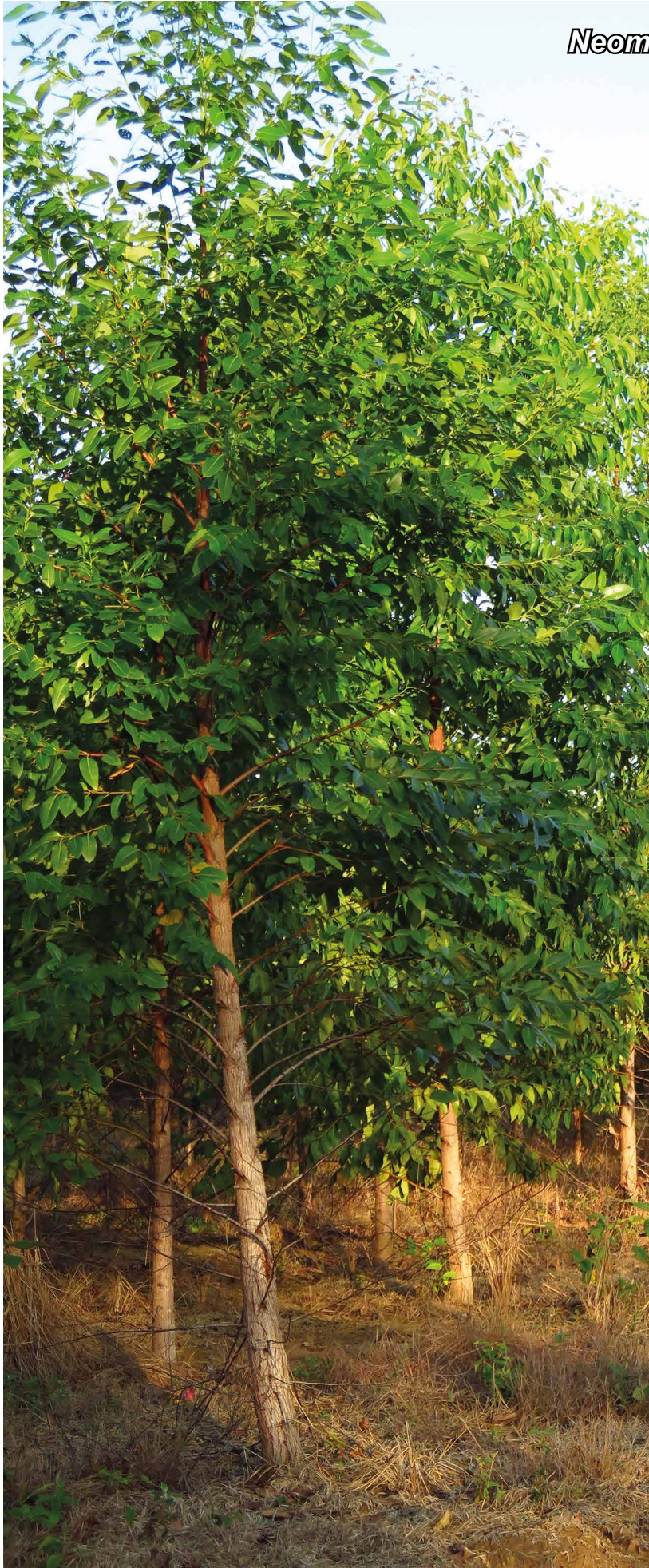


Neometulocladosporiella eucalypti



Fungal Planet 763 – 13 July 2018

Neometulocladosporiella* Crous & M.J. Wingf., gen. nov.Etymology.* Name refers to the fact that it is similar to *Metulocladosporiella*.Classification — *Rutstroemiaceae*, *Helotiales*, *Leotiomyces*.

Conidiophores dimorphic. *Microconidiophores* erect, pale brown, smooth, solitary, subcylindrical, straight to flexuous, septate, giving rise to a single, terminal conidiogenous cell. *Conidiogenous cells* pale brown, smooth, clavate, with 1–3 flat-tipped apical loci, unthickened, not darkened, giving rise to ramoconidia. *Macroconidiophores* solitary, erect, straight to flexuous, unbranched, subcylindrical, medium brown, smooth, arising from superficial mycelium, base narrow but becoming significantly wider and darkened brown in second cell from the base, septate, medium brown, smooth, clavate, giving rise to a series of metulae or branches, which are medium brown, smooth, subcylindrical to

clavate, aseptate, base abruptly tapered to flat-tipped locus, apex with 2–4 denticles, unthickened, not darkened, giving rise to secondary ramoconidia. *Primary ramoconidia* fusoid-ellipsoid to subcylindrical, medium brown, smooth, septate, with 1–3 apical flat-tipped loci, unthickened, not darkened. *Secondary ramoconidia* straight, pale brown, smooth, septate, subcylindrical with obtuse ends, base with abrupt taper to truncate hilum, apex with 1–3 denticles, not thickened nor darkened, giving rise to branched, dry chains of acropetal conidia, pale brown, smooth to finely verruculose, subcylindrical with obtuse ends, septate, with a flat-tipped basal hilum and 1–3 apical denticles, not thickened nor darkened.

