

Preussia procaviicola



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Preussia procaviicola* Crous, sp. nov.Etymology.* Isolated from dung of *Procapra capensis* (rock rabbit).Classification — *Sporormiaceae*, *Pleosporales*, *Dothideomycetes*.

Ascomata pseudothecial, globose to pyriform, 200–300 µm diam, smooth, black, central ostiolate; wall of 6–8 layers of brown *textura angularis*. *Pseudoparaphyses* filiform, hyaline, smooth, 3–4 µm diam, anastomosing, constricted at septa, hyphae-like. *Asci* 8-spored, bitunicate, cylindrical-clavate, stipitate, with ocular chamber, 85–170 × 20–25 µm. *Ascospores* biserial, cylindrical with obtuse ends, becoming dark brown, guttulate, transversely 3-septate, prominently constricted at septa, two middle cells equal in length, 7.5–9 µm long, end cells 11–14 µm long; germ slits oblique, gelatinous sheath not persistent, (32–)35–40(–42) × (7–)8–9 µm.

Culture characteristics — Colonies flat, spreading, with moderate aerial mycelium and feathery, lobate margin, reaching 35 mm diam after 2 wk at 25 °C. On MEA and PDA surface smoke grey, reverse olivaceous grey; on OA surface olivaceous grey.

Typus. NAMIBIA, Gobabeb Namib Research Institute, Mirabib, on dung of *Procapra capensis*, 19 Nov. 2019, P.W. Crous, HPC 3110 (holotype CBS H-24493, culture ex-type CPC 38946 = CBS 146981, ITS, LSU, *tef1* (first part) and *tub2* sequences GenBank MZ064441.1, MZ064498.1, MZ078229.1 and MZ078269.1, MycoBank MB 839528).

Notes — *Preussia procaviicola* was isolated from the same dung sample as *P. procaviae* (Crous et al. 2020a), although the latter is only known from its asexual morph. *Preussia procaviicola* is close to *P. intermedia* (ascospores 3-septate, 48–59 × 9.5–11.5 µm; Guarro et al. 2012), but morphologically distinct from that species.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Preussia africana* (strain A54, GenBank KX611037.1; Identities = 515/539 (96 %), seven gaps (1 %)), *Sporormiella intermedia* (strain 18THES003, GenBank MT856402.1; Identities = 498/522 (95 %), four gaps (0 %)) and *Preussia lignicola* (strain KoRLI046140, GenBank MN341249.1; Identities = 509/535 (95 %), seven gaps (1 %)). Closest hits using the **LSU** sequence are *Preussia intermedia* (strain CBS 364.69, GenBank MH878451.1; Identities = 875/877 (99 %), one gap (0 %)), *Preussia minipascua* (voucher UPS:Kruys 306, GenBank GQ203745.1; Identities = 868/876 (99 %), one gap (0 %)) and *Preussia persica* (strain GLMC 447, GenBank MT156301.1; Identities = 841/849 (99 %), no gaps). Closest hits using the **tef1** sequence had highest similarity to *Preussia procaviae* (strain CPC 38861, GenBank MW173126.1; Identities = 370/484 (76 %), 44 gaps (9 %)), *Synfenestella sorbi* (strain FRa, GenBank MK357595.1; Identities = 224/253 (89 %), three gaps (1 %)) and *Parafenestella alpina* (strain C198, GenBank MK357574.1; Identities = 225/256 (88 %), two gaps (0 %)). Closest hits using the **tub2** sequence had highest similarity to *Preussia lignicola* (strain 18ALIC002, GenBank MT671880.1; Identities = 385/444 (87 %), 17 gaps (3 %)), *Sporormiella intermedia* (strain 18THES003, GenBank MT881987.1; Identities = 375/441 (85 %), ten gaps (2 %)) and *Preussia procaviae* (strain CPC 38861, GenBank MW173141.1; Identities = 340/389 (87 %), nine gaps (2 %)).

Colour illustrations. Mirabib, typical habitat of the rock rabbit in the Namib Desert. *Asci* and *ascospores*. 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 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, Walvis Bay, Namibia; e-mail: gillian@gobabeb.org