

**Fissidens integerrimus** Mitt., in J.D.Hooker, *Fl. Tasman.* 2: 168 (1859)

Type: Cheshunt, Tas., *W.Archer*; holo: NY; iso: HO, NY, WELT.

*Fissidens tasmanicus* Broth. & Rodway, *Pap. & Proc. Roy. Soc. Tasmania* 1915: 104 (1915). Type: Newmans Ck, Tasman Penin., Tas., on rocks under water, 2 Feb. 1899, *W.A.Weymouth* 2563; iso: HO 73459.

*Fissidens hunteri* J.H.Willis, *Victorian Naturalist* 68: 83 (1951). Type: banks of Goonmirk Ck, Delegate R., Vic., alt. 1050 m, 6 Apr. 1943, *W.Hunter* 95; holo: MEL; iso: Hb G.O.K.Sainsbury, Hb H.T.Clifford.

Illustrations: J.H.Willis, *loc. cit.*, as *F. hunteri*; J.E.Beever & I.G.Stone, *New Zealand J. Bot.* 30: 242–245, figs 3–5 (1992); J.E.Beever, B.Malcolm & N.Malcolm, *The Moss Genus Fissidens in New Zealand: an illustrated key* 36 (2002).

**Plants** slender, 5–25 mm long, dark green to blackened, forming dense, smooth mats or loosely gregarious. **Stems** simple or branched; axillary nodules weak; rhizoids at base of main stems, branches, or occasionally in leaf axils; in section with a narrow central strand. **Leaves** oblong-lanceolate, in numerous pairs, 1–2 mm long, 0.2–0.4 mm wide, erect-spreading to patent; **apex** acute or obtuse, blunt; **margins** weakly serrulate by projecting cells; **laminae** unistratose; **vaginant laminae** reaching 1/2–2/3 leaf length, open to half closed, **limbidium** usually distinct, sometimes obscure or absent, intramarginal, in 1–3 rows of elongate, vermicular, linear cells; **dorsal lamina** tapered to the leaf base; **lamina cells** thick-walled, subquadrate to hexagonal, smooth, not bulging, 10–15 µm wide, the marginal row usually much smaller, becoming larger towards the costa, longer towards the base (to 20 µm); **costa** of *bryoides*-type, subpercurrent.

**Dioicous** or **autoicous**. **Male plants** separate, shorter, with up to c. 9 pairs of leaves, or gemmiform and axillary on female shoots; **perigonia** terminal. **Perichaetia** terminal; **perichaetial leaves** narrower than vegetative leaves, to 0.25 mm long. **Setae** 2–3 mm long, terminal on the main stem or lateral branches, straw-coloured, stiff. **Capsules** erect to inclined, symmetrical; theca 0.6–0.8 mm long, c. 0.5 mm wide; **exothecial cells** collenchymatous, in c. 30 columns around the circumference. **Operculum** rostrate, as long as the theca. **Peristome** of *scariosus*-type; teeth c. 50–60 µm wide at the base. **Calyptra** mitrate, slightly scabrous at the apex. **Spores** 15–20 µm diam.

[Images](#)

Occurs in Vic. and Tas.; usually aquatic, on stones in streams and in rock crevices in waterfalls.

Also known from New Zealand.

*Selected specimens examined:* Vic.: Masons Falls, Kinglake, *I.G.Stone* 7546 (MEL); Cora Lynn Falls, Cumberland, near Marysville, *I.G.Stone* 9211 (MEL). Tas.: Guy Fawkes Rivulet, *W.W.Watts Tas.* 259 (NSW).

*Fissidens integerrimus* is frequently blackish with dark greenish tips. It is similar to *F. strictus* Hook.f. & Wilson in general appearance and habitat preference, but in the latter the more finely tapered leaves lack all trace of a limbidium, and the leaf lamina is bistratose.

*Fissidens rigidulus* is also a common species on rock in streams and cascades, but it is a much larger plant, the leaves having strong borders several cells thick and the laminae 1–2 (–3)-stratose.

[Bibliography](#)