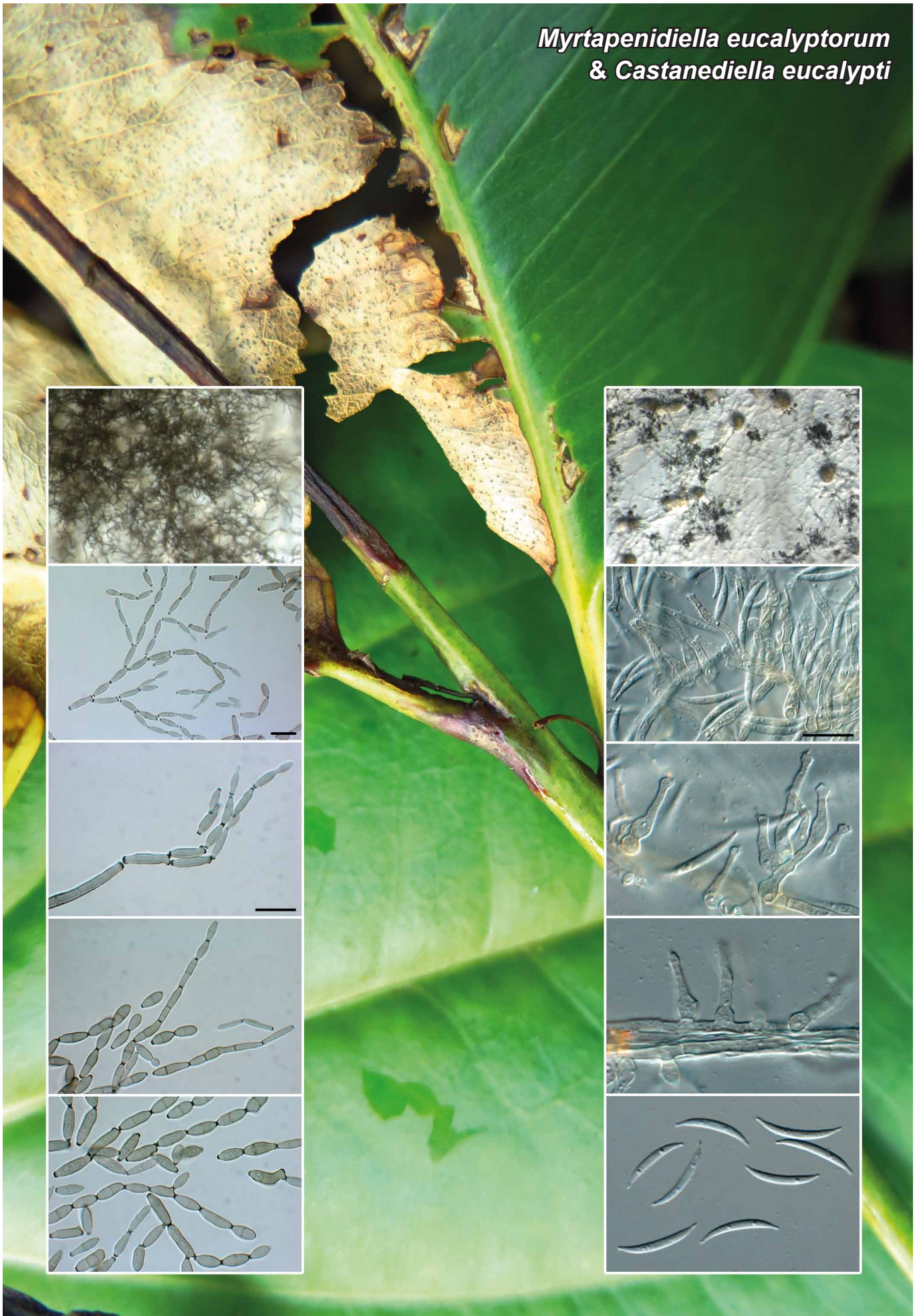


Myrtapendiella eucalyptorum
& *Castanediella eucalypti*



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Myrtapendiella eucalyptorum Crous & M.J. Wingf., *sp. nov.*

Etymology. Name reflects the host genus *Eucalyptus*, from which the species was isolated.

Classification — *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*.

Mycelium consisting of branched, septate, pale brown, smooth, 2–3 µm diam hyphae. *Conidiophores* solitary, erect, rarely branched below, straight to geniculous-sinuuous, 40–70 × 3–5 µm, 2–6-septate, brown, roughened, thick-walled. *Conidiogenous cells* terminal and intercalary, subcylindrical, thick-walled, straight, brown, roughened, 15–30 × 3–5 µm, with 1–2 flat-tipped apical loci, 2–3 µm diam, thickened and darkened. *Ramoconidia* brown, thick-walled, roughened, subcylindrical to ellipsoid-fusoid, 0–1-septate, 16–20 × 3–4(–5) µm, with 1–2 hila, thickened, darkened, 2–3 µm. *Conidia* occurring in branched chains (–10), acropetal, brown, thick-walled, roughened, medianly 1-septate, (10–)12–14(–16) × (3–)3.5–4 µm; hila thickened, darkened, 1.5–2 µm diam.

