

Lichenicolous Biota (Nos 301–320)

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Abstract: The 13th fascicle (20 numbers) of the exsiccata 'Lichenicolous Biota' is published. The issue contains material of 18 non-lichenized fungal taxa (16 teleomorphs of ascomycetes, 2 basidiomycetes). Collections of the type species of the following genera are distributed: *Lichenochora* (*L. obscuroides*, syn. *L. thallina*) and *Nesolechia* (*N. oxyspora*). The new combination *Sphaerellothecium arnoldii* (A.Massal.) Hafellner is proposed.

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Introduction

The exsiccata 'Lichenicolous Biota' is continued with fascicle 13 containing 20 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 (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 2019+ and hosted at New York Botanical Garden under <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 13th fascicle, I gratefully acknowledge the contribution of 2 collections by Rolf SANTESSON (†).

In fieldwork I received support by Angela HAFELLNER and Jolanta MIADLIKOWSKA.

Rolf SANTESSON (†) 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:

***Sphaerellothecium arnoldii* (A.Massal.) Hafellner combinatio nova**

Mycobank number: MB 833734

Bas.: *Tichothecium arnoldii* A.Massal., *Miscellanea Lichenologica*: 27 [meaning 57] (sub *Arnoldi*) (1856); non (Hepp) Körb. (1865). – *Endococcus arnoldii* (A.Massal.) Trevis., *Conspectus Verrucarinarum*: 17 (1860).

Syn.: *Phaeospora* (*Sphaeria*?) *arnoldii* Hepp, *Flechten Europas* no. 701 (1860, sub *Arnoldi*) (superfluous name). – *Tichothecium arnoldii* (Hepp) Körb., *Parerga Lichenologica*: 469 (1865) non A.Massal. (1856). – *Discothecium arnoldii* (Hepp) Vouaux, *Bulletin de la Société Mycologique de France* 29: 58 (1913). – *Polycoccum arnoldii* (Hepp) D.Hawksw., *Botaniska Notiser* 132: 289 (1979).

Note 1: *Phaeospora arnoldii* Hepp is usually regarded as newly described species. It is doubtful that this was the intention of the author. When Hepp introduced the name *Phaeospora arnoldii* he listed some synonyms. Among others he cited a legitimate name with priority, *Tichothecium arnoldii* A.Massal. (1856), which he ought to have adopted. Therefore, it could well be that Hepp intended to make a new combination rather than to describe a new species, because in the 19th century new combinations were often made without citing the author of the basionym in brackets.

Note 2: MASSALONGO (1856) indicated the type with the phrase “In thallo *Urceolariae scruposae bryophylae (iridatae Massal.?)* in Franconia superiori. Arnold”, whereas HEPP (1860) uses the phrase “Parasitisch auf *Urceol. scruposa* var. *iridata* (Mass.) auf steinigem Boden zwischen Winterhof und Ruppertsbuch, bei Eichstätt; F. Arnold”. So, evidently both collections come from the same area but do not come necessarily from the same locality because ARNOLD (1858: 702) listed 4 localities in Franconia, where he had collected this lichenicolous fungus.

Note 3: The offprint of the publication by MASSALONGO (1856) available to us looks like a booklet, but it has a confusing pagination imprinted. It starts from [35] to “42” and continues with “13” (meaning 43) onwards. Therefore page “27” several pages later – the page on which *Tichothecium arnoldii* A.Massal. is described (compare e.g. KESSLER 1930: 402) – should be read 57. And further back in the text, the page numbers “35” (meaning 65) to “42” (meaning 72) turn up a second time continuing this time with the pages “43” (meaning 83) to “46” (meaning 86). Such a copy is also available from Bayerische Staatsbibliothek Digital (url: https://reader.digitale-sammlungen.de/de/fs1/object/display/bsb10301610_00005.html). In contrast, a copy with re-arranged chapters and corrected pagination (p. [35]–75) but with part of the text missing is incorporated in the volume edited by LAZZARIN (1991) containing several of the rarer papers of Massalongo’s lichenological oeuvre. The explanation why the pagination of all versions known to us does not start with page number 1 is imprinted at the end: “Estratto dal Volume pubblicato in occasione delle Nozze Bizio-Pazienti” (whole volume not seen by us) in which Massalongo’s work was evidently not the first in a series of papers dealing with various subjects.