Type species. *Neometulocladosporiella eucalypti* Crous & M.J. Wingf. MycoBank MB825406.

Neometulocladosporiella eucalypti* Crous & M.J. Wingf., sp. nov.Etymology.* Name refers to *Eucalyptus*, the host genus from which this fungus was collected.

Conidiophores dimorphic. *Microconidiophores* erect, pale brown, smooth, solitary, subcylindrical, straight to flexuous, 1–3-septate, 30–70 × 3–4 µm, giving rise to a single, terminal conidiogenous cell. *Conidiogenous cells* 10–50 × 3–4 µm, pale brown, smooth, clavate, with 1–3 flat-tipped apical loci, 2 µm diam, unthickened, not darkened, giving rise to ramoconidia. *Macroconidiophores* solitary, erect, straight to flexuous, unbranched, subcylindrical, medium brown, smooth, arising from superficial mycelium, base narrow but becoming significantly wider and darkened brown in second cell from the base, 200–600 × 10–16 µm, 5–10-septate, medium brown, smooth, clavate, giving rise to a series of up to 20 metulae or branches, 15–25 × 5–9 µm, which are medium brown, smooth, subcylindrical to clavate, aseptate, base abruptly tapered to flat-tipped locus, 2 µm diam, apex with 2–4 denticles, 1 × 1 µm, unthickened, not darkened, giving rise to secondary ramoconidia. *Primary ramoconidia* fusoid-ellipsoid to subcylindrical, medium brown, smooth, 0–1-septate, 12–22 × 4–5 µm, with 1–3 apical flat-tipped loci, 1 µm diam, unthickened, not darkened. *Secondary ramoconidia* straight, pale brown, smooth, 0–1-septate, subcylindrical with obtuse ends, 13–15 × 5–7 µm, base with abrupt taper to truncate hilum, 1–1.5 µm diam, apex with 1–3 denticles, 1 µm diam, not thickened nor darkened, giving rise to branched, dry chains of acropetal conidia, pale brown, smooth to finely verruculose, subcylindrical with obtuse ends, 0–1-septate, (9–)10–11(–12) × (4–)5(–6) µm, with a flat-tipped basal hilum and 1–3 apical denticles, 0.5–1 µm diam, not thickened nor darkened.

Culture characteristics — Colonies spreading, with moderate aerial mycelium and even margin, covering dish after 2 wk at 25 °C. On MEA surface isabelline, reverse hazel. On PDA surface and reverse honey. On OA surface buff.

Typus. COLOMBIA, Cali, on leaves of *Eucalyptus grandis* × *urophylla* (*Myrtaceae*), 26 June 2010, M.J. Wingfield (holotype CBS H-23584, culture ex-type CPC 31787 = CBS 144419, ITS and LSU sequences GenBank MH327800.1 and MH327836.1, MycoBank MB825407).

Notes — *Neometulocladosporiella* resembles *Metulocladosporiella* (*Herpotrichiellaceae*), a genus associated with speckle disease on banana leaves (Crous et al. 2006, 2014, Marin-Felix et al. 2019). The fungus from *Eucalyptus* leaves is, however, phylogenetically distinct, being allied to *Helotiales* and clustering with genera such as *Ciboria* and *Lanzia*. A new genus, *Neometulocladosporiella*, is therefore introduced to accommodate the fungus occurring on *Eucalyptus*, and to distinguish it from *Metulocladosporiella*, which occurs on *Musa* spp. (Bensch et al. 2012, Marin-Felix et al. 2019).

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence had highest similarity to *Lanzia allantospora* (GenBank AB926099.1; Identities = 526/557 (94 %), 8 gaps (1 %)), *Roseodiscus sinicus* (GenBank NR_154394.1; Identities = 494/529 (93 %), 6 gaps (1 %)) and *Ciboria americana* (GenBank JN033399.1; Identities = 515/552 (93 %), 13 gaps (2 %)). Closest hits using the LSU sequence are *Lanzia allantospora* (GenBank AB926154.1; Identities = 855/859 (99 %), no gaps), *Ciboria americana* (GenBank JN086702.1; Identities = 792/803 (99 %), no gaps) and *Lambertella subrenispora* (GenBank AB926152.1; Identities = 831/851 (98 %), no gaps).

Colour illustrations. *Eucalyptus* trees in Colombia; conidiophores sporulating on pine needle agar, conidiogenous apparatus, conidiogenous cells and conidia. Scale bars = 10 µm.