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Typifications of some species of *Ramularia* and similar genera (*Mycosphaerellaceae*) revisited

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Abstract: Braun, U. 2017: Typifications of some species of *Ramularia* and similar genera (*Mycosphaerellaceae*) revisited. Schlechtendalia **32**: 25–28.

The typifications of some species of ramularioid ascomycetes originally assigned to *Cercospora*, *Cercosporella*, *Cylindrium*, *Cylindrosporium*, *Ophiocladium*, *Ovularia*, and *Ramularia*, proved to be incorrect and in conflict with the Code (ICN). Some of the typifications concerned are corrected in the present work.

Zusammenfassung: Braun, U. 2017: Typisierungen einiger Arten von *Ramularia* und ähnlicher Gattungen erneut aufgegriffen. Schlechtendalia **32**: 25–28.

Die Typisierungen einiger ursprünglich zu *Cercospora*, *Cercosporella*, *Cylindrium*, *Cylindrosporium*, *Ophiocladium*, *Ovularia* und *Ramularia* gestellter Arten ramularioider Ascomyzeten haben sich als inkorrekt und im Konflikt mit dem Code (ICN) erwiesen. Einige der betroffenen Typisierungen werden in der vorliegenden Arbeit korrigiert.

Key words: Type material, lectotypification, neotypification, Ascomycota.

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Introduction

Braun (1995, 1998) published a classical taxonomic monograph of *Cercosporella*, *Ramularia* and morphologically similar ascomycete genera, most of them belonging in the *Mycosphaerellaceae*, based on phenotypic characters. For most of the treated taxa, it was possible to clarify their typifications, including numerous lecto- and neotypifications. Videira et al. (2016) published a first comprehensive study on *Ramularia* and similar genera based on cultures and molecular sequence analyses, i.e. they managed to transfer the taxonomy of this complex of genera into the 21st century. However, some previously designated typifications turned out to be incorrect and in conflict with the ICN, requiring corrections in line with the current rules of the Code.

List of species with reassessed typifications

Cercosporella pastinacae P. Karst., Hedwigia 23(4): 63, 1884.
≡ *Pseudocercosporella pastinacae* (P. Karst.) U. Braun, Nova Hedwigia 56(3–4): 444, 1993.
≡ ***Filiella pastinacae*** (P. Karst.) Videira & Crous, Stud. Mycol. 83: 88, 2016.
Holotype: Finland, Mustiala, on *Pastinaca sativa*, 7 Jul. 1867, P. Karsten (H 3921).
Notes: Braun's (1998: 140) designation of a neotype (Germany, Dresden, Rabenh., Fungi Eur. Exs. 1262, HAL) is superfluous since type material of this species has recently been traced in Helsinki (H).

Cercosporella angustana Ferraris, in Ferraris & Massa, Ann. Mycol. 10(3): 297, 1912.
≡ ***Pseudocercosporella angustana*** (Ferraris) U. Braun, Mycotaxon 51: 50, 1994.
Lectotype (designated here, MycoBank, MBT375717): Ferraris & Massa, Ann. Mycol. 10(3): Plate (Tav./Tab.) V, Fig. 18, 1912.
Notes: Braun (1995: 144) stated that type material of this species could not be traced. However, the original drawing (Plate V, Fig. 18) is part of the original material that has to be taken into consideration for a lectotypification (Art. 9.2 and 9.3).

Cercospora acerina R. Hartig, Untersuch. Forstbot. Inst. München 1: 59, 1880.
≡ ***Mycocentrospora acerina*** (R. Hartig) Deighton, Taxon 21(5–6): 716, 1972.
Lectotype (designated here, MycoBank, MBT375719): Hartig, Untersuch. Forstbot. Inst. München 1: Plate (Taf.) IV, Figs 1–9, 1880.
Notes: Braun (1995: 228) designated "Thüm., Herb. Mycol. Oecon. 743" (B) as neotype, which is, however, incorrect since the original description of this species is accompanied by original illustrations that have to be taken into consideration for a lectotypification (Art. 9.2 and 9.3).

