

*Diabolocovidia claustri*



Fungal Planet 1048 – 29 June 2020

## *Diabolocovidia* Crous, *gen. nov.*

*Etymology.* This fungus was described during the coronavirus pandemic, April 2020. Name composed of *diabolicus* = devilish and covid, referring to COVID-19.

Classification — *Xylariaceae*, *Xylariales*, *Sordariomycetes*.

*Mycelium* consisting of branched, septate, hyaline to pale brown, smooth to finely roughened, hyphae. *Conidiophores* solitary, erect, flexuous, mostly reduced to a terminal conidiogenous cell. *Conidiogenous cells* pale brown, smooth, sub-

cylindrical to slightly clavate, proliferating via single apical blastic locus, and remaining attached to acropetal chain of conidia that remain attached to one another via narrow isthmus. *Conidia* brown, thin-walled, smooth, guttulate, granular, ellipsoid to obovoid; conidia remaining attached in chains of propagules, disarticulating at maturity into single propagules or shorter chains.

*Type species.* *Diabolocovidia claustris* Crous.  
Mycobank MB835401.

## *Diabolocovidia claustris* Crous, *sp. nov.*

*Etymology.* Name refers to the closure or lockdown experienced in many countries during the COVID-19 pandemic.

*Mycelium* consisting of branched, septate, hyaline to pale brown, smooth to finely roughened, 2–3 µm diam hyphae. *Conidiophores* solitary, erect, flexuous, mostly reduced to a terminal conidiogenous cell. *Conidiogenous cells* pale brown, smooth, subcylindrical to slightly clavate, 8–10 × 3–4 µm, proliferating via single apical blastic locus, and remaining attached to acropetal chain of conidia that remain attached to one another via narrow isthmus. *Conidia* brown, thin-walled, smooth, guttulate, granular, ellipsoid to obovoid, (7–)8–9(–11) × (4–)5–6(–7) µm; conidia remaining attached in chains of 8–12 propagules, disarticulating at maturity into single propagules or shorter chains.

Culture characteristics — Colonies flat, spreading, with sparse to moderate aerial mycelium and feathery, lobate margin, reaching 30 mm diam after 2 wk at 25 °C. On MEA surface and reverse cinnamon. On PDA surface and reverse hazel to brown vinaceous. On OA surface hazel.

*Typus.* USA, Florida, Gainesville, on leaves of *Serenoa repens* (*Arecaceae*), 28 Feb. 2018, *M.J. Wingfield*, HPC 2792 (holotype CBS H-24353, culture ex-type CPC 37593 = CBS 146630; ITS and LSU sequences GenBank MT373367.1 and MT373350.1, MycoBank MB835402).

Notes — *Diabolocovidia* is reminiscent of genera such as *Ampullifera* (but conidiophores different and hyphopodia present) and *Junctospora* (but conidiophores sparingly branched, subhyaline; Seifert et al. 2011). Phylogenetically, it is allied to *Vamsapriya*, which is characterised by having brown, synnematos conidiophores, mono- to polytretic conidiogenous cells, and dark brown, septate conidia arranged in acropetal chains (Dai et al. 2014). Based on these differences, *Diabolocovidia* is herewith introduced as a new genus.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Vamsapriya khunkonensis* (voucher MFLU 13-0367, GenBank NR\_154499.1; Identities = 427/464 (92 %), 5 gaps (1 %)), *Didymobotryum rigidum* (strain JCM 8837, GenBank LC228650.1; Identities = 517/561 (92 %), 7 gaps (1 %)), and *Vamsapriya bambusicola* (voucher MFLU 13-0368, GenBank NR\_154500.1; Identities = 533/605 (88 %), 37 gaps (6 %)). Closest hits using the **LSU** sequence are *Vamsapriya bambusicola* (strain MFLUCC 11-0477, GenBank NG\_067527.1; Identities = 849/864 (98 %), no gaps), *Fasciatispora petrakii* (strain HKUCC 207, GenBank AY083828.1; Identities = 832/848 (98 %), 1 gap (0 %)), and *Vamsapriya indica* (strain MFLUCC 12-0544, GenBank KM462840.1; Identities = 815/831 (98 %), no gaps).

*Colour illustrations.* Leaves of *Serenoa repens*. Conidiophores with conidiogenous cells giving rise to chains of conidia. Scale bars = 10 µm.

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