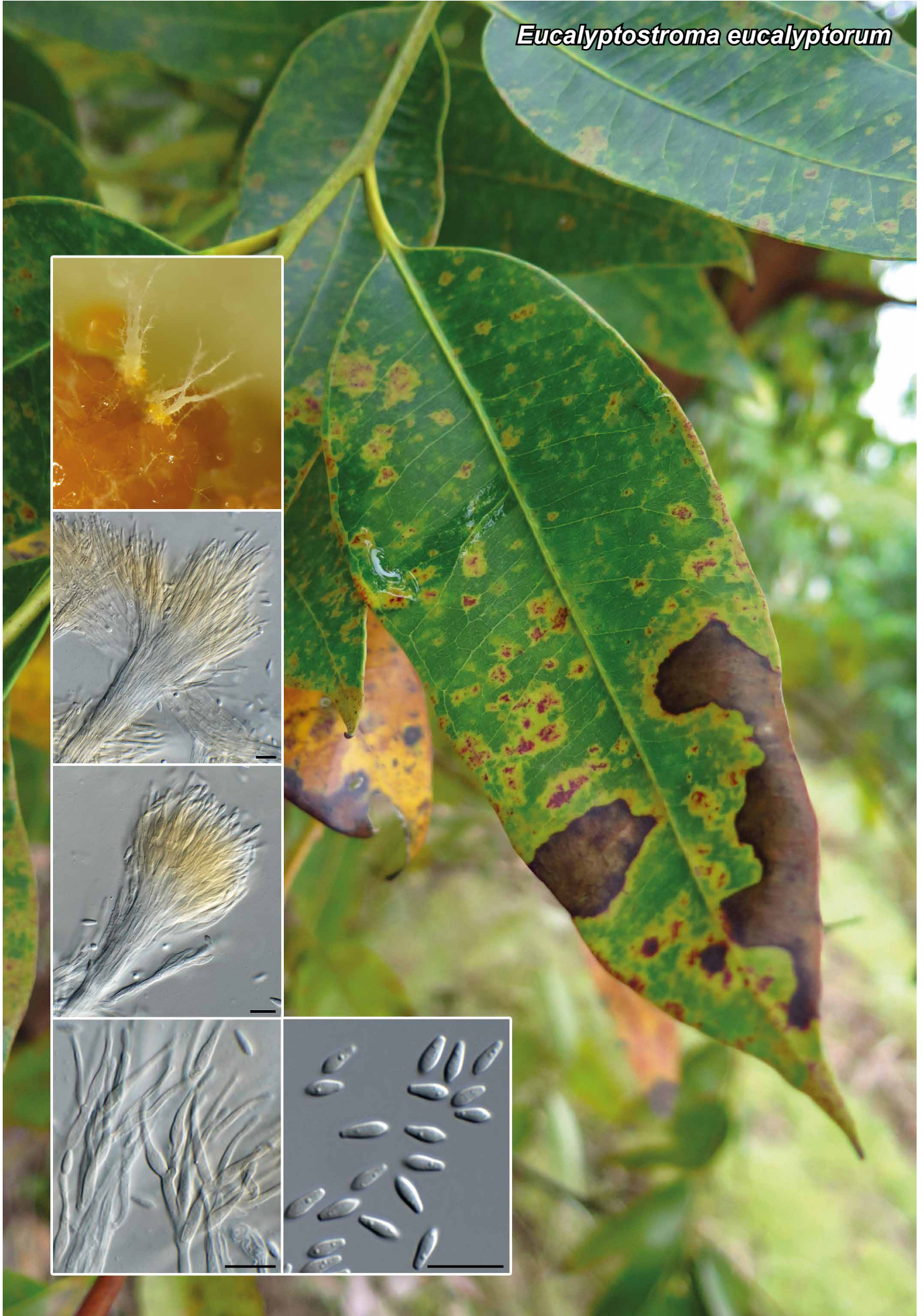


Eucalyptostroma eucalyptorum



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Eucalyptostroma eucalyptorum Crous & M.J. Wingf., sp. nov.

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

Classification — *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*.

Conidiomata scattered to gregarious, consisting of dense synnemata, 100–300 × 20–70 µm; stem consisting of aggregated conidiophores, hyaline, smooth, 2–3 µm diam, flaring outwards in upper conidiogenous region to form a yellow-orange slimy conidial mass. *Conidiogenous region* consisting of a series of branches (up to 6), giving rise to lateral and terminal conidiogenous cells; branches subcylindrical, aseptate, hyaline, smooth, 9–12 × 2–3 µm. *Conidiogenous cells* elongated ampulliform, pale luteous, smooth, phialidic at apex, 1.5 µm diam, with short collarette, 1–2 µm long, 13–16 × 2–3 µm. *Conidia* solitary, smooth, aseptate, fusoid-ellipsoid in upper third, apex subobtuse, base truncate, 1 µm diam, (4–)5(–6) × (1.5–)2(–2.5) µm.

Culture characteristics — Colonies erumpent, spreading, with sparse to moderate aerial mycelium and smooth, even margin, reaching 12 mm diam after 2 wk at 25 °C. On MEA surface pale luteous, reverse luteous. On PDA surface and reverse umber in centre, pale luteous in outer region. On OA surface luteous in centre, pale luteous in outer region.

Typus. COLOMBIA, Llanos, on leaves of *Eucalyptus pellita* (*Myrtaceae*), July 2010, *M.J. Wingfield* (holotype CBS H-23582, culture ex-type CPC 31800 = CBS 144421, ITS and LSU sequences GenBank MH327802.1 and MH327838.1, MycoBank MB825411).

Notes — The monotypic genus *Eucalyptostroma* was recently introduced for a hyphomycete occurring on *Eucalyptus* leaves in Malaysia (Crous et al. 2016a). *Eucalyptostroma eucalyptorum* which also occurs on *Eucalyptus* leaves, but in Colombia, is distinguished by forming more synnematal conidiomata, and having slightly larger conidia than *E. eucalypti* (3–4.5 × 2 µm). *Eucalyptostroma* is recognized on leaves by forming slimy, yellow-orange conidial mass on either synnemata or sporodochia.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence had highest similarity to *Eucalyptostroma eucalypti* (GenBank NR_154027.1; Identities = 517/536 (96 %), 7 gaps (1 %)), *Chaetosphaeria myriocarpa* (GenBank JF340253.1; Identities = 403/474 (85 %), 32 gaps (6 %)) and *Codinaea pini* (GenBank NR_137943.1; Identities = 351/401 (88 %), 13 gaps (3 %)). Closest hits using the LSU sequence are *Eucalyptostroma eucalypti* (GenBank KY173500.1; Identities = 806/818 (99 %), 3 gaps (0 %)), *Paliophora intermedia* (GenBank EF204500.1; Identities = 790/827 (96 %), 1 gap (0 %)) and *Chaetosphaeria curvispora* (GenBank GU180636.1; Identities = 796/838 (95 %), no gaps).

Colour illustrations. Symptomatic *Eucalyptus* leaves; agar colony with sporulation, synnemata, conidiogenous cells and conidia. Scale bars = 10 µm.