Note 4: The shape of the asci of the species indicates a closer relationship to *Sphaerellothecium araneosum* (Rehm ex Arnold) Zopf rather than to *Polycoccum tryptethelioides* (Th.Fr.) R.Sant. Additionally, the small ascomata are connected to a net of brown superficial hyphae, little conspicuous under the dissecting microscope but very distinct in preparations for the light microscope. These pigmented vegetative hyphae had already been noticed by Hepp (l.c., “Mycelium braun, wie bei den Sphaerien!”), the reason why he was uncertain about the generic placement of this species.

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301. *Cercidospora epipolytropa* (Mudd) Arnold

in Flora (Regensburg) 57: 154 (1874). – Bas.: *Thelidium epipolytropum* Mudd, Manual of British Lichens: 298 (1861). – Syn.: *Didymella epipolytropa* (Mudd) Berl. & Voglino, Sylloge Fungorum Additamentum I–IV: 89 (1886). – *Didymosphaeria epipolytropa* (Mudd) G.Winter in Rabenhorst Kryptogamen-Flora, 2. Aufl., 1(2): 432 (1885).

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

Europe, Austria: Styria, Eastern Alps, Seetaler Alpen, Zirbitzkogel massif W above the village Obdach, Sabathyalm, on the E edge NE below the summit of Oberer Schlaferkogel, NE-side of a small mountain top, 47°04'40"N / 14°34'36"E, 2060 m alt., GF 8953/1, mosaic of patches of Loiseleurietum and bare mineral soil, on pebbles of mica schist.

Note 1: *Lecanora polytropa* is the type host of *Cercidospora epipolytropa*.

Note 2: Accompanying thalli of *Rhizocarpon geographicum* may be infected with *Endococcus macrosporus* (Hepp ex Arnold) Nyl. (e.g., seen on specimen sent to UPS).

11. X. 2018

leg. J. Hafellner (83763), det. J. Hafellner

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

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302. *Cercidospora stereocaulorum* (Arnold) Hafellner

in Herzogia 7(3-4): 362 (1987). – Bas.: *Leptosphaeria stereocaulorum* Arnold, Flora (Regensburg) 57: 153, 175 (1874). – Syn.: *Metasphaeria stereocaulorum* (Arnold) Sacc., Sylloge Fungorum 2: 183 (1883). – *Sphaerulina stereocaulorum* (Arnold) Vouaux, Bulletin de la Société Mycologique de France 29: 35 (1913).

Host: *Stereocaulon* spec. (thallus)

Europe, Austria: Vorarlberg, Eastern Alps, Verwall-Gruppe, Hochjoch massif E above of the market town Schruns, by the trail from the lookout Sauerbleis to Schwarzsee, 47°04'15"N / 09°59'00"E, c. 2100 m alt., GF 8925/2, outcrops of mica schist in alpine vegetation on steep slope exposed to the N, along fissures of the outcrops.

Note 1: The type host of *Cercidospora stereocaulorum* is *Stereocaulon alpinum*.

Note 2: The infection causes a strong deformation of phyllocladia (formation of galls), in which groups of ascomata of the lichenicolous fungus develop. These are not the cephalodia which are also present and are of greyish colour.

6. VIII. 2008

leg. J. Hafellner (79744), det. J. Hafellner

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

Hafellner J. 2019: Lichenicolous Biota (Nos 301–320). - Fritschiana 94: 25–42.

303. *Endococcus umbilicariae* (Linds.) Hafellner

in Fritschiana 94: 9 (2019). – Bas.: *Microthelia umbilicariae* Linds., Transactions of the Royal Society of Edinburgh 25: 538 (1869). – Syn.: *Polycoccum umbilicariae* (Linds.) D.Hawksw., Bulletin of the British Museum (Natural History), Botany series 14(2): 171 (1985).

