

Neometulocladosporiella seifertii



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Neometulocladosporiella seifertii Crous, sp. nov.

Etymology. Named after Keith A. Seifert, a Canadian mycologist who is always impressed by hyphomycetes with such magnificent, pigmented, solitary conidiophores.

Classification — *Rutstroemiaceae*, *Helotiales*, *Leotiomyces*.

Conidiophores dimorphic. *Microconidiophores* erect, medium brown, smooth, solitary, subcylindrical, straight to flexuous, 1–3-septate, 35–70 × 3–5 µm, giving rise to a single, terminal conidiogenous cell. *Conidiogenous cells* 10–30 × 3–4 µm, medium brown, smooth, clavate, with a flat-tipped apical locus, 1–2 µm diam, unthickened, not darkened, giving rise to ramoconidia. *Macroconidiophores* solitary, erect, straight to flexuous, unbranched, subcylindrical, dark brown, smooth, arising from superficial mycelium, 250–600 × 10–16 µm, 5–12-septate, dark brown, smooth, clavate, giving rise to a series of branches, 10–15 × 5–7 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 or clavate, medium brown, smooth, 0–1-septate, 10–22 × 5–6 µm, with 1–3 apical flat-tipped loci, 1 µm diam, unthickened, not darkened. *Secondary ramoconidia* straight, pale brown, smooth to finely verruculose, 0–1-septate, subcylindrical with obtuse ends, 10–14 × 5–6 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 to ellipsoid with obtuse ends, constricted at median septum, (8–)9–10(–12) × (4–)4.5(–5) µm, with a flat-tipped basal hilum and 1–3 apical denticles, 0.5–1 µm diam, not thickened nor darkened.

Culture characteristics — Colonies flat, spreading, with moderate aerial mycelium and smooth, lobate margin, reaching 35 mm diam after 2 wk at 25 °C. On MEA surface isabelline, reverse hazel; on PDA surface isabelline, reverse umber; on OA surface isabelline.

Typus. SOUTH AFRICA, Western Cape Province, Clanwilliam, on leaves of *Combretum caffrum* (*Combretaceae*), 2018, P.W. Crous, HPC 3048 (holotype CBS H-24424, culture ex-type CPC 38599 = CBS 146795, ITS and LSU sequences GenBank MW175352.1 and MW175392.1, MycoBank MB837844).

Colour illustrations. Leaves and branches of *Combretum caffrum*. Erect mononematous macroconidiophores on SNA; Clavate conidiophores giving rise to a series of branches and conidiogenous cells; microconidiophores and chains of conidia. Scale bars = 10 µm.

Notes — The hitherto monotypic genus *Neometulocladosporiella* was established for a genus of hyphomycetes occurring on *Eucalyptus* leaves collected in Colombia (Crous et al. 2018c). Morphologically the two species are very similar regarding their conidiophores, branches and conidial dimensions, and they are best distinguished based on the DNA sequence data.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Neometulocladosporiella eucalypti* (strain CPC 31787, GenBank NR_160350.1; Identities = 535/555 (96 %), one gap (0 %)), *Lanzia allantospora* (strain CBS 124334, GenBank AB926099.1; Identities = 527/559 (94 %), nine gaps (1 %)), and *Rutstroemia firma* (voucher TU 104487, GenBank LT158448.1; Identities = 516/555 (93 %), nine gaps (1 %)). Closest hits using the **LSU** sequence are *Neometulocladosporiella eucalypti* (strain CPC 31787, GenBank NG_064541.1; Identities = 831/836 (99 %), no gaps), *Lanzia allantospora* (strain CBS 124334, GenBank AB926154.1; Identities = 838/847 (99 %), no gaps), and *Ciboria americana* (voucher KUS-F52240, GenBank JN086702.1; Identities = 744/760 (98 %), no gaps).