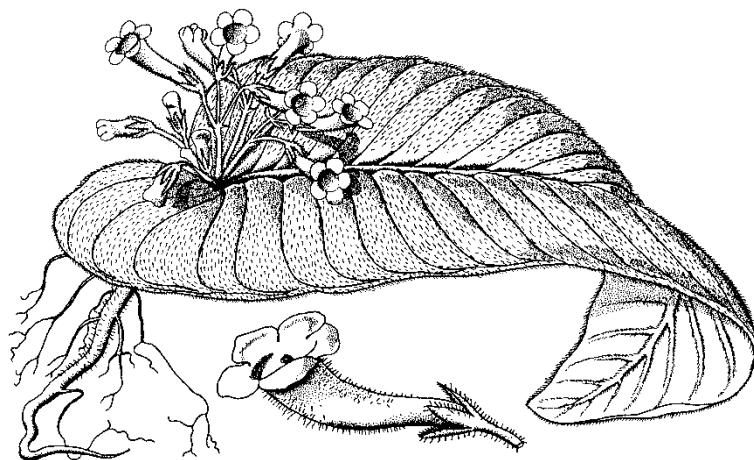


FRITSCHIANA

90



Veröffentlichungen aus dem
Institut für Biologie, Bereich Pflanzenwissenschaften
der Karl-Franzens-Universität Graz

Josef Hafellner

Lichenicolous Biota (Nos 271–300)

Graz, 19. Dezember 2018

Hofrat Prof. Dr. Karl FRITSCH
(* 24.2.1864 in Wien, † 17.1.1934 in Graz)

Karl FRITSCH studierte nach einem Jahr in Innsbruck an der Universität Wien Botanik und wurde dort 1886 zum Dr.phil. promoviert; 1890 habilitierte er sich. Nach Anstellungen in Wien wurde FRITSCH 1900 als Professor für Systematische Botanik an die Universität Graz berufen, wo er aus bescheidenen Anfängen ein Institut aufbaute. 1910 wurde er Direktor des Botanischen Gartens, 1916 wurde das neu errichtete Institutsgebäude bezogen. Aus der sehr breiten wissenschaftlichen Tätigkeit sind vor allem drei Schwerpunkte hervorzuheben: Floristisch-systematische Studien, besonders zur Flora von Österreich, monographische Arbeiten (besonders über *Gesneriaceae*) und Arbeiten zur systematischen Stellung und Gliederung der Monocotylen. An Kryptogamen interessierten ihn besonders Pilze und Myxomyceten.

Nachrufe: KNOLL F. 1934: Karl Fritsch. - Berichte der Deutschen Botanischen Gesellschaft 51: (157)–(184) [mit Schriftenverzeichnis]. — KUBART B. 1935: Karl Fritsch. - Mitteilungen des Naturwissenschaftlichen Vereins für Steiermark 71: 5–15 [mit Porträt]. — TEPPNER H. 1997: Faszination versunkener Pflanzenwelten. Constantin von Ettingshausen - ein Forscherportrait. - Mitteilungen Geologie und Paläontologie am Landesmuseum Joanneum 55: 133–136. — Im übrigen vgl. STAFLEU F.A. & COWAN R.S. 1976, Taxonomic Literature 1: 892 und BARNHART J.H. 1965: Biographical Notes upon Botanists 2: 12.

Graz, November 1997

Herwig TEPPNER

Die Serie FRITSCHIANA wurde als Publikationsorgan für die zahlreichen Aktivitäten im Zusammenhang mit der botanischen Sammlung des Institutes für Biologie (vormals Institut für Pflanzenwissenschaften bzw. Institut für Botanik) der Karl-Franzens-Universität Graz (GZU) gegründet. Vor allem Schedae-Hefte der von den Mitarbeitern herausgegebenen Exsiccatenwerke sollten hier erscheinen, aber auch Exkursionsberichte sowie Listen und Indices besonders wertvoller Bestände in GZU. Das Spektrum wurde mittlerweile auf floristische und kleinere taxonomische Arbeiten (zwischenzeitlich auch auf das Samentauschverzeichnis des Botanischen Gartens) ausgeweitet. Die Schedae-Hefte des von Prof. Dr. Josef POELT begründeten, inzwischen abgeschlossenen Exsiccatenwerkes *Plantae Graecenses* sind die Vorläufer dieser Schriftenreihe.

Gesamtredaktion:

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ISSN 1024-0306
Key title = Abbreviated title: Fritschiana (Graz)

Umschlagsbild: *Carolofritschia diandra* ENGL. (= *Acanthonema strigosum* Hook.f.); nach einer Zeichnung in HUTCHINSON J. & HEPPER F.N. 1963: Flora of West Tropical Africa, Ed. 2, Vol. II: 382.

FRITSCHIANA

**Veröffentlichungen aus dem
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**Josef Hafellner
Lichenicolous Biota (Nos 271–300)
pp. 1–22**

Graz, 19. Dezember 2018

Neukombinationen in diesem Heft / new combinations in this issue:

Polycoccum psoromatis (A.Massal.) Hafellner, **combinatio nova** (page 2).
[MycoBank number: MB 829113]

ISSN 1024-0306

Key title = Abbreviated title: Fritschiana (Graz)

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Date of publication: 19 December 2018

Printed by: Druckservice, Wirtschaftsabteilung der Karl-Franzens-Universität, Attemsgasse 8/I,
8010 Graz, Austria

Lichenicolous Biota (Nos 271–300)

Josef HAFELLNER*

HAFELLNER Josef 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana (Graz) 90: 1–22. - ISSN 1024-0306.

