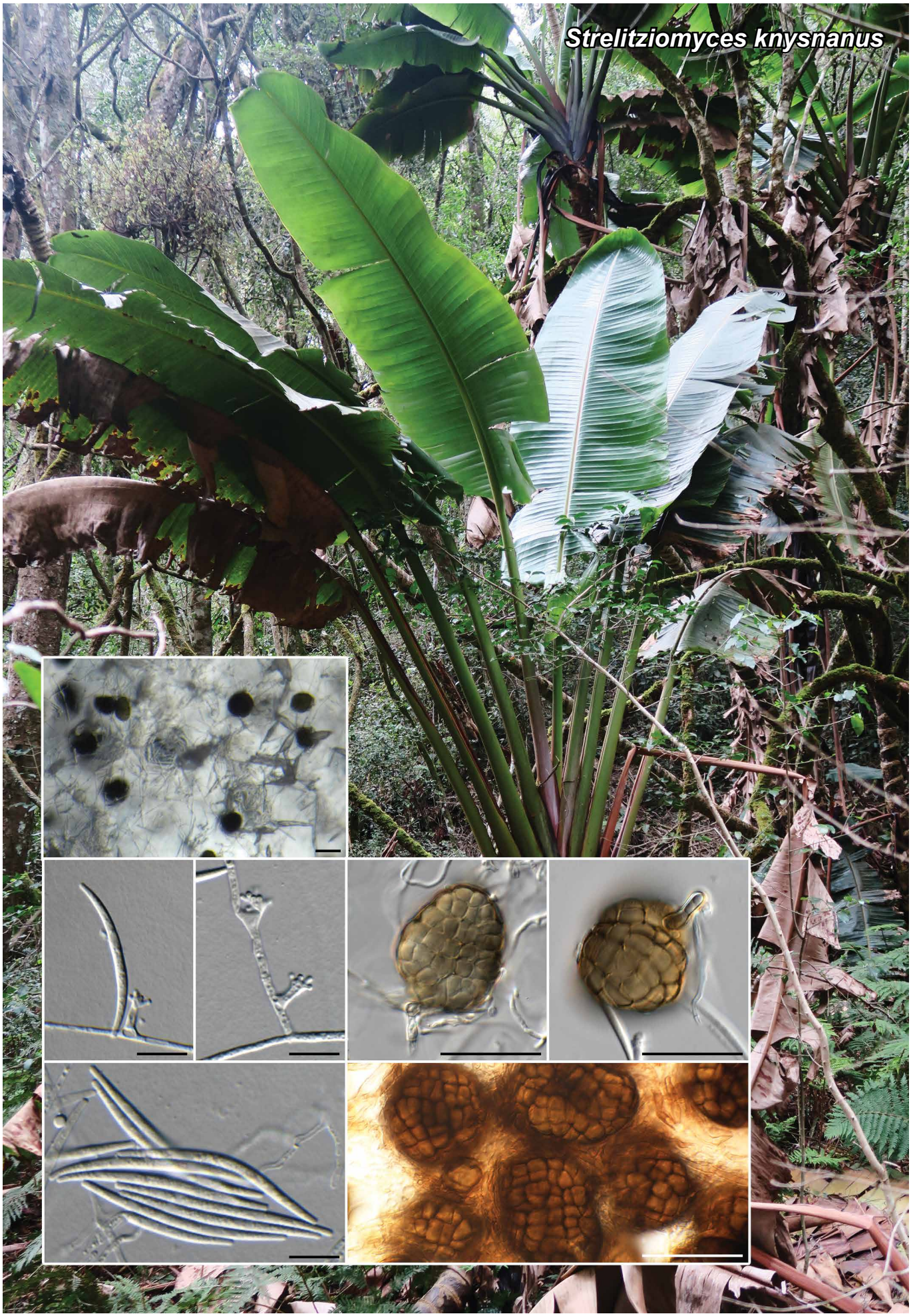
Strelitziomyces knysnanus

Fungal Planet 982 – 18 December 2019

Strelitziomyces Crous, *gen. nov.*

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

Classification — *Anungitiomycetaceae*, *Xylariales*, *Sordariomycetes*.

Mycelium consisting of hyaline, smooth, hyphae. *Conidiophores* arising from superficial hyphae, erect, solitary, subcylindrical, hyaline to pale brown at base, septate, mostly unbranched, with terminal conidiogenous cells that are subcylindrical, hyaline, smooth, rarely pale brown, with terminal rachis of subdenticulate loci; loci truncate, not thickened nor darkened. *Conidia* solitary, hyaline, smooth, medianly 1-septate, fusoid, apex subobtuse, base truncate. *Sclerotium-like bodies* formed prominently on and in agar, dark brown, muriformly septate, globose.

