

Fissidens rigidulus Hook.f. & Wilson, *Fl. Nov.-Zel.* 2: 61 (1854) var. **rigidulus**

T: Wellington, New Zealand, 1850, *Lyall* 95; lecto: BM, *fide* M.A.Bruggeman-Nannenga, *Proc. Kon. Ned. Akad. Wetensch.*, ser. C, 82: 20 (1979).

Fissidens tortuosus Geh. & Hampe, *Rev. Bryol.* 8: 27 (1881). T: locality unknown, *O.Beccari* 38; *n.v.*, *fide* M.A.Bruggeman-Nannenga, *op. cit.* 16.

Illustrations: G.A.M.Scott & I.G.Stone, *Mosses of Southern Australia* 84–88, pl. 7–9 (1976); M.A.Bruggemann-Nannenga, *op. cit.* 17, fig. 4a–g; D.G.Catcheside, *Mosses of South Australia* 73, fig. 14 (1980); J.Beever, B.Malcolm & N.Malcolm, *The Moss Genus Fissidens in New Zealand[:] an illustrated key* 58 (2002).

Dioicous. Shoots robust, stiff, 2–6 cm tall, branched. Leaves rigid, \pm secund when moist, individually curled and twisted when dry, oblong to lanceolate, 2.5–4.0 mm long, 0.6–0.7 mm wide; limb broad, cartilaginous, yellow, multistratose, complete except at the apex and base of dorsal laminae; apex acute to acuminate. Costa very strong, yellow or reddish, \pm percurrent. Vaginant laminae closed, c. three-fifths of the leaf length; dorsal lamina tapered, short-decurrent. Laminar cells small, obscure, \pm quadrate to hexagonal, 6–9 μ m wide, usually pluristratose juxtacostally.

Setae 4–8 mm long. Capsule theca \pm oblong, c. 1 mm long, erect or inclined, asymmetrical; operculum rostrate, the same length as the theca. Spores c. 20 μ m diam.

Occurs in S.A. Qld, N.S.W., A.C.T., Vic. and Tas.; forming dense, dark green mats in aquatic or semi-aquatic habitats, on rocks or earth banks. Also in Central America, South America, the Falkland Islands, New Guinea, New Caledonia, New Zealand, the Auckland Islands, Campbell Island and Macquarie Island.

S.A.: Ewens Ponds, Port MacDonnell, *M.Forbes MUCV 2652* (MUCV). Qld: Bunya Mountains Natl Park, *I.G.Stone 13365B* (MEL). N.S.W.: Brown Mtn, near Nimmitabel, *D.G.Catcheside 54.88* (AD). A.C.T.: Cascades Trail, Tidbinbilla, *D.G.Catcheside 75.9* (AD). Vic.: Tarra Valley, *I.G.Stone 9980* (MEL). Tas.: Lenas Ck., Wardlaw Pass, near St. Marys, 1881, *W.A.Weymouth* (HO, MEL).

Fissidens rigidulus var. *pseudostrictus* J.E.Beever is endemic to the North Island, New Zealand (Beever *et al.*, 2002).