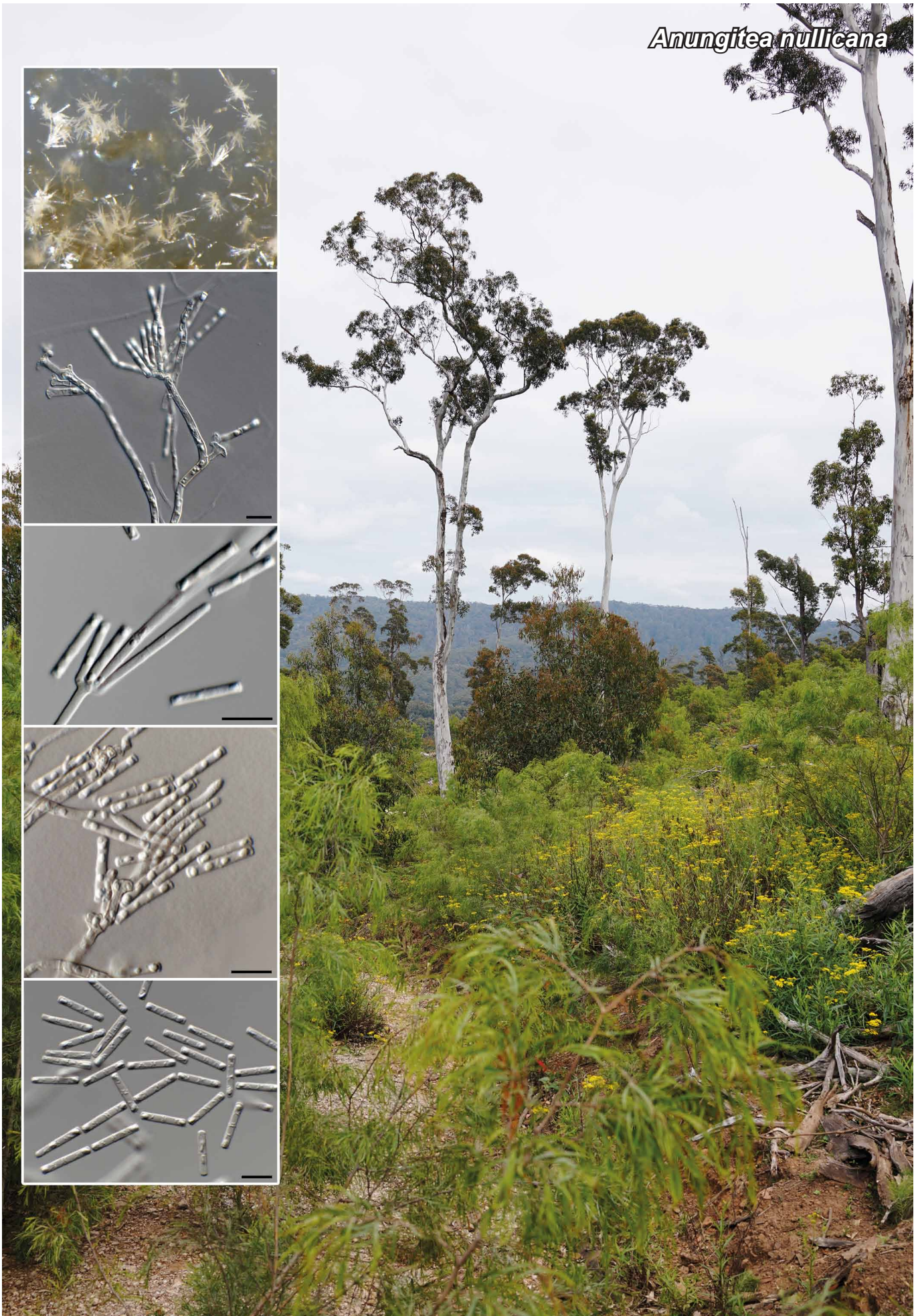


Anungitea nullicana



Fungal Planet 689 – 20 December 2017

Anungitea nullicana Crous, *sp. nov.*

Etymology. Name refers to Nullica State Forest, Australia, where this fungus was collected.

Classification — *Phlogicylindriaceae*, *Xylariales*, *Sordariomycetes*.

Mycelium consisting of hyaline, smooth, branched, septate, 3–3.5 µm diam hyphae. *Conidiophores* solitary, erect, subcylindrical, mostly unbranched, medium brown, smooth, 50–100 × 3–4 µm, 4–8-septate. *Conidiogenous cells* terminal and intercalary, pale brown, subcylindrical with terminal clusters of denticulate-like sympodial loci, 2 µm diam, not thickened nor darkened, 10–15 × 2 µm, conidiogenous head up to 10 µm diam. *Ramoconidia* uncommon, pale brown with terminal head of sympodial loci, 12–22 × 2 µm, head up to 10 µm diam. *Conidia* in long unbranched chains, hyaline, smooth, cylindrical with truncate ends, medianly 1-septate, with 2 large guttules per cell, (12–)14–17(–20) × 2.5(–3) µm.

Culture characteristics — Colonies flat, spreading, with sparse to moderate aerial mycelium and smooth, lobate margins, reaching 30 mm diam after 2 wk at 25 °C. On MEA surface amber, reverse chestnut. On PDA surface and reverse chestnut. On OA surface buff in centre, isabelline in outer zone.

Typus. AUSTRALIA, New South Wales, Nullica State Forest, on leaf litter of *Eucalyptus* sp. (*Myrtaceae*), 29 Nov. 2016, P.W. Crous (holotype CBS H-23297, culture ex-type CPC 32528 = CBS 143406, ITS and LSU sequences GenBank MG386058 and MG386111, MycoBank MB823406).

Notes — *Anungitea* is characterised by species with pigmented, solitary conidiophores, bearing a head with denticles with flattened conidiogenous scars that are neither unthickened nor darkened, and chains of cylindrical, 1-septate subhyaline conidia (Sutton 1973). *Anungitea nullicana* (conidia 1-septate, (12–)14–17(–20) × 2.5(–3) µm) is morphologically similar to *A. eucalyptigena* (conidia 0–1-septate, (11–)14–16(–18) × (2–)2.5(–3) µm) and *A. eucalyptorum* (conidia 0–1-septate, (13–)14–15(–17) × 2.5(–3) µm) (Crous et al. 2014a), and these species are best distinguished based on their DNA data.

Based on a megablast search using the ITS sequence, the closest matches in NCBI's GenBank nucleotide database were *A. eucalyptigena* (GenBank KY173383; Identities 561/570 (98 %), no gaps), *A. grevilleae* (GenBank KX228252; Identities 543/571 (95 %), 11 gaps (1 %)) and *A. eucalyptorum* (GenBank NR_132904; Identities 540/570 (95 %), 12 gaps (2 %)). The highest similarities using the LSU sequence were *A. eucalyptigena* (GenBank KY173477; Identities 818/821 (99 %), no gaps), *Phlogicylindrium eucalypti* (GenBank DQ923534; Identities 836/842 (99 %), 1 gap (0 %)) and *A. eucalyptorum* (GenBank KJ869176; Identities 833/841 (99 %), no gaps).

Colour illustrations. Nullica State Forest; conidiophores sporulating on PNA, conidiophores and conidia. Scale bars = 10 µm.

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