Abstract: The 12th fascicle (30 numbers) of the exsiccata 'Lichenicolous Biota' is published. The issue contains material of 27 non-lichenized fungal taxa (19 teleomorphs of ascomycetes, 5 anamorphic states of ascomycetes, 3 basidiomycetes), including isotype material of *Sclerococcum cladoniae* Diederich (no 300). Furthermore, collections of the type species of the following genera are distributed: *Cecidonia* (*C. umbonella*), *Milospium* (*M. graphideorum*), *Nigropuncta* (*N. rugulosa*), *Plectocarpon* (*P. lichenum*), and *Rhagadostoma* (*R. lichenicola*). The new combination *Polycoccum psoromatis* (A.Massal.) Hafellner is proposed.

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Introduction

The exsiccata 'Lichenicolous Biota' is continued with fascicle 12 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 (e.g. discoloration or galls). Consequently, the exsiccata contains both highly host-specific and plurivorous species, as long as the individuals clearly grow or fructifications develop 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 (Brussels [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 after HOLMGREN et al. 1990, continued and updated as electronic database by THIERS 2015 (onwards) and hosted at New York Botanical Garden <http://sweetgum.nybg.org/science/ih/>). 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 12th fascicle, I gratefully acknowledge the contribution of 3 collections by Paul DIEDERICH, 2 collections each by Franz BERGER (one together with Erich ZIMMERMANN and Silvia FEUSI) and Wolfgang von BRACKEL, furthermore 1 collection each by Walter OBERMAYER, Toby SPRIBILLE (together with Viktoria WAGNER) and Erich ZIMMERMANN.

In fieldwork I received support by Angela HAFELLNER (née Angela OCHSENHOFER) and Lucia MUGGIA.

Franz BERGER, Wolfgang von BRACKEL, Paul DIEDERICH, and Erich ZIMMERMANN 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 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.

Nomenclatural novelty

***Polycoccum psoromatis* (A.Massal.) Hafellner, combinatio nova**

Mycobank number: MB 829113.

Basionym: *Sphaeria psoromatis* A.Massal., Flora (Regensburg) 38: 241 (1855).

Holotype in M (compare Etayo & Triebel, The Lichenologist 42(3): 232, 2010).

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271. *Abrothallus parmeliacarum* (Sommerf.) Nyl.

in Bulletin de la Société Botanique de la Normandie, 2. sér., 3: 12 (1869). – Bas.: *Lecidea parmeliarum* („*parmeliorum*“) Sommerf. in Supplementum Florae Lapponiae: 176 (1826). – Syn.: *Buellia parmeliarum* (Sommerf.) Tuck. in Synopsis of the North American Lichens, Part 2: 106 (1888). – *Buellia parmeliarum* (Sommerf.) Fink in Lichen Flora of the United States: 372 (1935).

Host: *Parmelia omphalodes* (thallus)

Africa, Madeira: c. 3.5 km W of Poiso by the road to Pico do Arieiro, a short distance N below Achada Grande, on N-exposed slope, 32°43'25"N / 16°55'00"W, c. 1580 m alt., low outcrops and boulders of volcanic rocks between low shrubs, on boulders.

Note 1: Two species of *Parmelia* s. str. are mentioned in the protologue as host species, *Parmelia omphalodes* and *P. saxatilis*. By lectotypification the host of the type is *Parmelia saxatilis* (compare Suija et al., Taxon 67(6): 1174, 2018).

Note 2: The presence of the *Vouauxiomycetes* anamorphic state has been confirmed for the specimen in GZU.

11. II. 1990 leg. J. Hafellner (84226) & A. Hafellner, det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

272. *Arthonia clemens* (Tul) Th.Fr.

in Kongliga Svenska Vetenskaps-Akademiens Handlingar 7(2): 46 (1867). – Bas.: *Phacopsis clemens* Tul. in Annales des Sciences Naturelles, Botanique, sér. 3, 17: 124 (1852). – Syn.: *Conida clemens* (Tul.) A.Massal. in Miscellanea Lichenologica: 16 (1856). – *Coniangium clemens* (Tul.) Stein in Cohn (ed.), Kryptogamen-Flora von Schlesien, 2. Bd., 2. Hälfte: 289 (1879). – *Tomaselliella clemens* (Tul.) Cif. in Tomaselli & Ciferri, Archivio Botanico Italiano 28: 3 (1952).

Host: *Rhizoplaca chrysoleuca* (apothecia)

Northern America, U.S.A.: Montana, Sanders Co., north side of the Flathead River at Perma bridge, 47°22'09"N / 114°34'47.5"W, c. 634 m alt., in south-facing rocky shrub-steppe with *Purshia tridentata*, on dry rock faces.

Note 1: Two collections are mentioned in the protologue, one on *Rhizoplaca chrysoleuca* (sub *Squamaria rubina*) from the Dauphiné in the French Alps, the other on *Myriolecis albescens* (sub *Placodium albescens*) from Neustria (western part of the former kingdom of the Franks, i.e. northwestern part of today France).

Note 2: We recommend to designate the collection from the Alps as lectotype (formally yet to be done) in order to make *Rhizoplaca chrysoleuca* to the type host of *Arthonia clemens* and herewith fix the name as it is commonly understood.

04. II. 2012 leg. T. Spribille (37199) & V. Wagner, det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

273. *Arthonia parietinaria* Hafellner & A.Fleischhacker

in Fleischhacker et al., Fungal Biology 120(11): 1343 (2016).

Host: *Xanthoria parietina* (thallus, apothecia)

Europe, Germany: Bavaria (Bayern), Mittelfranken, district Neustadt an der Aisch-Bad Windsheim, nature conservation area Sieben Buckel S of the market town Nordheim, 49°34'31"N / 10°21'42"E, c. 320 m alt., semi-natural steppic grassland with groups of bushes over gypsum soil, on branches of *Sambucus nigra*.