Type species. Strelitziomyces knysnanus Crous.
MycoBank MB 832893.

Strelitziomyces knysnanus Crous, *sp. nov.*

Etymology. Name refers to the location where it was collected, Knysna.

Mycelium consisting of hyaline, smooth, 1.5–2 µm diam hyphae. *Conidiophores* arising from superficial hyphae, erect, solitary, subcylindrical, 5–35 × 2–3 µm, hyaline to pale brown at base, 0–3-septate, mostly unbranched, with terminal conidiogenous cells that are subcylindrical, hyaline, smooth, rarely pale brown, 5–25 × 2–2.5 µm, with terminal rachis of subdenticulate loci, 1–2 × 0.5–1 µm; loci truncate, not thickened nor darkened. *Conidia* solitary, hyaline, smooth, medianly 1-septate, fusoid, apex subobtuse, base truncate, 1 µm diam, (24–)30–32 × 2 µm. *Sclerotium-like bodies* formed prominently on and in agar, dark brown, muriformly septate, 30–80 µm diam, globose, lacking an ostiole, and remaining sterile although they are reminiscent of a coelomycete synasexual morph.

Culture characteristics — Colonies flat, spreading, with moderate aerial mycelium and smooth, lobate margin, reaching 10 mm diam after 2 wk at 25 °C. On MEA surface isabelline with diffuse isabelline pigment, reverse isabelline. On PDA surface smoke grey, reverse isabelline. On OA surface isabelline.

Typus. South Africa, Western Cape Province, Knysna, Knysna area, on leaves of *Strelitzia alba* (*Strelitziaceae*), 21 Nov. 2018, *F. Roets*, HPC 2727 (holotype CBS H-24183, culture ex-type CPC 37067 = CBS 146056, ITS, LSU and *rpb2* sequences GenBank MN562135.1, MN567642.1 and MN556810.1, MycoBank MB832894).

Notes — *Strelitziomyces* is closely related to *Anungitiomyces*, a monotypic genus occurring on *Eucalyptus* leaf litter in South Africa (Crous et al. 2019a). *Anungitiomyces* is characterised by brown, erect conidiophores, 0–1-septate, obclavate, hyaline conidia, arising via sympodial conidiogenesis. The main differences between the two genera lie in the lack of pigmentation in *Strelitziomyces*, and the prominently formed sclerotium-like bodies.

Based on a megablast search of NCBIs GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Anungitiomyces stellenboschiensis* (strain CPC 34726, GenBank MK876376.1; Identities = 537/616 (87 %), 31 gaps (5 %)), *Rhinocladiella pyriformis* (strain CBS 469.94, GenBank MH862476.1; Identities = 379/434 (87 %), 15 gaps (3 %)), and *Pseudotruncatella arezzoensis* (strain MFLUCC 14-0988, GenBank NR_157489.1; Identities = 352/399 (88 %), 19 gaps (4 %)). Closest hits using the **LSU** sequence are *Anungitiomyces stellenboschiensis* (strain CPC 34726, GenBank MK876415.1; Identities = 810/826 (98 %), 1 gap (0 %)), *Oxydothis garethjonesii* (strain MFLUCC 15-0287, GenBank KY206762.1; Identities = 804/837 (96 %), 4 gaps (0 %)), and *Entosordaria quercina* (strain RQ, GenBank MF488994.1; Identities = 800/837 (96 %), 4 gaps (0 %)). No significant hits were obtained when the ***rpb2*** sequence was used in blastn and megablast searches.

Colour illustrations. *Strelitzia alba* plants in Knysna forest. Colony on synthetic nutrient poor agar; conidiophores and conidiogenous cells; conidia; sclerotia. Scale bars = 80 µm (sclerotia), 10 µm (conidia and conidiogenous cells).

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
Michael J. Wingfield, 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: mike.wingfield@fabi.up.ac.za
Francois Roets, Department of Conservation Ecology and Entomology, Stellenbosch University, Stellenbosch 7600, South Africa; e-mail: fr@sun.ac.za
Wijnand J. Swart, Department of Plant Sciences (Division of Plant Pathology), University of the Free State, P.O. Box 339, Bloemfontein 9300, South Africa; e-mail: Swartwj@ufs.ac.za