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Cylindrium septatum Bonord., Handb. allgem. Mykol.: 35, 1851.
≡ ***Ramularia septata*** (Bonord.) Bubák, Ann. Mycol. 14(5): 350, 1916.
Lectotype (designated here, MycoBank, MBT375721): Bonorden, Handb. allgem. Mykol.: Plate (Tafel) I, Fig. 16, 1851.
Notes: Braun (1998: 50) designated "Sacc., Mycoth. Ven. 1050" (HAL) as neotype, which is, however, incorrect since the original description is accompanied by an illustration which is part of the original material (Art. 9.3) and has to be taken into consideration for a lectotypification (Art. 9.2).

Cylindrosporium majus (as "*Cylindrospora major*") Unger, Exanth. Pflanzen: 168, 1833.
≡ ***Ramularia major*** (Unger) U. Braun, Nova Hedwigia 47(3–4): 340, 1988.
Lectotype (designated here, MycoBank, MBT375722): Unger, Exanth. Pflanzen: Plate (Tab.) II, Fig. 11, 1833 [based on *Ramularia* on *Tussilago petasites* = *Petasites hybridus*].
Notes: Braun (1988: 340) proposed a neotypification of *Cylindrosporium majus* (on *Petasites hybridus*, Germany, Thuringia, Erfurt, 7 Oct. 1900, H. Diedicke, JE) [see also Braun (1998: 87)]. However, there is an original drawing which is part of the original material in the sense of the Code (Art. 9.3) and has to be taken into consideration as lectotype (Art. 9.2).

Ophiocladium hordei Cavara, Z. Pflanzenkrankh. 3: 26, 1893.
≡ ***Ramularia collo-cyni*** B. Sutton & J.M. Waller, Trans. Brit. Mycol. Soc. 90(1): 57, 1988.
≡ *Ramularia hordeicola* U. Braun, Int. J. Mycol. Lichenol. 3(2–3): 281, 1988.
Lectotype (designated here, MycoBank, MBT375723): Cavara, Z. Pflanzenkrankh. 3: Plate (Tab.) I, Fig. 9, 1893. **Epitype** (designated here, MycoBank, MBT375724): Austria, Reichersberg am Inn, Züchtungsfirma Saatbau Linz, on *Hordeum vulgare*, s.d., collector unknown (CBS H-22641), culture ex-epitype – CBS 101180 (sequences retrieved from the epitype, see Videira et al. 2016: 61)
Notes: The neotypification of *Ophiocladium hordei* in Videira et al. (2016: 125) is not Code compliant (see Art. 9.7). The original description of this species is supplemented by an original drawing which is part of the original material of this species in the sense of the Code (Art. 9.3) that has to be used for a lectotypification (Art. 9.2). The erroneously designated "neotype" is proposed to serve as epitype. A formal correction of the neotype to epitype according to Art. 9.9 is not possible since the requirements of Art. 9.8 have not been met, i.e. an epitypification in Videira et al. (2016: 125) were not effected.

Ovularia vossiana (subsp.) *jubatskana* Sacc., Malpighia 10: 276, 1896.
≡ ***Ramularia jubatskana*** (Sacc.) U. Braun, Nova Hedwigia 56(3–4): 431, 1993.
Lectotype (designated here, MycoBank, MBT375725): Saccardo, Malpighia 10: Plate (Tav.) VI, Fig. 8, 1896.
Notes: Braun (1993: 431) failed to trace type material of this species and proposed a neotype (Sweden, Jemtlandia, on *Carduus crispus*, 1931, A.G. Eliasson, JE). This typification is, however, incorrect since the original description is supplemented by an original drawing which has to be taken into consideration for a lectotypification (Art. 9.2, 9.3).

Ovularia polygoni-alpini Maire, Bull. Soc. Bot. France 57: CLXXV "1910" 1912, nom. inval. (Art. 36.1 c).
≡ *Ramularia polygoni-alpini* (Maire) U. Braun, Nova Hedwigia 56(3–4): 432, 1993.
= ***Ramularia ufensis*** Karak., Mat. Mikol. Obsled. Ross. 2: 81, 1915.
Notes: Type material of *O. polygoni-alpini* has not been found and is probably not preserved (Braun 1998: 214). Furthermore, the latter name is invalid (published as "ad. int."), but the valid name *R. ufensis* (holotype: LE 42028) is available.

