

PTYCHOMNIACEAE

Josephine Milne¹ & Niels Klazenga²

Ptychomniaceae M.Fleisch., *Musc. Buitenzorg* 656 (1908).

Type: *Ptychomnion* (Hook.f. & Wilson) Mitt.

Dioicous or phylloidioicous. Plants forming small tufts or large creeping or hanging turfs. Stems mostly sympodially branched; creeping parts short, usually without leaves; erect parts complanate to squarrose; central strand lacking; paraphyllia often present. Leaves broadly ovate to ovate-lanceolate, smooth to plicate or rugose, plane to concave, acute to acuminate; margin usually serrate near the apex (entire in *Tetraphidopsis*), entire below, recurved in the basal part; costa short and double or absent (short and single in *Tetraphidopsis*). Laminal cells linear to rhomboid, thin- to thick-walled, pitted or not; basal cells shorter, often thick-walled and strongly pitted; alar cells differentiated. Gemmae often present.

Perichaetia and perigonia in leaf axils. Calyptra cucullate. Capsules exerted, erect to horizontal, ovoid to cylindrical, straight to slightly curved, conspicuously furrowed; stomata at the base of the capsule, phaneropore; annulus differentiated or not; operculum long, conico-rostrate. Peristome diplolepideous; exostome teeth narrowly rectangular, shouldered, bordered, with a median zig-zag line on the outer side, often with conspicuous transparent zones, densely horizontally striate, occasionally with papillae over the striae, papillose at the apex; endostome with a high basal membrane; processes rudimentary to well-developed; cilia present or absent. Spores smooth to papillose.

This family includes six genera and 11 species. It occurs mainly in temperate and tropical rainforest in Australasia, Malesia, South America (Chile), China and Sri Lanka. Ptychomniaceae is represented in Australia by four genera, six species and an additional variety.

Reference

Enroth, J. (1991), Bryophyte flora of the Huon Peninsula, Papua New Guinea. XLI. Ptychomniaceae (Musci), *Acta. Bot. Fenn.* 143: 35–41.

Key to Genera

- 1 Gemmae in globose tufts at apices of stems and branches; costa short and single ... **TETRAPHIDOPSIS**
- 1: Gemmae in leaf axils or absent; costa absent or short and double2
 - 2 Leaves squarrose, rugose **PTYCHOMNION**
 - 2: Leaves terete-foliate to complanate, smooth or plicate3
- 3 Laminal cells thick-walled, conspicuously pitted; paraphyllia present; gemmae clavate.....
..... **GLYPHOTHECIUM**
- 3: Laminal cells thin-walled, not pitted; paraphyllia absent; gemmae long and filiform **HAMPELLA**

¹ Royal Botanic Gardens Melbourne, Birdwood Avenue, South Yarra, Vic. 3141.

² Royal Botanic Gardens Melbourne, Birdwood Avenue, South Yarra, Vic. 3141.