Note 1: *Xanthoria parietina* is the type host of *Arthonia parietinaria*.

Note 2: *Pyrenochaeta xanthoriae* Diederich is additionally present on the duplicate in GZU and may also be detected on duplicates distributed to other herbaria.

9. X. 2018 leg. W. v. Brackel (8029), det. W. v. Brackel

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

274. *Arthonia tavaresii* Grube & Hafellner

in Grube et al., The Lichenologist 27(1): 40 (1995).

Host: *Pyrenula hibernica* (thallus)

Africa, Canary Islands: Tenerife, Macizo de Anaga, ca. 5 km E of El Bailadero by the road to Chamorga, 28°33'00"N / 16°10'40"W, c. 820 m alt., regrowth of forest with codominant *Laurus azorica* and *Erica arborea*, on bark of evergreen broad-leaved trees (*Laurus azorica* agg., *Ilex canariensis*).

Note 1: The type host of *Arthonia tavaresii* is given in the protologue as an unnamed *Pyrenula* spec. We have restudied the holotype and an isotype (Santesson, Fungi Lichenicoli exs. no. 255; Obermayer, Dupla Graecensis Lichenum no. 36) in GZU and we are now able to determine the host lichen of the type collection to species: *Pyrenula hibernica*.

Note 2: For a paratype from the Azores the host was given as *Parmentaria chilensis*, a name occasionally but erroneously applied to this phaeo-dictyospored *Pyrenula* occurring in the Macaronesian region (compare Etayo & Aptroot, The Lichenologist 35(3): 235, 2003).

13. II. 1989 leg. J. Hafellner (84216) & A. Hafellner, det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

275. *Heterocephalacria bachmannii* (Diederich & M.S.Christ.) Millanes & Wedin

in Liu et al., Studies in Mycology 81: 120 (2015). – Bas.: *Syzygospora bachmannii* Diederich & M.S.Christ. in Diederich, Bibliotheca Lichenologica 61: 30 (1996).

Host: *Cladonia gracilis* agg. (podetia)

Europe, Germany: Bayern (Bavaria), Oberpfalz, administrative district Schwandorf, natural monument Wildenstein ESE of Tännesberg, 49°31'15"N / 12°24'30"E, c. 730 m alt., GF 6440/3, on soil layer over siliceous rocks.

Note: The type host of *Heterocephalacria bachmannii* is *Cladonia subrangiformis*.

Note 2: The basidiomata of the macroscopically similar *Tremella cladoniae* Diederich & M.S.Christ. is usually confined the squamules of the primary thallus of *Cladonia* species. For distinguishing microscopical characters between the two species compare Diederich (Biblioth. Lichenol. 60: 32 Fig. 10 and 67 Fig. 30, 1996).

5. V. 2017 leg. W. v. Brackel (7985), det. W. v. Brackel
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

276. *Nectriopsis hirta* Etayo

in Opuscula Philolichenum 8: 136 (2010).

Host: *Buellia griseovirens* (thallus, apothecia)

Europe, Austria: Oberösterreich (Upper Austria), Mühlviertel, Rannatal SSE of Neustift im Mühlkreis, between the second and the third ford, 48°29'05"N / 13°46'35"E, c. 320 m alt., GF 7548/2, deciduous forest rich in *Fraxinus excelsior* along the creek, on bark of *Fraxinus excelsior*.

Note 1: The type hosts of *Nectriopsis hirta* are *Lepra albescens* and *Pertusaria pertusa*.

Note 2: Infected host apothecia have been seen on the specimen in GZU.

27. XII. 2017 leg. F. Berger (32712), det. F. Berger
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

277. *Opegrapha sphaerophoricola* Isbrand & Alstrup

in The Bryologist 95(2): 233 (1992).

Host: *Sphaerophorus globosus* (thallus)

Africa, Canary Islands: La Gomera, on the mountain Garajonay, in the depression N below the summit, 28°06'15"N / 17°14'10"W, c. 1360 m alt., old *Erica* woodland ("brezal"), on bark of *Erica arborea*.

Note 1: *Sphaerophorus globosus* is the type host of *Opegrapha sphaerophoricola*.

Note 2: The aggregated ascomata of *Opegrapha sphaerophoricola* recall some non-cecidiogenous species of *Plectocarpon* but as a stromatic basal layer is not distinct we keep the species in *Opegrapha*.

18. II. 1991 leg. J. Hafellner (83932) & A. Hafellner, det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

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

in Hawksworth & Galloway, The Lichenologist 16: 86 (1984). – Bas.: *Dothidea lichenum* Sommerf. in Supplementum Florae Lapponicae: 224 (1826); Fries, Elenchus Fungorum 2: 123 (1828). – Syn.: *Lichenomyces lichenum* (Sommerf.) R.Sant. in Svensk Botanisk Tidskrift 54(4): 501 (1960). – *Celidium lichenum* (Sommerf.) J.Schröt. in Cohn, Kryptogamenflora Schlesien 3(2): 135 (1893).

Host: *Lobaria pulmonaria* (thallus)

Europe, Austria: Tirol (Tyrol), Eastern Alps, Ammergeauer Alpen (Ammergebirge), c. 8.9 km E of the market town Reutte, E slopes of the mountains Soldatenköpfe N of the barrier lake Plansee, along Altenbergweg, in the lowermost part, 47°29'30"N / 10°50'05"E, c. 1030 m alt., GF 8531/1, mixed forest with codominant *Fagus sylvatica*, *Picea abies* and *Abies alba*, on bark of *Acer pseudoplatanus*.

Note 1: *Lobaria pulmonaria* is the type host of *Plectocarpon lichenum*.

