

Neocladophialophora quercina



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Neocladophialophora Crous & R.K. Schumach., *gen. nov.*

Etymology. Name reflects its morphological similarity to the genus *Cladophialophora*.

Mycelium consisting of hyaline, smooth, septate, branched, hyphae. *Conidiophores* reduced to conidiogenous cells. *Conidiogenous cells* erect, subcylindrical, hyaline to subhyaline, mono- to polyphialidic; loci truncate. *Conidia* formed in long, rarely branched basipetal chains consisting of subcylindrical

conidia, apical conidium clavate to subglobose, other conidia subcylindrical, 0–1-septate, somewhat constricted at the septum, guttulate to granular, subhyaline; constricted at the truncate hila, somewhat darkened. Older conidia appear pale olivaceous in mass.

Type species. *Neocladophialophora quercina*.
Mycobank MB810618.

Neocladophialophora quercina Crous & R.K. Schumach., *sp. nov.*

Etymology. Name reflects the host genus *Quercus*, from which this species was isolated.

Mycelium consisting of hyaline, smooth, septate, branched, 1.5–2 µm diam hyphae. *Conidiophores* reduced to conidiogenous cells. *Conidiogenous cells* erect, subcylindrical, hyaline to subhyaline, mono- to polyphialidic, 10–30 × 3–4 µm; loci truncate, 1 µm diam. *Conidia* formed in long, rarely branched basipetal chains consisting of subcylindrical conidia (up to 20 per chain), apical conidium clavate to subglobose, other conidia subcylindrical, 0–1-septate, somewhat constricted at the septum, guttulate to granular, subhyaline, (9–)13–15(–17) × (2.5–)3(–5) µm; constricted at the truncate hila, somewhat darkened, 0.5 µm diam. Older conidia appear pale olivaceous in mass.

Culture characteristics — Colonies spreading, appressed, surface folded with sparse aerial mycelium and smooth, lobate margin, reaching 18 mm diam after 2 wk at 25 °C in the dark. On MEA and PDA surface and reverse ochreous. On OA surface pale luteous.

Typus. GERMANY, on dead twig of *Quercus robur* (Fagaceae), 23 Feb. 2014, R.K. Schumacher (holotype CBS H-22003, culture ex-type CPC 24426 = CBS 138874; ITS sequence GenBank KP004470, LSU sequence GenBank KP004498, MycoBank MB810619).

Notes — *Neocladophialophora* is morphologically similar to *Cladophialophora*, *Fusicladium* and *Polyscytalidium* (see Crous et al. 2007c, Bench et al. 2012), but different in that conidiophores are hyaline, conidiogenous cells phialidic, and conidia are constricted at their slightly darkened hila. Furthermore, conidia are pigmented in mass, and terminal conidia are frequently clavate to subglobose.

ITS. Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence are *Triscelophorus* cf. *acuminatus* (GenBank KF730836; Identities = 210/235 (89 %), Gaps = 14/235 (5 %)), *Triscelophorus monosporus* (GenBank KF730840; Identities = 184/193 (95 %), Gaps = 1/193 (0 %)) and *Hemibeltrania mitrata* (GenBank EF029228; Identities = 280/351 (80 %), Gaps = 19/351 (5 %)).

LSU. Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the LSU sequence are *Scolecobasidium tropicum* (GenBank KF156102; Identities = 687/786 (87 %), Gaps = 14/786 (1 %)), *Isthmolongispora ampulliformis* (GenBank EU107303; Identities = 707/809 (87 %), Gaps = 8/809 (0 %)) and *Dactylaria humicola* (GenBank EU107304; Identities = 687/793 (87 %), Gaps = 13/793 (1 %)).

Colour illustrations. *Quercus robur* tree; conidiophores and polyphialidic conidiogenous cells giving rise to branched chains of conidia. Scale bars = 10 µm.

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