



Fungal Planet 1113 – 19 December 2020

***Gobabebomyces* Crous, gen. nov.**

Etymology. Name refers to the Gobabeb-Namib Research Institute, where this fungus was collected.

Classification — *Incertae sedis*, *Myriangiales*, *Dothideomycetes*.

Conidiomata erumpent, pycnidial, opening via irregular rupture of epidermis, brown, subglobose, somewhat flattened, exuding a brown conidial mass; wall of 3–4 layers of brown *textura angularis*. *Conidiophores* reduced to conidiogenous cells lining

inner cavity, hyaline, smooth, ampulliform to doliiform, phialidic. *Conidia* solitary, medium brown, verruculose, aseptate, ellipsoid, thick-walled with obtuse ends. Hyphae hyaline to brown, encased in mucoid sheath, constricted at septa, forming hyaline, smooth, aseptate ellipsoid conidia with obtuse ends, becoming brown and verruculose, and undergoing microcyclic conidiation.

Type species. *Gobabebomyces vachelliae* Crous.
MycoBank MB837821.

***Gobabebomyces vachelliae* Crous, sp. nov.**

Etymology. Name refers to the host genus *Vachellia* from which it was isolated.

Conidiomata restricted to thorns, erumpent, pycnidial, opening via irregular rupture of epidermis, brown, subglobose, somewhat flattened, 80–150 µm diam, exuding a brown conidial mass; wall of 3–4 layers of brown *textura angularis*. *Conidiophores* reduced to conidiogenous cells lining inner cavity, hyaline, smooth, ampulliform to doliiform, phialidic, 3–5 × 3–4 µm. *Conidia* solitary, medium brown, verruculose, aseptate, ellipsoid, thick-walled with obtuse ends, (8–)10–11(–12) × (5–)6(–7) µm. In culture hyphae hyaline to brown, 4–6 µm diam, encased in mucoid sheath, constricted at septa, forming hyaline, smooth, aseptate ellipsoid conidia with obtuse ends, 5–7 × 3–4 µm, becoming brown and verruculose, swelling and larger in size, and undergoing microcyclic conidiation.

Culture characteristics — Colonies erumpent, spreading, surface irregular to folded, with sparse aerial mycelium and uneven margin, reaching 10 mm diam after 2 wk at 25 °C. On MEA, PDA and OA surface olivaceous grey, reverse iron-grey.

Typus. NAMIBIA, Gobabeb-Namib Research Institute, on leaves of *Vachellia* (= *Acacia erioloba* (*Fabaceae*), 19 Nov. 2019, *P.W. Crous*, HPC 3132 (holotype CBS H-24450, culture ex-type CPC 38885 = CBS 146779, ITS and LSU sequences GenBank MW175335.1 and MW175375.1, MycoBank MB837822).

Notes — *Gobabebomyces* is an asexual, coniothyrium-like coelomycetous morph related to *Lembosiniella*, a genus of ascomycetes forming dark brown to black, superficial, irregular leaf spots with linear to Y-shaped hysterothecia on *Eucalyptus* spp. in Australia (Crous et al. 2019b). Species of *Lembosiniella* are sterile in culture.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence had highest similarity to *Elsinoe phaseoli* (strain CBS 165.31, GenBank MH855166.1; Identities = 388/452 (86 %), 30 gaps (6 %)), *Lembosiniella eucalyptorum* (strain CBS 144603, GenBank NR_165601.1; Identities = 379/443 (86 %), 24 gaps (5 %)), and *Elsinoe australis* (strain KNa-5, GenBank FJ010328.2; Identities = 384/451 (85 %), 24 gaps (5 %)). Closest hits using the LSU sequence are *Endosporium populi-tremuloides* (strain UAMH 10529, GenBank NG_064317.1; Identities = 778/816 (95 %), nine gaps (1 %)), *Lembosiniella eucalyptorum* (strain CBS 144603, GenBank NG_067908.1; Identities = 774/814 (95 %), six gaps (0 %)), and *Elsinoe banksiigena* (strain CPC 32402, GenBank NG_064552.1; Identities = 772/814 (95 %), five gaps (0 %)).

Colour illustrations. *Vachellia erioloba* trees growing at the Gobabeb-Namib Research Institute. Thorn with conidiomata; colonies on malt extract agar; conidiogenous cells giving rise to conidia; conidia. Scale bars = 10 µm.

Pedro W. Crous & Johannes Z. Groenewald, Westerdijk Fungal Biodiversity Institute, P.O. Box 85167, 3508 AD Utrecht, The Netherlands; e-mail: p.crous@wi.knaw.nl & e.groenewald@wi.knaw.nl
Neriman Yilmaz, Department of Biochemistry, Genetics and Microbiology, Forestry and Agricultural Biotechnology Institute (FABI), Faculty of Natural and Agricultural Sciences, University of Pretoria, Private Bag X20, Hatfield 0028, Pretoria, South Africa; e-mail: neriman.yilmazvisagie@fabi.up.ac.za
Don A. Cowan, Centre for Microbial Ecology and Genomics, Department of Biochemistry, Genetics and Microbiology, University of Pretoria, Private Bag X20, Hatfield 0028, Pretoria, South Africa; e-mail: don.cowan@up.ac.za
Gillian Maggs-Kölling, Gobabeb-Namib Research Institute, P.O. Box 953, Walvis Bay, Namibia; e-mail: gillian@gobabeb.org