Host: *Lasallia pustulata* (thallus)

Africa, Canary Islands: Gran Canaria, a short distance N below the summit of Pico de las Nieves, 27°58'00"N / 15°34'20"W, c. 1870 m alt., conspicuous wall-like basaltic outcrop in pine forest, on steep rock faces exposed to the N.

Note 1: *Lasallia pustulata* is the type host of *Endococcus umbilicariae*.

Note 2: *Lasallia* has been reduced to subgeneric rank within *Umbilicaria* (compare Davydov et al., Taxon 66(6): 1282–1303, 2017), but this is not generally accepted.

26. II. 1994

leg. J. Hafellner (48136), det. J. Hafellner

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

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304. *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 macroceras* (podetia)

Europe, Austria: Steiermark (Styria), Eastern Alps, Northern Limestone Alps, Müzzsteger Alpen, eastern foothills of Veitsch Alpe, N of the town Kindberg, by the trail a short distance SE below the refuge Grundbauernhütte, 47°38'45"N / 15°28'55"E, c. 1420 m alt., GF 8358/4, talus of ravine, on raw humus between *Vaccinium myrtillus*.

Note 1: The type host of *Heterocephalacria bachmannii* is *Cladonia subrangiformis*.

Note 2: The basidiomata of the macroscopically similar *Tremella cladoniae* Diederich & M.S.Christ. are usually confined to 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).

28. VII. 2012

leg. J. Hafellner (83934), det. J. Hafellner

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

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305. *Lichenochora obscuroides* (Linds.) Triebel & Rambold

in Rambold & Triebel, Bibliotheca Lichenologica 48: 168 (1992). – Bas.: *Lecidea obscuroides* Linds., Transactions of the Royal Society of Edinburgh 22: 112, 247 (1859). – Syn.: *Sphaerella thallina* Cooke, Grevillea 8(no. 45): 10 (1879). – *Lichenochora thallina* (Cooke) Hafellner, Nova Hedwigia 48: 363 (1989).

Host: *Phaeophyscia orbicularis* (thallus)

Europe, Austria: Kärnten (Carinthia), Eastern Alps, foothills of Saualpe W of the town Wolfsberg, c. 1 km W of the village St. Michael by the road to Lading, 46°50' 05"N / 14°47'10"E, c. 550 m alt., GF 9154/4, fruit trees in a pasture, on twigs of *Juglans regia* fallen to the ground after strong wind.

Note 1: *Phaeophyscia orbicularis* is the type host of *Lichenochora obscuroides*.

Note 2: *Lichenochora obscuroides* is a heterotypic name of the type species of *Lichenochora*, *L. thallina*, and has priority over the latter.

25. XII. 2010

leg. J. Hafellner (77052), det. J. Hafellner

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

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306. *Phacopsis cephalodioides* (Nyl.) Triebel & Rambold

in Nova Hedwigia 47(3-4): 296 (1988). – Bas.: *Agyrium cephalodioides* Nyl., Flora (Regensburg) 49: 373 (1866).

Host: *Hypogymnia tubulosa* (thallus)

Africa, Madeira: Pico do Arieiro, S below the summit on slope exposed to the S, 32°43'55"N / 16°55'45"W, c. 1700 m alt., tract of land reforested with pines, on bark of *Pinus spec.*

Note 1: The type host of *Phacopsis cephalodioides* is *Hypogymnia physodes*.

Note 2: Triebel & Rambold (l.c.) have reinvestigated authentic material originating from Denmark and have designated a lectotype.

Note 3: A strain of *Nesolechia oxyspora* is additionally present on the specimen kept in GZU and may also be seen on duplicates sent to other herbaria.

18. II. 1990

leg. J. Hafellner (70464) & A. Hafellner, det. J. Hafellner

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

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307. *Sphaerellothecium arnoldii* (A.Massal.) Hafellner

in Fritschiana (Graz) 94: 27 (2019). – Bas.: *Tichothecium arnoldii* A.Massal., Miscellanea Lichenologica: 27 (1856, sub *Arnoldi*). – Syn.: *Endococcus arnoldii* (A.Massal.) Trevis., Conspectus Verrucarinarum: 17 (1860).

