

Hyalocladosporiella cannae



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Hyalocladosporiella cannae T.K.A. Kumar, *sp. nov.*

Etymology. Named after the host genus *Canna*, from which the fungus was isolated.

Classification — *Incertae sedis*, *Chaetothyriales*, *Eurotiomycetes*.

Mycelium consisting of hyaline to olivaceous grey, branched, septate, 1–3 µm diam hyphae. **Conidiophores** dimorphic, solitary and in loose fascicles. **Microconidiophores** erect, cylindrical, almost straight, geniculate, 1–2-septate, pale brown to olivaceous brown, smooth, thick-walled (1 µm), 15–40 × 3–4 µm. **Macroconidiophores** erect, cylindrical, flexuous, geniculate, 4–8-septate, pale brown to olivaceous brown, smooth, thick-walled (1 µm), 50–130 × 4–5 µm. **Conidiogenous cells** integrated, terminal, subcylindrical, smooth, pale brown to brown, slightly thick-walled, 10–15 × 3–4 µm; loci sympodially arranged, slightly thickened and darkened. **Primary ramoconidia** ellipsoid to cylindrical, hyaline to pale olivaceous grey, smooth, 0–3-septate, slightly thick-walled, 30–40 × 5–6 µm; hila thickened and darkened. **Secondary ramoconidia** ellipsoid to cylindrical, hyaline, smooth, guttulate, 0–3-septate, slightly thick-walled, 16–23 × 4–6 µm; hila thickened. **Intercalary conidia** fusoid-ellipsoid, hyaline, guttulate, smooth, 0–2 septate, slightly constricted around the septum in some, thin-walled, 6–15 × 2–3 µm; loci thickened and darker. **Terminal conidia** lemoniform to pyriform to guttuliform, ellipsoid or fusoid, hyaline, guttulate, smooth, aseptate, thin-walled, 3–6 × 1–3 µm; loci thickened and darker.

Culture characteristics — Colonies reaching 30 mm diam after 1 wk at 28 °C on Sabouraud's agar (SA), then growth suddenly slowing down and cultures becoming non-viable and dead, erumpent, folded with smooth margins, aerial mycelium moderate. Surface on SA olivaceous grey, smoke-grey at the centre, reverse olivaceous grey.

Typus. INDIA, Kerala, Kozhikode, on leaves of *Canna indica* (*Cannaceae*), 20 Aug. 2014, T.K.A. Kumar (holotype CAL 1342, ITS sequence GenBank MF072396, MycoBank MB821283).

Notes — *Hyalocladosporiella cannae* is morphologically and genetically distinct from the only other described species in the genus, *H. tectonae* (Crous et al. 2014a). Morphologically, *H. cannae* can be distinguished from *H. tectonae* by the former's shorter macroconidiophores, wider ramoconidia, shorter intercalary conidia that are 0–2-septate, and much shorter lemoniform to pyriform to guttuliform, or ellipsoid to fusoid terminal conidia that lack septa.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequences are several unidentified environmental samples, GenBank KT328894 (Identities = 579/579 (100 %), no gaps), GenBank GU054168 (Identities = 579/579 (100 %), no gaps), GenBank KM265975 (Identities = 549/549 (100 %), no gaps), GenBank KF435240 (Identities = 543/543 (100 %), no gaps), GenBank KF436120 (Identities = 526/526 (100 %), no gaps), GenBank KM265610 (Identities = 494/494 (100 %), no gaps) and *H. tectonae* (GenBank KJ869142; Identities = 550/581 (95 %), Gaps = 7/581 (1 %)). Interestingly, uredospores of *Puccinia thaliae* were observed among the hyphae of *H. cannae* growing on *Canna indica* leaves. However, evidence to prove hyperparasitism by *H. cannae* was not obtained.

Colour illustrations. *Canna indica* in Kerala; portion of leaf with mycelial growth; conidiophores and conidia. Scale bars = 10 µm.