
Phacidiella alsophilae

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Phacidiella alsophilae Crous, *sp. nov.*

Etymology. Name refers to the host genus *Alsophila* from which it was isolated.

Classification — *Stictidaceae*, *Ostropales*, *Lecanoromycetes.*

Conidiomata pycnidial, erumpent, hyaline on SNA and OA, solitary or aggregated, globose, up to 300 µm diam; wall of 3–6 layers of hyaline *textura angularis*; exuding a creamy conidial mass. *Conidiophores* lining the inner cavity, subcylindrical, smooth, hyaline, 0–1-septate, giving rise to 1–2 conidiogenous cells, 4–10 × 2–3 µm. *Conidiogenous cells* terminal, smooth, subcylindrical to doliiform, proliferating sympodially at apex, 5–10 × 2–3 µm. *Conidia* solitary, hyaline, smooth, subcylindrical, flexuous, apex obtuse, base truncate, (60–)90–135(–150) × (2–)2.5(–3) µm, 15–25-septate, disarticulating into phragmospores, cylindrical with truncate ends, 4–7 µm long; flexuous conidia enclosed in mucoid sheath, 1–1.5 µm diam.

Culture characteristics — Colonies flat, spreading, surface folded, with sparse to moderate aerial mycelium and smooth, even margin, reaching 25 mm diam after 2 wk at 25 °C. On MEA surface cinnamon, reverse sepia. On PDA surface buff, reverse cinnamon. On OA surface buff.

Typus. South Africa, Western Cape Province, Knysna, on leaves of *Alsophila capensis* (= *Cyathea capensis*) (*Cyatheaceae*), Nov. 2018, *M.J. Wingfield*, HPC 2701 (holotype CBS H-24233, culture ex-type CPC 37041 = CBS 146134; ITS and LSU sequences GenBank MT373361.1 and MT373344.1, MycoBank MB835393).

Notes — *Phacidiella alsophilae* is related to *P. podocarpi* (conidia 1-septate, (7–)8–10(–12) × (2–)2.5(–3) µm; Crous et al. 2014), although they are morphologically distinct. Because the type species of *Phacidiella*, *P. salicina* (conidia aseptate, on twigs of *Salix viminalis*, Finland), is presently not known from culture, the phylogenetic relationships between species in the genus remains unresolved. *Phacidiella alsophilae* and *P. podocarpi* are thus tentatively retained in *Phacidiella*.

Based on a megablast search of NCBIs GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Phacidiella podocarpi* (strain CBS 138904, GenBank NR_137934.1; Identities = 558/614 (91 %), 10 gaps (1 %)), *Fitzroyomyces cyperi* (strain CBS 143170, GenBank MG386047.1; Identities = 626/729 (86 %), 18 gaps (2 %)), and *Fitzroyomyces cyperacearum* (voucher MFLU 18-0695b, GenBank MK499349.1; Identities = 626/731 (86 %), 22 gaps (3 %)). Closest hits using the **LSU** sequence were *Phacidiella podocarpi* (strain CBS 138904, GenBank NG_058118.1; Identities = 904/930 (97 %), 10 gaps (1 %)), *Stictis radiata* (voucher Palice (ESS 21520), GenBank AY300864.1; Identities = 754/783 (96 %), no gaps), and *Carestiella socia* (strain GG2437a, GenBank AY661682.1; Identities = 793/826 (96 %), 3 gaps (0 %)).

Colour illustrations. Unfolding leaf of *Alsophila capensis*. Conidiomata on OA; conidiogenous cells giving rise to conidia. Scale bars = 10 µm.

Hormodochis eucalypti (Crous) Crous, *comb. nov*.

MycoBank MB835394.

Basionym. *Phacidiella eucalypti* Crous, Fungal Diversity 25: 30. 2007.

Description & Illustration — Crous et al. (2019b).

Typus. South Africa, Western Cape Province, Stellenbosch Mountain, on *Eucalyptus* sp., 10 Jan. 2006, *P.W. Crous* (holotype CBS H-19768, cultures ex-type CBS 120255 = CPC 12745, CPC 12746, 12747; ITS-LSU sequence GenBank EF110617.1).

Notes — The genus *Hormodochis* was resurrected by Crous et al. (2020a) to accommodate taxa with erumpent, globose pycnidial conidiomata with aseptate conidia, arranged in cylindrical chains, olivaceous brown, smooth, subcylindrical to somewhat doliiform, with truncate ends. Morphologically and phylogenetically, *Phacidiella eucalypti* is better accommodated in *Hormodochis* than *Phacidiella*, as the latter has hyaline conidia (Sutton 1980). Another genus to consider with subhyaline conidia is *Trullula*, which differs in mode of conidiogenesis and conidium morphology (see Crous et al. 2020a).

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