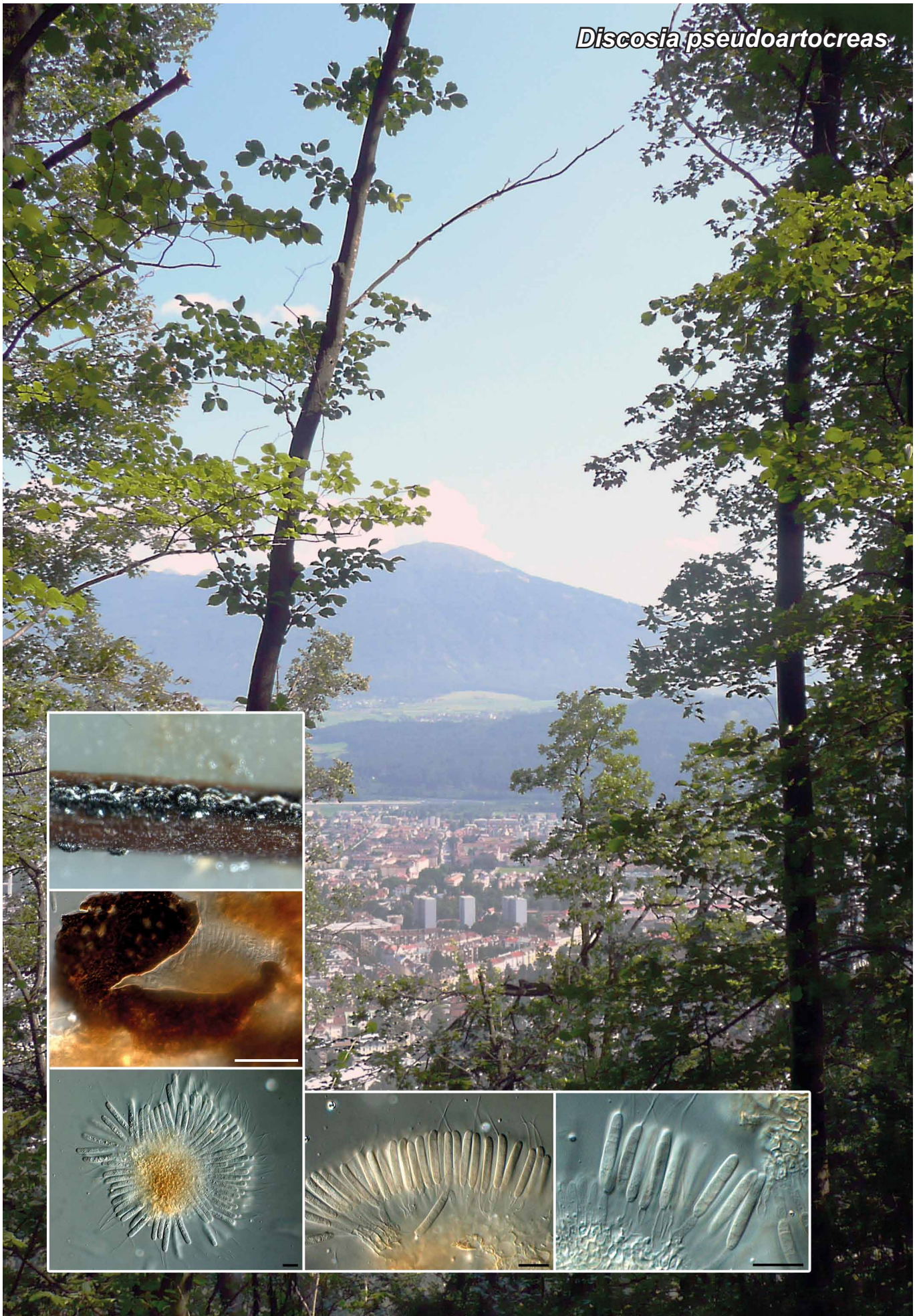


Discosia pseudoartocreas



Fungal Planet 188 – 26 November 2013

***Discosia pseudoartocreas* Crous & Damm, sp. nov.**

Etymology. Named after its morphological similarity to *Discosia artocreas*.

On PNA. *Conidiomata* stromatic, pycnidial, erumpent to superficial, subglobose to lenticular, unilocular, dark brown, up to 150 µm diam; wall composed of polygonal brown cells. *Conidiophores* lining the inner cavity, hyaline to pale brown, subcylindrical, 0–1-septate, branched below or not, 7–15 × 2–3 µm. *Conidiogenous cells* integrated, terminal, hyaline to pale brown, subcylindrical, 5–8 × 1.5–2 µm. *Conidia* cylindrical, 3-septate, pale brown, with an appendage at both ends, (11–)14–16(–17) × 2.5(–3) µm; basal cell 2.5–3 µm long, obconic with truncate hilum, second cell from base 5–8 µm long, third cell 3–4 µm long and apical cell 2–3 µm long with obtusely rounded apex. *Appendages* cellular, unbranched, filiform, eccentric; apical appendage 10–13 µm long, basal appendage 7–11 µm long.

Culture characteristics — Colonies reaching 70 mm diam after 2 wk, spreading, flat, with sparse aerial mycelium; margins feathery on PDA, but smooth and even on MEA and OA. On PDA surface olivaceous-grey in centre, iron-grey in outer region, iron-grey underneath; on MEA olivaceous-grey with patches of iron-grey, reverse iron-grey; on OA surface mycelium growing in concentric zones, olivaceous grey with pale olivaceous grey zones.

Typus. AUSTRIA, Innsbruck, on leaves of *Tilia* sp. (*Tiliaceae*), 11 Aug. 2012, U. Damm (holotype CBS H-21447, culture ex-type CPC 21117, 21118 = CBS 136438, ITS GenBank sequence KF777161, LSU GenBank sequence KF777214, MycoBank MB805853).

Notes — Members of the genus *Discosia* are saprobes and plant pathogens of numerous vascular plants, and have a global distribution. *Discosia artocreas*, the type species of the genus, is cosmopolitan and characterised by having a wide host range (Vanev 1992). In his study of the genus, Vanev (1992) chose CBS 241.66 as representative of *D. artocreas*, as the original type had been lost. In a recent phylogenetic study on *Discosia* and related genera, Tanaka et al. (2011) showed isolates identified as *D. artocreas* to be paraphyletic. Morphologically *D. pseudoartocreas* closely resembles *D. artocreas* (conidia (16.3–)18(–20) × (1.8–)2.1(–2.5) µm; Vanev 1992), (conidia (12.5–)14–22 × 2–3 µm; Nag Raj 1993), though conidia are smaller.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the LSU sequence are *Discosia artocreas* (GenBank AB593705; Identities = 786/786 (100 %), no gaps), *D. aff. brasiliensis* (GenBank AB593706; Identities = 786/786 (100 %), no gaps) and *D. aff. artocreas* (GenBank AB593704; Identities = 785/786 (99 %), no gaps). Closest hits using the ITS sequence had highest similarity to '*Discosia* sp. 1' (GenBank AB594778; Identities = 543/546 (99 %), Gaps = 1/546 (0 %)), *D. aff. artocreas* (GenBank AB594772; Identities = 543/546 (99 %), Gaps = 1/546 (0 %)) and '*Discosia* sp. 2' (GenBank AB594780; Identities = 542/546 (99 %), Gaps = 1/546 (0 %)).

Colour illustrations. Innsbruck, Austria; conidiomata on PNA; ruptured conidioma; conidiogenous cells giving rise to conidia. Scale bars = 10 µm.