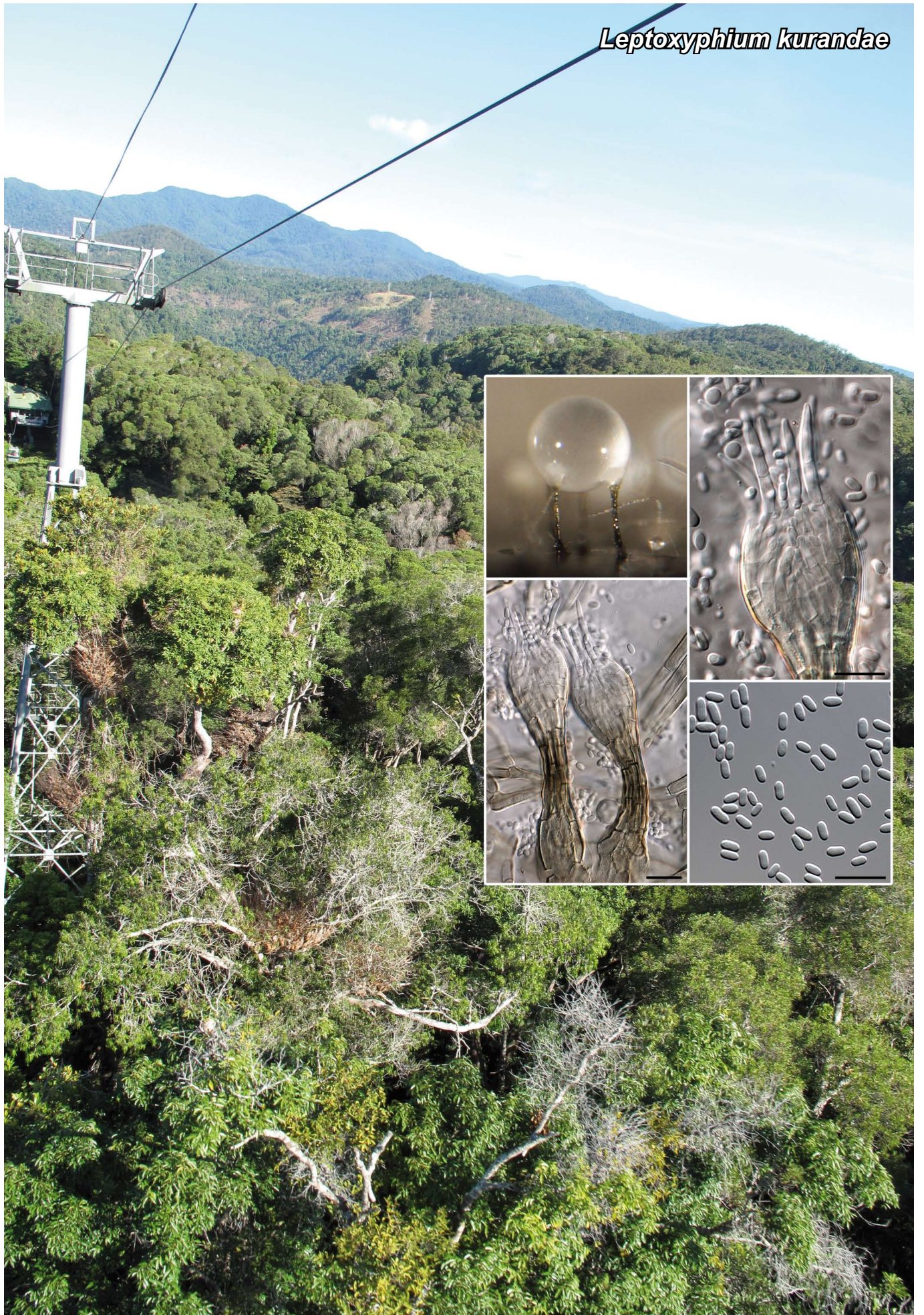


Leptoxyphium kurandae



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Leptoxyphium kurandae Crous & R.G. Shivas, *sp. nov.*

Leptoxyphium madagascariense simile, sed conidiis majoribus, (4–)6–7(–9) × 2–3 µm, discernitur.

Etymology. Named after the town of Kuranda, where this fungus was collected.

Mycelium consisting of medium, grey-brown hyphae, 5–9 µm diam, septate, branched, constricted at septa, forming hyphal ropes, thick-walled, finely verruculose, frequently encased in mucoid sheath. **Conidiomata** synnematous, separate or in clusters of 2–3, erect, straight to slightly flexuous; bulbous base brown, 30–50 × 25–35 µm; cylindrical part dark olivaceous-brown, 60–100 × 12–15 µm, hyphal apex 30–50 × 25–40 µm, loose apical hyphae flaring, 20–35 × 2.5–3 µm. **Conidiophores** subcylindrical to subulate, 0–2-septate, 15–25 × 2–3 µm, tightly aggregated in apical part of synnema, among synnematous hyphae that diverge close to apex. **Conidiogenous cells** integrated, terminal, phialidic, 7–10 × 2–2.5 µm, tapering to a truncate apex, with periclinal thickening and visible collarette. **Conidia** broadly ellipsoid with rounded ends, aseptate, eguttulate, hyaline, smooth, (4–)6–7(–9) × 2–3 µm, aggregating in hyaline, slimy masses at apex of synnemata.

Culture characteristics — (in the dark, 25 °C, after 2 wk): Colonies spreading, erumpent, with sparse to moderate aerial mycelium and even margins, reaching 30 mm diam after 2 wk; on malt extract agar surface olivaceous grey, outer region umber, and iron-grey in reverse; on oatmeal agar surface iron-grey; on potato-dextrose agar surface olivaceous grey, grey olivaceous in outer region and reverse.

Typus. AUSTRALIA, Queensland, Cairns, Kuranda, S 16°49'24.6", E 145°38'2.6", on leaves of *Eucalyptus* sp., 13 Aug. 2009, P.W. Crous & R.G. Shivas, holotype CBS H-20591, culture ex-type CPC 17274 = CBS 129530, ITS sequence GenBank JF951150 and LSU sequence GenBank JF951170, MycoBank MB560176.

Notes — Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence are *Leptoxyphium* sp. TMS-2011 (HQ631026; Identities = 574/576 (99 %), Gaps = 0/576 (0 %)), *Leptoxyphium madagascariense* (GQ303277; Identities = 617/628 (98 %), Gaps = 2/628 (0 %)) and *Polychaeton citri* (GU214649; Identities = 656/704 (93 %), Gaps = 23/704 (3 %)). A similar search using the LSU sequence yielded the closest hits to be *Microxyphium citri* (AY004337; Identities = 914/914 (100 %), Gaps = 0/914 (0 %)) and *Leptoxyphium fumago* (GU214430; Identities = 878/882 (99 %), Gaps = 2/882 (0 %)). Morphologically *L. kurandae* can be distinguished from *L. madagascariense*, by its larger conidia (Cheewangkoon et al. 2009).

Colour illustrations. *Eucalyptus* and other rainforest trees viewed from the cable car at Kuranda; conidiophores sporulating on agar; synnematous conidiophores with hyphal apices and conidia. Scale bars = 10 µm.

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