanked for critically reading the manuscript.

I would be very grateful to receive material of lichenicolous biota from my colleagues. 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.

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21. ***Abrothallus welwitschii*** Mont. ex Tul.

in Ann. Sci. Nat., Bot., sér. 3, 17: 115 (1852) ('*welwitschii*').

Host: *Sticta fuliginosa* (thallus)

Africa, Canary Islands: Tenerife, Anaga peninsula, along main road from Las Mercedes to Chamorga, 0.5 km before crossing with road to San Andrés, c. 730 m alt., 28°32'45"N, 16°13'W, regrowth of laurel forest on the ridge, on branches of an unnamed shrub.

Note: The type host of *Abrothallus welwitschii* is *Sticta sylvatica*.

19. VII. 2007 leg. P. Diederich (16517) & D. Ertz, det. P. Diederich
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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22. ***Arthrorhaphis grisea*** Th.Fr.

in Lich. Arctoi: 304 (1860).

Host: *Baeomyces rufus* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Koralpe, in the valley of the Schwarze Sulm c. 4 km SE below the village Glashütten, above northern bank of the creek, 46°48'05"N, 15°05'45"E, c. 900 m alt., GF 9156/4, cliffs of micaschist in open mixed forest, on loose pebbles of micaschist between roots of a fallen tree.

Note: *Arthrorhaphis grisea* evidently is not lichenized but a pathogenic lichenicolous fungus killing the thallus of its host and causing a decay of the stalked *Baeomyces* apothecia. Therefore ascomata of *Arthrorhaphis grisea* are only found in a relatively narrow zone some millimeters behind the centrifugally growing edge of the infested area.

17. VIII. 2008 leg. J. Hafellner (71561) & L. Muggia, det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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23. *Chaenothecopsis hospitans* (Th.Fr.) Tibell

in Tibell & Ryman, Nova Hedwigia 60: 202 (1995). – Bas.: *Calicium hospitans* Th.Fr. in Bot. Notiser 1865: 40 (1865).

Host: *Lecanora carpinea* (thallus, apothecia)

Europe, Austria: Styria, Eastern Alps, Gurktaler Alpen, Predlitzwinkel S of the village Predlitz, c. 2 km N of the village Turrach, bank of the stream Turrach, 46°59'40"N, 13°54'20"E, c. 1150 m alt., GF 9049/1, stripe of riparian forest, on bark of *Alnus incana*.

Note: The type host of *Chaenothecopsis hospitans* was given by Th. Fries (l.c.) as *Lecanora albella* which needs confirmation.

24. X. 1989 leg. J. Hafellner (41653) & E. Schreiner, det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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24. *Clypeococcum epicrassum* (H.Olivier) Nav.-Ros. & Cl.Roux

in Navarro-Rosinés et al., Bull. Soc. Linn. Provence 45: 423 (1994). – Bas.: *Buellia epicrassa* H.Olivier in Bull. Int. Acad. Internat. Géogr. Bot. 14: 281 (1905). – Syn.: *Didymosphaeria epicrassa* (H.Olivier) Vouaux in Bull. Soc. Mycol. France 29: 108 (1913). – *Polycoccum epicrassum* (H.Olivier) R.Sant. in Svensk Bot. Tidskr. 54: 504 (1960).

Host: *Squamarina cartilaginea* (thallus)

Europe, Spain: Aragón, Prov. Zaragoza, Los Monegros, c. 70 km E of Zaragoza, low hills a few km N of the village Bujaraloz, c. 250 m alt., open Juniperetum thuriferae over gypsum soil.

Note: *Squamarina cartilaginea* is the type host of *Clypeococcum epicrassum*.

25. V. 1983 leg. J. Hafellner (41652), det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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25. *Melaspilea canariensis* D.Hawksw.

in Lichenologist 14: 84 (1982).

Host: *Pertusaria* spec. (thallus)

Africa, Canary Islands: Tenerife, S of Garachico, W of San Juan del Reparo, c. 565 m alt., 28°21'N, 16°45'E, lava flow, on volcanic rocks.

Note: The distributed material originates from a site very close to the type locality. The host of the type specimen originally remained undetermined but evidently represents a species of *Pertusaria*, too.

23. VII. 2007 leg. P. Diederich (16678) & D. Ertz, det. P. Diederich
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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26. *Opegrapha melanospila* Müll.Arg.

in Flora 60: 474 (1877).

Host: *Parmotrema crinitum* (thallus)

Australasia, Australia: Queensland, Noosa River NE of Tewantin, about 70 km SE of Gympie, 26°23'S, 153°02'E, at sea level, mangroves, on bark of *Avicennia marina*.

Note: The type host of *Opegrapha melanospila* is a strain of *Parmotrema perforatum*. The species was first reported from Australia by Bailey (Synopsis Queensland Fl., Suppl. 2: 88, 1888) under the name *Graphis parmeliarum* C.Knight ('*parmeliorum*'). The type host of that heterotypic synonym is given as '*Parmelia tinctorum*'.

27. VII. 1986 leg. J. Hafellner (19628) & N. Stevens, det. J. Hafellner
duplicate of the host (Hafellner 41648 in GZU) det. J. A. Elix
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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27. *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 Sylloge Lichenum Italicorum: 353 (1900).