5. IX. 2004 leg. J. Hafellner (81202), det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

279. *Plectocarpon macaronesiae* Diederich, Etayo & Sérusiaux

in Diederich & Etayo, Nordic Journal of Botany 14(5): 592 (1994).

Host: *Lobaria macaronesica* (thallus)

Africa, Canary Islands: Tenerife, Macizo de Anaga, by the road to Cabezo del Tejo c. 2 km NW of the turnoff from the road to the village Chamorga, 28°33' 40"N / 16°09'40"W, c. 870 m alt., laurel forest, on bark of *Laurus azorica* agg.

Note 1: The type host of *Plectocarpon macaronesiae* is *Lobaria macaronesica* (sub *Lobaria* cf. *meridionalis*).

Note 2: For taxonomy of the host species see Cornejo & Scheidegger (The Bryologist 113(3): 590–604, 2010).

24. II. 1989 leg. J. Hafellner (84213) & A. Hafellner, det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

280. *Pronectria tincta* (Fuckel) Lowen

in Mycotaxon 39: 462 (1990). – Bas.: *Cryptodiscus tinctus* Fuckel, Fungi Rhenani Exsiccati Suppl. Fasc. IV, no. 1836 (1867 [fide Pfister 1985]). – Syn.: *Nectriella tincta* (Fuckel) R.Sant. in Eriksson, Svensk Botanisk Tidskrift 58: 235 (1964).

Host: *Physcia stellaris* (thallus, apothecia)

Europe, Austria: Tirol (Tyrol), Eastern Alps, Ötztaler Alpen, lowermost Rofental c. 0.5 km SW of the village Vent, at riverbank of the creek Rofenache, 46°51'23"N / 10°54'39"E, c. 1905 m alt., GF 9131/1, shrubs along riverbank, on dead branches of *Salix* spec.

Note 1: The type host of *Pronectria tincta* is *Anaptychia ciliaris* (isotype in M).

Note 2: *Pronectria tincta* has been found spreading to adjacent thalli of *Melanohalea exasperata*, *Physcia adscendens*, *Polycauliona candelaria* and an unnamed species of *Usnea*. Separate specimens with these hosts have been deposited in GZU.

14. VIII. 2018 leg. F. Berger (32355), E. Zimmermann & S. Feusi

det. F. Berger

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

281. *Milospium graphideorum* (Nyl.) D.Hawksw.

in Transactions of the British Mycological Society 65(2): 228 (1975). – Bas.: *Spilomium graphideorum* Nyl. in Actes de la Société Linnéenne de Bordeaux 21: 398 (1856). – Syn.: *Coniothecium graphideorum* (Nyl.) Keissl. in Rabenhorst's Kryptogamen-Flora von Deutschland, Österreich und der Schweiz, 2. Aufl., 8: 618 (1930).

Host: sterile crustose lichen with *Trentepohlia* photobiont (thallus)

Europe, France: dépt. Pyrénées-Atlantiques, 15 km SSE of Saint-Jean-de-Luz, forêt communale de Sare S of the village Sare, near the road D306 towards the Col de Lizarrieta, 43°15'40"N / 01°36'32"W, c. 310–360 m alt., deciduous forest, on bark of the trunk of a very old *Quercus*.

Note 1: The type host of *Milospium graphideorum* is *Lecanographa lyncea*.

Note 2: The type species of the genus *Milospium*, only known in its hyphomycetous state, has been assigned to Pezizomycotina *incertae sedis* (compare Crous et al., IMA Fungus 6(1): 180–182, 2015).

26. VIII. 2015 leg. P. Diederich (18164), det. P. Diederich
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

282. *Polycoccum psoromatis* (A.Massal.) Hafellner

in Fritschiana (Graz) 90: 2 (2018). – Bas.: *Sphaeria psoromatis* A.Massal. in Flora (Regensburg) 38: 241 (1855). – Syn.: *Clypeococcum psoromatis* (A.Massal.) Etayo in Etayo & Triebel, The Lichenologist 42 (3): 232 (2010). – *Pharcidia psoromatis* (A.Massal.) Vouaux, Bulletin de la Société Mycologique de France 30: 242 (1914). – *Epicymatia psoromatis* (A.Massal.) Sacc. in Sylloge Fungorum 1: 573 (1882).

Host: *Squamarina cartilaginea* (thallus)

Africa, Canary Islands: La Gomera, by the road to the village Taguluche 2.1 km SSW of the turnoff from the road to Alojera, 28°08'20"N / 17°18'20"W, c. 650 m alt., boulder field on slope exposed to the W, on thin soil layers over basaltic boulders.

Note 1: *Squamarina cartilaginea* is the type host of *Polycoccum psoromatis*.

Note 2: In a phylogenetic reconstruction of various phaeo-didymospored lichenicolous fungi it was shown that the species belongs to the *Polycoccum* clade (compare Ertz et al., Fungal Diversity 74: 62, 2015).

19. II. 1991 leg. J. Hafellner (34884) & A. Hafellner, det. J. Hafellner
distributed to: BCN, BR, CANB, E, GZU, LE, M, NY, PRM, UPS

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

283. ***Polycoccum pulvinatum*** (Eitner) R.Sant.

in Lichens and Lichenicolous Fungi of Sweden and Norway: 175 (1993). – Bas.: *Tichothecium pulvinatum* Eitner, Jahres-Bericht der Schlesischen Gesellschaft für Vaterländische Cultur 78: 26 (1901). – Syn.: *Polycoccum galligenum* Vězda, Česká Mykologie 23(2): 107 (1969).

Host: *Physcia caesia* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Steirisches Randgebirge, Grazer Bergland, surroundings of the village Gutenberg W of the provincial town Weiz, SW side of the farm buildings belonging to the castle Gutenberg, 47°12' 40"N / 15°34'05"E, c. 565 m alt., GF 8759/3, roof of a farm building exposed to the W, on clay roofing tiles.

