

Devriesia agapanthi



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Devriesia agapanthi Crous, *sp. nov.*

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

Ascomata amphigenous on dead leaf tissue at soil level, immersed, substomatal, solitary, brown, subglobose, up to 100 µm diam, ostiole central, 10 µm diam; wall of 2–3 layers of brown *textura angularis*. *Asci* fasciculate, sessile, obclavate, bitunicate, hyaline, 30–40 × 8–12 µm, with visible ocular chamber. *Ascospores* hyaline, smooth (becoming brown and verruculose in older asci), multiseriate, guttulate, medianly septate, with minute constriction at septum, straight to slightly curved, fusoid-ellipsoidal, widest in middle of apical cell, tapering to obtusely rounded ends, (10–)12–13(–14) × 3(–3.5) µm. *Colonies* homothallic, sporulating in culture.

Culture characteristics — (in the dark, 25 °C after 3 wk): Colonies variable on agar media, hardly growing on PDA and SNA, erumpent, lacking aerial mycelium, iron-grey, reaching 2–4 mm diam. On MEA and OA spreading, with sparse aerial mycelium, and smooth, lobate margins; reaching 20 mm diam. On MEA olivaceous grey, iron-grey at margin, and in reverse; on OA iron-grey. Chlamydospore-like structures not observed in culture.

Typus. SOUTH AFRICA, Western Cape Province, Knysna, Pledge Nature Reserve, leaves of *Agapanthus africanus* (*Amaryllidaceae*), 28 July 2011, P.W. Crous, holotype CBS H-20971, cultures ex-type CPC 19834, 19833 = CBS 132689, ITS sequence GenBank JX069875 and LSU sequence GenBank JX069859, MycoBank MB800393.

Notes — Seifert et al. (2004) introduced the genus *Devriesia* to accommodate five *Cladosporium*-like fungi that were heat resistant, produced chlamydospore-like structures, and occurred in soil. Since its initial description an additional 10 species have been described (Crous & Groenewald 2011), which considerably broadened the generic circumscription. The present collection represents the first potential teleomorph linked to this complex, suggesting that when found, teleomorphs of *Devriesia* would be *Teratosphaeria*-like in morphology (Crous et al. 2007a, 2009a, b). No anamorph was found on the host, nor observed to form in culture.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hit using the ITS sequence is *Devriesia hilliana* (GenBank GU214633; Identities = 532/551 (97 %), Gaps = 7/551 (1 %)), followed by *Devriesia xanthorrhoeae* (GenBank HQ599605; Identities = 514/530 (97 %), Gaps = 9/530 (2 %)), and *Devriesia lagerstroemiae* (GenBank GU214634; Identities = 509/558 (91 %), Gaps = 34/558 (6 %)). Closest hits using the LSU sequence yielded highest similarity to *Devriesia hilliana* (GenBank GU214414; Identities = 889/894 (99 %), Gaps = 0/894 (0 %)), *Devriesia xanthorrhoeae* (GenBank HQ599606; Identities = 887/894 (99 %), Gaps = 0/894 (0 %)), and *Devriesia queenslandica* (GenBank JF951168; Identities = 882/894 (99 %), Gaps = 0/894 (0 %)).

Colour illustrations. Fallen tree along path at Pledge Nature Reserve, with *Agapanthus africanus* growing among other bulb plants; conidiomata on dead leaf tissue; asci; germinating ascospores on malt extract agar; ascospores. Scale bars = 10 µm.