

Fissidens elegans Brid., *Musc. Rec.*, Suppl. 1: 167 (1806)

T: St. Domingo, *Poiteau s.n.*; holo: B *n.v.*, *fide* R.A.Pursell (1994).

Illustrations: Z.Iwatsuki & T.Suzuki, *J. Hattori Bot. Lab.* 51: 448, pl. 2(14–27) (1982); R.A.Pursell, *Mem. New York Bot. Gard.* 69: 51, fig. 33; 52, fig. 34a–e (1994).

Gonioautoicous. Plants dull green, 1.5–8.0 mm tall. Stems reddish brown, often branching, in T.S. with 2 outer layers very thick-walled, a cortex (oil-filled) and a very thin-walled central strand; axillary nodules lacking. Rhizoids \pm smooth, basal and in axils and at bases of innovations. Leaves smallest at the base, abruptly larger and \pm uniform above; apical leaves smaller on sterile plants, inrolled from the tips when dry, oblong to oblong-lanceolate, 0.8–1.0 mm long, 3–5 times longer than wide; apex acute, with a sharp apical cell; costa ending 2–8 cells below the apex, usually pigmented. Vaginant laminae 67–75% the length of the leaf, half-closed to closed; limbidium unistratose, 1 or 2 cells wide, variable in length and occurrence, often submarginal near the base, frequently only on upper leaves. Dorsal lamina truncate or tapered below; margin crenulate, \pm entire where bordered; laminal cells isodiametric, obscure, bulging, with mostly 2–4 often inconspicuous papillae.

Perigonia terminal on short axillary branches; perigonial leaves shouldered, to 0.7 mm long; antheridia numerous. Perichaetial leaves longer (c. 1.2 mm); vaginant laminae occasionally open; limbidium usually better developed; archegonia terminal on the main shoot. Capsules not seen.

Occurs in north-eastern Qld; uncommon in comparatively dry rainforest, on basalt and soil around rocks at altitudes of 280–600 m. Also in southern and south-eastern U.S.A., Mexico, Central America, northern South America, the West Indies and the Hawaiian Islands.

Qld: 'Conjuboy', 55 km NW of Greenvale, *R.J.Fensham 105* (CANB); Havilah, 48 km S of Collinsville, *R.J.Fensham 100* (CANB).