Hosts: *Cladonia coniocraea* and *Cladonia digitata* (thallus)

Europe, Austria: Upper Austria, Eastern Alps, Nördliche Kalkalpen, Ennstaler Alpen, Bosruck massif E of the pass Pyhrnpass, small ridge between the pass and the Fuchsalm, SW of the Fuchsalm, 47°37'10"N, 14°18'35"E, c. 1060 m alt., GF 8351/4, clearing with many stumps on slope exposed to the SE used as pasture, on rotting stumps.

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

2. XI. 2007 leg. J. Hafellner (69246) & L. Muggia, det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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28. *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: Carinthia, Eastern Alps, Seetaler Alpen, Löllinger Graben, c. 1 km E of the village Lölling, 46°55'15"N, 13°36'40"E, c. 1000 m alt., GF 9053/4, row of trees by the road, on bark of *Aesculus hippocastanum*.

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

14. V. 1986 leg. J. Hafellner (14735), det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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29. *Trematosphaeriopsis parmeliiana* Jacz. & Elenkin

in Elenkin, Izv. Imp. S.-Peterburgsk. Bot. Sada 1(4): 146 (1901).

Host: *Xanthoparmelia* spec. (thallus)

Northern America, Mexico: Sonora, 3 km SE of Moctezuma, 29°47'N, 109°37'W, c. 680 m alt., lava field in open shrubland, on volcanic boulders.

Note: The type host of *Trematosphaeriopsis parmeliiana* is *Xanthoparmelia camtschadalis* (as *Parmelia molliuscula* var. *vagans*).

9. II. 1993 leg. J. Hafellner (37608) & A. Hafellner, det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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

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

Host: *Lobaria pulmonaria* f. *papillaris* (thallus)

Africa, Canary Islands: Tenerife, Monte del Agua S of Los Silos, c. 1 km W of Erjos, 28°19'N, 16°48'W, c. 1140 m alt., laurel forest, on bark of unnamed trees.

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

22. VII. 2007 leg. P. Diederich (16617) & D. Ertz, det. P. Diederich
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

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31. *Biatoropsis usnearum* Räsänen

in Ann. Soc. Zool. Bot. Fenn. Vanamo 5(9): 8 (1934).

Host: *Usnea articulata* (thallus)

Africa, Canary Islands: Tenerife, Valle de la Orotava S of Puerto de la Cruz, along road to Las Cañadas del Teide National Park, between Aguamansa and Bermeja, 28°21'24"N, 16°30'33"W, c. 1180 m alt., mixed forest, with *Pinus canariensis* and *Erica arborea*, on branches of *Pinus canariensis*.

Note: The type host of *Biatoropsis usnearum* is *Usnea comosa* (syn. *U. subfloridana*).

20. VII. 2007

leg. P. Diederich (16700) & D. Ertz, det. P. Diederich

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

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32. *Cercidospora epipolytropa* (Mudd) Arnold

in Flora 57: 154 (1874). – Bas.: *Thelidium epipolytropum* Mudd in Manual Brit. Lich.: 298 (1861). – Syn.: *Didymella epipolytropa* (Mudd) Berl. & Voglino in Syll. Fung. Addit. I–IV: 89 (1886). – *Didymosphaeria epipolytropa* (Mudd) G.Winter in Rabenh. Krypt.-Fl., 2. Aufl., 1(2): 432 (1885).

Host: *Lecanora polytropa* var. *polytropa* (apothecia)

Europe, Austria: Carinthia, Eastern Alps, Steirisches Randgebirge, Stubalpe E of the small town St.Leonhard, NW of the pass Packsattel, halfway between Knödelhütte and Bernsteinhütte, Lahnofen, short SE below the summit, 46°59'40"N, 14°55'45"E, c. 1510 m alt., GF 9055/2, small cliffs and large boulders of micaschist in open spruce-larch forest, on inclined rock faces.

Note: *Lecanora polytropa* is the type host of *Cercidospora epipolytropa*.

10. VIII. 2005

leg. J. Hafellner (64892), det. J. Hafellner

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

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33. *Cercidospora verrucosaria* (Linds.) Arnold

in Flora 57: 154 (1874). – Bas.: *Microthelia verrucosaria* Linds. in Quart. J. Microscop. Sci. 9: 349 (1869). – Syn.: *Didymella verrucosaria* (Linds.) Sacc. & D.Sacc. in Syll. Fung. 17: 657 (1905). – *Didymosphaeria verrucosaria* (Linds.) Magnus in Dalla Torre & Sarnthein, Fl. Tirol 3: 473 (1905).

Host: *Megaspora verrucosa* (thallus, apothecia)

Europe, Austria: Styria, Eastern Alps, Niedere Tauern, Wölzer Tauern, Rettlkirchspitze NW of the little town Oberwölz, slope exposed to the N c. 1 km W of the refuge Neunkirchner Hütte, 47°16'15"N, 14°08'00"E, c. 1720 m alt., GF 8750/2, marble outcrops in subalpine pasture, on plant remnants.

Note: *Megaspora verrucosa* is the type host of *Cercidospora verrucosaria*.

24. VIII. 2002 leg. J. Hafellner (60688) & J. Miadlikowska, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

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34. *Microcalicium disseminatum* (Ach.) Vain.

in Acta Soc. Fauna Flora Fennica 57(1): 77 (1927). – Bas.: *Cyphelium disseminatum* Fr. ex Ach. in Kongl. Vetensk. Akad. Handl. 1817: 227 (1817). – Syn.: *Calicium disseminatum* (Ach.) Fr. in Sched. Critic.: 7 (1824).

