

Fissidens badyinbarus I.G.Stone, in I.G.Stone & D.G.Catcheside, *J. Bryol.* 17: 624 (1993)

Type: Hinchinbrook Is., Qld, 4 Aug. 1988, *I.G.Stone 24918*; holo: MEL.

Illustration: I.G.Stone & D.G.Catcheside, *op. cit.* 625, fig. 3.

Plants minute, to 3 mm long, semi-prostrate, \pm flabelliform, dark green. **Stems** reddish brown; in section with a weak central strand; axillary hairs with 3–5 inconspicuous hyaline cells; axillary nodules weak; rhizoids basal, in axils of lower leaves and at the base of innovations, with thick stippled red-gold walls. **Leaves** up to 8 pairs, increasing in size upwards, down-curved when dry, the margins curved under; upper leaves narrowly oblong-lanceolate, to c. 1.8 mm long and 0.3 mm wide, elimbate; **apex** acute to obtuse-apiculate; **margins** crenulate-serrulate. **Vaginant laminae** reaching to shortly beyond mid-leaf, part to almost fully open, marginal cells often oblate to short-rectangular, thicker-walled, larger juxtacostally, to c. 15 μ m long; **dorsal lamina** tapered to the insertion; **lamina cells** firm-walled, \pm quadrate to irregularly rounded-hexagonal, 8–12 (–15) μ m wide, slightly larger juxtacostally, mammillose to unipapillose, the papillae small; **costa** of *bryoides*-type, subpercurrent or percurrent, rarely short-excurrent, strong, ending in a large, clear-pointed apical cell.

Autoicous or **dioicous**. Male shoots uncommon, smaller than female shoots, axillary or sometimes as loose plants. **Perigonia** terminal on separate male plants or axillary. **Perichaetia** terminal; **perichaetial leaves** slightly larger than stem leaves, 1.0–1.2 mm long; vaginant laminae \pm open. **Setae** terminal, geniculate, twisted at the apex when dry, 3.0–4.4 mm long, slender. **Capsules** erect, \pm symmetrical, 0.50–0.75 mm long, c. 0.3 mm wide; **exothecial cells** quadrate to short-rectangular, 25–30 μ m wide, the longitudinal walls slightly thicker than horizontal walls, weakly collenchymatous. **Operculum** not seen. **Peristome** of *scariosus*-type. **Calyptra** campanulate, with a short basal split, \pm smooth, c. 0.5 mm long. **Spores** 12.0–12.5 μ m diam.

[Images](#)

Known only from Hinchinbrook Island, north-eastern Qld, and on the nearby mainland at Cardwell.

Selected specimens examined: Qld: Hinchinbrook Is., *I.G.Stone 24898* (MEL); Waterfall Ck, Cardwell, *I.G.Stone s.n.* (MEL).

Differs from other species with oblate laminal cells in being completely elimbate and in having a percurrent to short-excurrent costa ending in a large, clear-pointed apical cell.

[Bibliography](#)