

*Rachicladosporium pini*



Fungal Planet 80 – 31 May 2011

## *Rachicladosporium pini* Crous & Quaedvlieg, *sp. nov.*

*Rachicladosporii luculiae* simile, sed ramoconidiis majoribus, 15–22 × 3–4 µm, discernitur.

*Etymology.* Named after the host from which it was collected, *Pinus monophylla*.

On oatmeal agar. *Mycelium* consisting of smooth, septate, branched, 2–3 µm wide hyphae. *Conidiophores* erect, brown, smooth, cylindrical, thick-walled, unbranched or branched once, 2- to multiseptate, 25–130 × 3–4 µm. *Conidiogenous cells* terminal, 5–12 × 3–4 µm, brown, smooth, proliferating sympodially, subcylindrical or clavate, with one to several aggregated, flattened, somewhat thickened and darkened scars, 1–2 µm diam. *Primary ramoconidia* brown, smooth, thick-walled, subcylindrical, 0–1-septate, 15–22 × 3–4 µm. *Secondary ramoconidia* fusoid-ellipsoidal, 9–15 × 2.5–3 µm, smooth, brown, with 1–3 terminal scars, 1 µm diam. *Intercalary conidia* in short, branched chains of up to 4, brown, smooth, fusoid-ellipsoidal, 8–11 × 2–2.5(–3) µm. *Terminal conidia* medium brown to brown, smooth, fusoid-ellipsoidal, (5–)6–7(–8) × 2–2.5(–3) µm; scars flattened, somewhat thickened and darkened, 0.5–1 µm diam.

*Culture characteristics* — (in the dark, 25 °C, after 2 wk): Colonies spreading, erumpent with sparse aerial mycelium, folded surface and lobed margin, reaching 15 mm diam. On oatmeal agar olivaceous grey; on potato-dextrose agar iron-grey with excessive slime production, iron-grey in reverse; on malt extract agar surface olivaceous grey, reverse iron-grey.

*Typus.* NETHERLANDS, Hilversum, Pinetum Blijdenstein, on needles of *Pinus monophylla*, 19 June 2009, W. Quaedvlieg, holotype CBS H-20586, cultures ex-type CPC 16770 = CBS 129525, ITS sequence GenBank JF951145 and LSU sequence GenBank JF951165, MycoBank MB560169.

*Notes* — Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence are *Rachicladosporium luculiae* (EU040237; Identities = 536/557 (96 %), Gaps = 12/557 (2 %)) and *Rachicladosporium cboliae* (GU214650; Identities = 627/657 (95 %), Gaps = 12/657 (2 %)). These associations were supported by the LSU sequence. Morphologically, *R. pini* is very similar to *R. luculiae* and *R. cboliae* (Crous et al. 2007b, 2009b), but can be distinguished based on its larger ramoconidia.

*Colour illustrations.* *Pinus monophylla* tree at the Pinetum Blijdenstein in Hilversum; conidiophores giving rise to chains of conidia. Scale bars = 10 µm.