

Fissidens henryae I.G.Stone, *J. Bryol.* 13: 159 (1984)

Type: bank of Tully R., near Rockingham, Lower Tully, Qld, *I.G.Stone 19050*; holo: MEL.

?*Moenkemeyera australiensis* Dixon, *Proc. Roy. Soc. Queensland* 53: 25 ('1941') [1942]. Type: Lower Tully River, Qld, 1937, *E.Henry s.n.*; not located, *fide* Stone (1984).

Illustrations: I.G.Stone, *op. cit.* 160, fig. 1.

Plants loosely gregarious. **Stems** to c. 2 mm tall, with readily detached fertile subterminal innovations having a mass of short rhizoids; rhizoids \pm smooth, long, basal on stems, red or purplish red; stem section with a small central strand. **Leaves** mostly in 6–9 pairs, closely overlapping, except the basal bract-like leaves, to 1.5 mm long and 0.5 mm wide, lingulate, widest above in the apical lamina; **apex** obtuse; **margins** very finely crenulate by projecting papillae, elimbate; **vaginant laminae** reaching to mid-leaf or slightly beyond, equal or unequal, joining midway between costa and margin; **dorsal lamina** tapered to the base, mostly reaching the insertion, occasionally ending abruptly some distance above; **lamina cells** \pm hexagonal or pentagonal, small, mostly 7.5–10.0 μ m wide, becoming wider (to 15 μ m) near the costa, papillose, the papillae a few per cell, minute, often obscure; **costa** of *bryoides*-type, translucent or coloured, ending below the apex.

?**Dioicous**. **Male plants** not seen. **Female plants** with terminal **perichaetia**, with c. 6–12 archegonia in a terminal group; **perichaetial leaves** sometimes slightly shorter than those below; vaginant laminae slightly wider than in stem leaves, usually with a limbidium of rectangular cells proximally. **Setae** smooth, green, 0.5–1.5 mm long. **Capsules** short-elliptical, symmetrical, c. 0.6 mm long and 0.4 mm wide; **exothecial cells** with slightly thickened walls. **Operculum** low-conical-rostrate, c. 0.25–0.30 mm long. **Peristome** of modified *scariosus*-type, erect when dry, bright red, c. 160 μ m long; teeth c. 30 μ m wide at the base, occasionally completely entire, usually split above into 2 straight arms, one narrower and often shorter, often partly joined and only perforate, scarcely trabeculate, densely papillose, the papillae to c. 5 μ m long, fine, irregular, on the inner and outer surfaces in horizontal, oblique or occasionally vertical rows obscured by the length and density of the papillae. **Calyptra** c. 0.45 mm long, conical, covering only the operculum. **Spores** green, 15–20 (–30) μ m diam., with low irregular papillae.

[Images](#)

Known only from the type locality, growing on silty soil on river banks subject to periodic flooding or on old logs.

Specimens examined: Qld: type locality, *I.G.Stone 19052, 19053, 19055* (MEL).

The description is based on the holotype and three other specimens, all collected on 9 June 1982 by Ilma Stone, Alan Stone and A. and M.Thorsborne in rainforest on the bank of the Tully River, near Lower Tully.

Fissidens henryae shows some resemblance in vegetative features to *F. microcladus* Thwaites & Mitt., but it differs markedly in its peristome characters. The peristome teeth in *F. microcladus* are much longer (c. 270 μ m), spirally thickened above and minutely papillose below. The spores are 9–13 μ m in diameter and almost smooth.

Stone (1984) indicated that the specimens from the banks of the Tully River bore a close resemblance to material collected by Miss E. Henry from the same locality in 1937 and described as *Moenkemeyera australiensis* (Dixon, 1942). The type specimen of *M. australiensis* has not been found, nor any other specimens located, so the degree of similarity could not be confirmed. As a new name in *Fissidens* was required for the recent collections, the material was described as *F. henryae* by Stone (1984).

[Bibliography](#)