

PTYCHOMNION

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Ptychomnion (Hook.f. & Wilson) Mitt., *J. Linn. Soc., Bot.* 12: 536 (1869); from the Greek *ptychios* (folded) and *mnion* (a moss), probably in reference to the rugose leaves.

Hypnum sect. *Ptychomnion* Hook.f. & Wilson, in J.D.Hooker, *Bot. Antarct. Voy.* 2(2): 110 (1854).

Type: *P. aciculare* (Brid.) Mitt.

Dioicous or phylloidioicous. Plants forming loose turfs. Stems simple to sparingly branched; paraphyllia scarce. Leaves squarrose, broadly ovate, ±plicate near the base, rugose distally; apex acuminate and twisted; margin serrate in the acumen, entire below; costa absent, or very short, narrow and weak. Laminal cells linear, incrassate, pitted; basal cells rectangular, slightly pitted. Gemmae absent.

Capsules horizontal, curved, cylindrical, furrowed; annulus differentiated; operculum very long-rostrate. Peristome: exostome teeth with very conspicuous transparent zones along median line on outer face, densely horizontally striate at the base, papillose at the apex; endostome pale yellow, slightly longer than the exostome, with a high basal membrane, processes hyaline, keeled, papillose; cilia present. Spores globose, smooth.

Ptychomnion is characterised by its squarrose, rugose leaves.

A genus of three predominantly Southern Hemisphere species (Australasia, South America, South Pacific islands and the Subantarctic islands); one in Australia.

Ptychomnion aciculare (Brid.) Mitt., *J. Linn. Soc., Bot.* 12: 536 (1869)

Hypnum aciculare Brid., *Musc. Recent.* 2(2): 158 (1801). T: "Noua Hollandia in terra *Van Diemen*" [Tas.]; B n.v.

Illustrations: D.G.Catcheside, *Mosses of South Australia* 297, fig. 179 (1980); J.Beever, K.W.Allison & J.Child, *Mosses of New Zealand*, 2nd edn 116, fig. 56 (1992); W.R.Buck, D.H.Vitt & W.M.Malcolm, *Key to the Genera of Australian Mosses* 23 (2002); D.Meagher & B.Fuhrer, *A Field Guide to the Mosses and Allied Plants of Southern Australia* 73 (2003).

Plants to 12 cm long, bright green to yellowish, with a 'papery' texture when dry. Stems dark red-yellow, irregularly branched; central strand lacking. Leaves 2.0–3.5 mm long, 1.5–2.5 mm wide, shallowly cochleate, with a few weak plications at the base to 25–33% of leaf length. Laminal cells 38–50 × 7–10 µm, shorter towards the apex; basal cells rectangular, yellow to orange.

Seta 20–30 mm long, dark red, flexuose. Peristome: exostome teeth red-brown to orange; tips hyaline. Spores 10.0–12.5 µm diam.

Occurs in S.A., Qld, N.S.W., Vic. and Tas., mainly in rainforest at altitudes up to 1550 m; grows on soil, rotting logs and as an epiphyte. Also in New Zealand, New Caledonia and Samoa, Juan Fernandez Islands and Chile.

S.A.: N of Lenswood Research Centre, July 1984, *Hall* (CANB). Qld: Bellenden Ker (Centre Peak), 12 km NW of Babinda, Wooroonooran Natl Park, *H.Streimann* & *T.Pócs* 64360 (CANB). N.S.W.: Brindle Ck, Helmholtzia Track, Border Ranges Natl Park, 27 km NNE of Kyogle, *H.Streimann* 61100 (CANB). Vic.:

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Cement Creek Turntable, Mt Donna Buang, Yarra Ranges Natl Park, *N.Klazenga 5036* (MEL). Tas.: Mt Fortesque, 8 Apr. 2000, *K.Felton* (HO).

Ptychomnion aciculare is readily recognised by its texture and its squarrose undulate leaves. A second species, *P. densifolium* (Brid.) A.Jaeger, occurs on Macquarie Island. That moss is characterised by its sheathing and more densely plicate leaf bases.

Excluded Name

Ptychomnion cygnisetum (Müll.Hal.) Kindb., *Enum. Bryin. Exot.* 31 (1888)

Syn: Hermit Island, Tierra del Fuego, *J.D.Hooker*; Burnst Island, Darwin Sound, *C.Spegazzini*; Port Cook, *C.Spegazzini*; Beagle Channel, Tierra del Fuego, *Spegazzini*; Auckland Island, New Zealand, *Krone*.

Although this species was reported from Australia by Jaeger & Sauerbeck (*Adumbratio flore muscorum totius orbis terrarum. Part 8, Ber. Thätigk. St. Gallischen Naturwiss. Ges.* 1876–1878: 211–454, 1878) and later authors, no collections of this species could be located.