Host: *Chaenotheca chrysocephala* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Stubalpe W of Köflach, area of the pass Hirscheegger Sattel, ridge SW above the inn Salzstiegelhaus, 47°03'50"N, 14°52'00"E, c. 1600 m alt., GF 8955/1, subalpine spruce forest, on bark of *Picea abies*.

Note: Lichenicolous behaviour is not mentioned in the protologue. The distributed material contains both conidiomata and ascomata.

20. VII. 2002 leg. J. Hafellner (59864), det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

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35. *Nectriopsis lecanodes* (Ces.) Diederich & Schroers

in Sérusiaux et al., *Lejeunia*, n. s., 162: 56 (1999). – Bas.: *Sphaeria Nectria lecanodes* Ces. in Rabenhorst, Bot. Zeitung 15: 407 (1857); Rabenhorst, Herb. Mycol., ed. 2, no. 525 (1863). – Syn.: *Nectria lecanodes* (Ces.) Fuckel in Jahrb. Nassauischen Vereins Naturkunde 23–24: 178 (1870).

Host: *Lobaria virens* (thallus)

Africa, Canary Islands: Tenerife, Monte del Agua S of Los Silos, c. 1 km W of Erjos, 28°19'N, 16°48'W, c. 1140 m alt., laurel forest, on bark of unnamed trees.

Note 1: The original spelling of the name is '25. *Sph. Nectria lecanodes* Ces. mss.' From the previous page (p. 406) it is evident that '*Sph.*' is an abbreviation of the generic name *Sphaeria*. Therefore the basionym is *Sphaeria lecanodes* and not *Nectria lecanodes* as often cited. The text of the protologue was reprinted together with the exsiccatum label, and there the entire text is signed by 'Cesati' indicating that both name and validating description were contributed by Cesati. Therefore the correct citation of the author of the taxon is 'Ces.' (ICBN 46.2).

Note 2: The type host of *Nectriopsis lecanodes* is given as *Peltigera canina*. However, *Peltigera canina* has often been understood in a broad sense at that time and a reinvestigation of the type specimen would be necessary.

22. VII. 2007 leg. P. Diederich (16612) & D. Ertz, det. P. Diederich
distributed to: BR, CANB, GZU, NY, UPS

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36. *Paranectria oropensis* (Ces.) D.Hawksw. & Piroz.

in Can. J. Bot. 55: 2555 (1977). – Bas.: *Sphaeria Nectria oropensis* Ces. in Rabenhorst, Bot. Zeitung 15: 406 (1857); Rabenhorst, Herb. Mycol., ed. 2, no. 524 (1863). – Syn.: *Nectria oropensis* (Ces.) Tul. & C.Tul. in Sel. Fung. Carp. 3: 95 (1865). – *Ciliomyces oropensis* (Ces. in Rabenh.) Höhn. in Sitzungsber. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 115: 25 (1906).

Host: *Parmelina pastillifera* (thallus, apothecia)

Europe, Austria: Styria, Eastern Alps, Nördliche Kalkalpen, Hochschwab-Gruppe, on the saddle Hackentörl SW above the village Seewiesen, 47°36'20"N, 15°15'05"E, c. 1290 m alt., GF 8357/4, open mixed forest with much *Fagus sylvatica* and *Picea abies*, on bark of *Fagus sylvatica*.

Note 1: The original spelling of the name is '24. *Sphaeria Nectria oropensis* Ces. mss.' Therefore the basionym is *Sphaeria oropensis* and not *Nectria oropensis* as sometimes cited. The text of the protologue was reprinted together with the exsiccatum label, and there the entire text is signed by 'Cesati' indicating that both name and validating description were contributed by Cesati. Therefore the correct citation of the author of the taxon is 'Ces.' (ICBN 46.2).

Note 2. The type host of *Paranectria oropensis* are sterile squamules of a so far undetermined lichen, tentatively named *Trapeliopsis granulosa* (as *Biatora decolorans*) by Cesati (or Rabenhorst?). *Parmelina pastillifera* is added herewith to the host spectrum.

11. IX. 2004 leg. J. Hafellner (63310), det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

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37. *Paranectria oropensis* (Ces.) D.Hawksw. & Piroz.

in Can. J. Bot. 55: 2555 (1977). – Bas.: *Sphaeria Nectria oropensis* Ces. in Rabenhorst, Bot. Zeitung 15: 406 (1857); Rabenhorst, Herb. Mycol., ed. 2, no. 524 (1863). – Syn.: *Nectria oropensis* (Ces.) Tul. & C.Tul. in Sel. Fung. Carp. 3: 95 (1865). – *Ciliomyces oropensis* (Ces.) Höhn. in Sitzungsber. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 115: 25 (1906).

Host: *Phaeophyscia orbicularis* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Stubalpe, Mitterberg NW above the village Maria Lankowitz, by the road short N of the turnoff to St.Johann, 47°04'40"N, 15°00'50"E, c. 980 m alt., GF 8956/1, solitary trees in a pasture, on bark of *Fraxinus excelsior*.

Note 1: The original spelling of the name is '24. *Sphaeria Nectria oropensis* Ces. mss.' Therefore the basionym is *Sphaeria oropensis* and not *Nectria oropensis* as sometimes cited. The text of the protologue was reprinted together with the exsiccatum label, and there the entire text is signed by 'Cesati' indicating that both name and validating description were contributed by Cesati. Therefore the correct citation of the author of the taxon is 'Ces.' (ICBN 46.2).