Host: *Diploschistes muscorum* (thallus, apothecia)

Europe, Austria: Kärnten (Carinthia), Eastern Alps, Gailtaler Alpen, on the mountain Reißkofel c. 11 km E of the market town Kötschach-Mauthen, by the trail from the bivouac along the western crest to the summit, 46°41'10"N / 13°08'10"E, c. 2060 m alt., GF 9344/2, low outcrops of Triassic limestone and fragments of *Cariacetum firmæ*, on soil.

Note 1: *Diploschistes muscorum* is the type host of *Sphaerellothecium arnoldii*.

Note 2: *Sphaerellothecium arnoldii* must not be confused with another lichenicolous fungus occurring on *Diploschistes* species, *Lichenothelia rugosa* (G.Thor) Ertz & Diederich, for which ascospores with an irregular sculpture are diagnostic.

21. VII. 2009

leg. J. Hafellner (76065), det. J. Hafellner

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

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308. *Sphaerellothecium parietinarium* (Linds.) Hafellner & V.John

in Herzogia 19(1): 168 (2006). – Bas.: *Microthelia parietinaria* Linds., Transactions of the Royal Society of Edinburgh 25: 541 (1869). – Syn.: *Didymosphaeria parietinaria* (Linds.) Sacc. & D.Sacc., Sylloge Fungorum 17: 681 (1905). – *Endococcus parietinarius* (Linds.) Clauzade & Cl.Roux, Champignons lichenicoles non lichenisés (Montpellier): 28 (1976).

Host: *Xanthoria aureola* (thallus)

Africa, Canary Islands: Lanzarote, volcano Guanapay E above the village Teguisse, NE margin of the crater, 29°03'30"N / 13°32'55"W, c. 450 m alt., on low outcrops of volcanic conglomerate on the outside of the crater, on rock faces exposed to the N.

Note 1: The type host of *Sphaerellothecium parietinarium* is *Xanthoria parietina*.

Note 2: The host has been named following the species concept outlined by Lindblom & Ekman (Mycological Research 109(2): 187–199, 2005).

9. IV. 1999

leg. J. Hafellner (47437) & A. Hafellner, det. J. Hafellner

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

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309. *Stigmidium congestum* (Körb.) Triebel

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

Host: *Lecanora chlarotera* (apothecia)

Europe, Austria: Steiermark (Styria), Eastern Alps, Niedere Tauern, Schladminger Tauern, Obertal S of the town Schladming, between Hopfriesen and the inn Tauerngold, 47°19'05"N / 13°41'20"E, c. 1060 m alt., GF 8648/3, riparian forest along the creek, on bark of *Alnus incana*.

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.

Note 3: *Vouxiella lichenicola* is present as admixture on the specimen in GZU and may also be detected on other duplicates.

25. VIII. 2001

leg. J. Hafellner (56865), det. J. Hafellner

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

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310. *Stigmidium epistigmellum* (Nyl. ex Vouaux)

Kocourk. & K.Knudsen

in Bryologist 112(3): 579 (2009). – Bas.: *Pharcidia epistigmella* Nyl. ex Vouaux, Bulletin de la Société Mycologique de France 28: 235 (1912).

Host: *Caloplaca bolacina* (thallus, apothecia)

Northern America, U.S.A.: California, Los Angeles County, San Clemente Island, between Eel Point and Seal Cove on the W shore of the island, 32°55'00"N / 118°32'15"W, c. 50 m alt., talus a few hundred meters back from the shore, on boulders of volcanic rock.

Note 1: The size of the ascospores in the population distributed here is close to the lower end of variability allowed by Kocourková & Knudsen (Bryologist 112: 579, 2009) and is herewith close to that given in the protologue.

Note 2: The type host of *Stigmidium epistigmellum* was originally identified as *Caloplaca festiva* but was corrected to *C. luteominia* by Kocourková & Knudsen (l. c.) after revision of the holotype.

