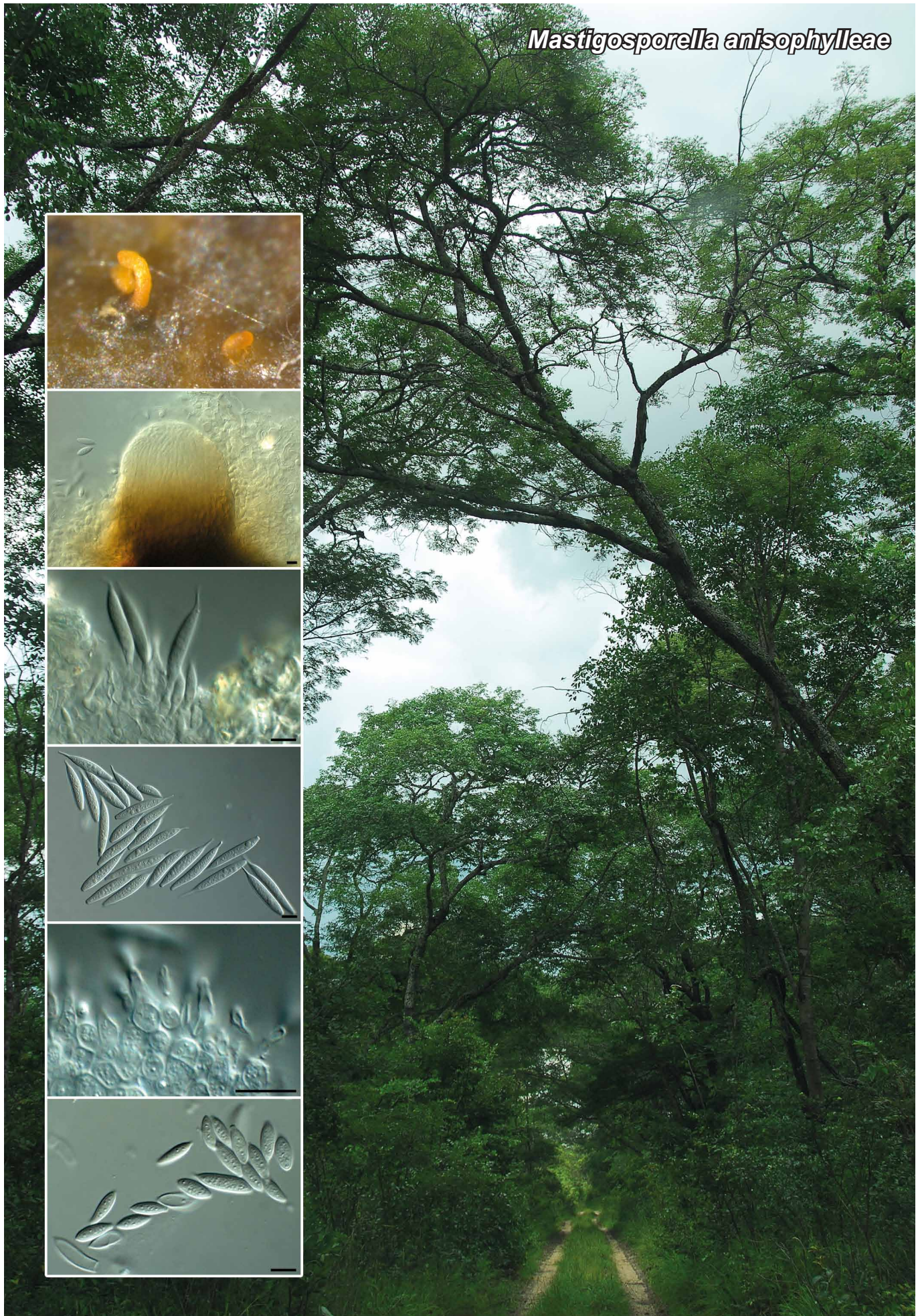


Mastigosporella anisophylleae



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Mastigosporella anisophylleae Crous, sp. nov.

Etymology. Named after the host genus on which it occurs, *Anisophyllea*.

