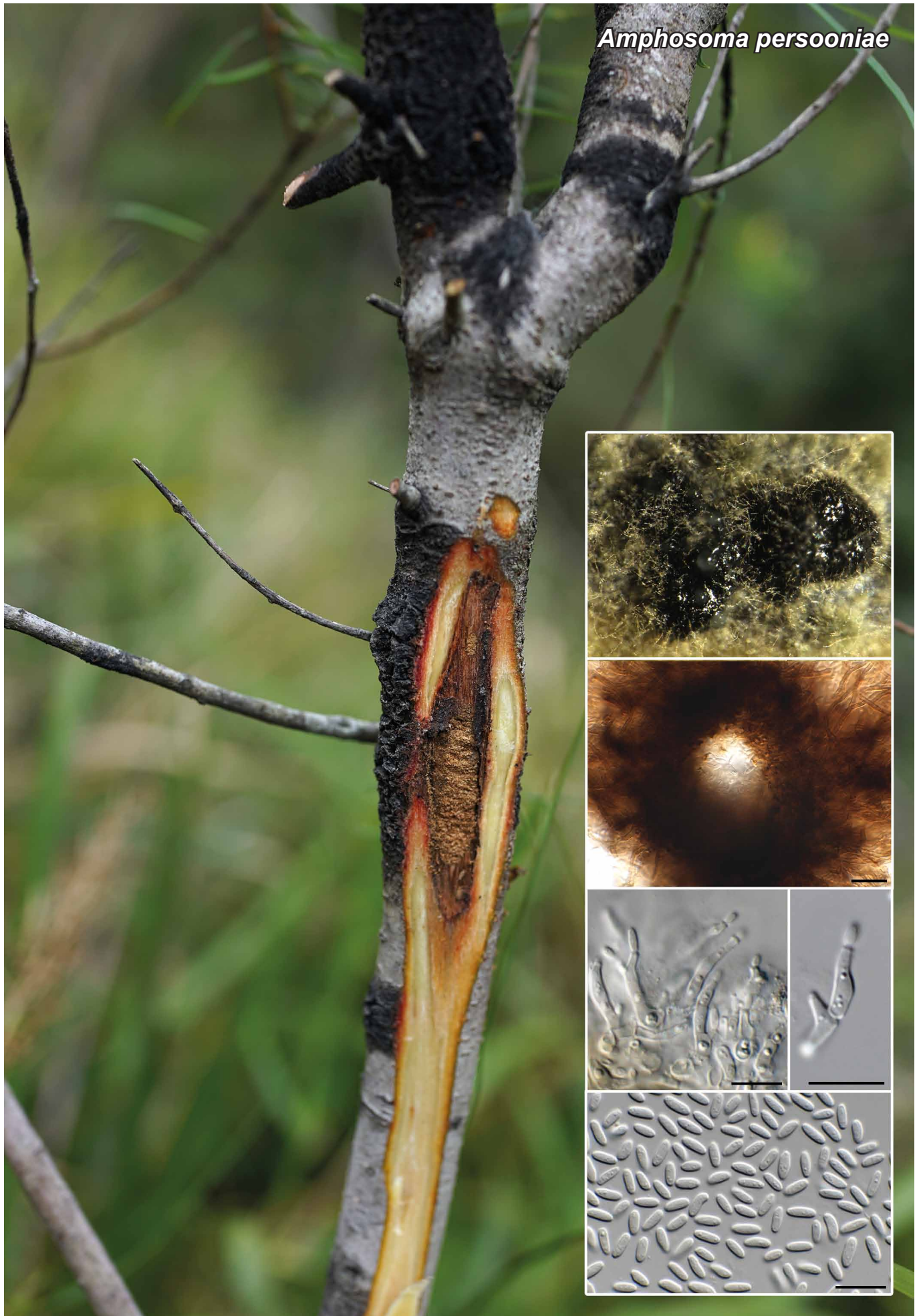


*Amphosoma persooniae*



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## *Amphosoma persooniae* Crous, sp. nov.

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

*Classification* — *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*.

Associated with prominent stem cankers on *Persoonia*; cankers were covered by prominent black conidiomata. *Conidiomata* pycnidial, globose, 90–180 µm diam, dark brown, with central ostiole, 20–30 µm diam, exuding a crystalline conidial mass; outer conidiomatal wall covered with brown, verruculose, septate hyphae, 2–2.5 µm diam; wall of 3–5 layers of brown *textura angularis*. *Conidiophores* lining the inner cavity, hyaline, smooth, branched, 1–4-septate, 10–40 × 2–2.5 µm. *Conidiogenous cells* terminal and intercalary, hyaline, smooth, subcylindrical, phialidic with prominent periclinal thickening, 5–17 × 2–2.5 µm. A few conidiogenous cells also appear to proliferate percurrently. *Conidia* hyaline, smooth-walled, guttulate, aseptate, subcylindrical, straight, apex obtuse, base truncate, 1–1.5 µm diam, (4.5–)5–6(–7) × (2–)2.5(–3) µm.

*Culture characteristics* — Colonies erumpent, spreading, surface folded, with moderate aerial mycelium and smooth, lobate margins, reaching 8 mm diam after 2 wk at 25 °C. On MEA, PDA and OA surface and reverse olivaceous grey.

*Typus.* AUSTRALIA, New South Wales, Tullarwalla Creek, on stems of *Persoonia* sp. (*Proteaceae*), 27 Sept. 2016, P.W. Crous (holotype CBS H-23273, culture ex-type CPC 32235 = CBS 143171, ITS and LSU sequences GenBank MG386037 and MG386090, MycoBank MB823379).

*Notes* — *Amphosoma persooniae* is phylogenetically related to species of *Amphosoma* (Baral et al. 2017). Although *Amphosoma* is supposed to have trinarium-like asexual morphs, *A. persooniae* appears phoma-like in morphology (see Chen et al. 2015). Upon initial incubation, several white apothecia resembling *Amphosoma* were observed, although the cultures were derived from the phoma-like morph that also developed on the twigs. Although no inoculations were performed, conidiomata were associated with prominent stem cankers on *Persoonia*, suggesting that this could be a plant pathogen, but further collections are required to resolve its ecology.

Based on a megablast search using the ITS sequence, the closest matches in NCBI's GenBank nucleotide database were *Amphosoma resinicola* (GenBank KT222388; Identities 482/565 (85 %), 23 gaps (4 %)) and *Amphosoma atroolivacea* (GenBank KT222387; Identities 468/570 (82 %), 42 gaps (7 %)). The highest similarities using the LSU sequence were *Amphosoma atroolivacea* (GenBank KT222387; Identities 827/854 (97 %), 4 gaps (0 %)), *Amphosoma resinicola* (GenBank KT222388; Identities 822/852 (96 %), no gaps) and *Retiarius superficialis* (GenBank KY352467; Identities 747/785 (95 %), 3 gaps (0 %)).

*Colour illustrations.* Stem canker on *Persoonia* sp.; conidiomata sporulating on PDA, conidiomatal ostiole, conidiophores and conidia. Scale bars = 10 µm.

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