16. IV. 1966

leg. R. Santesson (18037), det. R. Santesson

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

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

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

Host: *Platismatia glauca* (thallus, on galls induced by *Nesolechia oxyspora*)

Africa, Madeira: Pico dos Estanquinhos at NE edge of the plateau Paul da Serra, uppermost N slopes somewhat below the summit, 32°46'20"N / 17°04'35"W, c. 1600 m alt., *Vaccinium padifolium* shrub among scattered volcanic outcrops and boulders, on twigs of *Vaccinium padifolium*.

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: *A. parmeliarum* must not be confused with a second species (*A. cetrariae* I.Kotte) occasionally found on *Platismatia glauca*. The ascomata of that species develop dispersed on the thallus and are regularly accompanied by the coelomycetous anamorphic state.

17. II. 1990 leg. J. Hafellner (84255) & A. Hafellner, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

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312. *Endococcus umbilicariae* (Linds.) Hafellner

in Fritschiana 94: 9 (2019). – Bas.: *Microthelia umbilicariae* Linds., Transactions of the Royal Society of Edinburgh 25: 538 (1869). – Syn.: *Polycoccum umbilicariae* (Linds.) D.Hawksw., Bulletin of the British Museum (Natural History), Botany series 14(2): 171 (1985).

Host: *Lasallia pustulata* (thallus)

Africa, Madeira: Pico Escalvado c. 1 km S of Pico do Arieiro, 32°43'00"N / 16°55'45"W, c. 1670 m alt., volcanic cliffs, on steep rock faces exposed to the N difficult to access.

Note 1: *Lasallia pustulata* is the type host of *Endococcus umbilicariae*.

Note 2: *Lasallia* has been reduced to subgeneric rank within *Umbilicaria* (compare Davydov et al., Taxon 66(6): 1282–1303, 2017), but this is not generally accepted.

20. II. 1990 leg. J. Hafellner (27351) & A. Hafellner, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

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313. *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, *Jahrbücher des Nassauischen Vereins für Naturkunde* 23–24: 178 (1870).

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* agg.

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 citation of the author of the taxon is “Ces.” (ICN 46.2).

Note 3: *Tremella lobariacearum* and *Plectocarpon macaronesiae* have been observed as admixture on the specimen in GZU and may also be present on other duplicates.

8. II. 1989

leg. J. Hafellner (84233), det. J. Hafellner

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

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314. *Nesolechia oxyspora* (Tul.) A.Massal.

in *Miscellanea Lichenologica*: 43 (1856). – Bas.: *Abrothallus oxysporus* Tul., *Annales des Sciences Naturelles, Botanique*, sér. 3, 17: 116 (1852). – Syn.: *Lecidea oxyspora* (Tul.) Nyl., *Mémoires de la Société Impériale des Sciences Naturelles de Cherbourg* 3: 185 (1855). – *Epithallia oxyspora* (Tul.) Nyl., *Öfversigt af Kongl. Vetenskaps-Akademiens Forhandlingar* 12: 9 (1855). – *Biatora oxyspora* (Tul.) Tuck., *A Synopsis of the North American Lichens* 2: 29 (1888). – *Phacopsis oxyspora* (Tul.) Triebel & Rambold, *Nova Hedwigia* 47: 300 (1988). – *Punctelia oxyspora* (Tul.) Divakar, Crespo & Lumbsch in Divakar et al., *Fungal Diversity* 84: 114 (2017).

Host: *Platismatia glauca* (thallus)

Africa, Madeira: NW of Montaña de las Negrinas, near the turnoff to Alajeró, 28°06'00"N / 17°13'50"W, c. 1380 m alt., pine-reforestation, on bark of *Pinus* spec.

Note 1: Two hosts are listed in the protologue: *Platismatia glauca* (sub *Cetraria* g.) and *Parmelia saxatilis*. The host of the lectotype is *Parmelia saxatilis* (Triebel et al., *Bryologist* 98: 78, 1995).

