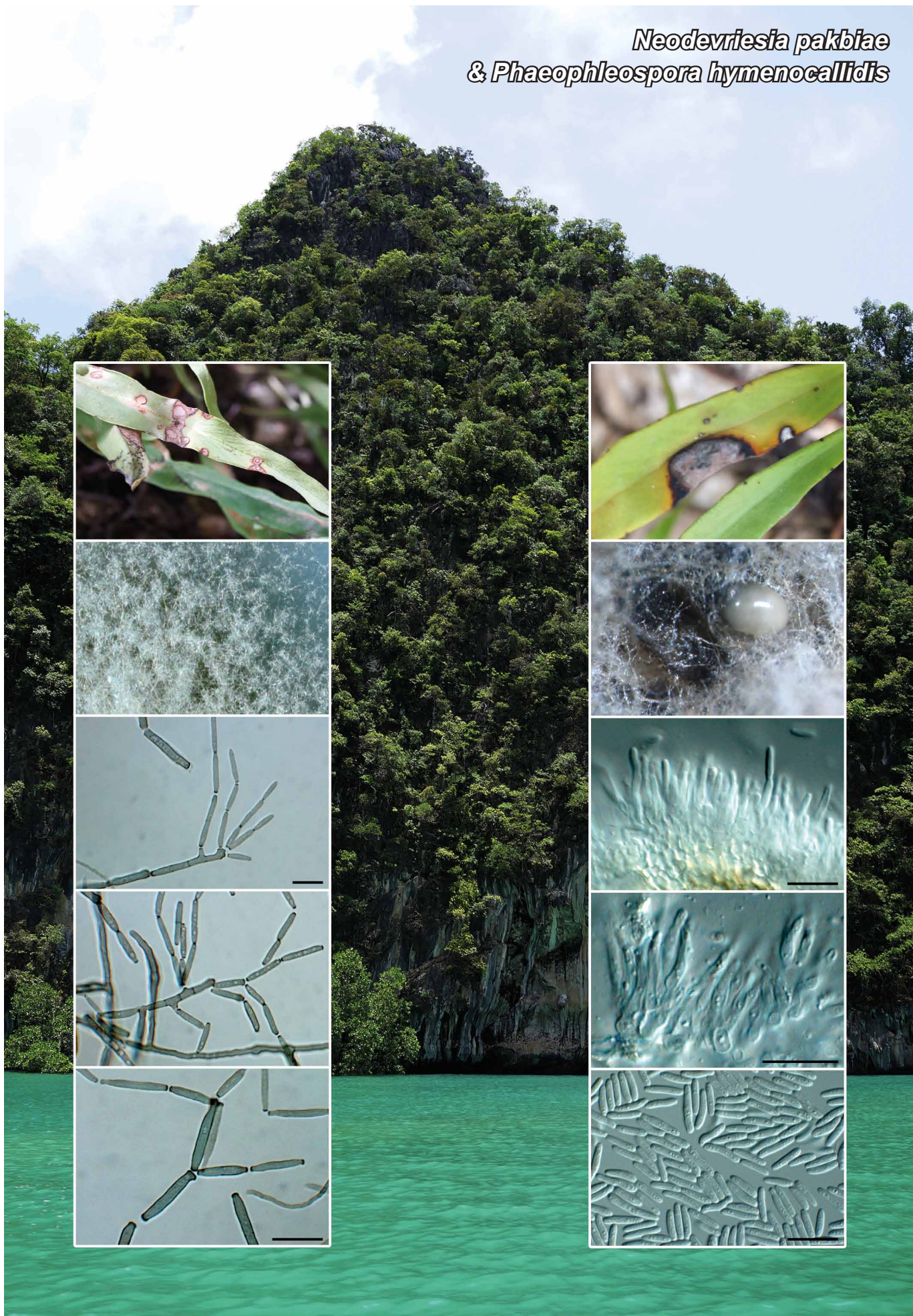


Neodevriesia pakbiae
& *Phaeophleospora hymenocallidis*



Fungal Planet 343 & 344 – 10 June 2015

Neodevriesia pakbiae Crous, *sp. nov.*

Etymology. Name reflects the island Pakbia, where this species was collected.

Classification — *Neodevriesiaceae*, *Capnodiales*, *Dothideomycetes*.

