

Sympoventuria melaleuca



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Sympoventuria melaleuca Crous, sp. nov.

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

Classification — *Sympoventuriaceae*, *Venturiales*, *Dothideomycetes*.

Mycelium consisting of smooth, pale brown, septate, branched, 2–3 µm diam hyphae. *Conidiophores* reduced to conidiogenous loci on hyphae, 3–7 × 2–3 µm; scars truncate, unthickened, not darkened, 1–1.5 µm diam. *Conidia* in long, branched chains, pale brown, smooth, fusoid-ellipsoid, 0–1-septate, prominently guttulate, (8–)11–17(–25) × 2–3 µm; hila truncate, unthickened, 1–2 µm diam.

Culture characteristics — Colonies erumpent, spreading, with moderate aerial mycelium and smooth, lobate margins, reaching 20 mm diam after 2 wk at 25 °C. On MEA, PDA and OA surface amber, reverse chestnut.

Typus. AUSTRALIA, Victoria, Royal Botanic Gardens Victoria, Melbourne Gardens, on leaves of *Melaleuca* sp. (*Proteaceae*), 2 Dec. 2016, P.W. Crous (holotype CBS H-23298, culture ex-type CPC 32576 = CBS 143407, ITS, LSU and *tub2* sequences GenBank MG386059, MG386112 and MG386168, MycoBank MB823407).

Notes — *Sympoventuria* was introduced for a venturia-like ascomycete with a distinct hyphomycete asexual morph occurring on *Eucalyptus* leaf litter in South Africa (Crous et al. 2007). *Sympoventuria melaleuca* adds one additional taxon to the genus, this time occurring on *Proteaceae*, but again collected in the southern hemisphere. *Sympoventuria melaleuca* (conidia 0–1-septate, (8–)11–17(–25) × 2–3 µm) can be distinguished from *S. capensis* (conidia (1–)3(–5)-septate, 10–65 × 2.5–5 µm; Crous et al. 2007), in that it has smaller, 0–1-septate conidia.

Based on a megablast search using the ITS sequence, the closest matches in NCBI's GenBank nucleotide database were *S. capensis* (GenBank NR_121323; Identities 521/563 (93 %), 8 gaps (1 %)) and *Fusicladium africanum* (GenBank EU035424; Identities 514/565 (91 %), 8 gaps (1 %)). The highest similarities using the LSU sequence were *S. capensis* (GenBank KF156104; Identities 785/790 (99 %), no gaps), *Scolecobasidium excentricum* (GenBank KF156105; Identities 782/790 (99 %), 1 gap (0 %)) and *Fusicladium africanum* (GenBank EU035424; Identities 838/850 (99 %), no gaps). No significant hits were found when the *tub2* sequence was used in a blast search.

Colour illustrations. *Melaleuca* sp.; conidiophores sporulating on PNA, conidiophores, conidiogenous cells and conidia. Scale bars = 10 µm.

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