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Nomenclatural notes on some cercosporoid hyphomycetes

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Abstract: Braun, U., Farr, D.F. & Minnis, A.M. 2009: Nomenclatural notes on some cercosporoid hyphomycetes. Schlechtendalia **19**: 81–84.

Cercospora haleniae is validated, *Cercospora tragiicola* sp. nov. and *Passalora halesiicola* sp. nov. (≡ *Cercospora halesiae* nom. inval., *Passalora halesiae* comb. inval.) are described and the combination *Pseudocercospora nepheloides* is introduced.

Zusammenfassung: Braun, U., Farr, D.F. & Minnis, A.M. 2009: Nomenklatorische Anmerkungen zu einigen cercosporoiden Hyphomyzeten. Schlechtendalia **19**: 81–84.

Cercospora haleniae wird validiert, *Cercospora tragiicola* sp. nov. und *Passalora halesiicola* sp. nov. (≡ *Cercospora halesiae* nom. inval., *Passalora halesiae* comb. inval.) werden beschrieben und die Kombination *Pseudocercospora nepheloides* wird eingeführt.

Key words: *Cercospora*, combinations, nomenclature, *Passalora*, validations.

Crous & Braun (2003) published an annotated list of names published in *Cercospora* Fresen. and *Passalora* Fr. (*Mycosphaerella* Johanson anamorphs). The nomenclature of several names has recently been checked. The following names and combinations proved to be invalid or otherwise in need of correction.

1. ***Cercospora haleniae*** Chupp & Bisby ex U. Braun, D.F. Farr & Minnis, **sp. nov.** MycoBank, MB 513134

≡ *Cercospora haleniae* Chupp & Bisby, Fungi of Manitoba and Saskatchewan: 114, 1938, nom. inval. (ICBN, Art. 36.1; McNeill et al. 2006).

Differt a C. apii s. lat. conidiophoris brevioribus, 5–30 × 3–6 µm, cicatricibus conidialibus 1–1.5 µm diam. et conidiis obclavatis-subcylindraceis.

Holotype: On *Halenia deflexa* (Gentianaceae), Canada, Manitoba, Berens River, 1 Aug. 1935, G.R. Bisby 4921 (CUP 39964).

Leaf spots amphigenous, subcircular, brown, margin indefinite. Caespituli amphigenous, punctiform, dark brown to blackish. Mycelium internal. Stromata intraepidermal, 10–25 µm diam., yellowish brown to brown. Conidiophores in small to moderately large fascicles, arising from stromata, erumpent, subcylindrical-conical to geniculate-sinuous, unbranched, 5–30 × 3–6 µm, 0–1-septate, pale to medium olivaceous-brown, thin-walled, smooth. Conidiophores reduced to conidiogenous cells or conidiogenous cells integrated, terminal, 5–20 µm long. Conidiogenous loci conspicuous, thickened and darkened, 1–1.5 µm diam. Conidia solitary, obclavate-cylindrical, 20–70(–80) × 3–6 µm, 1–6-septate, hyaline or subhyline, thin-walled, smooth, apex obtuse to sub-

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acute, base obconically truncate, 1.5–2 µm wide, hilum somewhat thickened and darkened.

Notes: Crous & Braun (2003) re-examined type material of *C. haleniae* and maintained it as a morphologically well-characterized species of *Cercospora* s. str. that is easily distinguished from the *C. apii* Fresen. complex by its uniformly short conidiophores with smaller conidiogenous loci and obclavate-cylindrical conidia. Unfortunately, *C. haleniae* has to be considered an invalid species since a Latin description or diagnosis was lacking in the original publication. This species was also described by Chupp (1954) in his monograph, but only in English.

2. ***Cercospora tragiicola*** U. Braun, D.F. Farr & Minnis, **sp. nov.** MycoBank, MB 513135

≡ *Cercospora euphorbiicola* var. *tragiae* Tharp (‘*euphorbiaecola*’), Mycologia 9: 109, 1917.