Ovularia rigidula Delacr., Bull. Soc. Mycol. France 6(4): 181, 1890.
≡ ***Ramularia rigidula*** (Delacr.) Nannf., in Lundell & Nannfeldt, Fungi Exs. Suec., Fasc. XXXIX–XL, Sched.: 33, 1950.
Lectotype (designated here, MycoBank, MBT375726): Delacroix, Bull. Soc. Mycol. France 6(4): Plate XX, Fig. VI (a, b), 1890.
Notes: Braun (1998: 214) stated that he could not trace type material of *O. rigidula*. Therefore, the original drawing (Plate XX, Fig. VI a, b), which is part of the original material in the sense

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of the Code (Art. 9.3), is designated as lectotype. The description of *O. rigidula* is to be found on p. 181 and not on p. 189, as sometimes cited.

Ramularia chaerophylli Ferraris, Malpighia 16: 473, 1902.
Lectotype (designated here, MycoBank, MBT375727): Ferraris, Malpighia 16: Plate (Tav.) XI, Fig. XVII, 1902.
Notes: Braun (1998: 54) failed to locate type material of this species. Therefore, the original illustration, which is part of the original material in the sense of the Code (Art. 9.3), is designated as lectotype (Art. 9.2).

Ramularia didyma Unger, Exanth. Pflanzen: 169, 1833.
Lectotype (designated here, MycoBank, MBT375728): Unger, Exanth. Pflanzen: Plate (Tafel) II, Fig. 10, 1833.
Notes: Von Arx's (1983: 51) neotype designation (Switzerland, on *Ranunculus nemorosus*, leg. Terrier, ZT) is not Code compliant (see Art. 9.7). According to Art. 9.2 (see also 9.3), the original illustration published in Unger (l.c.) is part of the original material and has to be taken into consideration for a lectotypification.

Ramularia geranii Fuckel, Jahrb. Nassauischen Vereins Naturk. 23–24: 361, "1869" 1870.
Lectotype (designated here, MycoBank, MBT375729): Fuckel, Jahrb. Nassauischen Vereins Naturk. 23–24: Plate (Tafel) I, Fig. 23, "1869" 1870.
Notes: Braun (1998: 165) designated "Schneider, Herb. Schles. Pilze 898" (HAL) as neotype, which is, however, not a Code compliant typification since Fuckel (l.c.) included Tafel I, Fig. 23 in the protologue, although only a single conidium was depicted. Videira et al. (2016: 131) designated CBS H-17726 as epitype (ex-epitype culture CBS 160.24). This epitypification has been effected in this publication (a neotype, although incorrectly designated, has been cited so that this typification is in line with Art. 9.8). "*Ramularia geranii* (Westend.) Fuckel" with reference to *Fusidium geranii* Westend. represents an incorrect author citation and an inacceptable interpretation of this name. The later name was not cited by Fuckel (l.c.), and there is no evidence for an indirect reference to *Fusidium geranii* since Fuckel (l.c.) consistently used direct and full references to previously published names and publications in his whole work. Therefore, I follow Index fungorum and ascribe the name *R. geranii* to Fuckel.

Ramularia oreophila Sacc., Michelia 2: 382, 1881 and Fungi Ital., Tab. 987, 1881.
Lectotype (designated here, MycoBank, MBT375730): Saccardo, Fungi Italici Autographice Delineati, Fasc. 17–28, Tab. 987, 1881.
Notes: Braun (1998: 51) designated "Krieger, Fungi Saxon. Exs. 639" (HAL) as neotype. However, "Fungi Ital., Tab. 987" is part of the original material in the sense of the Code (Art. 9.3) and has to be taken into consideration for a lectotypification (Art. 9.2).

Ramularia vaccarii Ferraris, Malpighia 16: 473, 1902.
= ***Ramularia gei*** (A.G. Eliasson) Lindr., Acta Soc. Fauna Fl. Fenn. 23(3): 26, 1902.
Lectotype (designated here, MycoBank, MBT375731): Ferraris, Malpighia 16: Plate (Tav.) XI, Fig. XVI, 1902.
Notes: Braun (1998: 247) stated that type material of this species could not be traced. Therefore, the original drawing, which is part of the original material (Art. 9.3), is designated as lectotype (Art. 9.2).

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