Fissidens victorialis Mitt., Trans. & Proc. Roy. Soc. Victoria 19: 92 (1882)

Type: Victoria R., N.T., 1855–56, F. Mueller; holo: NY; iso: MEL.

Plants simple or branched; sterile shoots with numerous pairs of leaves, fertile plants shorter and with up to 8 pairs of leaves. Sterile stems 5–8 mm long, fertile stems 2–3 mm long; in section with a small central strand of thin-walled cells surrounded by 3 or 4 layers of thickwalled cells, the outer layer smaller; rhizoids basal or axillary in lower leaves. Leaves of sterile plants in many pairs, ±uniform, oblong-lanceolate, 0.6–1.0 mm long, 0.27–0.30 mm wide, elimbate; apex obtuse to acute or obtuse-apiculate; margins ±entire, rarely partly bistratose vaginant laminae reaching to mid-leaf or just beyond, unequal, half-closed, joining between margin and costa; dorsal lamina rounded or tapered to the base, occasionally ending above the insertion; laminal cells ±hexagonal, 8.0–12.5 μm wide, becoming slightly longer proximally in vaginant laminae, ±thin-walled, with or without a hyaline spot; costa of bryoides-type, percurrent or just subpercurrent, failing 2–5 cells below the leaf apex.

Dioicous. Male plants short, c. 2 mm long; perigonia terminal. Female plants 2–3 mm long, with leaves up to 8 pairs, abruptly increasing in size upwards; vaginant laminae reaching beyond mid-leaf, ventricose, often undulate and overlapping; basal laminal cells elongate; perichaetial leaves to 1.4 mm long. Setae to 2 cm long. Capsules with exothecial cells ±evenly thickened. Spores c. 17.5 μm diam.

Images

Endemic to northern W.A., and N.T.; common in large colonies on vertical seepage areas on cliffs with seasonal rain, usually in monsoon vine forest in protected areas.

Selected specimens examined: W.A.: Marigui Promontory, Prince Regent River Reserve, West Kimberley, K.F.Kenneally 2172 (MELU, PERTH). N.T.: Jim Jim Falls, Kakadu Natl Park, J.Russell-Smith 1238 (DNA, MELU); Katherine Gorge Natl Park, I.G.Stone 23302 (MELU).

Fissidens victorialis differs from F. holstii Broth. in having a shorter costa with a different internal structure, as well as the absence of elongate intramarginal cells in the vaginant laminae.

Bibliography