

Fissidens zollingeri Mont., *Ann. Sci. Nat., Bot.*, sér. 3, 4: 114 (1845)

T: Java [Indonesia], *Zollinger 1604*; holo: PC *n.v.*, *fide* C.Müller (1848). [Zhi-Hua Li (1985) remarked that “no *Fissidens* could be found among these plants”.]

Fissidens xiphioides M.Fleisch., *Hedwigia* 38: 125 (1899). T: Buitenzorg [Bogor], Java, [Indonesia], *M.Fleischer*; lecto: FH *n.v.*, *fide* Z.Iwatsuki & T.Suzuki, *op. cit.* 367 (1982).

Illustrations: H.C.Gangulee, *Mosses E. India* 479, fig. 220; 481, fig. 221 (1971), as *F. xiphioides*; Z.Iwatsuki & T.Suzuki, *op. cit.* 459, pl. 13 (1982).

Synoicous. Plants ±flabelliform or elongate, 2–6 mm tall, 1.8–2.5 mm wide; axillary hyaline nodules prominent. Leaves ±oblong, 1.5–1.8 mm long, 0.35–0.45 mm wide; limbidium narrow, ±complete to the acute apex; costa percurrent to excurrent. Vaginant laminae reaching mid-leaf, closed. Dorsal lamina often ending in a rounded lobe at the base; laminal cells irregularly hexagonal, 12–25 × 10–15 µm, those at base of vaginant laminae to 50 µm long. Green multicellular filamentous propagula present on protonemata and, occasionally, in leaf axils.

Setae 2–3 mm long. Capsules symmetrical, erect; theca oblong-elliptical, 0.5–1.0 mm long; operculum conical-rostrate.

Occurs in N.T, Qld and north-eastern N.S.W.; grows on shaded or semi-shaded damp soil, occasionally on rock. Widespread in tropical and subtropical Asia, from India to Japan, Oceania and South America.

N.T.: Conder Pt, Melville Is., *H.Streimann 42497* (CANB, NY); Kakadu Natl Park, *L.A.Craven & G.Whitbread 6771* (CANB). Qld: Bizant, Lakefield Natl Park, *I.G.Stone 23828* (MEL); Mount Elliot Natl Park, *I.G.Stone 8425* (MEL). N.S.W.: Pholis Gap, Nightcap Natl Park, 13 June 1983, *H.S.Curtis* (MEL).

Similar to *F. curvatus*, but differs in the occurrence of axillary propagula in leaves, a synoicous inflorescence, erect capsules and *scariosus*-type peristome. We follow Pursell (1988) in including *F. zollingeri* in sect. *Areofissidens* rather than sect. *Fissidens* because of the large juxtacostal cells and *scariosus*-type peristome.