Note 2: In recent years this plurivorous lichenicolous fungus has become more frequent in the southeastern part of Austria.

29. X. 2006

leg. J. Hafellner (66975), det. J. Hafellner

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

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38. *Phoma fistulata* Etayo & Osorio

in Comunic. Bot. Mus. Nac. Hist. Nat. Antrop., Montevideo 6(129): 10 (2004).

Host: *Concamerella pachyderma* (thallus)

Southern America, Uruguay: Dept. Rocha, along Hwy. 16, Cerro Aspero 8 km NW from Laguna Negra, 34°03'S, 53°40'W, slope exposed to the E, on rocks.

Note: The type host of *Phoma fistulata* is *Concamerella fistulata*.

21. II. 1967

leg. H. S. Osorio (5700 p.p.), det. H. S. Osorio

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

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39. *Plectocarpon lichenum* (Sommerf.) D.Hawksw.

in Hawksworth & Galloway, Lichenologist 16: 86 (1984). – Bas.: *Dothidea lichenum* Sommerf. in Suppl. Flor. Lapp.: 224 (1826); Fries, Elenchus Fung. 2: 123 (1828). – Syn.: *Lichenomyces lichenum* (Sommerf.) R.Sant. in Svensk Bot. Tidskr. 54(4): 501 (1960). – *Celidium lichenum* (Sommerf.) J.Schröt. in Cohn, Kryptfl. Schlesien 3(2): 135 (1893).

Host: *Lobaria pulmonaria* (thallus)

Africa, Canary Islands: Tenerife, Bosque de la Esperanza SW of La Laguna, Las Lagunetas, Cumbres de la Victoria, 28°24'34"N, 16°25'16"W, c. 1675 m alt., pine forest, on *Pinus canariensis*.

Note: *Lobaria pulmonaria* is the type host of *Plectocarpon lichenum*.

20. VII. 2007 leg. P. Diederich (16653) & D. Ertz, det. P. Diederich
distributed to: BR, CANB, GZU, LE, M, NY, UPS

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

40. *Polycoccum sporastatae* (Anzi) Arnold

in Flora 57: 144, 174 (1874). – Bas.: *Tichothecium sporastatae* Anzi in Atti Soc. Ital. Sci. Milano 9: 257 (1866). – Syn.: *Didymosphaeria sporastatae* (Anzi) G.Winter in Rabenhorst, Krypt.-Fl. Deutschl., 2. Aufl. 1(2): 431 (1885).

Host: *Sporastatia testudinea* (thallus, apothecia)

Europe, Austria: Styria, Eastern Alps, Niedere Tauern, Seckauer Tauern, Speikbichl S of the village Mautern, summit area, 47°21'30"N, 14°49'00"E, c. 1870 m alt., GF 8654/2, small boulder field and dwarf shrub communities on gentle slope exposed to the N, on boulders of gneiss.

Note: The type host of *Polycoccum sporastatae* is *Sporastatia polyspora*.

22. VI. 2000 leg. J. Hafellner (51694) & A. Hafellner, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

41. *Pronectria fissuriprodiens* Etayo

in Etayo & Diederich, Bull. Soc. Naturalistes Luxembourgeois 97: 110 (1996).

Host: *Lobaria pulmonaria* (thallus)

Europe, Austria: Carinthia, Eastern Alps, Karnische Alpen, Angerbachtal E of the Plöckenpass, c. 6 km S of the village Mauthen, 46°36'30"N, 12°59'00"E, ca. 1320 m alt., GF 9343/4, mixed forest rich in conifers at the bottom of the valley, on bark of *Salix caprea*.

Note: *Lobaria pulmonaria* is the type host of *Pronectria fissuriprodiens*.

31. VIII. 2007

leg. J. Hafellner (70495), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

42. *Sagediopsis fissurisedens* Hafellner

in Herzogia 9(3–4): 757 (1993).

Host: *Aspilidea myrinii* (thallus)

Europe, Austria: Styria, Eastern Alps, Niedere Tauern, Schladminger Tauern, Seerieszinken SE of the town Schladming, slopes exposed to NW above of the Lärnachscharte, 47°21'10"N, 13°44'55"E, c. 2150 m alt., GF 8648/1, low outcrops and boulder fields of micaschist surrounded by a mosaic of alpine meadows and dwarf shrub communities, on inclined rock faces of boulders.

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

13. VIII. 2001

leg. J. Hafellner (56438), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

43. *Sclerococcum sphaerale* (Ach.) Fr.

in Scleromyceti suecici no. 179 (1821). – Bas.: *Spiloma sphaerale* Ach. in Syn. Method. Lich.: 2 (1814). – Syn.: *Coniothecium sphaerale* (Ach.) Keissl. in Rabenhorst, Krypt.-Fl. Deutschl., 2. Aufl., 8: 616 (1930). – *Acolium sphaerale* (Ach.) Rehm. in Rabenhorst, Krypt.-Fl. Deutschl., 2. Aufl., 1(3): 400 (1890).

Host: *Pertusaria corallina* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Stubalpe, Steinplan c. 8 km SE of the town Knittelfeld, short S below the cross on the summit, 47°09'45"N, 14°54'20"E, c. 1660 m alt., GF 8855/1, low outcrops of micaschist on clearings in the subalpine spruce forest, on inclined rock faces exposed to the SE.

Note: *Pertusaria corallina* is the type host of *Sclerococcum sphaerale*.

