

*Neopseudocercospora terminaliae*



Fungal Planet 172 – 26 November 2013

## *Neopseudocercospora* Crous, *gen. nov.*

*Etymology.* Named after its resemblance to the genus *Pseudocercospora*.

*Foliicolous*, plant pathogenic. *Mycelium* superficial, consisting of branched, septate, medium brown, hyphae, at times constricted at septa, lacking hyphopodia. *Conidiophores* solitary, erect, medium brown, subcylindrical, straight to once geniculate, septate. *Conidiogenous cells* integrated, terminal, medium brown, smooth, subcylindrical, proliferating several times percurrently

near apex. *Conidia* solitary, medium brown, smooth, subcylindrical, straight to gently curved, apex obtuse, base truncate, rarely with minute marginal frill, not thickened nor darkened, transversely euseptate (with central pore), rarely with longitudinal septa, guttulate to finely granular, surface finely roughened.

*Type species.* *Neopseudocercospora terminaliae*.  
Mycobank MB805834.

## *Neopseudocercospora terminaliae* Crous, *sp. nov.*

*Etymology.* Named after the host from which it was collected, *Terminalia*.

*Colonies* occurring on the underside of leaves, associated with pale brown leaf spots, indistinct, confined by leaf veins, 1–5 mm diam, covering lesion with black conidial mass. *Mycelium* superficial, consisting of branched, septate, medium brown, 3–4 µm diam hyphae, at times constricted at septa, lacking hyphopodia. *Conidiophores* solitary, erect, medium brown, subcylindrical, straight to once geniculate, 0–3-septate, 15–40 × 4–6 µm. *Conidiogenous cells* integrated, terminal, medium brown, smooth, subcylindrical, 5–25 × 5–7 µm; proliferating several times percurrently near apex. *Conidia* solitary, medium brown, smooth, subcylindrical, straight to gently curved, apex obtuse, base truncate, 5–6 µm diam, rarely with minute marginal frill, not thickened nor darkened, transversely 7–11-euseptate (with central pore), rarely with longitudinal septa, guttulate to finely granular, surface finely roughened, (65–)70–75(–80) × (8–)10 µm.

*Culture characteristics* — Colonies erumpent, surface folded, with sparse aerial mycelium and lobate, feathery margins, reaching 10 mm diam after 2 wk. On MEA surface iron-grey with patches of olivaceous-grey, reverse iron-grey; on OA and PDA surface dirty white with patches of pale olivaceous-grey.

*Typus.* ZAMBIA, -11.91237 25.30100, on *Terminalia* sp. (*Combretaceae*), 24 Feb. 2013, *M. van der Bank* (holotype CBS H-21431, culture ex-type CPC 22685, 22686 = CBS 136423, ITS sequence GenBank KF777175, LSU sequence GenBank KF777228, MycoBank MB805835).

*Colour illustrations.* *Terminalia* sp. in Zambia (photo credit: Olivier Maurin); conidiophores giving rise to conidia (note some conidia broken, not disarticulating). Scale bars = 10 µm.

*Notes* — *Neopseudocercospora* is reminiscent of the genera *Sporidesmium*, *Sporidesmaja* and *Phaeomycoentrospora* (Wu & Zhuang 2005, Yang et al. 2010, Crous et al. 2013a). *Sporidesmium*, however, belongs to the *Sordariomycetes*, and *Phaeomycoentrospora* to the *Pleosporales* (Crous et al. 2013a). *Sporidesmaja* has very long conidiophores, and obclavate conidia with darker basal cells, and belongs to the *Micropeltidaceae* (Yang et al. 2010). *Neopseudocercospora* belongs to the *Mycosphaerellaceae*, where it clusters with *Microcyclosporella* and *zasmidium*-like species (Clade 8 sensu Crous et al. 2013a). Within this family, it is reminiscent of some species of *Pseudocercospora* (Crous et al. 2013a). However, the combination of characters that include exclusively superficial hyphae, solitary conidiophores, conidiogenous cells that proliferate percurrently, and conidia that also have longitudinal septa, is not typical for *Pseudocercospora*.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the LSU sequence are *Mycosphaerella parkii* (GenBank DQ246245; Identities = 854/891 (96 %), Gaps = 7/891 (0 %)), *Mycosphaerella madeirae* (GenBank DQ204756; Identities = 851/890 (96 %), Gaps = 5/890 (0 %)) and *Phaeophleospora concentrica* (GenBank FJ493205; Identities = 851/892 (95 %), Gaps = 9/892 (1 %)). Closest hits using the ITS sequence had highest similarity to *Mycosphaerella milleri* (GenBank EU167577; Identities = 465/536 (87 %), Gaps = 16/536 (2 %)), *Phloeospora ulmi* (GenBank F251200; Identities = 455/527 (86 %), Gaps = 32/527 (6 %)) and *Pseudocercospora capsellae* (GenBank U214662; Identities = 470/545 (86 %), Gaps = 26/545 (4 %)).

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