Note 1: The type host of *Polycoccum pulvinatum* is *Physcia stellaris*.

Note 2: The type host of the heterotypic synonym *Polycoccum galligenum* is *Physcia dubia*.

10. VI. 2017 leg. J. Hafellner (41953), det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

284. ***Rhagadostoma lichenicola*** (De Not.) Keissl.

in Rabenh. Krypt.-Fl., 2. ed., Pilze 8, Flechtenparasiten: 320 (1930). – Bas.: *Bertia lichenicola* De Not. in Erbario Crittogramico Italiano no. 1190 (1864).

Host: *Solorina crocea* (thallus)

Europe, France: Rhône-Alpes, dépt. Haute-Savoie, Western Alps, Mont Blanc group, slopes SE above Chamonix, SW of Refuge du Plan de l'Aiguille, 45° 54'18"N / 6°52'56"E, c. 2200 m alt., scree and scattered boulders of siliceous schist in dwarf shrub heath somewhat above the tree line, exposed to the NW, on soil by the trail.

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

Note 2: The genus *Rhagadostoma* is based on *R. corrugatum* Körb., a later heterotypic synonym of *Bertia lichenicola* De Not.

18. VIII. 2011 leg. J. Hafellner (82695), det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

285. *Stigmidium congestum* (Körb.) Triebel

in Triebel et al., Mycotaxon 42: 290 (1991). – Bas.: *Pharcidia congesta* Körb. in Parerga Lichenologica: 470 (1865).

Host: *Lecanora chlarotera* (apothecia)

Europe, Austria: Steiermark (Styria), Eastern Alps, Steirisches Randgebirge, Grazer Bergland, N of the village St. Radegund, on the saddle between the mountains Schöckl and Burgstaller Höhe, 0.5 km NE of the wayside cross Angerkreuz, 47°13'10"N / 15°29'55"E, c. 1030 m alt., GF 8759/3, row of deciduous trees at the edge of a meadow, on bark of *Fraxinus excelsior*.

Note 1: *Lecanora chlarotera* (f. *rugosella*) is the type host of the species.

Note 2: Roux & Triebel (Bull. Soc. Linn. Provence 45: 483, 1994) reinvestigated the holotype (L-Typenherbar) and designated lectotypes for the heterotypic synonyms *Epicymatia vulgaris* Fuckel and *Epicymatia commutata* Niessl, both also with *Lecanora chlarotera* as type hosts.

5. XI. 2011

leg. J. Hafellner (79132), det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

286. *Stigmidium exasperatum* Etayo

in Guineana 16: 412 (2010).

Host: *Melanohalea exasperata* (apothecia)

Africa, Canary Islands: Tenerife, by the road (TF-21) from La Orotava to El Portillo, c. 1 km above of Montaña Bermeja, 28°19'15"N / 16°33'20"W, c. 1750 m alt., open *Pinus canariensis*-forest with dominant *Chamaecytisus proliferus* in the understorey, on bark of *Chamaecytisus proliferus*.

Note 1: *Melanohalea exasperata* is the type host of *Stigmidium exasperatum*.

17. II. 1989 leg. J. Hafellner (84219) & A. Hafellner, det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

287. ***Stigmidium squamariae*** (de Lesd.) Cl.Roux & Triebel

in Bulletin de la Société Linnéenne de Provence 45: 511 (1994). – Bas.: *Pharcidia squamariae* de Lesd. in Bulletin de la Société Botanique de France 56: 477 (1909).

Host: *Protoparmeliopsis muralis* var. *dubyi* (apothecia)

Europe, Switzerland: canton Ticino (Tessin), Western Alps, Le Pontine Alps, Adula group, c. 6 km NE of the village Olivone, W slopes of the mountain Torno above the Lago di Luzzone, a short distance above Alpe Garzott, 46°34'20"N / 08°59'25"E, c. 1640 m alt., large boulders of mafic metamorphite in a pasture, on inclined rock faces.

Note 1: The type host of *Stigmidium squamariae* is *Protoparmeliopsis muralis*.

Note 2: Roux & Triebel (l. c.) reinvestigated an isotype located in B.

22. VIII. 2012 leg. J. Hafellner (81766) & L. Muggia, det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

288. ***Stigmidium tabacinae*** (Arnold) Triebel

in Bibliotheca Lichenologica 35: 236 (1989). – Bas.: *Pharcidia tabacinae* Arnold in Flora (Regensburg) 64: 176 (1881). – Syn.: *Sphaerulina tabacinae* (Arnold) Vouaux in Bulletin de la Société Mycologique de France 29: 34 (1913).

Host: *Thalloidima opuntioides* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Northern Limestone Alps, Mürzsteger Alpen, Tonion Massiv ca. 9 km SE of the town Mariazell, Hochschnäbelbörl, 47°42'45"N / 15°23'35"E, c. 1580 m alt., GF 8258/3, low cliffs of limestone and open *Carex firma* meadows on the crest, on soil in fissures.

Note 1: The type host of *Stigmidium tabacinae* is *Psora tabacina* auct., a species now usually treated under the name *Toninia tristis*.

Note 2: Triebel (l. c.) designated a lectotype originating from northern Italy and preserved in M.

8. VII. 2007 leg. J. Hafellner (43423) & A. Hafellner, det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

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

in Diederich, Bibliotheca Lichenologica 61: 103 (1996).

Host: *Lobaria macaronesica* (thallus)

Africa, Canary Islands: Tenerife, Macizo de Anaga, surroundings of Mirador Pico de Ingles NE above the village Las Mercedes, 28°31'55"N / 16°15'50"W, c. 960 m alt., laurel forest, on bark of *Laurus azorica*.

