Idriellomyces eucalypti
Idriellomyces Crous, gen. nov.

Etymology. Name reflects a similarity to the genus Idriella.

Classification — Phlogicylindraceae, Xylariales, Sordariaceae.

Mycelium consisting of hyaline to olivaceous, smooth, septate, branched hyphae. Conidiophores arising from superficial mycelium, brown, smooth, septate, branched, aggregated into thick, erect synnemata, consisting of branched conidiophores with apical and intercalary conidiogenous cells; lateral conidiophores arising from synnemata, septate. Conidiogenous cells medium brown, smooth, subcylindrical with apical taper to a rachis containing several darkened scars. Conidia aseptate, solitary, dry, hyaline, smooth, guttulate, fusoid, apex subobtuse, base truncate.

Type species. *Idriellomyces eucalypti* Crous. MycoBank MB825426.

Idriellomyces eucalypti Crous, sp. nov.

Etymology. Name refers to *Eucalyptus*, the host genus from which this fungus was collected.

Mycelium consisting of hyaline to olivaceous, smooth, septate, branched hyphae, 1.5–2 µm diam. Conidiophores arising from superficial mycelium, brown, smooth, septate, branched, aggregated into thick, erect synnemata, up to 200 µm tall and 60 µm diam, consisting of branched conidiophores with apical and intercalary conidiogenous cells; lateral conidiophores arising from synnemata, 15–40 × 2–2.5 µm, 1–3-septate. Conidiogenous cells medium brown, smooth, subcylindrical with apical taper to a rachis containing several darkened scars, 0.5 µm diam, 8–20 × 2–2.5 µm. Conidia aseptate, solitary, dry, hyaline, smooth, guttulate, fusoid, apex subobtuse, base truncate, 0.5 µm diam, (5–)6.5–7(–8) × 1.5(–2) µm.

Culture characteristics — Colonies erumpent, spreading, with sparse aerial mycelium and even, smooth margin, reaching 12 mm diam after 2 wk at 25 °C. On MEA surface and reverseumber. On PDA surface sephia, reverse isabelline. On OA surface cinnamon with patches of sienna.


Notes — The genus *Idriella* (based on *I. lunata*) was treated by Hernández-Restrepo et al. (2016a) and shown to reside in the Microdochiaeae. The genus *Idriellomyces* is somewhat similar to *Idriella* in morphology, but represents a distinct genus in the family. *Idriellomyces* is morphologically distinct in that it lacks chlamydospores, conidiophores are pigmented and frequently aggregated in synnemata.

Based on a megablast search of NCBI’s GenBank nucleotide database, the closest hits using the ITS sequence had highest similarity to *Cylindrium elongatum* (GenBank KM231853.1; Identities = 457/549 (85 %), 37 gaps (6 %)). *Neopestalotiopsis piceana* (GenBank KM199372.1; Identities = 464/549 (85 %), 37 gaps (6 %)) and *Neopestalotiopsis aetearoa* (GenBank KM199369.1; Identities = 464/549 (85 %), 37 gaps (6 %)). Closest hits using the LSU sequence are *Castanediella cagnizarrii* (GenBank KP858988.1; Identities = 818/849 (96 %), 1 gap (0 %)), *Anungitea eucalyptorum* (GenBank KJ869176.1; Identities = 853/886 (96 %), 2 gaps (0 %)) and *Pseudophloeospora eucalypti* (GenBank HQ599593.1; Identities = 832/866 (96 %), 5 gaps (0 %)). No significant hits were obtained when the *tef1* and *tub2* sequences were used in BLASTn and megablast searches.

Colour illustrations. *Eucalyptus obliqua* trees at Silvan Reservoir Park; synnema on SNA, conidiogenous cells and conidia. Scale bars = 10 µm.