

DENDROCRYPHAEA

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Dendrocryphaea Paris & Schimp. ex Broth., in H.G.A. & K.A.E.Prantl, *Nat. Pflanzenfam.* 1(3): 743 (1905); from the Greek *dendron* (a tree), in reference to the relatively robust plants of this genus and their similarity to *Cryphaea*.

Lecto: *D. gorveana* (Mont.) Paris & Schimp.

Dendrocryphaea is an almost exclusively Southern Hemisphere genus. Four of the six species occur in continental South American, one is endemic to the Juan Fernández Islands in the south-eastern Pacific Ocean, and one is Australian. Plants typically grow on rocks or tree roots along creeks and are at least periodically submerged.

References

Enroth, J. (1995), Taxonomy of *Cyptodon*, with notes on *Dendrocryphaea* and selected Australasian species of *Cryphaea* (Cryphaeaceae, Bryopsida), *Fragm. Flor. Geobot.* 40: 133–152.

Griffin, D. III, Gradstein, S.R. & Aguirre, J. (1982), Studies on Colombian cryptogams XVII. On a new antipodal element in the neotropical páramos – *Dendrocryphaea latifolia* sp. nov. (Musci), *Acta Bot. Neerl.* 31: 175.

Dendrocryphaea tasmanica (Mitt.) Broth., in H.G.A.Engler & K.A.E.Prantl, *Nat. Pflanzenfam.* 1(3): 744 (1905)

Cryphaea tasmanica Mitt., *Fl. Tasman.* 2: 204 (1859). T: Jackey's Plain Creek, Tas., on rocks, *W.Archer s.n.*; iso: NY (2 specimens).

Illustrations: V.F.Brotherus, *op. cit.* 737, fig. 551F–H; G.A.M. Scott & I.G.Stone, *The Mosses of Southern Australia* 351, pl. 66 (1976), as *Cryphaea tasmanica*; J.Enroth, *op. cit.* 146, fig. 4g–m.

Plants rheophytic, mostly epilithic, relatively robust and rigid, often dusky dark green to blackish, unbranched or sparingly branched. Stem leaves c. 2.0–2.2 mm long and 1.2–1.5 mm wide, somewhat curved when dry, broadly ovate to nearly elliptic; apex acute, occasionally obtuse; margins plane, entire below, faintly serrulate above; costa forming an abaxial keel to the leaves, reaching the apex or nearly so. Laminal cells relatively thick-walled, their corners distinctly elevated; apical and median laminal cells rhomboid-oval to hexagonal, c. 12–20 × 5–8 µm; basal cells elongate-rectangular to ±linear, c. 50–80 × 7–10 µm; supra-alar cells (sub)quadrate to transverse; alar cells hyaline or brownish, slightly enlarged.

Perichaetia usually numerous, pseudolateral or terminal on relatively short branches. Post-fertilisation inner perichaetial leaves c. 2.5–2.8 mm long. Capsules c. 1.0–1.5 long and 0.8–1.0 mm wide, broadly ovoid; exothecial cells relatively thick-walled, ±isodiametric; annulus deciduous. Peristome: exostome teeth c. 350–400 µm long, coarsely but not very densely papillose; median line thick, slightly zig-zag; endostome segments as long as or slightly longer than the teeth, coarsely and rather densely spiculose-papillose, occasionally appendiculate; operculum c. 0.5 mm high, conical; calyptra c. 0.8 mm high, mitrate. Spores c. 15 µm diam., nearly smooth. $n = 11$ (10 + m), *fide* H.P.Ramsay, *New Manual of Bryology* 1: 195 (1983), as *Cryphaea tasmanica*.

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This endemic rheophyte can be confirmed only from Vic. and Tas.; previous reports from N.S.W. and A.C.T. are probably based on misidentifications of *Cratoneuropsis relaxa* (Hook.f. & Wilson) M.Fleisch. (Campyliaceae).

Vic.: Erskine R., Lorne, Nov. 1919, *W.W.Watts* (H-BR, NSW); upper Jamieson R., 23 Feb. 1949, *J.H.Willis* (MEL). Tas.: Liffey Falls, SE of Devonport, *D.H.Vitt 29400* (H).

This moss resembles *Cryphaea parvula* in its sporophyte characters, but it grows in aquatic habitats, is much more robust, and has broader leaves, elevated cell corners and slightly enlarged alar cells.