Note 1: The type host of *Tremella lobariacearum* is *Lobaria pulmonaria*.

Note 2: *Nectriopsis lecanodes* (Ces.) Diederich & Schroers has been observed as admixture on the specimen in GZU and may also be present on other duplicates.

8. II. 1989 leg. J. Hafellner (84234), det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

290. *Tremella phaeophysciae* Diederich & M.S.Christ.

in Diederich, Bibliotheca Lichenologica 61: 142 (1996).

Host: *Phaeophyscia orbicularis* (thallus)

Europe, Austria: Tirol (Tyrol), Eastern Alps, Ötztaler Alpen, Nauderer Berge, E above the village Nauders, 46°53'20"N / 10°30'35"E, c. 1500 m alt., GF 9129/1, solitary trees at the edge of meadows on slopes exposed to the W, on bark of *Prunus padus*.

Note 1: *Phaeophyscia orbicularis* is the type host of *Tremella phaeophysciae*.

14. IV. 1984 leg. J. Hafellner (84076), det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

291. *Cecidonia umbonella* (Nyl.) Triebel & Rambold

in Nova Hedwigia 47: 284 (1988). – Bas.: *Lecidea umbonella* Nyl. in Flora (Regensburg) 49: 372 (1866).

Host: *Lecidea lapicida* agg. (thallus)

Europe, Norway: Oppland, Lom kommune, Jotunheimen, E above of Spiterstulen, close to northern shore of the lake situated E below the mountain Skauthö, 61°37' 40"N / 08°27'45"E, c. 1610 m alt., boulders of siliceous rocks, on rock.

Note 1: As lichenicolous growth originally was not recognized respectively not indicated, no host is mentioned in the protologue. The host in the type collection was tentatively determined as *Lecidea lapicida* (Triebel & Rambold, l. c.).

Note 2: *Muellerella pygmaea* (Körb.) D.Hawksw. is present as additional lichenicolous species on all duplicates.

26. VIII. 1984 leg. J. Hafellner (83929) & A. Ochsenhofer, det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

292. *Didymocyrtis cladoniicola* (Diederich, Kocourk. & Etayo) Ertz & Diederich

in Ertz et al., Fungal Diversity 74: 67 (2015). – Bas.: *Phoma cladoniicola* Diederich, Kocourk. & Etayo, The Lichenologist 39(2): 157 (2007).

Host: *Flavoparmelia caperata* (thallus)

Europe, Spain, Baleares: Mallorca, NW of Bunyola, 1.5 km SW of Orient, 39°43' 30"N / 02°44'50"E, c. 430 m alt.; in forest near a river, on the trunk of *Quercus ilex* subsp. *rotundifolia*.

Note 1: The type host of *Phoma cladoniicola* is *Cladonia pyxidata*.

Note 2: *Phoma caperatae* Vouaux (in Bouly de Lesdain, Bull. Soc. Bot. France 59: 16, 1912) might constitute an earlier synonym but the type of that species is apparently lost (compare Hawksworth, Bull. Brit. Mus., Nat. Hist., Bot. 9(1): 80, 1981).

30. III. 2010 leg. P. Diederich (16914), det. P. Diederich

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

293. *Epithamnolia rangiferinae* E.Zimm., Diederich & Suija

in Suija et al., Mycologia 109(6): 892 ("2017", 2018).

Host: *Cladonia rangiferina* (thallus)

Europe, Italy: Lombardy region (Lombardia), prov. Sondrio, Eastern Alps, Southern Rhaetian Alps, Ortler group, Valle del Braulio N of Bormio, in the uppermost part of the valley WNW below Passo dello Stelvio (Stilfser Joch), 46°32' 07"N / 10°26'26"E, c. 2550 m alt., alpine meadows, on the ground.

Note 1: *Cladonia rangiferina* is the type host of *Epithamnolia rangiferinae*.

Note 2: In fresh and humid material the conidiomata may be considerably paler (compare Suja et al., l. c. Fig. 6).

Note 3: A taxonomic position within the Phacidiales was recently proposed for *Epithamnolia* (compare Suija et al., Mycologia 109(6): 882–899, 2018). At the same time all lichenicolous *Hainesia* species so far described have been transferred to *Epithamnolia*. All species of the genus are only known in the coelomycetous state.

16. IV. 2018

leg. E. Zimmermann (4496), det. E. Zimmermann

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

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

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

Host: *Lobaria pulmonaria* (thallus)

Northern America, U.S.A.: Alaska, Matanuska-Susitna Borough, Byers Lake c. 45 km N of Talkeetna, above the northern lakeshore, 62°44'50"N / 150°06'35"W, c. 260 m alt., boreal forest over diluvial moraine, on bark of *Betula neoalaskana*.

Note 1: The type host of *Nectriopsis lecanodes* is *Peltigera canina*.

Note 2: The original spelling of the name is "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 nomenclatural authority of the taxon is "Ces." (ICBN 46.2).

25. VIII. 2010

leg. J. Hafellner (83664), det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

295. ***Nigropuncta rugulosa*** D.Hawksw.

in Bulletin of the British Museum (Natural History), Botany series 9(1): 46 (1981).

Host: *Bellemera cinereorufescens* (thallus)

Europe, Austria: Steiermark (=Styria), Eastern Alps, Steirisches Randgebirge, Fischbacher Alpen, on the mountain Stuhleck N above the village Rettenegg, W above of the Seeriegel, 47°33'45"N / 15°47'25"E, c. 1550 m alt., GF 8460/2, on overhanging rock faces of small siliceous cliffs (mica schist) on slopes exposed to the E.

