Hyalocladosporiella cannae
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, Eurotiales.

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 symmetrically 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, 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.

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