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**Semifissispora natalis** Crous, Jacq. Edwards & P.W.J. Taylor, *sp. nov.*

*Etyymology.* natalis (Latin genitive noun), refers to the birth date of the first author, on which this fungus was collected.

*Classification —** Massarinaceae, Pleosporales, Dothideomycetes.

Ascomata pseudothecial, immersed in leaf tissue (litter), separate, globose, brown, to 350 µm diam, with central ostiole, 40–50 µm diam (but frequently rupturing the epidermis via irregular split); wall of 3–6 layers of brown *textura angularis*, becoming thin-walled and hyaline towards the centrum. *Pseudo-paraphyses* intermingled among asci, hyaline, smooth, with clavate terminal cells, constricted at septa, hyphae-like, 3.5–6 µm diam, extending above asci. Asci stipitate, bitunicate, 8-spored, fusoid-ellipsoid, hyaline, smooth, with visible apical chamber, 2–3 µm diam, 90–140 x 16–22 µm. Ascospores bi- to triseriate, fusoid, hyaline, smooth, guttulate, with minute fine guttules concentrated at polar ends of each cell, 1-septate, prominently constricted at septum, bending at maturity, surrounded by a prominent mucoid sheath, 2–4 µm diam; apical cells (22–)24–27(–28) x (7–)8–9(–10) µm, basal cells (23–)26–28(–31) x (6.5–)7(–7.5) µm.

Culture characteristics — Colonies reaching up to 20 mm diam after 2 wk at 25 °C spreading, with surface folded, margins feathery, lobate, and sparse aerial mycelium. On 2 % malt extract agar (MEA) surface smoke grey with patches of sepia, reverse sepia. On oatmeal agar (OA) surface isabelline. On 2 % potato dextrose agar (PDA) surface and reverse isabelline.

*Typus.** AUSTRALIA, Melbourne, cycle path alongside Moonee Ponds Creek, on leaf litter of *Eucalyptus* sp (Myrtaceae), 2 Nov. 2014, P.W. Crous, J. Edwards & P.W.J. Taylor (holotype CBS H-22394, culture ex-type CPC 25383 = CBS 140659; ITS sequence GenBank KT950846, LSU sequence GenBank KT950858, gapdh sequence GenBank KT950875, tef1 sequence GenBank KT950878, MycoBank MB814924); CPC 25384.

Notes — Swart (1982) introduced the genus *Semifissispora* (based on *S. fusiformis*) to accommodate three species found on *Eucalyptus* leaf litter, which he suspected to play a role in breakdown of litter under semi-arid conditions. There have subsequently been two additional reports of *Semifissispora* spp. from South Africa, namely *S. elongata* and *S. rotundata* (Crous 1993, Crous & Van der Linde 1993). The genus has remained obscure, although Swart (1982) correctly place it in the Pleosporales, suspecting that it was a member of Pleosporaceae. Based on the LSU sequences generated in this study, *Semifissispora* resides in the Massarinaceae, a position that is also supported by its morphology.

Of the three species presently known in *Semifissispora*, *S. natalis* differs from the other species in having longer and wider ascospores, the largest ascospores found in *S. elongata*, with apical cells being 18–25 x 4–6 (av. 20.7 x 5.1) and basal cells 22–26 x 3.5–5 (av. 23.7 x 4.4) µm.

*Colour illustrations.* Symptomatic *Eucalyptus* leaves along cycle path next to Moonee Ponds Creek; ascomata, asci and ascospores with sheath. Scale bars: ascoma = 350 µm, all others = 10 µm.