

MYRINIACEAE

Niels Klazenga¹

Myriniaceae Schimp., *Syn. Musc. Europ.*, 2nd edn, 2: CXI, 859 (1876), as Myrinieae.

Type: *Myrinia* Schimp.

Dioicous or autoicous. Plants small, pleurocarpous. Stems creeping, frequently irregularly monopodially branched; branch primordia *Climacium*-type, subtype SO. Paraphyllia lacking; pseudoparaphyllia foliose. Leaves mostly ovate-lanceolate; margin crenulate to serrulate; costa usually single, ending just above midway along the leaf, rarely short and double. Laminal cells linear, rhomboidal to elliptical or elongate-oval, smooth; alar cells differentiated, forming large triangular patches that reach or almost reach the costa and extend upwards to the broadest part of the leaf.

Capsules long-exserted, erect to inclined, ellipsoidal. Peristome diplolepidous; exostome rudimentary to well developed; endostome usually well developed; cilia usually lacking.

The Myriniaceae is a mainly tropical family of four genera. It has traditionally been included in the Fabroniaceae, but was re-established and expanded by Buck & Crum (1978). Like members of Fabroniaceae, species of Myriniaceae are characterised by well-developed triangular alar patches that extend to the widest part of the leaf. However, they differ in the longer mid- and upper laminal cells and, most importantly, in the relatively well-developed endostome (greatly reduced in the Fabroniaceae). Moreover, Myriniaceae lack the paired, papillose exostome teeth that are characteristic of the Fabroniaceae.

One apparently very rare species in Australia.

References

- Buck, W.R. (1980), A re-interpretation of the Fabroniaceae: additions and corrections, *J. Hattori Bot Lab.* 47: 45–55.
- Buck, W.R. (1998), Pleurocarpous mosses of the West Indies, *Mem. New York Bot. Gard.* 82: 1–400.
- Buck, W.R. & Crum, H.A. (1978), A re-interpretation of the Fabroniaceae with notes on selected genera, *J. Hattori Bot. Lab.* 44: 347–369.
- Norris, D.H. & Koponen, T. (1990), Bryophyte flora of the Huon Peninsula, Papua New Guinea. XXXIII. Leskeaceae and Fabroniaceae (Musci) plus corrigenda to previous papers, *Ann. Bot. Fennici* 27: 1–12.

MACGREGORELLA

Macgregorella E.B.Bartram, *Philipp. J. Sci.* 68: 284 (1939); named after Richard Crittenden McGregor (1871–1936), ornithologist and natural history collector in the Philippines.

Type: *M. philippinensis* E.B.Bartram [= *M. indica* (Broth.) W.R.Buck]

Autoicous. Stems creeping, frequently irregularly monopodially branched, terete-foliate, in cross section with 2 or 3 rows of narrow thick-walled cells surrounding broader thin-walled cells; central strand present. Pseudoparaphyllia foliose. Stem and branch leaves similar, erect to erecto-patent, ovate-lanceolate, smooth; margin crenulate; costa single, relatively stout,

¹ Royal Botanic Gardens Melbourne, Birdwood Avenue, South Yarra, Vic. 3141.

ending at about the length of the leaf. Laminal cells rhomboid to elliptical, firm-walled, not pitted, papillose abaxially at the upper end; alar cells subquadrate, forming triangular patches that almost reach costa at base, tapering off upwards, ending at widest part of leaf.

Perichaetial leaves long-acuminate, ecostate. Seta smooth. Capsules exerted, erect, ellipsoidal. Exostome teeth short, blunt; endostome processes narrowly triangular, on a short basal membrane; cilia absent. Spores spherical, papillose.

The monotypic *Macgregorella* is widespread but scattered in SE Asia, Malesia and tropical Australia. The rudimentary exostome teeth separate this genus from both *Austinia* Müll.Hal., which has no exostome at all, and *Schwetschkeopsis* Broth. (Anomodontaceae), which has well-developed exostome teeth.

***Macgregorella indica* (Broth.) W.R.Buck, *J. Hattori Bot. Lab.* 47: 53 (1980)**

Schwetschkea indica Broth., *Rec. Bot. Surv. India* 1(12): 328 (1899). T: Pollebeta, Coorg, India, *L.T.Walker* 232; lecto: H-BR *n.v.*, *fide* D.H.Norris & T.Koponen, *op. cit.* 5; *loc. id.*, *L.T.Walker* 231; syn: H-BR(?) *n.v.*

Austinia brotheri W.R.Buck & H.A.Crum, *J. Hattori Bot. Lab.* 44: 356 (1978); *Austinia luzonensis* Broth. ex Broth. & Watts, *Proc. Linn. Soc. New South Wales* 43: 561 (1918), *nom. nud.* T: Ravenshoe, Qld, *W.W.Watts* 667; holo: H-BR; iso: MICH, NSW.

Illustrations: W.R.Buck & H.A.Crum, *op. cit.* 357, figs 13–16, as *Austinia brotheri*; D.H.Norris & T.Koponen, *op. cit.* 6, fig. 2a–f.

Plants small, dirty green, glossy, growing in mats. Stems creeping, frequently irregularly monopodially branching, terete-foliate, julaceous. Branch leaves erect to erecto-patent, slightly reflexed when dry, ovate-lanceolate, 0.3–0.7 mm long, 0.17–0.30 mm wide, gradually acuminate, smooth; margin crenulate throughout. Laminal cells rhomboid to elliptical, 15–25 × 6–7 µm, firm-walled, not pitted, abaxially papillose, longer along the costa, shorter along margins and towards the apex; alar cells subquadrate, isodiametric to oblate, in 3–5 rows, tapering off and ending at widest part of leaf.

Perichaetial leaves to 0.9 mm long, long-acuminate, ecostate. Seta c. 4.5 mm long, reddish brown, smooth. Capsules ellipsoidal, c. 1 mm long, smooth. Peristome: exostome teeth short, blunt; endostome processes narrowly triangular, on a short basal membrane. Spores to 20 µm diam., finely papillose.

Found once in Ravenshoe in wet-tropical north-eastern Qld (the type of *Austinia brotheri*); also known from southern India, the Philippines and Papua New Guinea.

Macgregorella indica appears to be common in disturbed areas of Papua New Guinea. Although it is autoicous, and sporogones are present on most collections studied, they are unknown in the very scant and old Australian material.