

Teratosphaeria mareebensis



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***Teratosphaeria mareebensis* Crous & R.G. Shivas, sp. nov.**

Teratosphaeria considerianae similis, sed conidiis minoribus, (5–)7–8(–9) × (2–)2.5–3(–4) µm, discernitur.

Etymology. Named after the town of Mareeba, where this fungus was collected.

Mycelium consisting of smooth, medium brown, septate, 2–3 µm diam hyphae; hyphal cells becoming shorter (4–7 µm long) in specific areas, becoming fertile and developing conidiogenous cells that form slimy conidial masses. *Conidiophores* reduced to conidiogenous cells that are integrated in hyphae as inconspicuous phialidic loci, 1–2 µm diam, with 1–2 loci per conidiogenous cell; collarette absent. *Conidia* medium brown, smooth, fusoid-ellipsoidal, widest in middle, apex obtuse, base somewhat flattened, (5–)7–8(–9) × (2–)2.5–3(–4) µm, on potato-dextrose agar conidial ends develop a darkened, thickened region, though this is not observed in sporulating colonies on oatmeal agar.

Culture characteristics — (in the dark, 25 °C, after 2 wk): Colonies spreading, erumpent; surface irregular with moderate aerial mycelium, and even, lobed margin, reaching 15 mm diam after 2 wk; on malt extract agar surface olivaceous grey, outer region iron-grey, and iron-grey in reverse; on oatmeal agar surface olivaceous grey; on potato-dextrose agar surface olivaceous grey, iron-grey in outer region and reverse.

Typus. AUSTRALIA, Queensland, Cairns, Mareeba, S 16°58.755' E 145°20.608', on leaves of *Eucalyptus alba*, 10 Aug. 2009, P.W. Crous & R.G. Shivas, holotype CBS H-20590, culture ex-type CPC 17272 = CBS 129529, ITS sequence GenBank JF951149 and LSU sequence GenBank JF951169, MycoBank MB560175.

Notes — Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence are *Teratosphaeria considerianae* (GQ852791; Identities = 512/524 (98 %), Gaps = 2/524 (0 %)), and *T. miniata* (GQ852803; Identities = 507/520 (98 %), Gaps = 3/520 (1 %)). A similar search using the LSU sequences yielded high identity with *T. hortaea* (FJ790299; Identities = 851/854 (99 %), Gaps = 0/854 (0 %)), *T. complicata* (GQ852714; Identities = 842/845 (99 %), Gaps = 0/845 (0 %)) and *T. brunneotingens* (EU019286; Identities = 907/911 (99 %), Gaps = 0/911 (0 %)). Morphologically *T. mareebensis* can be distinguished from *T. considerianae* by its smaller conidia (Summerell et al. 2006, Crous et al. 2009b, c), and the fact that conidia of the latter do not have darkened, thickened ends as in *T. mareebensis*.

Colour illustrations. *Eucalyptus* sp. growing at the DPI research farm near Mareeba; hyphae with conidiogenous cells giving rise to conidia. Scale bars = 10 µm.

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