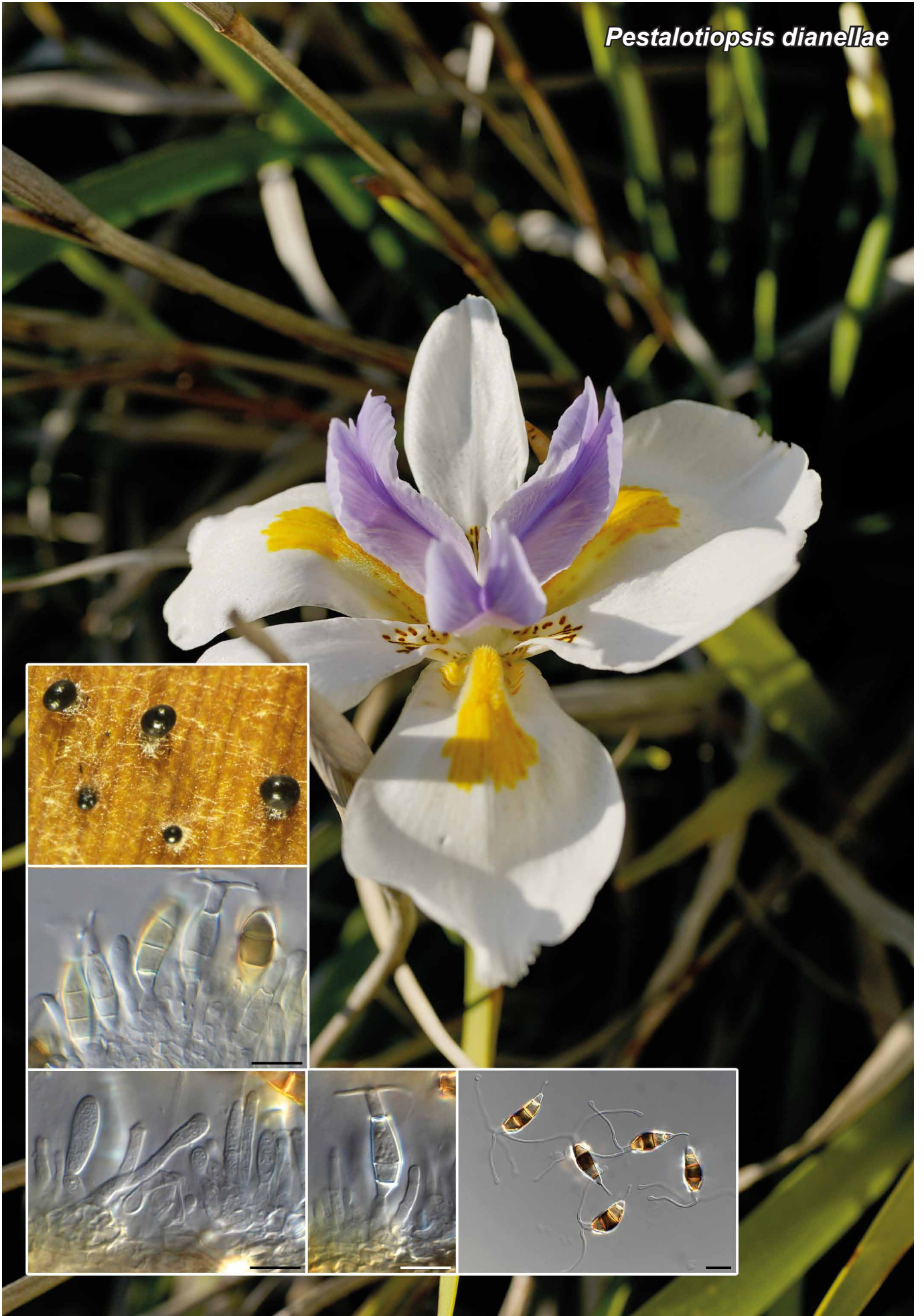


Pestalotiopsis dianellae



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Pestalotiopsis dianellae Crous, *sp. nov.*

Etymology. Name refers to *Dianella*, the host genus from which this fungus was collected.

Classification — *Pestalotiopsidaceae*, *Xylariales*, *Sordariomycetes*.

Conidiomata pycnidial, globose, separate, immersed to erumpent on banana leaf agar, dark brown to black, 100–350 µm diam, exuding a globose, dark brown conidial mass. *Conidiophores* 0–1-septate, branched at the base, subcylindrical, mostly reduced to conidiogenous cells, hyaline, smooth, up to 30 µm tall. *Conidiogenous cells* integrated, ampulliform to subcylindrical, proliferating percurrently at apex, 6–20 × 3–4 µm. *Conidia* fusoid, straight, 4-septate, (22–)24–25(–27) × 7(–8) µm, somewhat constricted at septa, basal cell conic to obconic with truncate hilum, 3–5 µm long; three median cells 15–19 µm long, doliiform, verruculose, dark brown, versicoloured, (second cell from basal cell honey brown, third cell dark brown, fourth cell honey brown, each cell 5–6 µm long); apical cell cylindrical, hyaline, thin and smooth-walled, 3–6 µm long, with 2–4 tubular apical appendages, each arising from different locus, swollen at tip, filiform, flexuous, unbranched, 18–45 µm long; basal appendage single, tubular, unbranched, centric, 5–10 µm long, frequently swollen at tip.

Culture characteristics — Colonies erumpent, spreading, with moderate aerial mycelium and smooth, lobate margins, covering dish after 2 wk at 25 °C. On MEA surface luteous, reverse sienna. On PDA surface dirty white, reverse ochreous. On OA surface dirty white.

Typus. AUSTRALIA, Victoria, Mount Best Tin Mine Road, on *Dianella* sp. (*Liliaceae*), 28 Nov. 2016, *P.W. Crous* (holotype CBS H-23287, culture ex-type CPC 32261 = CBS 143421, ITS, LSU and *tub2* sequences GenBank MG386051, MG386104 and MG386164, MycoBank MB823400).

Notes — Of the species of *Pestalotiopsis* presently known from their DNA, *P. dianellae* is most closely related to *P. arceuthobii*, *P. microspora* and *P. portugalica*, from which it is morphologically quite distinct. In general, it is more similar to species with knobbed apical appendages like *P. spathulata* and *P. theae* (Maharachchikumbura et al. 2014), but the latter are again phylogenetically distinct from *P. dianellae*, and hence it is described here as new.

Based on a megablast search using the ITS sequence, the closest matches in NCBI's GenBank nucleotide database were *P. arceuthobii* (GenBank NR_147561; Identities 571/579 (99 %), no gaps), *P. microspora* (GenBank AF377291; Identities 571/579 (99 %), no gaps) and *P. portugalica* (GenBank NR_147556; Identities 570/581 (98 %), 2 gaps (0 %)). The highest similarities using the LSU sequence were *P. microspora* (GenBank KY366173; Identities 838/844 (99 %), no gaps), *P. knightiae* (GenBank KM116241; Identities 838/844 (99 %), no gaps) and *P. papuana* (GenBank KM116240; Identities 838/844 (99 %), no gaps). The highest similarities using the *tub2* sequence were *P. distincta* (GenBank KX895293; Identities 416/440 (95 %), no gaps), *P. portugalica* (GenBank KX895338; Identities 412/441 (93 %), no gaps) and *P. monochaeta* (GenBank KX642435; Identities 426/456 (93 %), 4 gaps (0 %)).

Colour illustrations. *Dianella* sp.; conidiomata sporulating on banana leaf agar, conidiophores and conidia. Scale bars = 10 µm.

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