AEROBRYOPSIS

Heinar Streimann[†]

Aerobryopsis M.Fleisch., Hedwigia 44: 304 (1905); from the Greek aerios (of the air) and bryon (a moss), in reference to the trailing habit.

Lecto: A. longissima (Dozy & Molk.) M.Fleisch.

Plants robust, medium to large in size. Primary stems creeping; branching loose or dense; secondary stems with several short branches. Branch leaves wide-spreading or complanate, ovate to oblong, gradually or abruptly attenuate to a long straight or flexuose to crisped acumen; base cordate, concave, \pm undulate above; margin erect or \pm undulate in the middle, serrulate or serrate throughout; costa slender, extending more than two-thirds of the leaf length. Laminal cells rhomboidal to elongate-rhomboidal, with a distinct papilla over the centre of each cell, thick-walled, subporose; basal cells larger, clear; alar cells not distinct.

Calyptra cucullate, smooth. Seta exserted, generally much longer than the capsule. Capsules oblong-cylindrical, slightly scabrous, with a distinct apophysis; operculum conical, with a long \pm oblique beak. Peristome: exostome teeth papillose throughout; endostome segments as long as the teeth, often perforated along the keel; cilia absent.

This predominantly tropical and subtropical genus of 16 species is found mainly in southern Africa and East Asia. One widespread species is known from north-eastern Australia.

Reference

Streimann, H. (1991), Taxonomic studies on Australian Meteoriaceae (Musci). 2: The genera Aerobyopsis, Barbella, Floribundaria, Meteoriopsis, Meteorium and Weymouthia, J. Hattori Bot. Lab. 69: 277–312.

Aerobryopsis longissima (Dozy & Molk.) M.Fleisch., Hedwigia 44: 305 (1905)

Neckera longissima Dozy & Molk., Ann. Sci. Nat., Bot., sér. 3, 2: 313 (1844). T: Java, Sumatra [Indonesia] and Borneo [Malaysia]; n.v.

Meteorium sigmatophyllum Müll.Hal. ex Bailey, Syn. Queensland Fl., Suppl. 3: 98 (1890), nom. nud.

Aerobryopsis sigmatophylla Broth. & Watts, Proc. Linn. Soc. New South Wales 43: 599 (1918), nom. nud.

[Aerobryopsis wallichii auct. non (Brid.) M.Fleisch.: H.Streimann & J.Curnow, Cat. Mosses Australia & Island Territories 5 (1989)]

Illustration: H.Streimann, J. Hattori Bot. Lab. 69: 288 (1991).

Plants yellow-green, slightly glossy. Branch leaves ovate-lanceolate, $1.5-3.0 \text{ mm} \log 0.6-1.0 \text{ mm}$ wide, gradually tapering to an elongate acumen, often flexuose, and then the leaf also undulate in the upper median part; margin serrate above, less so and distantly to indistinctly serrate below; costa weak. Apical laminal cells variable, to $40 \times 7 \mu m$, rarely thick-walled; upper cells linear or linear-rhomboidal, wavy or ±sigmoidal, to $35 (-45) \times 6 \mu m$; median cells similar but less wavy or sigmoidal; basal corner cells irregularly rounded to quadrate, c. $8-10 \mu m$ wide, their contents ±granular.

Seta to 20 mm long, scabrous above, \pm smooth below. Capsules suberect, to 2.5 mm long. Peristome: exostome teeth to c. 0.6 mm long. Spores 12–18 (–25) µm diam.

Occurs in north-eastern Qld; this widespread tropical species extends from India, through East Asia and Malesia, to the Pacific, Central America and the Caribbean. Common on trees, shrubs, but rarely on vines, tree leaves or rotting logs. Also found on rocks near streams.

Cite as: H.Streimann, Australian Mosses Online. 2. Meteoriaceae: Aerobryopsis. http://www.anbg.gov.au/abrs/Mosses_Online/Aerobryopsis.pdf (2012) Qld: Big Tableland, 26 km S of Cooktown, *H.Streimann 30837* (CANB, H, NY); Mossman Gorge, *W.B.Schofield & M.I.Schofield 79939* (UBC); Lamb Ra., 21 km NE of Atherton, *H.Streimann 29854* (CANB); Cooroo L.A., 16 km WNW of Innisfail, *H.Streimann 29986* (CANB, L); Blue Water Ck, 39 km WSW of Ingham, *H.Streimann 28379* (CANB).