30. VII. 2005

leg. J. Hafellner (65120), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

44. *Sphaerellothecium cladoniae* (Alstrup & Zhurb.) Hafellner

in Hafellner et al., Mitt. Naturwiss. Ver. Steiermark 134: 96 (2005). – Bas.: *Sphaerellothecium araneosum* var. *cladoniae* Alstrup & Zhurb. in Symb. Bot. Upsal. 34(1): 486 (2004).

Host: *Cladonia pocillum* (thallus)

Europe, Austria: Styria, Eastern Alps, Nördliche Kalkalpen, Ennstaler Alpen, Gesäuseberge, Gsuchmauer ca. 9 km SW of the village Hieflau, on the ridge short W of the summit, 47°32'55"N, 14°39'55"E, c. 2100 m alt., GF 8453/4, small outcrops of triassic limestone in alpine meadows, on soil and plant remnants.

Note: *Cladonia pocillum* is the type host of *Sphaerellothecium cladoniae*.

11. IX. 2006

leg. J. Hafellner (67852), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

45. *Stigmidium tabacinae* (Arnold) Triebel

in Biblioth. Lichenol. 35: 236 (1989). – Bas.: *Pharcidia tabacinae* Arnold in Flora 64: 176 (1881).
– Syn.: *Sphaerulina tabacinae* (Arnold) Vouaux in Bull. Soc. Mycol. France 29: 34 (1913).

Host: *Toninia toepfferi* (thallus)

Africa, Canary Islands: El Hierro, Punta de Tigirote NE below the village San Andrés, 27°47'10"N, 17°55'40"W, c. 840 m alt., prominent row of volcanic cliffs surrounded by pastures, on horizontal soil.

Note: The type host of *Stigmidium tabacinae* is *Toninia tristis* (Arnold l.c., sub *Psora tabacina*).

10. II. 1995

leg. J. Hafellner (48325), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

46. *Taeniolella atricerebrina* Hafellner

in Biblioth. Lichenol. 96: 115 (2007).

Host: *Tephromela atra* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Stubalpe W of the town Köflach, Hirscheggeralpe c. 6 km WNW above the village Hirscheegg, near the Seinerkreuz, 47°01'45"N, 14°52'55"E, c. 1780 m alt., GF 8955/3, large boulders of micaschist on a knoll somewhat above the treeline, on inclined rock faces.

Note: *Tephromela atra* is the type host of *Taeniolella atricerebrina*.

29. VII. 2003

leg. J. Hafellner (65414) & A. Hafellner, det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

47. *Thelocarpon lichenicola* (Fuckel) Poelt & Hafellner

in Phytion 17: 70 (1975). – Bas.: *Ahlesia lichenicola* Fuckel in Jahrb. Nassauischen Vereins Naturkunde 23–24: 281 (1870). – Syn.: *Thelocarpon ahlesii* Rehm in Hedwigia 30: 11 (1891).

Host: *Baeomyces rufus* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Fischbacher Alpen, southern slopes of Rennfeld, 'Am Eibegg' N of the village St.Jakob-Breitenau, 47°24'35"N, 15°26'05"E, c. 860 m alt., GF 8558/4, montane forest rich in conifers, outcrops of siliceous rocks on the talus of a forest road.

Note: *Baeomyces rufus* is the type host of the species.

17. XI. 2002 leg. J. Hafellner (59388) & M. Zhurbenko, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

48. *Tremella lichenicola* Diederich

in Lejeunia 119: 2 (1986).

Host: *Mycoblastus fucatus* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Stubalpe, Teigitschgraben c. 6 km SW of the town Köflach, 1.3 km WSW of the village Edelschrott, above the orographically left riverbank of the Teigitsch, 47°01'05"N, 15°02'10"E, c. 780 m alt., GF 8956/3, cliffs of a siliceous schist in a relatively open pine-spruce forest, on the edge of a small clearing above the cliffs, on bark of *Betula pendula*.

Note: *Mycoblastus fucatus* is the type host of *Tremella lichenicola*.

11. IX. 2005 leg. J. Hafellner (64739), det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

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

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

Host: *Lobaria pulmonaria* f. *papillaris* (thallus)

Africa, Canary Islands: Tenerife, Anaga peninsula, Monte de las Mercedes, along road and ridge W of Cruz del Carmen, 28°32'N, 16°17'W, c. 910 m alt., laurel forest, on branches of unnamed trees.

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

24. VII. 2007 leg. P. Diederich (16468) & D. Ertz, det. P. Diederich
distributed to: BR, CANB, GZU, LE, M, NY, UPS

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

50. *Zwackhiomyces martinatianus* (Arnold) Triebel & Grube

in Grube & Hafellner, Nova Hewigia 51: 322 (1990). – Bas.: *Arthopyrenia martinatiana* Arnold in Flora 54: 147 (1871). – Syn.: *Didymella martinatiana* (Arnold) Vouaux in Bull. Soc. Mycol. France 29: 100 (1913). – *Pharcidia martinatiana* (Arnold) Sacc. & D.Sacc. in Sylloge Fungorum 17: 648 (1905).

Host: *Porpidia crustulata* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Fischbacher Alpen, southern slopes of Rennfeld, 'Am Eibegg' N of the village St.Jakob-Breitenau, 47°24'35"N, 15°26'20"E, c. 700 m alt., GF 8558/4, outcrops of siliceous rocks and remnants of a mixed deciduous forest (*Fraxinus excelsior*, *Acer pseudoplatanus*, *Alnus incana*) near the creek, on rock.

