



Fungal Planet 968 – 18 December 2019

Teratosphaeria corymbiicola Crous, sp. nov.

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

Classification — *Teratosphaeriaceae*, *Capnodiales*, *Dothi-deomycetes*.

Leaf spots amphigenous, 3–6 mm diam, subcircular, brown with a broad red-purple margin. **Conidiomata** amphigenous, exuding a mucoid conidial mass; pycnidia brown, globose, 180–250 µm diam with central ostiole, or opening via irregular split. **Conidiophores** reduced to conidiogenous cells lining inner cavity, brown, verruculose, doliiform to ampulliform, proliferating percurrently at apex, 5–10 × 5–6 µm. **Conidia** solitary, brown, verruculose, guttulate, 0–1-septate, subcylindrical, straight to irregularly curved, apex subobtuse, base truncate, 2.5–3 µm diam, with marginal frill, (17–)25–27(–33) × (4–)5(–6) µm, in culture 1(–3)-septate, and up to 40 µm long.

Culture characteristics — Colonies erumpent, spreading, with sparse aerial mycelium and smooth, lobate margin, reaching 5 mm diam after 2 wk at 25 °C. On MEA surface isabelline to dirty white, reverse brown vinaceous. On PDA surface isabelline to dirty white, reverse sepia with diffuse brick pigment. On OA surface isabelline with diffuse brick pigment.

Typus. AUSTRALIA, New South Wales, Sydney, Longueville, on leaves of *Corymbia ficifolia* (*Myrtaceae*), 4 Sept. 2016, A.J. Carnegie, HPC 2539 (holotype CBS H-24244, culture ex-type CPC 36371 = CBS 146047, ITS, LSU, *actA*, *cmdA*, *rpb2*, *tef1* and *tub2* sequences GenBank MN562120.1, MN567628.1, MN556788.1, MN556794.1, MN556802.1, MN556823.1 and MN556840.1, MycoBank MB832875).

Notes — *Teratosphaeria corymbiicola* is a typical species of *Teratosphaeria* that belongs to the species complex that causes leaf spots and shoot blight of eucalypts (Andjic et al. 2019, Crous et al. 2019c). Phylogenetically it is close to *T. pseudocryptica* (conidia aseptate, (10–)12–14(–17) × (3.5–)4(–6) µm), although it is morphologically quite distinct.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Kirramyces* sp. (strain A16, GenBank EU300986.1; Identities = 505/506 (99 %), 1 gap (0 %)), *Teratosphaeria pseudocryptica* (strain CBS 118504, GenBank KF901687.1; Identities = 466/475 (98 %), 1 gap (0 %)), and *Teratosphaeria rubida* (strain CBS 124579, GenBank MH863388.1; Identities = 531/542 (98 %), 4 gaps (0 %)). Closest hits using the **LSU** sequence are *Teratosphaeria complicata* (strain CBS 125216, GenBank MH874961.1; Identities = 788/790 (99 %), no gaps), *Teratosphaeria hortaea* (strain CBS 124156, GenBank MH874881.1; Identities = 788/790 (99 %), no gaps), and *Teratosphaeria mareebensis* (strain CBS 129529, GenBank MH876828.1; Identities = 787/790 (99 %), no gaps). Closest hits using the **actA** sequence had highest similarity to *Teratosphaeria pseudocryptica* (strain CBS 118504, GenBank KF903598.1; Identities = 521/528 (99 %), no gaps), *Teratosphaeria rubida* (strain CBS 124579, GenBank KF903552.1; Identities = 521/528 (99 %), no gaps), and *Teratosphaeria hortaea* (strain CBS 124156, GenBank KF903550.1; Identities = 490/533 (92 %), 9 gaps (1 %)). Closest hits using the **cmdA** sequence had highest similarity to *Teratosphaeria pseudocryptica* (strain CBS 118504, GenBank KF902760.1; Identities = 443/455 (97 %), no gaps), *Teratosphaeria rubida* (strain CBS 124579, GenBank KF902764.1; Identities = 442/455 (97 %), no gaps), and *Austroafricana associata* (strain CBS 120732, GenBank KF902532.1; Identities = 275/292 (94 %), 1 gap (0 %)). Closest hits using the **rpb2** sequence had highest similarity to *Teratosphaeria molleri-ana* (strain CBS 118359, GenBank KX348104.1; Identities = 754/879 (86 %), no gaps), *Teratosphaeria fimbriata* (strain CPC 13324, GenBank LT799766.1; Identities = 574/671 (86 %), no gaps), and *Teratosphaeria dunnii* (strain CBS 145548, GenBank MK876491.1; Identities = 777/916 (85 %), no gaps). Closest hits using the **tef1** sequence had highest similarity to *Teratosphaeria pseudocryptica* (strain CBS 118504, GenBank KF903348.1; Identities = 347/365 (95 %), 5 gaps (1 %)), *Teratosphaeria rubida* (strain CBS 124579, GenBank KF903352.1; Identities = 346/365 (95 %), 6 gaps (1 %)), and *Teratosphaeria dunnii* (strain CBS 145548, GenBank MK876500.1; Identities = 269/322 (84 %), 11 gaps (3 %)). Closest hits using the **tub2** sequence had highest similarity to *Teratosphaeria pseudocryptica* (strain CPC 11264, GenBank FJ952512.1; Identities = 318/334 (95 %), 2 gaps (0 %)), *Teratosphaeria rubida* (strain MUCC 659, GenBank FJ532013.1; Identities = 319/337 (95 %), 2 gaps (0 %)), and *Teratosphaeria australiensis* (strain MUCC 695, GenBank FJ532010.1; Identities = 295/342 (86 %), 13 gaps (3 %)).

Colour illustrations. *Corymbia ficifolia* tree *Teratosphaeria corymbiicola* was isolated from. Leaf spot; conidiogenous cells; conidia. Scale bars = 10 µm.

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