Note 2: Following the taxon concept outlined by Triebel et al. (*Bryologist* 98: 73, 1995), three infra-specific taxa can be distinguished in *Nesolechia oxyspora*. Of these, *N. oxyspora* var. *oxyspora* is able to infect species of *Everniastrum*, *Melanohalea*, *Parmelia*, *Platismatia*, and *Punctelia*.

14. II. 1991

leg. J. Hafellner (34583) & A. Hafellner, det. J. Hafellner

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

Hafellner J. 2019: Lichenicolous Biota (Nos 301–320). - Fritschiana 94: 25–42.

315. *Polycoccum microcarpum* Diederich & Etayo

in Etayo & Diederich, The Lichenologist 30(2): 111 (1998).

Host: *Cladonia digitata* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Nördliche Kalkalpen, Ennstaler Alpen, Gesäuse, in the secondary valley Hartelsgraben ca. 3 km W of the village Hiefrau, just N of the 2nd bridge, 47°35'15"N / 14°42'25"E, c. 660 m alt., GF 8454/1, mixed forest with codominant *Picea abies*, *Abies alba* and *Fagus sylvatica*, on decaying stumps.

Note 1: The type host of *Polycoccum microcarpum* is an undetermined *Cladonia* species. On the listed paratypes the following host species are mentioned: *Cladonia bellidiflora*, *Cladonia digitata*, *Cladonia cervicornis*.

Note 2: A coelomycetous anamorphic state supposed to belong to *Polycoccum microcarpum* has been additionally noticed on the specimen held at GZU and it may also be present on the other duplicates.

26. VIII. 2004 leg. J. Hafellner (64100) & J. Miadlikowska, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2019: Lichenicolous Biota (Nos 301–320). - Fritschiana 94: 25–42.

316. *Sphaerellothecium contextum* Triebel

in Bibliotheca Lichenologica 35: 76 (1989).

Host: *Protoparmelia badia* (thallus, apothecia)

Europe, Austria: Steiermark (Styria), Eastern Alps, Gurktaler Alpen, on the mountain Kirbisch ca. 11 km SW of the town Murau, SW above of the village St. Lorenzen, a short distance below the summit on slope exposed to NE, 47°03'05"N / 14°03'05"E, c. 2100 m alt., GF 8950/1, outcrops and boulder fields of Palaeozoic siliceous schist in dwarf shrub belt, on inclined rock faces.

Note 1: The type host of *Sphaerellothecium contextum* is *Sporastatia testudinea*.

Note 2: The species was first noticed and thoroughly investigated but misidentified by Zopf (Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum 70: 178–185, 1897, sub *Sphaerellothecium araneosum*).

24. VIII. 2003 leg. J. Hafellner (62324), det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2019: Lichenicolous Biota (Nos 301–320). - Fritschiana 94: 25–42.

317. *Stigmidium epistigmellum* (Nyl. ex Vouaux) Kocourk. & K.Knudsen

in Bryologist 112(3): 579 (2009). – Bas.: *Pharcidia epistigmella* Nyl. ex Vouaux, Bulletin de la Société Mycologique de France 28: 235 (1912).

Host: *Caloplaca bolacina* (thallus, apothecia)

Northern America, U.S.A.: California, Los Angeles County, Santa Catalina Island, E side of Isthmus Cove, 33°26'35"N / 118°29'25"W, c. 20 m alt., rock outcrops not far from the seashore, on volcanic rocks.

Note 1: The size of the ascospores in the population distributed here is close to the lower end of variability allowed by Kocourková & Knudsen (Bryologist 112: 579, 2009) and is herewith close to the size given in the protologue.

Note 2: The type host of *Stigmidium epistigmellum* was originally identified as *Caloplaca festiva* but was corrected to *C. luteominia* by Kocourková & Knudsen (l. c.) after revision of the holotype.

Note 3: Interestingly, *Caloplaca luteominia*, also present on the duplicates sent to UPS and NY, is not infested.

