

**Fissidens autoicus** Thér. & Dixon, *J. Linn. Soc., Bot.* 43: 297 (1916)

T: Sandakan, British North Borneo [Malaysia], 2 Apr. 1913, *C.H.Binstead*; holo: BM, iso: H-BR, NSW.

*Fissidens cairnensis* Broth. & Watts, *Proc. Linn. Soc. New South Wales* 43: 549 (1918). T: near hotel, Babinda, Cairns, Qld, on rotten logs, *W.W.Watts 332a*; holo: H-BR; iso: NSW

Illustration: A.Eddy, *Handb. Malesian Mosses* 1: 78, fig. 69 (1988).

Autoicous. Plants simple or branched, c. 5.0 mm tall and 1.9 mm wide, densely foliate. Leaves gradually larger distally, homomalous when dry, erecto-patent when moist, ligulate, 1.0–1.5 mm long, 0.3–0.4 mm wide; apex broadly acute to obtuse-apiculate; costa subpercurrent. Vaginant laminae to mid-leaf, almost closed, open in perichaetial leaves; limbidium proximal, with 2–4 rows of pale prosenchymatous cells, the outer occasionally rectangular. Dorsal lamina rounded to the base. Margin serrulate. Laminal cells rounded-hexagonal, slightly convex, smooth or obscurely uneven, 7–10 µm wide; marginal cells smaller.

Axillary male and female buds numerous on some shoots. Calyptra mitrate, c. 0.4 mm long, ±scabrous. Setae terminal on main or axillary branches, ±pustulose, geniculate, 1.5–2.0 mm long, occasionally 2 per perichaetium. Capsules c. 0.7 mm long, tapered at the base; exothecial cells ±firm-walled; operculum c. 0.5–0.6 mm long, conical-rostrate. Peristome teeth 45–50 µm wide at the base. Spores 12–15 µm diam.

Very rare in north-eastern Qld; also in Borneo and New Guinea.

In the protologue of *F. cairnensis*, laminal cells were described as being unipapillate. However, papillae appear to be absent or rare, even in transverse sections, although the surface can be obscurely uneven (Stone, 1994).