Fissidens ceylonensis Dozy & Molk., Ann. Sci. Nat., Bot., sér. 3, 2: 304 (1844)

Type: Ceylon [Sri Lanka], Koenig; holo: L, fide Z.Iwatsuki & M.A.Haji Mohamed, J. Hattori Bot. Lab. 62: 395 (1987).

Fissidens subhumilis Catches., *Mosses of South Australia* 80 (1980). Type: George Ck, 10 miles [c. 16 km] S of Adelaide River, N.T., *M.Lazarides & L.Adams* 256; holo: CANB.

Illustrations: D.G.Catcheside, Mosses of South Australia 79, fig. 19 (1980), as F. subhumilis; Z.-H.Li, Acta Bot. Fennica 129: 28, fig. 12i-u (1985); Z.Iwatsuki & M.A.Haji Mohamed, op. cit. 346, fig. 2 (1987); A.Eddy, Handbook of Malesian Mosses 1: 82, fig. 75 (1988).

Plants small, pale to dark green or reddish brown, growing in dense tufts on soil. **Stems** simple, rarely branched, to 10 mm tall and 1.5 mm wide with leaves; hyaline nodules not differentiated; in section with a weakly differentiated central strand; rhizoids basal. **Leaves** in numerous pairs, mostly uniform, oblong-lingulate, to 1 mm long and 0.3 mm wide, widest below the middle; **apex** obtuse to acute; **vaginant laminae** 2/3-3/4 leaf length, ±closed; **limbidium** of narrow thick-walled cells, usually reaching the apex, often intramarginal by 1 or 2 rows of laminal cells proximally, in sterile shoots marginal distally, usually intramarginal proximally, occasionally absent or intermittent; **dorsal lamina** tapered or broad at the base, sometimes ending above the insertion; **margins** crenulate above. **Lamina cells** quadrate to hexagonal, 5–6 (–10) µm wide, convex; **papillae** mostly peripheral. **Costa** of *bryoides*-type, percurrent to short-excurrent.

Autoicous. Perigonia usually axillary, occasionally terminal on a short basal shoot, 0.2–0.6 mm long, \pm pigmented. Perichaetia terminal on a stem or lateral branch. Perichaetial leaves with vaginant laminae broader at the base, joining above mid-leaf, open. Setae 2–3 mm long, smooth. Capsules cylindrical, oblong, c. 1 mm long; urn 0.5–0.7 mm long; exothecial cells quadrate, thin-walled, with thickened corners. Operculum long-rostrate, c. 0.45 mm long. Peristome 40–45 µm wide at the base. Calyptra campanulate, c. 0.5 mm long, smooth, covering the operculum. Spores (8–) 10–12 (–16) µm diam., very finely papillose.

Images

Common in northern W.A., N.T., far north-eastern Qld; grows on lateritic soil, occasionally on termite mounds in monsoonal forest or woodland at low elevations.

Also in Greece, the Seychelles, Sri Lanka, India, SE Asia, China, Malesia, the Philippines, Fiji, Samoa and the Society Islands.

Selected specimens examined: N.T.: Twin Falls, Jim Jim Falls area, Kakadu Natl Park, *J.Russell-Smith* 1222 (DNA, MEL); Nourlangi, Kakadu Natl Park, *I.G.Stone* 23380 (MEL). Qld: on creek bank S of Claudie R., Iron Ra., 21 Sept. 1979, *M.Thorsborne* (*I.G.Stone* 17611) (MEL).

The species exhibits considerable variation in the size of plants, and while it has often been mistaken for *F. intromarginatulus*, the two species differ in habitat, leaf shape and costal features. It can also be confused with *F. hollianus* which has dark, multipapillose, laminal cells and slightly scabrous setae.

<u>Bibliography</u>