

Fissidens hollianus Dozy & Molk., *Bryol. Javan* 1: 4, tab. 4 (1855)

Type: Java, Indonesia, *Dr Holle* 13; holo: L.

Illustrations: E.B.Bartram, *Philipp. J. Sci.* 68: 18, pl. 1, fig. 2 (1939); Z.Iwatsuki & T.Suzuki, *J. Hattori Bot. Lab.* 51: 466, pl. 20 (1982).

Plants dark green, brownish when old, 2.5–6.0 mm long, 1.1–2.4 mm wide, with the leaves, densely and evenly foliate. **Stems** usually simple, occasionally branched near the apex; in section with an indistinct central strand. **Leaves** in 6–16 pairs, ±uniformly lanceolate, occasionally slightly falcate, 1.1–1.5 mm long, 0.3–0.4 mm wide; apex acute to broadly acute, apiculate; **vaginant laminae** reaching to about mid-leaf, unequal; **limbidium** of 2–4 rows of hyaline elongate smooth thick-walled cells reaching about 3/4 the length of the vaginant laminae, prosenchymatous, cells of the outer row occasionally shorter, hyaline and ±rectangular; **dorsal lamina** broadly truncate at the base, occasionally failing above the insertion; **margins** crenulate by projecting cells and papillae. **Lamina cells** pellucid, quadrate to hexagonal, 5–8 µm long, thin-walled, obscure, with 3–6 small papillae at the corners; cells of base of vaginant laminae becoming elongated, smooth; **costa** of *bryoides*-type, percurrent to barely excurrent, hyaline to yellowish.

Autoicous. Perigonia axillary or occasionally terminal on a short basal shoot, often abundant, 0.2–0.6 mm long, ±pigmented. **Perichaetia** terminal on stems and branches; **perichaetial leaves** with vaginant laminae broader at the base, joining above mid-leaf, open. **Setae** short, to c. 2 mm long, ±scabrous with pustulose cells. **Capsules** inclined to horizontal, short-cylindrical, 0.35–0.60 mm long, 0.3–0.4 mm wide; **exothecial cells** quadrate, 22–30 µm wide, thin-walled with distinct corner thickenings. **Operculum** rostrate, 0.4–0.7 mm long. **Peristome** teeth c. 250 µm long, c. 35 µm wide at the base, the filaments spirally thickened, minutely and densely papillose in the basal part. **Calyptra** campanulate to mitrate, short, covering only the beak of the operculum, 0.35–0.40 mm long; cells ±vesiculose. **Spores** 12–14 µm diam., almost smooth.

[Images](#)

Apparently very rare in north-eastern Qld.

Also known from Christmas Island, Malesia, the Philippines, China, Japan, New Caledonia, Vanuatu and Fiji.

Specimen examined: Qld: Blue Walk, Cairns Botanic Gardens, *I.G.Stone* 15320 p.p. (MEL).

Fissidens hollianus is characterised by its autoicous inflorescences, axillary perigonia, relatively long stems, ±uniform median to upper leaves, dark and multipapillose lamina cells, and the relatively short and slightly scabrous setae.

The species differs from *F. ceylonensis* in having shorter vaginant laminae, longer leaves, and slightly scabrous or pustulose setae.

[Bibliography](#)