Culture characteristics — Colonies erumpent with sparse aerial mycelium and even, lobed margins, reaching 25 mm diam after 1 mo at 25 °C. On MEA, PDA and OA surface and reverse iron grey.

Typus. MALAYSIA, Sarawak, on leaf spots of *Eucalyptus pellita* (*Myrtaceae*), May 2014, M.J. Wingfield (holotype CBS H-22240, culture ex-type CPC 24864 = CBS 139920; ITS sequence GenBank KR476727, LSU sequence GenBank KR476762, MycoBank MB812432); CPC 24863.

Notes — The genus *Myrtapendiella* (*Teratosphaeriaceae*) was introduced by Quaedvlieg et al. (2014) to accommodate penidiella-like genera occurring on *Myrtaceae*. Two species are presently known, namely *M. corymbia* (ramoconidia 0–2-septate, (7–)10–12(–14) × 2.5–3 µm, intercalary conidia 0–1-septate, 7–9(–12.5) × 2.5–3(–3.5) µm, terminal conidia 4.5–6.5 × 2–3 µm; Cheewangkoon et al. 2009) and *M. eucalypti* (ramoconidia (0–)1(–3)-septate, (25–)35–40(–48) × (3.5–)4–5(–6.5) µm, intercalary conidia 0–1(–2)-septate, (10–)12–15(–18) × (3.5–)4–5(–5.5) µm, terminal conidia 0–1-septate, (9–)12–15(–19) × (4–)5–6(–7) µm; Cheewangkoon et al. 2008). *Myrtapendiella eucalyptorum* is distinct from both species by having ramoconidia intermediary in length between that of *M. corymbia* and *M. eucalypti*.

Castanediella eucalypti Crous, Hern.-Restr. & M.J. Wingf., *sp. nov.*

Etymology. Name reflects the host genus *Eucalyptus*, from which the species was isolated.

Classification — *Incertae sedis*, *Xylariales*, *Sordariomycetes*.

Mycelium consisting of hyaline to pale brown, branched, septate, 2–5 µm diam hyphae, frequently constricted at septa. *Conidiophores* erect, solitary, branched below or not, 1–2-septate, subcylindrical, medium brown, smooth, 10–30 × 3–4 µm. *Conidiogenous cells* terminal to intercalary, subcylindrical to ampulliform, pale brown, smooth, terminating in a swollen apex 2–3 µm diam with several scars, polyblastic, 8–25 × 2.5–4 µm. *Conidia* solitary, hyaline, smooth, falcate, slightly curved, widest in middle with subobtuse ends, (15–)18–21(–23) × 2–3 µm.

Culture characteristics — Colonies spreading, reaching up to 60 mm diam after 1 mo at 25 °C, with sparse aerial mycelium, and smooth, lobed margins. On OA surface honey with patches of isabelline. On MEA surface isabelline with patches of dirty white, reverse umber. On PDA surface and reverse fuscous black.

Typus. MALAYSIA, Sabah, on leaf spots of *Eucalyptus pellita* (*Myrtaceae*), May 2014, M.J. Wingfield (holotype CBS H-22226, culture ex-type CPC 24746 = CBS 139897; ITS sequence GenBank KR476723, LSU sequence GenBank KR476758, MycoBank MB812433); CPC 24747.

Notes — *Castanediella eucalypti* is morphologically different from *C. acaciae* in that it lacks sporodochia. Furthermore, its conidiophores are not densely branched, and it also has larger conidia than those of *C. acaciae* (8–12 × 1.5–2 µm). These species are also phylogenetically distinct.

Colour illustrations. Symptomatic leaf of *Eucalyptus pellita*; *Myrtapendiella eucalyptorum* (left column): colony, conidiophores and conidia; *Castanediella eucalypti* (right column): colony on SNA, conidiophores and conidia. Scale bars = 10 µm.

Pedro W. Crous, Margarita Hernández-Restrepo & Johannes Z. Groenewald, CBS-KNAW Fungal Biodiversity Centre, P.O. Box 85167, 3508 AD Utrecht, The Netherlands;
e-mail: p.crous@cbs.knaw.nl, m.hernandez@cbs.knaw.nl & e.groenewald@cbs.knaw.nl
Michael J. Wingfield, Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria, Pretoria 0002, South Africa; e-mail: mike.wingfield@up.ac.za