4. IV. 1966 leg. R. Santesson (17221b), det. R. Santesson
distributed to: BCN, BR, CANB, GZU, NY, PRM, UPS

Hafellner J. 2019: Lichenicolous Biota (Nos 301–320). - Fritschiana 94: 25–42.

318. *Stigmidium heterodermiae* Etayo

in Bibliotheca Lichenologica 84: 124 (2002).

Host: *Heterodermia leucomelos* s.l. (thallus)

Africa, Canary Islands: El Hierro, Mirador de Bascos W above the village Sabinosa, 27°45'15"N / 18°07'05"W, c. 660 m alt., at the upper edge of the cliffs exposed to the NW, on low outcrops of volcanic rocks.

Note 1: The type host of *Stigmidium heterodermiae* is *Heterodermia boryi*, in the past often treated as infraspecific taxon of *Heterodermia leucomelos*. For the *Heterodermia leucomelos* group the genus *Leucodermia* has been proposed (see Mongkolsuk et al., Phytotaxa 235(1): 1–66, 2015).

Note 2: The original spelling of the epithet of the host lichen will be protected by conservation (see May, Taxon 66: 487, 2017) and the change to the female gender as occasionally proposed ("*leucomelaena*") is therefore obsolete.

5. II. 1995 leg. J. Hafellner (83976) & A. Hafellner, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2019: Lichenicolous Biota (Nos 301–320). - Fritschiana 94: 25–42.

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

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

Host: *Toninia toepfferi* (thallus)

Africa, Canary Islands: La Gomera, SE above of the village Chipude, saddle NE of the mountain La Fortaleza, 28°06'08"N / 17°16'25"W, c. 1130 m alt., open vegetation on the ridge, on volcanic soil.

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.

20. II. 1991 leg. J. Hafellner (83951) & A. Hafellner, det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Hafellner J. 2019: Lichenicolous Biota (Nos 301–320). - Fritschiana 94: 25–42.

320. ***Tremella cladoniae*** Diederich & M.S.Christ.

in Diederich, Bibliotheca Lichenologica 61: 65 (1996).

Host: *Cladonia coniocraea* (thallus)

Europe, Austria: Steiermark (Styria), Eastern Alps, Northern Limestone Alps, Ennstaler Alpen, Tamischbachturm massif SW of the village Großreifling, SE-slopes of Bärenstein, by the trail from Tamischbachgraben to Bärensattel, 47°37'35"N / 14°41'35"E, c. 1000 m alt., GF 8354/3, mixed forest, on mossy bark at the base of trunks of *Fagus sylvatica*.

Note 1: The type host of *Tremella cladoniae* is an unnamed *Cladonia*.

Note 2: The basidiomata of the macroscopically similar *Heterocephalacria bachmannii* (Diederich & M.S.Christ.) Millanes & Wedin are usually found on the upper parts of podetia of various *Cladonia* species. For distinguishing microscopical characters between the two species compare Diederich (Biblioth. Lichenol. 60: 32 Fig. 10 and 67 Fig. 30, 1996).

24. VII. 2005 leg. J. Hafellner (67396), det. J. Hafellner
distributed to: BR, CANB, GZU, NY, UPS

Taxon Synopsis:

Taxon	Exs. no.
Ascomycota	
Arthoniomycetes	
Lecanoromycetes (incl. Ostropomycetidae)	
<i>Nesolechia oxyspora</i>	314
<i>Phacopsis cephalodioides</i>	306
Leotiomycetes	
Sordariomycetes (incl. Hypocreales)	
<i>Lichenochora obscuroides</i>	305
<i>Nectriopsis lecanodes</i>	313
Eurotiomycetes (incl. Verrucariales and Mycocaliciales)	
<i>Endococcus umbilicariae</i>	303, 312
<i>Sphaerellothecium arnoldii</i>	307
<i>Sphaerellothecium contextum</i>	316
<i>Sphaerellothecium parietinarium</i>	308
<i>Stigmidium congestum</i>	309
<i>Stigmidium epistigmellum</i>	310, 317
<i>Stigmidium heterodermiae</i>	318
<i>Stigmidium tabacinae</i>	319
Dothideomycetes	
<i>Abrothallus parmeliarum</i>	311
<i>Cercidospora epipolytropa</i>	301
<i>Cercidospora stereocaulorum</i>	302
<i>Polycoccum microcarpum</i>	315
Anamorphic Fungi (unclassified)	
Hyphomycetes	
Coelomycetes	
Basidiomycota	
Agaricomycetes	
Pucciniomycetes	
Tremellomycetes	
<i>Heterocephalacria bachmannii</i>	304
<i>Tremella cladoniae</i>	320