≡ *Cercospora euphorbiicola-tragiae* Tharp, auct. (erroneous citation).

= *Cercospora tragiae* Ellis & Everh., in herb.

Differt a Cercospora tragiae-folii conidiophoris brevioribus, 5–25 × 2–5 µm, non septatis, cicatricibus conidialibus 1–1.5 µm diam. et conidiis 1.5–3 µm latis.

Holotype: On *Tragia nepetifolia* (Euphorbiaceae), USA, Texas, Austin, 6 Oct. 1914, I.M. Lewis & B.C. Tharp (BPI 436234).

Leaf spots subcircular to irregular, 1–8 mm diam., center pale, yellowish to ochraceous-brown, margin narrow, dark brown. Caespituli amphigenous, punctiform to confluent, dull brown. Mycelium internal. Stromata 20–35 µm diam., globose, brown. Conidiophores in small to moderately large, dense fascicles, arising from stromata, erect, straight, subcylindrical-conical to slightly geniculate-sinuous, unbranched, 5–25 × 2–5 µm, aseptate (conidiophores reduced to conidiogenous cells), pale yellowish brown, tips often paler, thin-walled, smooth. Conidiogenous loci conspicuous, slightly thickened and darkened, 1–1.5 µm diam. Conidia solitary, narrowly obclavate-cylindrical to acicular, (20–)30–80(–110) × 2–3.5 µm, apex subacute, base slightly to distinctly obconically truncate, 1–1.5 µm wide, hilum slightly thickened and darkened.

Notes: The nomenclature of this species is confusing. Chupp (1954) cited this species as “*Cercospora euphorbiaecola tragiae*” and discussed its taxonomy. He emphasized that this fungus “is not at all like *C. euphorbiaecola*” and “could well be changed to *C. tragiae*.” However, he did not formally introduce and recognize this combination. Crous & Braun (2003) considered this fungus a separate species of *Cercospora* s. str. that is easily distinguished from the *C. apii* complex by having uniformly short, aseptate conidiophores with small conidiogenous loci, only 1–1.5 µm diam., and obclavate-cylindrical conidia. However, they followed Chupp (1954) and listed this species under the name “*C. euphorbiicola-tragiae*.” *Cercospora euphorbiicola* G.F. Atk. (≡ *Pseudocercospora euphorbiicola* (G.F. Atk.) U. Braun & Crous) is an unrelated species which was reallocated to *Pseudocercospora* Speg. in Crous & Braun (2003). The variant “*C. euphorbiicola-tragiae*” (as species name) is, however, incorrect. This name was definitely only published as a variety, viz. *Cercospora euphorbiicola* var. *tragiae*. This fungus does not have a valid name at the species rank. In order to avoid further confusion, we prefer to describe a new species using another epithet. *C. tragiae-folii* A.K. Kar & M. Mandal, described from India (Kar & Mandal 1973), is another true *Cercospora* species on *Tragia*. It differs from *C. tragiicola* in having much longer and wider conidiophores, up to about 280 × 3–5 µm, wider conidiogenous loci, 2.5–4.5 µm, and wider conidia, 3–4.5 µm (holotype!: on

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Tragia involucrata, India, West Bengal, Jalangi, Murshidabad, 27 Jan. 1967, A.K. Kar. & M. Mandal, IMI 135155).

3. ***Passalora halesiicola*** U. Braun, D.F. Farr & Minnis, **sp. nov.** MycoBank, MB 513136

≡ *Cercospora halesiae* Dearn., Mycologia 33: 365, 1941, nom. inval. (ICBN, Art. 36.1; McNeill et al. 2006).

≡ *Passalora halesiae* (Dearn.) U. Braun & Crous, *Mycosphaerella* and its anamorphs: 1. Names published in *Cercospora* and *Passalora*. CBS Biodiversity Series 1: 209, 2003, comb. inval.

