Fissidens maceratus Mitt., Trans. \& Proc. Roy. Soc. Victoria 19: 91 (1882)
T: Brisbane River, Qld, F.M.Bailey; holo: NY.
Fissidens splachnobryoides Broth., in K.M.Schumann \& C.A.G.Lauterbach, Fl. Schutzgeb. Südsee 81 (1900). T: Butaueng, New Guinea, Kaernbach; holo: H-BR.
Illustrations: H.C.Gangulee, Mosses E. India 463, fig. 211 (1971), as F. splachnobryoides; Z.Iwatsuki \& T.Suzuki, J. Hattori Bot. Lab. 51: 451, pl. 5 (1982), as F. splachnobryoides; I.G.Stone, J. Bryol. 15: 117, fig. $1 ; 118$, fig. 2 (1988).

Dioicous. Plants pale green, small, $1-9 \mathrm{~mm}$ tall, $1.5-3.0 \mathrm{~mm}$ wide. Stems with a small central strand; axillary nodules weak. Leaves $4-10$-jugate, lingulate-lanceolate, broadest in the apical lamina, $0.4-2.6 \mathrm{~mm}$ long, $0.1-0.6 \mathrm{~mm}$ wide; limbidium of very narrow substereid cells on all laminae, mostly bistratose, $2-5$ cells wide, reaching or almost reaching the acute apex; costa thin, failing well below the apex. Vaginant laminae reaching mid-leaf, closed; margin entire, occasionally weakly sinuate; laminal cells thin-walled, smooth to mammillose, mostly $30-40 \times 15-20 \mu \mathrm{~m}$, smaller apically, longer basally. Propagula axillary green multicellular filaments.

Setae c. 4 mm long, terminal. Capsules rare, erect, $0.7-1.0 \mathrm{~mm}$ long. Spores $15-20 \mu \mathrm{~m}$ diam.

Occurs in the Kimberley region of northern W.A., in montane rainforest in north-eastern Qld, in drier country to the west, and in south-eastern Qld; grows on soil and crumbling limestone. Also in India, Sri Lanka, SE Asia, Indonesia, New Guinea, China and New Caledonia.
W.A.: Winjana Gorge, Kimberley, May 1988, G.A.M.Scott (MEL). Qld: Maidenhair Grotto, Hippie Tower, Chillagoe, I.G.Stone 21765 (MEL); Granite Gorge, Mareeba, I.G.Stone 15926 (MEL); Hippie Tower, Chillagoe, M.Godwin C2498 (AD, MEL); Balancing Rock, Chillagoe, I.G.Stone 16716 (MEL).
Pursell (1997) placed F. maceratus in the synonymy of F. flaccidus Mitt., along with $F$. mollis Mitt. and other names. I have seen the type of $F$. mollis, and I do not consider it to be conspecific with $F$. maceratus. Therefore, I prefer to retain $F$. maceratus, at least for the present.