Host Index:

Host taxon	Lichenicolous taxon	Exs. no.
<i>Caloplaca bolacina</i>	<i>Stigmidium epistigmellum</i>	310, 317
<i>Cladonia coniocraea</i>	<i>Tremella cladoniae</i>	320
<i>Cladonia digitata</i>	<i>Polycoccum microcarpum</i>	315
<i>Cladonia macroceras</i>	<i>Heterocephalacria bachmannii</i>	304
<i>Diploschistes muscorum</i>	<i>Sphaerellothecium arnoldii</i>	307
<i>Heterodermia leucomelos</i>	<i>Stigmidium heterodermiae</i>	318
<i>Hypomyrmia tubulosa</i>	<i>Phacopsis cephalodioides</i>	306
<i>Lasallia pustulata</i>	<i>Endococcus umbilicariae</i>	303, 312
<i>Lecanora chlarotera</i>	<i>Stigmidium congestum</i>	309
<i>Lecanora polytropa</i>	<i>Cercidospora epipolytropa</i>	301
<i>Lobaria macaronesica</i>	<i>Nectriopsis lecanodes</i>	313
<i>Phaeophyscia orbicularis</i>	<i>Lichenochora obscuroides</i>	305
<i>Platismatia glauca</i>	<i>Abrothallus parmeliarum</i>	311
<i>Platismatia glauca</i>	<i>Nesolechia oxyspora</i>	314
<i>Protoparmelia badia</i>	<i>Sphaerellothecium contextum</i>	316
<i>Stereocaulon spec.</i>	<i>Cercidospora stereocaulorum</i>	302
<i>Toninia toepfferi</i>	<i>Stigmidium tabacinae</i>	319
<i>Xanthoria aureola</i>	<i>Sphaerellothecium parietinarium</i>	308

Geographic Index:

BIOGEOGRAPHIC UNITS (see BRUMMITT 2001)

Country (or Archipelago)	Lichenicolous taxon	Exs. no.
1. EUROPE		
Austria.....	<i>Cercidospora epipolytropa</i>	301
.....	<i>Cercidospora stereocaulorum</i>	302
.....	<i>Heterocephalacria bachmannii</i>	304
.....	<i>Lichenochora obscuroides</i>	305
.....	<i>Polycoccum microcarpum</i>	315
.....	<i>Sphaerellothecium arnoldii</i>	307
.....	<i>Sphaerellothecium contextum</i>	316
.....	<i>Stigmidium congestum</i>	309
.....	<i>Tremella cladoniae</i>	320
2. AFRICA		
Canary Islands (belonging to Spain)		
.....	<i>Endococcus umbilicariae</i>	303
.....	<i>Nectriopsis lecanodes</i>	313
.....	<i>Sphaerellothecium parietinarium</i>	308
.....	<i>Stigmidium heterodermiae</i>	318
.....	<i>Stigmidium tabacinae</i>	319
Madeira (belonging to Portugal)		
.....	<i>Abrothallus parmeliarum</i>	311
.....	<i>Endococcus umbilicariae</i>	312
.....	<i>Nesolechia oxyspora</i>	314
.....	<i>Phacopsis cephalodioides</i>	306
3. ASIA TEMPERATE		
4. ASIA TROPICAL		
5. AUSTRALASIA		
6. PACIFIC		
7. NORTHERN AMERICA		
U.S.A.	<i>Stigmidium epistigmellum</i>	310, 317
8. SOUTHERN AMERICA (including CENTRAL AMERICA)		
9. ANTARCTIC		

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