

Acrodontium metrosideri



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Acrodontium metrosideri Crous & Thangavel, *sp. nov.*

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

Classification — *Teratosphaeriaceae*, *Capnodiales*, *Dothi-deomycetes*.

Mycelium consisting of hyaline, smooth, septate, branched, 1.5–2 µm diam hyphae. *Conidiophores* reduced to conidiogenous cells. *Conidiogenous cells* arising from superficial hyphae, medium brown, smooth, the lower third being cylindrical, and the upper section tapering prominently to a subacute apex; upper half consisting of a rachis with tightly aggregated loci, visible as small pimple-like scars, 0.5 µm diam, slightly darkened and refractive, 25–35 × 2.5–3 µm. *Conidia* solitary, aseptate, hyaline, smooth, ellipsoid to clavate, apex obtuse, tapering in lower third to truncate base, 0.5–1 µm diam, (3–)4(–5) × 1.5(–2) µm.

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

Typus. NEW ZEALAND, Auckland, Bucklands Beach, 22 Wells Rd, on *Metrosideros excelsa* (*Myrtaceae*), 8 Dec. 2016, R. Thangavel, T16_03926D (holotype CBS H-23586, culture ex-type CPC 32783 = CBS 144416, ITS and LSU sequences GenBank MH327798.1 and MH327834.1, MycoBank MB825404).

Notes — Videira et al. (2016) showed that *Acrodontium* resides in the *Teratosphaeriaceae*. Furthermore, her data also showed several other species reside in different orders, and are not congeneric with the type, *A. crateriforme*. The present collection, however, clusters within *Acrodontium* s.str. where it represents a distinct lineage, known from *Metrosideros excelsa* in New Zealand, clustering with another strain from New Zealand (PDD 105475) originally identified as *Septoria alpicola*, occurring on *Fuchsia excorticata* (conidia 60 × 2 µm, 1–7 septate on the specimen). It is apparent that the culture PDD 105475 became contaminated with the fungus described here as *Acrodontium podocarp*i, which due to its sticky, minute conidia, tends to be a common contaminant in culture collections.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence had highest similarity to '*Septoria cf. alpicola*' (GenBank KM975402.1; Identities = 528/532 (99 %), no gaps), *Acrodontium crateriforme* (GenBank GU214682.1; Identities = 507/538 (94 %), 13 gaps (2 %)) and *Acrodontium crateriforme* (GenBank KX287268.1; Identities = 507/538 (94 %), 13 gaps (2 %)). Closest hits using the LSU sequence are '*Septoria cf. alpicola*' (GenBank KM975377.1; Identities = 862/864 (99 %), no gaps), *Acrodontium crateriforme* (GenBank KX286957.1; Identities = 842/870 (97 %), 1 gap (0 %)) and *Acrodontium neolitseae* (GenBank KJ869184.1; Identities = 816/844 (97 %), 1 gap (0 %)).

Colour illustrations. Bucklands Beach, New Zealand; conidiophores sporulating on SNA, conidiophores, conidiogenous cells and conidia. Scale bars = 10 µm.

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