

Fissidens pellucidus Hornsch., *Linnaea* 15: 146 (1841)

Type: Surinam, *n.v.*

Fissidens laxus Sull. & Lesq., *Proc. Amer. Acad. Arts Sci.* 4: 276 (1859). Type: Hong Kong, 15 May 1855, C. Wright; holo: FH.

Fissidens crassinervis Sande Lac., *Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk.* 13: 3 (1872). Type: Tjidanie R., Mt Salak, Buitenzorg, Java, [Indonesia], 13 May 1860, Kurz; lecto: L, *fide* Z.Iwatsuki & T.Suzuki, *J. Hattori Bot. Lab.* 51: 392 (1982).

Fissidens holstii Broth., *Bot. Jahrb. Syst.* 20: 181 (1894). Type: Usambara, Tanzania, 1600 m, Aug. 1893, C.H.E.W.Holst 9195 *p.p.*; syn: H-BR.

Fissidens kurandae Broth. & Watts, *Proc. Linn. Soc. New South Wales* 43: 550 (1918). Type: Kuranda, Qld, W.W.Watts 273; holo: H-BR; iso: NSW.

Fissidens subkurandae E.B.Bartram, *Farlowia* 4: 236 (1952). Type: Leo Creek, Upper Nesbitt River, Qld, 18 Aug. 1948, E.B.Bartram 19928; holo: FH.

Plants light green, becoming mostly reddish brown with age, 2–5 mm long. **Stems** unbranched or branched; in section with a central strand; rhizoids at base of stems or axillary. **Leaves** in 4–20 or more pairs, distant to loosely imbricate, lanceolate to oblong-lanceolate, 0.7–1.4 mm long, 0.2–0.3 mm wide; **apex** acute to short-acuminate, apiculate; **margins** entire to crenulate-serrulate, elimbate or with a weak limbidium in the proximal part of vaginant laminae of perichaetial leaves; **vaginant laminae** reaching to c. 1/2 leaf length, acute, markedly unequal, the minor lamina ending c. mid-way between margin and costa, or narrowed and ending on the costa, or rounded and free distally, broad and retuse in perichaetial leaves; **dorsal lamina** usually rounded to the base, ending at the insertion or slightly above; **lamina cells** irregular, thick-walled, unistratose, quadrate to hexagonal, 15–35 µm long, 15–20 µm wide, smooth, rarely unipapillose, the papillae over the lumen and very small; juxtacostal cells in proximal parts of vaginant laminae larger, ±oblong; **costa** of *bryoides*-type, ending just below the apex to short-excurrent.

Monoicous, frequently **synoicous**, antheridia and archegonia in the same perichaetium, or ?**dioicous**. **Perigonial stems** usually gemmiform, around the base of perichaetial stems. **Perichaetia** terminal; **perichaetial leaves** with broad-shouldered vaginant laminae reaching 1/3–1/2 leaf length, open. **Setae** 2–4 mm long, yellowish, darkening with age; sporophytes 1 or 2 per perichaetium. **Capsules** erect to inclined, symmetrical; theca 0.3–0.7 mm long; **exothecial cells** quadrate to oblong, strongly collenchymatous and bulging. **Operculum** conical, long-rostrate, 0.3–0.8 mm long. **Peristome** of *scariosus*-type. **Calyptra** cucullate, smooth, c. 0.4 mm long, covering only the rostrum. **Spores** pale, rounded, smooth, 7–15 µm diam.

[Image 1](#)

[Image 2](#)

Uncommon in northern N.T. and north-eastern Qld; grows on clay banks in rainforest, usually on soil but occasionally epiphytic.

Also in subtropical North America, Central America, the Caribbean, South America, sub-Saharan West Africa, East Africa, South and East Asia, Oceania and Papua New Guinea.

Selected specimens examined: N.T.: Yapilaika, 16 km SW of Garden Point settlement, Melville I., *I.G.Stone 200016* (CANB). Qld: Noah Ck, Daintree Natl Park, *I.G.Stone 19338 p.p.* (MEL); road to Ayton, S of Cooktown, *S.P.Churchill & G.E.Kantak 12673* (DUKE, MEL); Cape Tribulation *I.G.Stone 18070, 19342 p.p.*, 19359 (MEL); Roaring Meg Ck, Daintree Natl Park, *M.Godwin C2827B* (MEL); Kuranda to Black Mountain, *I.G.Stone 16165* (MEL).

Fissidens pellucidus is characterised by its lustrous appearance and the firm-walled, smooth (rarely papillose) laminal cells. The plants, particularly the stems and costae, are usually rust-coloured. The costa is rather variable in length, ending a few cells below the apex to short-excurrent. Fruiting plants appear to be rare in Australia.

The syntype collection of *F. holstii* is a mixture of three *Fissidens* species. Pursell (2007) stated that “No part of the holotype has been located. Hornschuch listed only the locality ‘Suriname’ (i.e. Surinam, in northern South America). According to Müller (1849), Wiegelt might have been the collector.”

[Bibliography](#)