

*Pseudocamarosporium eucalypti*



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## *Pseudocamarosporium eucalypti* Crous, *sp. nov.*

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

*Classification* — *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*.

*Conidiomata* solitary, globose, brown, 180–250 µm diam, with central ostiole, exuding a brown conidial mass; wall of 6–8 layers of brown *textura angularis*. *Conidiophores* reduced to conidiogenous cells lining the inner cavity, hyaline, smooth, phialidic with periclinal thickening, 5–8 × 5–6 µm. *Conidia* solitary, medium brown, smooth, medianly 1-septate, ellipsoid, straight, thick-walled, ends obtuse, (7–)8–9(–10) × (4–)5 µm. *Spermatogonia* (forming on MEA) separate, globose, brown, up to 200 µm diam, with central ostiole; wall of 3–4 layers of brown *textura angularis*. *Spermatophores* reduced to spermatogenous cells. *Spermatogenous cells* lining the inner cavity, ampulliform to doliform, hyaline, smooth, 4–6 × 3–5 µm, apex with visible periclinal thickening and minute collarette. *Spermatia* solitary, smooth, hyaline, subcylindrical, straight to slightly curved, apex obtuse, base truncate, 3–6 × 1.5–2.5 µm.

*Culture characteristics* — Colonies flat, spreading, with moderate aerial mycelium, covering dish after 2 wk at 25 °C. On MEA, PDA and OA surface and reverse cinnamon.

*Typus.* USA, California, Davis, UC Davis, on leaves of *Eucalyptus* sp. (*Myrtaceae*), 2 Apr. 2019, P.W. Crous, HPC 2896 (holotype CBS H-24205, culture ex-type CPC 37995 = CBS 146084, ITS, LSU and *tef1* sequences GenBank MN562150.1, MN567657.1 and MN556833.1, MycoBank MB832910).

*Notes* — The *Camarosporium* complex was recently treated by Wanasinghe et al. (2017). *Pseudocamarosporium eucalypti* is closely related to *P. brabeji* (on branch of *Platanus* sp., Switzerland, conidia ellipsoid or subcylindrical, (9–)10–12(–13) × (4–)5(–6) µm, 1–3-transversely septate; Crous et al. 2018b), from which it is distinct by having smaller, 1-septate conidia, (7–)8–9(–10) × (4–)5 µm.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Pseudocamarosporium brabeji* (strain NW-FVA2387, GenBank MG098280.1; Identities = 581/588 (99 %), no gaps), *Pseudocamarosporium tilicola* (strain MFLUCC 13-0550, GenBank KJ747050.1; Identities = 551/558 (99 %), no gaps), and *Pseudocamarosporium piceae* (strain cp48, GenBank MK796148.1; Identities = 518/525 (99 %), no gaps). Closest hits using the **LSU** sequence are *Pseudocamarosporium propinquum* (strain MFLUCC 17-1211, GenBank MG812621.1; Identities = 844/844 (100 %), no gaps), *Pseudocamarosporium ulmi-minoris* (strain MFLUCC 17-0671, GenBank MG829062.1; Identities = 844/844 (100 %), no gaps), and *Pseudocamarosporium pteleae* (strain MFLUCC 17-0724, GenBank MG829061.1; Identities = 844/844 (100 %), no gaps). Closest hits using the **tef1** sequence had highest similarity to *Pseudocamarosporium pteleae* (strain MFLUCC 17-0724, GenBank MG829233.1; Identities = 434/442 (98 %), no gaps), *Paraconiothyrium cyclothyrioides* (strain UTHSC DI16-327, GenBank LT797124.1; Identities = 456/468 (97 %), no gaps), and *Paraconiothyrium brasiliense* (strain UTHSC DI16-311, GenBank LT797116.1; Identities = 428/440 (97 %), no gaps).

*Colour illustrations.* Leaves of *Eucalyptus* sp. in California *Pseudocamarosporium eucalypti* was isolated from. Conidiomata on pine needle agar; conidiogenous cells; conidia. Scale bars: conidiomata = 200 µm, all others = 10 µm.