Fissidens bogoriensis M.Fleisch., Musci Fl. Buitenzorg 1: 22 (1904)

Type: Buitenzorg, Java, Indonesia, 24 Apr. 1898, M.Fleischer; holo: FH; iso: S.

Fissidens diversiretis E.B.Bartram, Philipp. J. Sci. 68: 21 (1939), nom. illeg. non Broth. (1929); Fissidens lagunensis E.B.Bartram, Farlowia 1: 504 (1944). Type: middle elevations of Mt Maquiling, Laguna Prov., Luzon, Philippines, mostly above the hot mud springs and entirely below the mossy forest, 6 Oct. 1935, H.H.Bartlett 15697; holo: FH; iso: S.

Illustrations: M.Fleischer, *loc. cit.* fig. 2; Z.Iwatsuki, *J. Jap. Bot.* 39: 183, fig. 2 (1964), as *F. closteroides*; T.Shin, *Sci. Rep. Kagoshima Univ.* 13: 77, fig. 18 (1964), as *F. lagunensis*; Z.Iwatsuki & T.Suzuki, *J. Hattori Bot. Lab.* 43: 382, figs 2, 3 (1977); Z.Iwatsuki & T.Suzuki, *J. Hattori Bot. Lab.* 51: 449, pl. 3; 450, pl. 4 (1982); A.Eddy, *Handb. Malesian Mosses* 1: 89, fig. 84 (1988).

Plants green to dull green, densely foliate, flabelliform, small, to 3 mm tall with leaves. **Stems** very short, to 0.5 mm long, simple, in section with a weakly defined central strand. **Leaves** in 3–6 pairs, 1.0–2.3 mm long, 0.10–0.25 mm wide, ovate-lanceolate to lanceolate; **apex** acute to acuminate; **margins** almost entire to slightly crenulate, often weakly bordered by 1–3 rows of elongate and ±thicker-walled cells, often intramarginal, often without differentiated borders; **vaginant laminae** reaching 2/5-1/2 leaf length, joined at the costa, margins, or in between; **dorsal lamina** tapering to the base, ending at or some distance above the insertion; **limbidium** often absent, when present of 1–3 rows of elongate, ±thicker-walled cells, often intra-laminar; **lamina cells** smooth, lax, thin-walled, hexagonal to quadrate, 20–45 µm long, 15–20 µm wide, smaller and equidimensional near the margins, to 60 µm long near the base of the vaginant laminae; **costa** of *bryoides*-type, ending below the apex to subpercurrent.

Autoicous or rhizautoicous. Male branches very small, visible near stems bases. Perichaetia terminal; archegonia terminal on stems; perichaetia leaves not differentiated. Setae to c. 4 mm long, twisted. Capsules \pm cylindrical, c. 0.5 mm long and 0.3 mm wide; exothecial cells quadrate to rectangular, thin-walled, strongly collenchymatous. Operculum long-rostrate, 0.3–0.6 mm long. Peristome of *bryoides*-type; teeth 0.20–0.25 mm long, 20–25 µm wide at the base, the filaments spirally ornamented, the base minutely papillose. Calyptra mitriform or campanulate, c. 0.4 mm long, covering only the beak of the operculum. Spores 8–14 µm diam., almost smooth.

Images

Occurs on soil in rainforest in north-eastern Qld.

Also in Malesia, Japan, China, Taiwan and the Philippines.

Selected specimens examined: Qld: Palmerstone Rd, South Johnstone R., Cook Distr., 4 June 1982, *I.G.Stone* 18993 (MEL 2265514A); Lions Den, Helenvale, 19 June 1952, *I.G.Stone* 19240 (MEL 225334B).

Fissidens bogoriensis is a very variable species, particularly in leaf shape and areolation and in the leaf border, which is often weak or absent. It is a small plant characterised by the densely foliate stems, large and thin-walled lamina cells, and the \pm differentiated limbidium.

This species resembles *F. hyalinus* and *F. dealbatus* in its stem section and lamina cell size. However, both of the latter lack a costa, and the limbidium is distinctly prosenchymatous.

<u>Bibliography</u>