Mycelium consisting of smooth, brown, septate, branched, 1.5–2.5 µm diam hyphae. *Conidiophores* solitary, erect, subcylindrical, geniculate-sinuous, medium brown, smooth, branched or not, 1–4-septate, 7–60 × 2.5–3 µm. *Conidiogenous cells* terminal or intercalary, subcylindrical, brown, smooth, 10–25 × 2.5–3 µm, polyblastic, scars somewhat thickened and darkened, 1–2 µm diam. *Ramoconidia* subcylindrical, brown, smooth, guttulate, 0–2-septate, 17–33 × 2.5–3 µm, frequently developing lateral branches; scars somewhat darkened and thickened, 2–2.5 µm diam. *Conidia* in branched chains (–12), brown, subcylindrical, smooth, guttulate, 0(–1)-septate, (8–)10–13(–15) × (1.5–)2 µm; hila truncate, somewhat thickened and darkened, 0.5–1 µm diam.

Culture characteristics — Colonies spreading, with sparse aerial mycelium and smooth, lobed margins, reaching 25 mm diam after 1 mo at 25 °C. On PDA surface and reverse iron grey. On OA surface olivaceous grey. On MEA surface olivaceous grey, reverse iron grey.

Typus. THAILAND, Pakbia Island, on leaves of unidentified fern, 14 Aug. 2014, P.W. Crous (holotype CBS H-22244, culture ex-type CPC 25044 = CBS 139914; ITS sequence GenBank KR476742, LSU sequence GenBank KR476775, MycoBank MB812456); CPC 25045.

Notes — *Neodevriesia pakbiae* is phylogenetically closely related to *D. ficus*, *D. lagerstroemiae* and *D. strelitziae*. Quaedvlieg et al. (2014) placed these species in *Neodevriesiaceae* as an unresolved generic complex of devriesia-like taxa with teratosphaeria-like sexual morphs. Members of *Neodevriesiaceae* are foliicolous, saprobic or plant pathogenic, and were previously referred to as ‘*Teratosphaeriaceae* 2’ by Ruibal et al. (2009).

Phaeophleospora hymenocallidis Crous, *sp. nov.*

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

Classification — *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*.

Conidiomata erumpent, eustomatic, multilocular with central ostiole, globose, up to 300 µm diam, exuding a white globose conidial mass; wall of 3–6 layers of brown *textura angularis*. *Conidiophores* lining the inner cavity, subcylindrical to ampulliform, hyaline, smooth, 0–3-septate, branched below or not, 5–15 × 3–4 µm. *Conidiogenous cells* integrated, terminal and intercalary, subcylindrical to ampulliform, hyaline, smooth, 5–8 × 2–3 µm; proliferating inconspicuously percurrently or sympodially at apex, 1 µm diam. *Paraphyses* intermingled among conidiophores, subcylindrical, hyaline, smooth, 1–3-septate, up to 30 µm tall, and 2 µm diam. *Conidia* solitary, hyaline, smooth, guttulate, 0(–1)-septate, subcylindrical, straight to slightly curved, apex obtuse, base truncate, 1 µm diam, (6–)8–10(–12) × (1.5–)2 µm.

Culture characteristics — Colonies spreading, erumpent, with moderate to fluffy aerial mycelium, and smooth, lobed margins, reaching up to 40 mm diam after 1 mo at 25 °C. On MEA surface olivaceous grey, reverse iron grey. On PDA surface and reverse iron grey. On OA surface olivaceous grey.

Typus. THAILAND, Pakbia Island, on leaves of a fern, 14 Aug. 2014, P.W. Crous (holotype CBS H-22241, culture ex-type CPC 25018 = CBS 139911; ITS sequence GenBank KR476740, LSU sequence GenBank KR476773, MycoBank MB812455); CPC 25019.

Notes — The genus *Phaeophleospora*, based on *P. eugeniae*, is a member of the *Mycosphaerellaceae* forming pycnidia that give rise to brown, multiseptate, scolecosporous conidia via brown, percurrently proliferating conidiogenous cells lining the conidiomata (Crous et al. 1997, 2007a). Although morphologically similar, species of *Kirramyces* and *Colletogloeopsis* (Crous & Wingfield 1996), are linked to *Teratosphaeria* (*Teratosphaeriaceae*; Crous et al. 2009a, b). Morphologically *P. hymenocallidis* with its hyaline, 0–1-septate conidia is thus a very odd member of the genus. Once additional taxa have been collected, this relationship should become clearer, although for the present this taxon is best accommodated in *Phaeophleospora*.

Colour illustrations. Pakbia Island; *Neodevriesia pakbiae* (left column): symptomatic leaf, colony on SNA, conidiophores and conidia; *Phaeophleospora hymenocallidis* (right column): symptomatic leaf; colony sporulating on OA; conidiogenous cells and conidia. Scale bars = 10 µm.