Note: The type host of *Zwackhiomyces martinatianus* is *Lecidea martinatiana*, which is regarded as a heterotypic synonym of *Porpidia crustulata*.

17. XI. 2002 leg. J. Hafellner (59389) & M. Zhurbenko, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

51. *Arthrorhaphis citrinella* (Ach.) Poelt

in Bestimmungsschlüssel Europ. Flechten: 126 (1969). – Bas.: *Lichen citrinellus* Ach. in Kongl. Vetensk. Akad. Nya Handlingar 16: 135 (1795). – Syn.: *Mycobacidia citrinella* (Ach.) Dalla Torre & Sarnth. in Fl. Tirol 4: 601 (1902). – *Bacidia citrinella* (Ach.) Branth & Rostr. in Bot. Tidsskr. 3: 235 (1869).

Host: *Baeomyces rufus* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Gleinalpe, in the uppermost part of the valley Oswaldgraben c. 7 km NW of the village Kainach bei Voitsberg, at the foot of the Steinkogel, 47°10'20"N, 15°00'55"E, c. 1000 m alt., GF 8856/1, montane spruce forest, on bark of a fallen rotting trunk of *Picea abies*.

Note: In the protologue no host species is mentioned.

3. VI. 2000

leg. J. Hafellner (51186), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

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

in Gen. Fungi: 174 (1909). – Bas.: *Lecidea scabrosa* Ach. in Method. Lich.: 48 (1803). – Syn.: *Buellia scabrosa* (Ach.) A.Massal. in Geneacaena Lichenum: 20 (1854). – *Karschia scabrosa* (Ach.) Rehm in Rabenh. Krypt.-Fl., 2. Aufl., 1(3): 350 (1890).

Host: *Baeomyces placophyllus* (thallus)

Europe, Austria: Styria, Eastern Alps, Seetaler Alpen, massif of Zirbitzkogel SW of the town Judenburg, plateau of the cirque W above the the lake 'Großer Winterleitensee', 47°05'10"N, 14°33'40"E, c. 1960 m alt., GF 8953/1, mosaic of alpine pastures and dwarf shrub communities above the treeline, on soil at the edge of a trail.

Note: The type host of *Epilichen scabrosus* is *Baeomyces rufus*.

1. VII. 2006

leg. J. Hafellner (65962), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

53. *Lecidea verruca* Poelt

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

Host: *Aspicilia simoensis* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Koralpe, Moschkogel SSW of the pass Weinebene, slopes exposed to the SE short below the summit, 46°49'20"N, 14°59'35"E, c. 1900 m alt., GF 9155/4, boulder field surrounded by dwarf shrub communities, on inclined rock faces of boulders.

Note: The host originally remained undetermined, but Poelt (l.c.) already argued that it might be a species of *Aspicilia*.

1. V. 2002 leg. J. Hafellner (59922) & P. v. d. Boom, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

54. *Lecidea verruca* Poelt

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

Host: *Aspicilia* spec. (thallus)

Europe, Italy: Piemonte, Prov. Torino, Western Alps, Alpi Cozie, montains W of Pinerolo, northeastern slopes and ridges of the Punta Cialánica S above the village Perero, 44°53'00"N, 07°07'20"E, c. 2350 m alt., boulders and cliffs of siliceous rocks, on boulders on the ridge.

Note: The host originally remained undetermined, but Poelt (l.c.) already argued that it might be a species of *Aspicilia*.

26. VII. 2001 leg. J. Hafellner (69383), det. J. Hafellner
distributed to: BR, CANB, GZU, LE, NY, UPS

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

55. *Protoparmelia phaeonesos* Poelt

in Poelt & Leuckert, Nova Hedwigia 52: 56 (1991).

Host: *Aspilidea myrinii* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Stubalpe, massif of Ameringkogel E of the village Obdach, Weißenstein, slopes exposed to the S short below the summit, 47°03'55"N, 14°48'30"E, c. 2100 m alt., GF 8954/2, small boulder field surrounded by dwarf shrub communities, on inclined rock faces of boulders.

Note: *Aspilidea myrinii* is the type host of *Protoparmelia phaeonesos*.

3. IX. 2005

leg. J. Hafellner (65184), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

56. *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: Styria, Eastern Alps, Steirisches Randgebirge, Stubalpe, massif of Ameringkogel E of the village Obdach, Weißenstein, on the S ridge above the Melcheben, E above the refuge Weißensteinhütte, 47°03'35"N, 14°48'05"E, c. 1900 m alt., GF 8954/2, old fence somewhat above the treeline, on rotting wood of fence bars.

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

3. IX. 2005

leg. J. Hafellner (65159) & A. Hafellner, det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

57. *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: Styria, Eastern Alps, Niedere Tauern, Triebener Tauern, by the trail from the Beisteiner Alm ('Peilsteiner Alm') to the Griesmoar Kogel, N below the crest, 47°25'10"N, 14°36'50"E, c. 1750 m alt., GF 8553/4, open larch-spruce forest close to the treeline, on *Larix decidua*, on wood of dead branches.

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

4. III. 2000

leg. J. Hafellner (51578), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

58. *Rhizocarpon pusillum* Runemark

in Opera Bot. 2(1): 63 (1956).

