

## HIMANTOCLADIUM

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*Himantocladium* (Mitt.) M.Fleisch., *Musc. Buitenzorg* 3: 883 (1908); from the Greek *himantos* (a strap or thong) and *klados* (a branch), probably in reference to the branches that resemble small straps.

Lecto: *H. implanum* (Mitt.) M.Fleisch.

Dioicous. Plants forming loose fans, occasionally pendulous, dark green to yellow-brown. Primary stem creeping, with greatly reduced leaves; secondary stems octastichous, often subdistichous, strongly complanate, dorsiventrally flattened, short and erect or long and flexuose and horizontal to pendulous, unbranched, irregularly branched or subpinnate; conspicuous flagelliform branches often present; central strand absent. Pseudoparaphyllia few, foliose, narrowly triangular. Stipe leaves appressed, abruptly acuminate above the broadly ovate base; margin entire; costa faint. Secondary stem and branch leaves spreading, lingulate, asymmetrical, with the basicopic side reflexed; apex obtuse and apiculate, undulate or rugose when dry, slightly plicate at the base; margin crenulate, serrate at the apex; costa strong, often forked distally, failing below the leaf apex. Laminal cells thick-walled; upper cells isodiametric; median laminal cells oval or rhomboidal; basal cells narrowly rectangular, pitted, particularly at the insertion.

Perichaetia in leaf axils of secondary stems and branches.

A genus of six species in Africa, subtropical and tropical Asia, Australia and Oceania; one species in Australia. Although *Himantocladium* is usually epiphytic, it occasionally grows on rock.

### References

Bartram, E.B. (1952), North Queensland mosses collected by L.J. Brass, *Farlowia* 4: 235–247.

Enroth, J. (1989), Bryophyte flora of the Huon Peninsula, Papua New Guinea. XXVII. Neckeraceae (Musci), *Acta Bot. Fenn.* 137: 41–80.

Enroth, J. (1992), Notes on the Neckeraceae (Musci), 13. Taxonomy of the genus *Himantocladium*, *Ann. Bot. Fenn.* 29: 79–88.

***Himantocladium cyclophyllum*** (Müll.Hal.) M.Fleisch., *Musc. Buitenzorg* 3: 887 (1908)

*Neckera cyclophylla* Müll.Hal., *Syn. Musc. Frond.* 2: 664 (1851). T: Java, [Indonesia], *C.L. von Blume*; Herb. A.Braun, *n.v.*

*Himantocladium loriforme* (Bosch & Sande Lac.) M.Fleisch., *Musc. Buitenzorg* 3: 884 (1908). T: Celebes [Sulawesi, Indonesia], *H.Zollinger* 439; lecto: L., *vide* J.Enroth, *Ann. Bot. Fenn.* 29: 85 (1992); Seram, [Indonesia], *W.H. de Vriese s.n.*; syn: L; “Java in m. Gedé et Salak”, [Indonesia], *Teysmann s.n.*; syn: L.

Illustration: J.Enroth, *op. cit.* 53, fig. 5a–j (1989).

Plants dark green; older parts yellow-brown. Secondary stems to c. 7 cm long, usually flexuose, unbranched or irregularly branched to subpinnate, complanate, often subdistichous.

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Secondary stem and branch leaves 1.6–1.9 mm long, 0.58–0.67 mm wide. Upper laminal cells oval to rhomboidal, 6–12 µm long; median laminal cells mostly rhomboidal, 10–20 × 6–10 µm wide; basal cells 23–40 µm long.

Perichaetia c. 1 mm long; perichaetial leaves acuminate above a broadly ovate base; apex reflexed; margin crenate to dentate at the apex; archegonia to c. 30; paraphyses filamentous, much longer than archegonia. Perigonia and sporogones unknown in Australian material.

Occurs in north-eastern Qld (including islands in the Torres Strait); grows in lowland tropical rainforest to an altitude of 370 m, epiphytic or on shaded boulders. Also in India, China, Japan, Thailand, Malesia and islands in the south-western Pacific Ocean.

Qld: Noah Head, Mairdja Botanical Walk, Cape Tribulation Natl Park, 38 km NNE of Mossman, *H.Streimann 45769* (CANB); Rex Ck, Mossman Gorge, Daintree Natl Park, *H.Streimann 45834* (CANB); South Johnstone R., *I.G.Stone 18999* (MEL); El Arish S.F., *I.G.Stone 20034* (MEL); Windsor Tableland, *I.G.Stone 16107* (MEL).

This moss is characterised by its dioicous sexual condition and the strongly crenate or dentate upper margin of the perichaetial leaves (Enroth, 1989). Other distinguishing features cited by Enroth (1989) include the pitted, basal laminal cells and the submarginal limbidium. Although the pitted basal cells are conspicuous, the limbidium was not observed in Australian material.

### Doubtful Name

*Himantocladium plumula* (Nees) M.Fleisch., *Musc. Buitenzorg* 3: 889 (1908)

*Pilotrichum plumula* Nees, *Bryol. Univ.* 2: 759 (1827). T: Java, [Indonesia], *coll. unknown*; iso: ?BM *n.v.*, *fide* J.Enroth, *Ann. Bot. Fenn.* 29: 82 (1992).

The supposed occurrence of *H. plumula* in Australia is based on a collection from north-eastern Qld [Iron Range, Qld, *L.J.Brass 19258*, FH] reported by Bartram (1952). *Himantocladium plumula* can be distinguished from *H. cyclophyllum* by its synoicous sexual condition. All other Australian collections previously identified as *H. plumula* have perichaetia with archegonia only. Hence, they are not synoicous and are referable to *H. cyclophyllum*. We have not yet seen the specimen on which the Australian report was based.