

**Fissidens megalotis** Schimp. ex Müll.Hal., *Bot. Zeitung (Berlin)* 16: 154 (1858)

T: Gronekloof, Cape of Good Hope, South Africa, *Breutel*; holo: BM.

*Fissidens vittatus* Hook.f. & Wilson, *Fl. Tasman.* 2: 167 (1859). T: Circular Head, Tas., *R.Gunn 1697*; holo: BM; iso: HO.

*Fissidens forsythii* Broth., *Proc. Linn. Soc. New South Wales* 41: 576 (1916). T: near Barbers Creek, N.S.W., Sept. 1899, *W.Forsyth 566*; holo: H-BR; iso: MEL, NSW.

Illustrations: G.A.M.Scott & I.G.Stone, *op. cit.* 85, pl. 7; 87, pl. 8; 89, pl. 9 (1976); D.G.Catcheside, *op. cit.* 77, fig. 17 (1980), all as *F. vittatus*; J.Beever, B.Malcolm & N.Malcolm, *The Moss Genus Fissidens in New Zealand[:] an illustrated key* 44 (2002); D.Meagher & B.Fuhrer, *A Field Guide to the Mosses and Allied Plants of Southern Australia* 43 (2003).

Dioicous. Plants dark green, to 8 mm tall, curled downwards when dry. Leaves circinate when dry, often somewhat recurved when moist, broadly oblong-lanceolate, 1.0–1.5 mm long, 0.35–0.50 mm wide; limb narrow, uniseriate to biseriate, unistratose to bistratose, often failing near the apex, broader in vaginant laminae and proximally intramarginal with a broad vitta of laminal cells; apex acute, somewhat retrorse. Costa strong, short-excurrent. Vaginant laminae very broad, inflated, more than half the leaf length, open. Dorsal lamina tapered to the base, not decurrent. Margin entire to serrulate, except often coarsely crenate-dentate on vaginant laminae outside the vitta. Laminal cells firm-walled, rounded c. 6 µm diam., convex, obscurely bipapillose, basally larger and clearer.

Setae c. 5 mm long. Capsules short-oblong, horizontal, asymmetrical, c. 1 mm long; operculum rostrate, c. 0.5 mm long. Spores green, 20–22 µm diam.

Widespread in southern Australia (W.A., S.A., N.S.W., A.C.T, Vic. and Tas.); grows on soil, often in low rainfall areas. Also in southern Africa and New Zealand.

W.A.: Cascades, near Pemberton, *D.G.Catcheside 74.175* (AD). S.A.: Eyre Penin., 5 miles [c. 8 km] S of L. Gairdner, *D.E.A.Catcheside* (AD). N.S.W.: Inverell, *I.G.Stone 17785* (MEL). A.C.T.: Kambah, beside Murrumbidgee R., *D.G.Catcheside 64.74* (AD). Vic.: Licola, *I.G.Stone 24792A* (MEL). Tas.: Strickland, July 1912, *L.Rodway* (HO).

While this species can have slender, flagelliferous innovations with recurved leaves resembling those of *F. bifrons*, the coarsely crenate-dentate margins of the vaginant laminae are diagnostic.