Conidiomata immersed, pycnidial, up to 250 µm diam, yellowish on host tissue, with central ostiole which can become papillate (or not, in which case the conidioma can open by means of an irregular split), exuding a yellow conidial cirrus; wall of 6–10 layers of hyaline to subhyaline *textura globulosa* to *angularis*. *Conidiophores* reduced to conidiogenous cells. *Conidiogenous cells* hyaline, smooth, lining the inner cavity, subcylindrical to ampulliform or doliiform, 5–12 × 3–5 µm; proliferating several times inconspicuously percurrently near apex. *Conidia* solitary, aseptate, fusoid-ellipsoid, hyaline, smooth, thick-walled, granular, developing a solitary apical appendage (cellular, type A1 sensu Nag Raj 1993), which is part of the conidial body, which develops while still attached to the conidiogenous cell, attenuating into an acutely rounded tip; conidium body (21–)27–30(–32) × (4.5–)5–5.5(–6) µm (excluding appendage); basal hilum truncate, 1.5–2 µm diam, with minute marginal frill; apical appendage developing as continuation of conidium body, containing cytoplasm, (5–)6–7(–8) µm.

Culture characteristics — Colonies covering dish in 2 wk at 25 °C, flat, spreading, with sparse dirty white aerial mycelium and patches of orange due to copious sporulation. On PDA surface grey-olivaceous, reverse smoke-grey; on OA surface dirty white to apricot; on MEA surface ochreous, reverse umber.

Typus. ZAMBIA, -14.90099 25.45409, on *Anisophyllea* sp. (*Anisophylleaceae*), 21 Feb. 2013, *M. van der Bank* (holotype CBS H-21429, culture ex-type CPC 22461, 22462 = CBS 136421, ITS sequence GenBank KF779492, LSU sequence GenBank KF777221, MycoBank MB805831).

Notes — The genus *Mastigosporella* (presumed sexual morph *Wuestneiopsis*) is characterised by yellowish pycnidial conidiomata, and hyaline conidiogenous cells that proliferate percurrently, giving rise to narrowly ellipsoid to fusoid conidia that form an appendage (type A1) while still attached to the conidiogenous cell, becoming a tubular extension of the conidium body (Nag Raj 1993). Presently the genus is known from two species, *M. hyalina* (on *Quercus coccinea*, USA; conidia 18–28 × 3.5–5 µm) and *M. nyssae* (on *Nyssa* spp., USA; conidia 16–25 × 5–7 µm), which are smaller than those of *M. anisophyllea*.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the LSU sequence are *Cryphonectria decipiens* (GenBank JQ862750; Identities = 817/828 (99 %), Gaps = 1/828 (0 %)), *Aurifilum marmelostoma* (GenBank HQ730874; Identities = 826/838 (99 %), Gaps = 1/838 (0 %)) and *Cryphonectria macrospora* (GenBank AF408340; Identities = 825/837 (99 %), Gaps = 1/837 (0 %)).

The *Cryphonectriaceae* represents a family of ascomycetous fungi characterised by erumpent conidiomata with bright yellow-brown furfuraceous margins (Rossman et al. 2007). Several foliicolous genera on diverse woody hosts have in recent years been added to this family, namely *Aurantiosacculus* and *Foliocryphia* on *Eucalyptus* (Cheewangkoon et al. 2009, Crous et al. 2012b), and *Chrysocrypta* on *Corymbia* (Crous et al. 2012c). The present study links yet another genus to the *Cryphonectriaceae*, namely *Mastigosporella*.

Colour illustrations. *Anisophyllea* sp. and undergrowth along country road in Zambia (photo credit: Olivier Maurin); oozing conidial mass, papillate conidioma, conidiogenous cells and conidia. Scale bars = 10 µm.

Pedro W. Crous & Johannes Z. Groenewald, CBS-KNAW Fungal Biodiversity Centre, P.O. Box 85167, 3508 AD Utrecht, The Netherlands; e-mail: p.crous@cbs.knaw.nl & e.groenewald@cbs.knaw.nl

Michelle van der Bank, Department of Botany and Plant Biotechnology, University of Johannesburg, P.O. Box 524, Auckland Park, 2006, South Africa; e-mail: mvdbank@uj.ac.za