

*Vermiculariopsiella dichapetali*



Fungal Planet 232 – 10 June 2014

***Vermiculariopsiella dichapetali* Crous, sp. nov.**

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

*Ascomata* black, globose, superficial, up to 600 µm diam, developing on OA but remaining sterile, covered in brown, erect setae, similar to that observed in sporodochia. *Sporodochia* developing on SNA, erumpent, crystalline, up to 500 µm diam, with brown, erect setae dispersed throughout sporodochium, thick-walled, roughened, straight to flexuous, 100–300 × 6–10 µm, 6–12-septate, tapering to an obtuse apex that is medium brown, and thinner walled than the stipe. *Conidiophores* tightly aggregated in a brown stroma, subcylindrical, 1–4-septate, brown and verruculose at base, becoming pale brown in upper region, 60–80 × 2.5–3.5 µm. *Conidiogenous cells* terminal, subcylindrical, pale brown to subhyaline, verruculose to smooth, frequently curved in upper part, apex 1–1.5 µm diam, with prominent cylindrical collarette, 1–2 µm long, 20–40 × 2.5–3 µm. *Conidia* solitary, hyaline, guttulate, straight to slightly curved, inequilateral with inner plane straight and outer plane convex, apex subobtusely rounded, but frequently somewhat constricted and curved towards inner plane; base truncate but with excentric hilum, 0.5 µm diam, on inner straight plane, (10–)17–22(–24) × 2.5(–3) µm.

*Culture characteristics* — Colonies reaching 50 mm diam after 2 wk at 22 °C, flat, spreading, with sparse aerial mycelium and smooth, even margins. On PDA surface and reverse buff with patches of hazel. On OA and MEA surface ochreous.

*Typus.* BOTSWANA, B&B13358, on *Dichapetalum rhodesicum* (*Dichapetalaceae*), 17 Feb. 2013, M. van der Bank (holotype CBS H-21689, culture ex-type CPC 22463 = CBS 137977; ITS sequence GenBank KJ869129, LSU sequence GenBank KJ869186, MycoBank MB808904).

*Notes* — *Vermiculariopsiella* is characterised by having sporodochia with brown, erect setae dispersed throughout, stromatic, subhyaline conidiophores that give rise to phialidic conidiogenous cells with prominently curved apices, and hyaline, aseptate conidia (Seifert et al. 2011). The connection between *Vermiculariopsiella* and *Echinosphaeria* (sensu Puja et al. 2006) is obviously incorrect, as the asexual morph is an undescribed genus, and not *Vermiculariopsiella*. Presently there are around 16 species described in *Vermiculariopsiella*, and using the key of Marques et al. (2008), *V. dichapetali* is most similar to *V. elegans* (20–25 × 6–8 µm) and *V. indica* (22–30 × 8–11 µm) but distinguishable by its narrower conidia.

*ITS.* Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence are *Apodus oryzae* (GenBank AY681200; Identities = 359/402 (89 %), Gaps = 10/402 (2 %)), *Cordana solitaria* (GenBank HE672150; Identities = 353/394 (90 %), Gaps = 9/394 (2 %)) and *Cercophora grandiuscula* (GenBank GQ922544; Identities = 378/430 (88 %), Gaps = 10/430 (2 %)).

*LSU.* Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the LSU sequence are *Dictyochaeta cylindrospora* (GenBank EF063575; Identities = 789/828 (95 %), Gaps = 6/828 (0 %)), *Dactylaria parvispora* (GenBank EU107296; Identities = 781/830 (94 %), Gaps = 6/830 (0 %)) and *Cryptadelphia groenendalensis* (GenBank EU528007; Identities = 777/829 (94 %), Gaps = 5/829 (0 %)).

*Colour illustrations.* *Dichapetalum rhodesicum* in Botswana (photo: John Burrows); sterile black ascomata, white conidiomata, setae, conidiogenous cells and conidia in culture. Scale bars = 10 µm.

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