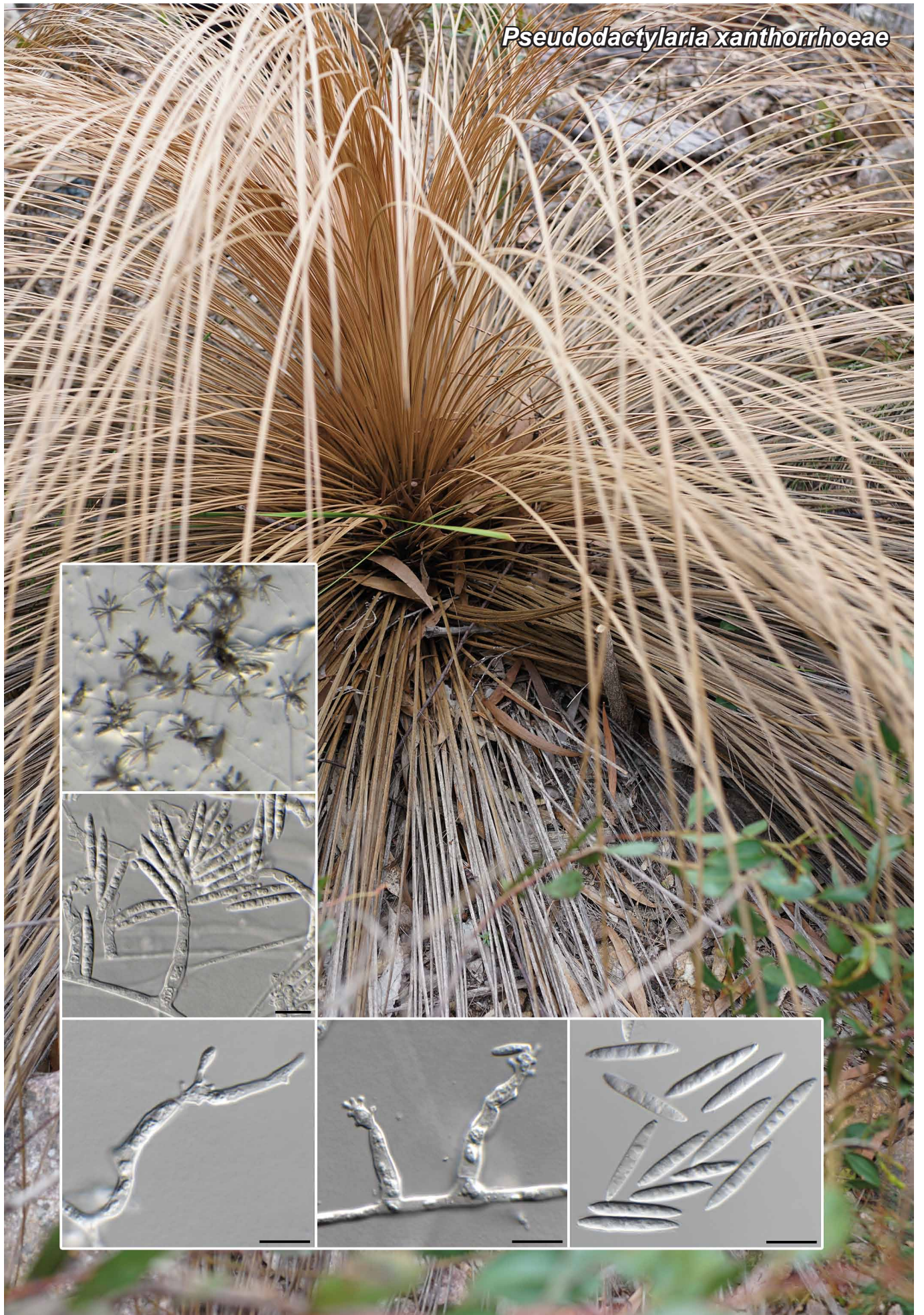


Pseudodactylaria xanthorrhoeae



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***Pseudodactylariales* Crous, ord. nov.**

MycoBank MB823468.

***Pseudodactylariaceae* Crous, fam. nov.**

MycoBank MB823469.

Classification — *Pseudodactylariaceae*, *Pseudodactylariales*, *Sordariomycetes*.

***Pseudodactylaria* Crous, gen. nov.**

Etymology. Name refers to its morphological similarity to the genus *Dactylaria*.