Note 1: *Bellemera cinereorufescens* is the type host of *Nigropuncta rugulosa* (isotype in GZU). However, the host had remained undetermined when the lichenicolous fungus was described, because the infection strongly suppresses the formation of host apothecia.

Note 2: Hawksworth & Poelt (Plant Syst. Evol. 154: 206–207, 1986) argued, that *Nigropuncta rugulosa* might be a lichen with anamorphic fructifications. However, meanwhile we have found the lichenicolous fungus several times with apothecia of *Bellemera* developed on adjacent areoles (specimens in GZU).

14. V. 2000 leg. J. Hafellner (50827), det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

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

in Hawksworth & Galloway, Lichenologist 16: 86 (1984). – Bas.: *Dothidea lichenum* Sommerf. in Supplementum Florae Lapponicae: 224 (1826); Fries, Elenchus Fungorum 2: 123 (1828). – Syn.: *Lichenomyces lichenum* (Sommerf.) R.Sant. in Svensk Botanisk Tidskrift 54(4): 501 (1960). – *Celidium lichenum* (Sommerf.) J.Schröt. in Cohn, Kryptogamenflora Schlesien 3(2): 135 (1893).

Host: *Lobaria pulmonaria* (thallus)

Africa, Canary Islands: Tenerife, Cordillera Dorsal, by the road (TF-24) from La Laguna towards Observatorio Astrofisico, Bosque de la Esperanza, c. 4 km NE below Las Lagunetas, 28°25'40"N / 16°23'15"W, c. 1250 m alt., pine forest, on bark of *Pinus canariensis*.

Note 1: *Lobaria pulmonaria* is the type host of *Plectocarpon lichenum*.

Note 2: All duplicates with both apothecia of the host (position mainly marginal, discs brown and smooth) and ascomata of the lichenicolous fungus (position mainly laminal, surface of ascomata black and rough).

9. II. 1989 leg. J. Hafellner (84205) & A. Hafellner, det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

297. *Plectocarpon macaronesiae* Diederich, Etayo & Sérusiaux

in Diederich & Etayo, Nordic Journal of Botany 14(5): 592 (1994).

Host: *Lobaria macaronesica* (thallus)

Africa, Canary Islands: Tenerife, Macizo de Anaga, surroundings of Mirador Pico de Ingles NE above the village Las Mercedes, 28°31'55"N / 16°15'50"W, c. 960 m alt., laurel forest, on bark of *Laurus azorica*.

Note 1: The type host of *Plectocarpon macaronesiae* is *Lobaria macaronesica* (sub *Lobaria* cf. *meridionalis*).

Note 2: For the taxonomy of the host species see Cornejo & Scheidegger (Bryologist 113(3): 590–604, 2010).

8. II. 1989

leg. J. Hafellner (84235), det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

298. *Rhagadostoma lichenicola* (De Not.) Keissl.

in Rabenh. Krypt.-Fl., 2. ed., Pilze 8, Flechtenparasiten: 320 (1930). – Bas.: *Bertia lichenicola* De Not. in Erbario Crittogramico Italiano no. 1190 (1864).

Host: *Solorina crocea* (thallus)

Europe, Austria: Kärnten (Carinthia), Eastern Alps, Steirisches Randgebirge, Koralpe, 18.7 km W of Deutschlandsberg, 200 m SE below the summit of Großer Speikkogel, 46°47'10"N / 14°58'25"E, c. 2115 m alt., GF 9255/2, alpine vegetation on slope exposed to the N, on soil.

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

Note 2: The genus *Rhagadostoma* is based on *R. corrugatum* Körb., a later heterotypic synonym of *Bertia lichenicola* De Not.

26. X. 2013

leg. W. Obermayer (13068), det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

299. *Sclerococcum ahtii* (Zhurb. & Pino-Bodas) Ertz & Diederich

in Diederich et al., The Bryologist 121(3): 395 (2018). – Bas.: *Dactylospora ahtii* Zhurb. & Pino-Bodas in Pino-Bodas et al., Persoonia 39: 102 (2017).

Host: *Cladonia rangiferina* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Steirisches Randgebirge, Steirisches Randgebirge, Stubalpe W of the town Köflach, Hirschgägeralpe ca. 5 km W above of the village Hirschegg, S above Saureishütte, above of the trail on slope exposed to the E, 47°01'00"N N / 14°53'05"E, c. 1780 m alt., GF 8955/3, dwarf shrub heath and pastures in tree line ecotone, on the ground between *Vaccinium myrtillus*.

Note 1: The type host of *Sclerococcum ahtii* is *Cladonia gracilis* ssp. *vulnerata*.

Note 2: Diederich et al. (Bryologist 121(3): 394–401, 2018) demonstrated that the well known anamorphic lichenicolous fungus *Sclerococcum sphaerae* (type of the sanctioned genus *Sclerococcum*) is congeneric with *Dactylospora* and consequently transferred all *Dactylospora* species to *Sclerococcum*, the genus with priority.

10. XI. 2018 leg. J. Hafellner (83849), det. J. Hafellner

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

Hafellner J. 2018: Lichenicolous Biota (Nos 271–300). - Fritschiana 90: 1–22.

300. *Sclerococcum cladoniae* Diederich Isotype

in Bulletin de la Société des Naturalistes Luxembourgeois 111: 57 (2010).

Host: *Cladonia subulata* (thallus)

Europe, Luxembourg: distr. Lorrain, W of Kayl, Monument des mineurs, 49°28'44"N / 06°01'09"E, c. 370 m alt., IFBL: M8.53, UTM: KV.88; abandoned quarry, over mosses.

Note 1: In the protologue two host species are mentioned, *Cladonia pocillum* and *C. subulata*.

Note 2: All specimens checked. The sporodochia on the upper side of thallus squamules are extremely small and may easily be overlooked. Use dissecting microscope with high magnification!

