

**Fissidens perobtusus** Dixon, *Proc. Linn. Soc. New South Wales* 55: 272 (1930)

Type: Lautoka, Viti Levu, Fiji, *Greenwood* 34; holo: BM.

*Fissidens traversii* I.G.Stone, *J. Bryol.* 12: 359 (1983a). Type: Five Mile Creek, Cardwell, Qld, *I.G.Stone* 16302; holo: BRI; iso: BM, MEL.

Illustrations: I.G.Stone, *op. cit.* 361, fig. 1; 362, fig. 2, as *F. traversii*.

**Plants** minute, 1–2 mm tall, pale green to golden brown, semi-erect when moist, prostrate when dry. **Stems** reddish gold, simple or with basal  $\pm$ deciduous innovations; in section with a small central strand of very thin-walled cells. **Leaves** in 3–14 pairs, closely imbricate, decurved and contorted when dry,  $\pm$ oblong, c. 0.3–0.8 mm long, 0.15–0.30 mm wide; **apex** rounded to obtuse; **margins** crenulate; **vaginant laminae** reaching 7/8 or more leaf length, gaping open, **elimbate**, proximally with a hyaline to yellowish marginal strip of  $\pm$ smooth very thick-walled oblate cells 5–6  $\mu$ m long and 8–10  $\mu$ m wide, cells towards the costa c. 20  $\mu$ m long; **dorsal lamina** tapered, ending well above the leaf insertion; **lamina cells** rounded-hexagonal, 5–9  $\mu$ m diam., strongly mammillose, **papillae** few, large, compound.

**Dioicous. Male plants** small, leaves in 3–5 pairs, vaginant laminae of perigonal leaves distinctly shouldered; antheridia few, in a terminal cluster. **Female plants** with 3–6 pairs of leaves; **perichaetial leaves** similar to vegetative leaves but the vaginant laminae usually wider and more inflated below; archegonia few, terminal. **Setae** 1.5–2.5 mm long, reddish gold, mostly bent upwards at the base. **Capsules** erect, pale, usually reddish at the rim, symmetrical,  $\pm$ cylindrical, 0.4–0.7 mm long, 0.3–0.5 mm wide; **exothecial cells**  $\pm$ quadrate, 25–30  $\mu$ m wide, collenchymatous. **Operculum** conical-rostrate, c. 0.3 mm long including the short slightly oblique beak. **Peristome** teeth 140–180  $\mu$ m long. **Calyptra** not seen. **Spores** c. 22–30  $\mu$ m diam.

[Images](#)

Widespread in northern W.A. and N.T., and in Qld from Cooktown to Hughenden. Grows on sheltered seepage walls at the base of cliffs, in dry gullies, and on skeletal soils and termite mounds mostly in open woodland.

Also known in New Caledonia and Fiji.

*Selected specimens examined:* W.A.: Hidden Valley, Kununurra, *I.G.Stone* 23455 (MEL); Great Northern Hwy, between Derby and Fitzroy Crossing, Erskine Ra., *H.Streimann* 29423 (CANB). N.T.: Katherine Gorge, *I.G.Stone* 23325 (MEL). Qld: Wallaman Falls road, W of Ingham, *I.G.Stone* 21209 (MEL).

The species is characterised by the rounded leaf apices, and vaginant laminae occupying almost the entire leaf length and lacking a border of elongated cells.

*Fissidens perobtusus* appears to be more closely related to other semi-limbate species than to any elimbate taxa. It can be confused with sterile plants of *F. brassii*.

[Bibliography](#)