Fissidens cuspidiferus Dixon, in H.N.Dixon & W.Greenwood, Proc. Linn. Soc. New South Wales 55: 271 (1930)

Type: Lautoka Mountains, Viti Levu, Fiji, W. Greenwood 319a; holo: BM.

Illustrations: H.N.Dixon & W.Greenwood, op. cit. pl. 8, fig. 3a, b; Z.Iwatsuki & T. Suzuki, J. Hattori Bot. Lab. 67: 280 (1989).

**Plants** small to very small, yellowish green. **Stems** 1.0–2.5 mm long; in section with or without a weak central strand. **Leaves** closely imbricate on stems, in 3–5 (–9) pairs; upper leaves narrowly lanceolate, 0.8–1.4 mm long, 0.16–0.24 mm wide; **apex** acute to narrowly acute; **vaginant laminae** reaching 1/2-2/3 leaf length; **limbidium** with 3–6 rows of long hyaline cells; **dorsal lamina** tapered or rounded to the insertion; **margins** of dorsal and apical laminae finely crenulate by projecting cells. **Lamina cells** ±quadrate, 5–10 µm, thinwalled, mammillose to unipapillose. **Costa** excurrent in upper leaves.

**Autoicous** or **rhizautoicous**. Male plants short or gemmiform at the base of female plants; **perigonia** terminal. **Perichaetia** terminal on stem; **perichaetial leaves** not differentiated. **Setae** 0.7–2.5 mm long, smooth. **Capsules** cylindrical, erect, symmetrical; **theca** 0.24–0.36 mm long; **exothecial cells** quadrate to rectangular, strongly collenchymatous. **Operculum** long-rostrate, c. 0.3 mm long. **Peristome** 190–210 mm long, the teeth 28–32 µm wide at the base, basal part of outer side minutely and densely papillose, the filaments spirally thickened and papillose. **Calyptra** campanulate, c. 0.3 mm long, scabrous. **Spores** 13–15 µm diam.

**Images** 

Apparently rare in northern N.T. and north-eastern Qld (Cape York Peninsula). Grows on shaded soil near creeks.

Also known from Fiji and New Caledonia.

Selected specimens examined: N.T.: 7 km NW of Conder Pt, Melville Is., *H.Streimann 42508* (CANB, NY). Qld: A. & J.Hall property, Lockerbie, Cape York Penin., *I.G.Stone 25572* (MEL).

Neither Dixon (1930), in the type description, nor Iwatsuki & Suzuki (1989) mentioned short female shoots having narrower leaves than those of the vegetative shoots. Iwatsuki & Suzuki (1989) described this moss as being rhizautoicous, but the autoicous condition is also observed in Australian material.

**Bibliography**