Host: *Sporastatia polyspora* (thallus)

Europe, Austria: Styria, Eastern Alps, Niedere Tauern, Wölzer Tauern, Greim c. 11 km NW of the small town Oberwölz, summit area, 47°14'50"N, 14°09'05"E, c. 2470 m alt., GF 8750/4, small outcrops of micaschist surrounded by alpine dwarf shrub communities, on vertical rock faces exposed to the E.

Note: In the protologue the type collection is cited without mentioning a host lichen. *Sporastatia testudinea* and an unnamed *Lecidea* [possibly representing sterile *Sporastatia polyspora*] are mentioned as hosts in the ecology paragraph.

30. VII. 2006

leg. J. Hafellner (67967) & L. Muggia, det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

59. *Rimularia furvella* (Nyl. ex Mudd) Hertel & Rambold

in Mitt. Bot. Staatssammlung München 23: 391 (1987). – Bas.: *Lecidea furvella* Nyl. ex Mudd in Manual Brit. Lich.: 207 (1861).

Host: *Lecanora polytropa* var. *alpigena* (thallus)

Europe, Austria: Styria, Eastern Alps, Steirisches Randgebirge, Koralpe, Weinofen c. 15.5 km WNW of the town Deutschlandsberg, short S above the pass Weinebene, 46°50'10"N, 15°01'00"E, c. 1720 m alt., GF 9156/3, low outcrops and boulders of a soft siliceous schist at the treeline, on slightly inclined rock faces.

Note: Originally the species was not recognized as lichenicolous. Contrary to *R. insularis* (e.g. Lichenicolous Biota no. 60) it is able to invade several silicicolous crustose lichens pertaining to different lineages of discomycetes (e.g. Lecanoraceae, Rhizocarpaceae, Aspiciliaceae).

15. IX. 2007

leg. J. Hafellner (70355), det. J. Hafellner

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

Hafellner J. 2008: Lichenicolous Biota (Nos 21–60). - Fritschiana 61: 1–28.

60. *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: Carinthia, Eastern Alps, Steirisches Randgebirge, Stubalpe W of the town Köflach, Peterer Kogel, on the S side of the summit, 47°01'55"N, 14°49'35"E, c. 1840 m alt., GF 8954/4, small boulders and outcrops of amphibolitic rock in a dwarf shrub heath, on inclined rock faces of small boulders.

Note: The type host of *Rimularia insularis* is *Lecanora rupicola*. Contrary to *R. furvella* (e.g. Lichenicolous Biota no. 59) it is able to invade only species of the *Lecanora rupicola* group.

26. V. 2005

leg. J. Hafellner (64966), det. J. Hafellner

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

Taxon Synopsis:

Taxon	Exs. no.
Ascomycota	
Lecanoromycetes (incl. Ostropales)	
<i>Chaenothecopsis hospitans</i>	23
<i>Epilichen scabrosus</i>	52
<i>Lecidea verruca</i>	53, 54
<i>Microcalicium disseminatum</i>	34
<i>Protoparmelia phaeonesos</i>	55
<i>Ramboldia insidiosa</i>	56, 57
<i>Rhizocarpon pusillum</i>	58
<i>Rimularia furvella</i>	59
<i>Rimularia insularis</i>	60
<i>Thelocarpon lichenicola</i>	47
Arthoniomycetes	
<i>Abrothallus welwitschii</i>	21
<i>Melaspilea canariensis</i>	25
<i>Opegrapha melanospila</i>	26
<i>Plectocarpon lichenum</i>	39
Leotiomycetes	
<i>Phaeopyxis punctum</i>	27
Sordariomycetes (incl. Hypocreales, Sordariales)	
<i>Nectriopsis lecanodes</i>	35
<i>Paranectria oropensis</i>	36, 37
<i>Pronectria fissuriprodiens</i>	41
Eurotiomycetes (incl. Verrucariales)	
<i>Sagediopsis fissurisedens</i>	42
<i>Telogalla olivieri</i>	28
Dothideomycetes	
<i>Arthrorhaphis grisea</i>	22
<i>Arthrorhaphis citrinella</i>	51
<i>Cercidospora epipolytropa</i>	32
<i>Cercidospora verrucosaria</i>	33
<i>Clypeococcum epicrassum</i>	24
<i>Polycoccum sporastatae</i>	40
<i>Sphaerellothecium cladoniae</i>	44
<i>Stigmidium tabacinae</i>	45

<i>Trematosphaeriopsis parmeliانا</i>	29
<i>Zwackhiomyces martinianus</i>	50
Anamorphic Fungi	
Hyphomycetes	
<i>Sclerococcum sphaerale</i>	43
<i>Taeniolella atricerebrina</i>	46
Coelomycetes	
<i>Phoma fistulata</i>	38
Basidiomycota	
Homobasidiomycetes	
Heterobasidiomycetes	
<i>Biatoropsis usnearum</i>	31
<i>Tremella lichenicola</i>	48
<i>Tremella lobariacearum</i>	30, 49

Host Index:

