

Rosellinia australiensis



Fungal Planet 564 – 20 June 2017

***Rosellinia australiensis* Crous & Barber, sp. nov.**

Etymology. Name refers to Australia, the country from which this fungus was collected.

Classification — *Xylariaceae*, *Xylariales*, *Sordariomycetes*.

Mycelium consisting of superficial to immersed, branched, septate, hyaline to pale brown, smooth, 3–4 µm diam hyphae. *Conidiophores* erect, straight to flexuous, branched, septate, indeterminate, with numerous lateral branches, brown, warty, 4–5 µm diam. *Conidiogenous cells* integrated, terminal or intercalary, subcylindrical to clavate, pale brown, smooth, 5–12 × 4–5.5 µm, with several terminal, hyaline denticles, 0.5 µm diam, inconspicuous, not thickened nor darkened. *Conidia* solitary, rhexolytic conidiogenesis, acrogenous, obovate to broadly ellipsoid, guttulate, thin-walled, aseptate, brown, smooth; hilum truncate, 1.5 µm diam, not thickened nor darkened, (8–)9(–10) × (6.5–)7(–8) µm.

Culture characteristics — Colonies covering dish after 7 d at 25 °C, with fluffy aerial mycelium. On MEA and OA surface olivaceous grey, reverse umber. On PDA surface and reverse dirty white.

Typus. AUSTRALIA, Western Australia, Perth, Chichester Park, on *Banksia grandis* litter, 15 June 2015, P.A. Barber (holotype CBS H-23124, culture ex-type CPC 27694 = CBS 142160, ITS and LSU sequence GenBank KY979742 and KY979797, MycoBank MB820940).

Additional isolates examined. AUSTRALIA, Western Australia, Perth, Bedford, Bedforddale, *Hakea* sp. (*Proteaceae*), 29 Sept. 2015, P.W. Crous, culture CPC 29482 = CBS 142079, ITS and LSU sequence GenBank KY979744 and KY979799; Western Australia, Perth, King's Park Botanic Gardens, on *Eucalyptus lane-poolei* (*Myrtaceae*), 27 Sept. 2015, M.J. Wingfield, culture CPC 29422 = CBS 142078, ITS and LSU sequence GenBank KY979743 and KY979798.

Notes — *Rosellinia australiensis* is known only by its asexual morph, which is hansfordia- to nodulisporium-like in morphology. Phylogenetically, however, it clusters among several species of *Rosellinia*, consequently a name in this genus was chosen for it. There is considerable confusion regarding the sexual and asexual morphs in *Xylariales*, and sequence data are required for a greater number of taxa in order to produce a solid taxonomic backbone for the order. Based on a megablast search using the ITS sequence of the ex-type culture, the best matches were with *R. thelena* (GenBank KF719202; Identities = 491/513 (96 %), 9 gaps (1 %)), *R. aquila* (GenBank KY610392; Identities = 494/518 (95 %), 11 gaps (2 %)), and *R. corticium* (GenBank KT149736; Identities = 416/444 (94 %), 10 gaps (2 %)).

Colour illustrations. *Banksia* leaf litter; conidiophores and conidia on PNA. Scale bars = 10 µm.