



Fungal Planet 1136 – 19 December 2020

Acremonium behniae Crous, sp. nov.

Etymology. Name refers to the host genus *Behnia* from which it was isolated.

Classification — *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*.

Mycelium consisting of hyaline, smooth, septate, branched, 1.5–2 µm diam hyphae. *Conidiophores* reduced to conidiogenous cells, erect, straight to flexuous, hyaline, smooth, phialidic, arising from superficial hyphae or from hyphal strands, giving rise to mucoid balls of conidia, but conidiogenous cells aggregated on hyphal strands, forming a sporodochial mass on agar surface conidiogenous cells subcylindrical with apical taper, 10–30 × 1.5–2 µm; apex 1–1.5 µm diam, with minute non-flares collarette, 1 µm tall. *Conidia* hyaline, smooth, aseptate, subcylindrical to fusoid-ellipsoid, apex subobtuse, base bluntly rounded, (3.5–)4–5(–6.5) × 1.5–2 µm.

Culture characteristics — Colonies flat, spreading, with folded surface, moderate aerial mycelium and smooth, lobate margin, reaching 30 mm diam after 2 wk at 25 °C. On MEA, PDA and OA surface dirty white, reverse buff to dirty white.

Typus. SOUTH AFRICA, Northern Province, Tzaneen, Buffelskloof Nature Reserve, on leaves of *Behnia reticulata* (*Asparagaceae*), 2018, P.W. Crous, HPC 3156 (holotype CBS H- 24443, culture ex-type CPC 38798 = CBS 146824, ITS and LSU sequences GenBank MW175360.1 and MW175400.1, MycoBank MB837851).

Notes — *Acremonium behniae* is closely related to *A. charticola* (conidiogenous cells 15–45(–60) × 1.5–2(–2.5) µm, conidia 3.2–4.5 × 1.4–2 µm; Gams 1971), but can be distinguished based on dimensions of its conidiogenous cells and conidia.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Acremonium charticola* (strain UOA/HCPF 14413, GenBank KC253940.1; Identities = 525/570 (92 %), nine gaps (1 %)) and *Acremonium sclerotigenum* (strain CBS 286.70H, GenBank MH859618.1; Identities = 535/581 (92 %), 14 gaps (2 %)). Closest hits using the **LSU** sequence are *Acremonium sclerotigenum* (strain UBOCC-A-118074, GenBank MT226553.1; Identities = 786/789 (99 %), one gap (0 %)), *Acremonium sordidulum* (strain CBS 385.73, GenBank MH872418.1; Identities = 837/841 (99 %), no gaps), and *Acremonium alternatum* (strain CBS 407.66, GenBank FJ176883.1; Identities = 837/841 (99 %), no gaps).

Colour illustrations. Leaves of *Behnia reticulata*. Sporulating colony on SNA; conidiophores and conidiogenous cells giving rise to conidia; conidia. Scale bars = 10 µm.