

Chaetomella zambiensis



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***Chaetomella zambiensis* Crous, sp. nov.**

Etymology. Named after the country where it was collected, Zambia.

On SNA. *Conidiomata* sporodochial, superficial, stipitate, separate, up to 250 µm diam, creamy in colour, globose, becoming cupulate; basal wall of brown *textura angularis*, which becomes hyaline towards apex, separating into paraphyses; conidioma surrounded by a brown outer layer of cylindrical cells with obtuse apices that give rise to brown, club-shaped setae, thick-walled, smooth to verruculose, 3–8-septate, basal cell swollen, apical cell clavate to ellipsoid, 50–90 × 4–6 µm. *Conidiophores* hyaline, smooth, branched, septate, filiform, giving rise to conidiogenous cells and paraphyses, up to 100 µm long, 1.5–2 µm diam. *Conidiogenous cells* terminal and lateral, monophialidic, subcylindrical, straight to curved, smooth, hyaline, with periclinal thickening and minute collarette, 3–20 × 1.5–2 µm. *Conidia* hyaline, smooth, aseptate, cymbiform, guttulate, apex acutely rounded, base with truncate hilum, 0.5 µm diam, (7–)8(–9) × (1.5–)2 µm.

Culture characteristics — Colonies reaching 70 mm diam after 2 wk at 22 °C, spreading, with moderate aerial mycelium and feathery margins. On PDA and OA surface and reverse dirty white. On MEA surface dirty white, reverse luteous.

Typus. ZAMBIA, B&B13448, Unknown host (*Fabaceae*), 21 Feb. 2013, *M. van der Bank* (holotype CBS H-21690, culture ex-type CPC 22465 = CBS 137978; ITS sequence GenBank KJ869130, LSU sequence GenBank KJ869187, MycoBank MB808905).

Notes — The genus *Chaetomella* (*Leotiomyces*) was treated by Rossman et al. (2004). Although there are more than 50 names in the genus, most taxa are poorly known, and the genus is in need of revision. Sutton (1980) included four species and one variety in *Chaetomella*, and reduced *Volutellospora* and *Harikrishnaella* to synonymy. Phylogenetically, *C. zambiensis* is best accommodated in *Chaetomella*, where it presents a novel lineage.

ITS. Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence are *Chaetomella raphigera* (GenBank KF193635; Identities = 448/472 (95 %), Gaps = 6/472 (1 %)), *Zoellneria rosarum* (GenBank KF661532; Identities = 468/508 (92 %), Gaps = 5/508 (0 %)) and *Chaetomella oblonga* (GenBank AY487079; Identities = 446/486 (92 %), Gaps = 8/486 (1 %)).

LSU. Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the LSU sequence are *Chaetomella raphigera* (GenBank AY487086; Identities = 789/804 (98 %), no gaps), *Chaetomella acutiseta* (GenBank AY544679; Identities = 801/817 (98 %), no gaps) and *Chaetomella oblonga* (GenBank AY487080; Identities = 801/817 (98 %), no gaps).

Colour illustrations. Unknown *Fabaceae* in Zambia (photo: John Burrows); conidiomata, setae, conidiophores and conidia in culture. Scale bars = 10 µm.

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