1. IX. 2009 leg. P. Diederich (16826), det. P. Diederich

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

Taxon Synopsis:

Taxon	Exs. no.
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Arthoniomycetes	
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<i>Arthonia parietinaria</i>	273
<i>Arthonia tavaresii</i>	274
<i>Opegrapha sphaerophoricola</i>	277
<i>Plectocarpon lichenum</i>	278, 296
<i>Plectocarpon macaronesiae</i>	279, 297
Lecanoromycetes (incl. Ostropomycetidae)	
<i>Cecidonia umbonella</i>	291
Leotiomycetes	
<i>Epithamnolia rangiferinae</i>	293
Sordariomycetes (incl. Hypocreales)	
<i>Nectriopsis hirta</i>	276
<i>Nectriopsis lecanodes</i>	294
<i>Pronectria tincta</i>	280
<i>Rhagadostoma lichenicola</i>	284, 298
Eurotiomycetes (incl. Verrucariales, Sclerococcales and Mycocaliciales)	
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<i>Sclerococcum cladoniae</i>	300
Dothideomycetes	
<i>Abrothallus parmeliarum</i>	271
<i>Didymocyrtis cladoniicola</i>	292
<i>Polycoccum psoromatis</i>	282
<i>Polycoccum pulvinatum</i>	283
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<i>Stigmidium exasperatum</i>	286
<i>Stigmidium squamariae</i>	287
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Anamorphic Fungi (unclassified or not yet assigned to a fungal class)	
Hypomycetes	
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Pucciniomycetes	
Tremellomycetes	
<i>Heterocephalacria bachmannii</i>	275
<i>Tremella lobariacearum</i>	289
<i>Tremella phaeophysciae</i>	290

Host Index:

Host taxon	Lichenicolous taxon	Exs. no.
<i>Bellemerea cinereorufescens</i>	<i>Nigropuncta rugulosa</i>	275
<i>Buellia griseovirens</i>	<i>Nectriopsis hirta</i>	276
<i>Cladonia gracilis</i>	<i>Heterocephalacria bachmannii</i>	275
<i>Cladonia rangiferina</i>	<i>Epithamnolia rangiferinae</i>	293
	<i>Sclerococcum ahtii</i>	299
<i>Cladonia subulata</i>	<i>Sclerococcum cladoniae</i>	300
<i>Flavoparmelia caperata</i>	<i>Didymocyrtis cladoniicola</i>	292
<i>Lecanora chlorotera</i>	<i>Stigmidium congestum</i>	285
<i>Lecidea lapicida</i>	<i>Cecidonia umbonella</i>	291
<i>Lobaria macaronesica</i>	<i>Plectocarpon macaronesiae</i>	279, 297
	<i>Tremella lobariacearum</i>	289
<i>Lobaria pulmonaria</i>	<i>Nectriopsis lecanodes</i>	294
	<i>Plectocarpon lichenum</i>	278, 296
<i>Melanohalea exasperata</i>	<i>Stigmidium exasperatum</i>	286
<i>Parmelia omphalodes</i>	<i>Abrothallus parmeliarum</i>	271
<i>Phaeophyscia orbicularis</i>	<i>Tremella phaeophysciae</i>	290
<i>Physcia caesia</i>	<i>Polycoccum pulvinatum</i>	283
<i>Physcia stellaris</i>	<i>Pronectria tincta</i>	280
<i>Protoparmeliopsis muralis v. dubyi</i>	<i>Stigmidium squamariae</i>	287
<i>Pyrenula hibernica</i>	<i>Arthonia tavarensii</i>	274
<i>Rhizoplaca chrysoleuca</i>	<i>Arthonia clemens</i>	272
<i>Solorina crocea</i>	<i>Rhagadostoma lichenicola</i>	284, 298
<i>Sphaerophorus globosus</i>	<i>Opegrapha sphaerophoricola</i>	277
<i>Squamaria cartilaginea</i>	<i>Polycoccum psoromatis</i>	282
<i>Thalloidima opuntioides</i>	<i>Stigmidium tabacinae</i>	288
<i>Xanthoria parietina</i>	<i>Arthonia parietinaria</i>	273
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Geographic Index:

BIOGEOGRAPHIC UNITS (see BRUMMITT 2001)

Country (or Archipelago)	Lichenicolous taxon	Exs. no.
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	<i>Plectocarpon lichenum</i>	278
	<i>Pronectria tincta</i>	280
	<i>Polycoccum pulvinatum</i>	283
	<i>Rhagadostoma lichenicola</i>	298
	<i>Sclerococcum ahtii</i>	299
	<i>Stigmidium congestum</i>	285
	<i>Stigmidium tabacinae</i>	288
	<i>Tremella phaeophysciae</i>	290
France	<i>Milospium graphideorum</i>	281
	<i>Rhagadostoma lichenicola</i>	284
Germany	<i>Arthonia parietinaria</i>	273
	<i>Heterocephalacia bachmannii</i>	275
Italy	<i>Epithamnolia rangiferinae</i>	293
Luxembourg	<i>Sclerococcum cladoniae</i>	300
Norway	<i>Cecidonia umbonella</i>	291
Spain	<i>Didymocyrtis cladoniicola</i>	292
Switzerland	<i>Stigmidium squamariae</i>	287
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	<i>Opegrapha sphaerophoricola</i>	277
	<i>Plectocarpon lichenum</i>	296
	<i>Plectocarpon macaronesiae</i>	279, 297
	<i>Polycoccum psoromatis</i>	282
	<i>Stigmidium exasperatum</i>	286
	<i>Tremella lobariacearum</i>	289
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	<i>Abrothallus parmeliarum</i>	271
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4. ASIA TROPICAL		
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ISSN 1024-0306