Maculae irregulares, brunneae, 5–20 mm diam., margine indistincto. Caespituli amphigeni, subeffusi, bruneoli. Mycelium internum et externum, hyphis superficialibus vix ramosis, subhyalinis, pallide olivaceis vel olivaceo-brunneis, septatis, tenuitunicatis, laevibus, 1–3.5 µm latis. Stromata nulla vel minuta, ad 30 µm diam., brunnea. Conidiophora laxe fasciculata, 2–15, vel solitaria, ex hyphis superficialibus oriunda, erecta, subcylindrica vel geniculata-sinuosa, non ramosa, 20–110 × 4–7 µm, 2–6-septata, brunnea, tenuitunicata, laevia. Cellulae conidiogenae integratae, terminales et intercalares, 10–25 µm longae. Cicatrices conidiales conspicuae, incrassatae et fuscatae, 1.5–2.5 µm diam. Conidia solitaria, obclavata-subcylindrica, 20–80(–105) × 3–5.5 µm, 2–9-septata, pallide brunnea vel olivaceo-brunnea, tenuitunicata, laevia, apice obtuso, basi obconice truncata, hilo leniter incrassato et fuscato.

Holotype: On *Halesia carolina* (= *H. tetraptera*) (Styracaceae), USA, Tenn., Blount Co., Bote Mt., Great Smoky Mountains National Park, 18 Aug. 1937, C.W. Greene, Dearness 8959 (DAOM).

Leaf spots variable in shape and size, irregular, brown, 5–20 mm diam., margin indistinct. Caespituli amphigenous, subeffuse, brownish. Mycelium internal and external; superficial hyphae sparingly branched, subhyaline, pale olivaceous or olivaceous-brown, septate, thin-walled, smooth, 1–3.5 µm wide. Stromata lacking or small, up to 30 µm diam., brown. Conidiophores in loose fascicles, 2–15, or solitary, arising from superficial hyphae, erect, subcylindrical to geniculate-sinuous, unbranched, 20–110 × 4–7 µm, 2–6-septate, brown, thin-walled, smooth. Conidiogenous cells integrated, terminal and intercalary, 10–25 µm long. Conidiogenous loci conspicuous, thickened and darkened, 1.5–2.5 µm diam. Conidia solitary, obclavate-subcylindrical, 20–80 (–105) × 3–5.5 µm, 2–9-septate, pale brown or olivaceous-brown, thin-walled, smooth, apex obtuse, base obconically truncate, hilum slightly thickened and darkened.

Notes: A description of *Cercospora halesiae* was given in Chupp (1954). Crous & Braun (2003) examined type material of this species and assigned it to *Passalora* due to thickened, darkened conidiogenous loci and pigmented conidia. On account of the formation of superficial hyphae with solitary conidiophores, this species is *Mycovellosiella*-like. Unfortunately, *C. halesiae* was published without a Latin description, which renders this name and the combination *Passalora halesiae* invalid.

4. ***Pseudocercospora nepheloides*** (Ellis & Holw. ex Heald & F.A. Wolf) U. Braun, D.F. Farr & Minnis, **comb. nov.** MycoBank, MB 513137

Bas.: *Cercospora nepheloides* Ellis & Holw. ex Heald & F.A. Wolf, U.S.D.A. Bur. Pl. Industr. Bull. 226: 87, 1912 (Jan.).

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= *Cercospora eustomatis* Peck (‘*eustomae*’), Bull. New York State Mus. Nat. Hist. 157: 45, 1912 (Mar.).

≡ *Cercosporina eustomatis* (Peck) Sacc. (‘*eustomae*’), Syll. fung. 25: 903, 1931.

≡ *Pseudocercospora eustomatis* (Peck) U. Braun, Schlechtendalia 2: 15, 1999.

Notes: Braun (1999) examined type material of *C. eustomatis*, reallocated this species to *Pseudocercospora* and published a description and illustration. *C. nepheloides* was reduced to synonymy with *P. eustomatis* (Braun 1999). The two names were published in 1912, but *C. nepheloides*, published in January, proved to have priority. In its protologue, the name, but not the validating description, was attributed to Ellis & Holw.

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