Mycelium consisting of hyaline, smooth, branched, septate hyphae. *Conidiophores* erect, hyaline, smooth, subcylindrical, straight to flexuous, unbranched, thick-walled, septate. *Conidiogenous cells* terminal, integrated, subcylindrical with apical taper; apical part forming a rachis with numerous aggregated cylindrical denticles; scars cicatrized, not thickened

The diagnosis of the order *Pseudodactylariales* and family *Pseudodactylariaceae* is based on the type genus, *Pseudodactylaria*.

Type genus. *Pseudodactylaria* Crous.

nor darkened, refractive if viewed from above. *Conidia* solitary, aggregating in slimy mass, fusoid-ellipsoid, hyaline, smooth, surrounded by a thin mucilaginous sheath, prominently guttulate, medianly 1-septate, apex subobtuse, base truncate, somewhat refractive.

Type species. *Pseudodactylaria xanthorrhoeae* Crous.
MycoBank MB823411.

***Pseudodactylaria xanthorrhoeae* Crous, sp. nov.**

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

Mycelium consisting of hyaline, smooth, branched, septate, 2–3 µm diam hyphae. *Conidiophores* erect, hyaline, smooth, subcylindrical, straight to flexuous, unbranched, thick-walled, 1–3-septate, 20–50 × 4–5 µm. *Conidiogenous cells* terminal, integrated, subcylindrical with apical taper, 15–30 × 3–4 µm; apical part forming a rachis with numerous aggregated cylindrical denticles, 1–3 × 1 µm; scars cicatrized, not thickened nor darkened, refractive if viewed from above. *Conidia* solitary, aggregating in slimy mass, fusoid-ellipsoid, hyaline, smooth, surrounded by a thin mucilaginous sheath, prominently guttulate, medianly 1-septate, apex subobtuse, base truncate, 1–1.5 µm diam, somewhat refractive, (20–)22–27(–33) × (3–)3.5(–4) µm.

Culture characteristics — Colonies erumpent, spreading, surface folded, with moderate aerial mycelium and smooth, lobate margins, reaching 20 mm diam after 2 wk at 25 °C. On MEA and PDA surface amber to isabelline, reverse isabelline. On OA surface amber to isabelline, reverse hazel.

Typus. AUSTRALIA, New South Wales, Nullica State Forest, on *Xanthorrhoea* sp. (*Asphodelaceae*), 29 Nov. 2016, P.W. Crous (holotype CBS H-23302, culture ex-type CPC 32430 = CBS 143414, ITS and LSU sequences GenBank MG386064 and MG386117, MycoBank MB823412); additional culture CPC 32714.

Colour illustrations. Dead leaves of *Xanthorrhoea* sp.; conidiophores sporulating on PNA, conidiophores and conidia. Scale bars = 10 µm.

Notes — *Pseudodactylaria* resembles species of *Dactylaria* (hyaline conidiophores and septate, hyaline conidia formed on denticles; De Hoog 1985), but can be distinguished by having 1-septate conidia encased in a mucoid sheath, which is absent in species of *Dactylaria* s.str. Furthermore, *Pseudodactylaria* represents an undescribed family and order, which are also introduced here as *Pseudodactylariaceae* and *Pseudodactylariales*, respectively.

Based on a megablast search using the ITS sequence, the closest matches in NCBI's GenBank nucleotide database were distant hits with unidentified *Sordariomycetes* and *Pseudobotrytis terrestris* (GenBank KF733463; Identities 496/562 (88 %), 18 gaps (3 %)), *Cercophora solaris* (GenBank KX171948; Identities 498/566 (88 %), 25 gaps (4 %)) and *Cercophora sulphurella* (GenBank AY587913; Identities 497/568 (88 %), 25 gaps (4 %)). The highest similarities using the LSU sequence were *Dactylaria hyalotunicata* (GenBank EU107298; Identities 826/835 (99 %), 2 gaps (0 %)), *Melanocarpus albomyces* (GenBank JQ067902; Identities 790/835 (95 %), 2 gaps (0 %)) and *Achaetomium strumarium* (GenBank AY681170; Identities 786/833 (94 %), 3 gaps (0 %)).

***Pseudodactylaria hyalotunicata* (K.M. Tsui et al.) Crous, comb. nov.** — MycoBank MB823413

Basionym. *Dactylaria hyalotunicata* K.M. Tsui et al., Sydowia 49: 182. 1997.

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