Host taxon	Lichenicolous taxon	Exs. no.
<i>Aspicilia simoensis</i>	<i>Lecidea verruca</i>	53
<i>Aspicilia spec.</i>	<i>Lecidea verruca</i>	54
<i>Aspilidea myrinii</i>	<i>Protoparmelia phaeonesos</i>	55
	<i>Sagediopsis fissurisedens</i>	42
<i>Baeomyces placophyllus</i>	<i>Epilichen scabrosus</i>	52
<i>Baeomyces rufus</i>	<i>Arthrorhaphis citrinella</i>	51
	<i>Arthrorhaphis grisea</i>	22
	<i>Thelocarpon lichenicola</i>	47
<i>Chaenotheca chrysocephala</i>	<i>Microcalicium disseminatum</i>	34
<i>Cladonia coniocraea</i>	<i>Phaeopyxis punctum</i>	27
<i>Cladonia digitata</i>	<i>Phaeopyxis punctum</i>	27
<i>Cladonia pocillum</i>	<i>Sphaerellothecium cladoniae</i>	44
<i>Concamerella pachyderma</i>	<i>Phoma fistulata</i>	38
<i>Lecanora bicincta</i>	<i>Rimularia insularis</i>	60
<i>Lecanora carpinea</i>	<i>Chaenothecopsis hospitans</i>	23
<i>Lecanora polytropa</i> var. <i>polytropa</i>	<i>Cercidospora epipolytropa</i>	32
<i>Lecanora polytropa</i> var. <i>alpigena</i>	<i>Rimularia furvella</i>	59
<i>Lecanora varia</i>	<i>Ramboldia insidiosa</i>	56, 57
<i>Lobaria pulmonaria</i>	<i>Plectocarpon lichenum</i>	39
	<i>Pronectria fissuriprodiens</i>	41
	<i>Tremella lobariacearum</i>	30, 49
<i>Lobaria virens</i>	<i>Nectriopsis lecanodes</i>	35
<i>Megaspora verrucosa</i>	<i>Cercidospora verrucosaria</i>	33
<i>Mycoblastus fucatus</i>	<i>Tremella lichenicola</i>	48
<i>Parmelina pastillifera</i>	<i>Paranectria oropensis</i>	36
<i>Parmotrema crinitum</i>	<i>Opegrapha melanospila</i>	26
<i>Pertusaria corallina</i>	<i>Sclerococcum sphaerale</i>	43

<i>Pertusaria</i> spec.	<i>Melaspilea canariensis</i>	25
<i>Phaeophyscia orbicularis</i>	<i>Paranectria oropensis</i>	37
<i>Porpidia crustulata</i>	<i>Zwackhiomyces martinianus</i>	50
<i>Sporastatia polyspora</i>	<i>Rhizocarpon pusillum</i>	58
<i>Sporastatia testudinea</i>	<i>Polycoccum sporastatiae</i>	40
<i>Squamarina cartilaginea</i>	<i>Clypeococcum epicrassum</i>	24
<i>Sticta fuliginosa</i>	<i>Abrothallus welwitschii</i>	21
<i>Tephromela atra</i>	<i>Taeniolella atricerebrina</i>	46
<i>Toninia toepfferi</i>	<i>Stigmidium tabacinae</i>	45
<i>Usnea articulata</i>	<i>Biatoropsis usnearum</i>	31
<i>Xanthoparmelia</i> spec.	<i>Trematosphaeriopsis parmeliana</i>	29
<i>Xanthoria parietina</i>	<i>Telogalla olivieri</i>	28

Geographic Index:

BIOGEOGRAPHIC UNITS*

Country (or Archipelago)	Lichenicolous taxon	Exs. no.
1. EUROPE		
Austria		
	<i>Arthrorhaphis citrinella</i>	51
	<i>Arthrorhaphis grisea</i>	22
	<i>Cercidospora epipolytropha</i>	32
	<i>Cercidospora verrucosaria</i>	33
	<i>Chaenothecopsis hospitans</i>	23
	<i>Epilichen scabrosus</i>	52
	<i>Lecidea verruca</i>	53
	<i>Microcalicium disseminatum</i>	34
	<i>Paranectria oropensis</i>	36, 37
	<i>Phaeopyxis punctum</i>	27
	<i>Polycoccum sporastatae</i>	40
	<i>Pronectria fissuriprodiens</i>	41
	<i>Protoparmelia phaeonesos</i>	55
	<i>Ramboldia insidiosa</i>	56, 57
	<i>Rhizocarpon pusillum</i>	58
	<i>Rimularia furvella</i>	59
	<i>Rimularia insularis</i>	60
	<i>Sagediopsis fissurisedens</i>	42
	<i>Sclerococcum sphaerale</i>	43
	<i>Sphaerellothecium cladoniae</i>	44
	<i>Taeniolella atricerebrina</i>	46
	<i>Telogalla olivieri</i>	28
	<i>Tremella lichenicola</i>	48
	<i>Zwackhiomyces martinianus</i>	50
Italy		
	<i>Lecidea verruca</i>	54
Spain (see also Africa, Canary Islands)		
	<i>Clypeococcum epicrassum</i>	24
2. AFRICA		
Canary Islands		
	<i>Abrothallus welwitschii</i>	21
	<i>Biatoropsis usnearum</i>	31
	<i>Melaspilea canariensis</i>	25
	<i>Nectriopsis lecanodes</i>	35
	<i>Plectocarpon lichenum</i>	39
	<i>Stigmidium tabacinae</i>	45
	<i>Tremella lobariacearum</i>	30, 49
3. ASIA TEMPERATE		

4. ASIA TROPICAL

5. AUSTRALASIA

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Mexico

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8. SOUTHERN AMERICA

Uruguay

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9. ANTARCTIC

* The nomenclature of the biogeographic units follows BRUMMITT, R.K. 2001: World Geographical Scheme for Recording Plant Distributions. Edition 2. - Pittsburg: Hunt Institute for Botanical Documentation, Carnegie Mellon University.