

LEPTOBRYUM

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Leptobryum (Schimp.) Wilson, *Bryol. Brit.* 219 (1855); from the Greek *lepto* (delicate or slender) and *bryon* (a moss), in reference to the delicate leaves of these mosses.

Bryum subg. *Leptobryum* Schimp., in Bruch, Schimper & Gümberl, *Bryol. Eur.* 4: 1 (1851).

Type: *L. pyriforme* (Hedw.) Wilson

Synocious, sometimes dioicous. Plants small, in dense tufts, radiculose at the base. Stems slender, unbranched. Rhizoids coloured, papillose. Upper leaves long, in comal tufts, crisped when dry, setaceous from a lanceolate base; margin entire or distantly denticulate above; leaf base sheathing. Lower leaves distant, small, lanceolate; costa single, broad, flat, percurrent or failing below apex. Gemmae sometimes present in leaf axils or as tubers on rhizoids.

Perichaetial leaves undifferentiated. Calyptra cucullate, smooth, glabrous. Setae long, thin, flexuose. Capsules strongly inclined to pendulous, pyriform with a long narrow neck, glossy; operculum convex, apiculate. Peristome double; exostome teeth 16, lanceolate-acuminate, yellowish, densely papillose, trabeculate; endostome segments hyaline, finely papillose, c. as long as teeth or shorter; segments keeled and perforate; basal membrane high; cilia in 3s (sometimes in 4s), appendiculate. Spores globose, papillose. $n = 20, 21, 22, 33$, *fide* R.Fritsch, *Bryophyt. Biblioth.* 40: 192 (1991).

This genus of two species is represented in Australia by the weedy and cosmopolitan *L. pyriforme*.

Reference

Arts, T. (2001), The moss genus *Leptobryum* and the identity of *Pohlia integra*, *J. Bryol.* 23: 325–330.

Leptobryum pyriforme (Hedw.) Wilson, *Bryol. Brit.* 219 (1855)

Webera pyriformis Hedw., *Sp. Musc. Frond.* 169 (1801). T: Europe; *n.v.*

Leptobryum sericeum Kindb., *Enum. Bryin. Exot.* 63 (1888); *Pohlia sericea* (Kindb.) Watts & Whitel., *Proc. Linn. Soc. New South Wales* 30 (Suppl.): 123 (1906). T: Tas., *Stuart*; *n.v.*

Bryum senodictyon Watts & Whitel., *Proc. Linn. Soc. New South Wales* 30 (Suppl.): 122 (1906), *nom. nud.* (in synon.). Based on: Gawler R., 1848, *F. Mueller s.n.* (MEL).

Leptobryum senodictyon Watts & Whitel., *Proc. Linn. Soc. New South Wales* 30 (Suppl.): 122 (1906), *nom. nud.*

Illustrations: D.G.Catcheside, *Mosses of South Australia* 247, fig. 142 (1980); J.E.Beever, K.W.Allison & J.Child, *Mosses New Zealand*, 2nd edn 97, fig. 42 (1992); A.Eddy, *Handb. Malesian Mosses* 3: 163, fig. 442 (1996).

Usually synocious. Plants soft, 1–3 cm tall. Rhizoids densely and finely papillose, brown to crimson or violet. Upper leaves lanceolate-subulate from a short sheathing base, 2–5 mm long, entire above, spreading and flexuose when moist or dry. Lower leaves rudimentary; costa percurrent; upper laminal cells short, especially at margins; mid-leaf cells linear, 80–90 × 8–9 μm, rhomboidal at base. Gemmae sometimes abundant, ovoid, multicellular, red-brown, in lower leaf axils or as tubers on underground rhizoids, pitted.

Setae 1–3 cm long, reddish. Capsules 1.7–2.5 mm long, ribbed when old and dry. Exostome teeth finely papillose on dorsal face; trabeculate on inner; endostome segments shorter than exostome teeth, perforated in midline; cilia as long as segments. Spores 12–18 μm, finely papillose. $n = 22 (20 + 2m)$, *fide* H.P.Ramsay, *Austral. J. Bot.* 22: 312 (1974).

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Occurs in W.A., S.A., N.T.(?), Qld(?), N.S.W., A.C.T., Vic. and Tas. An annual, almost cosmopolitan species that is found on all continents except Antarctica; most common in temperate regions. This is a weed on pots in glasshouses; infrequent on damp earth, burnt soil or limestone.

W.A.: Melaleuca Grove, Beverley Springs, Kimberley, 1 May 1988, *G.A.M.Scott* (MEL). S.A.: 33 km WSW of Kingscote, Kangaroo Is., *H.Streitmann 54871* (CANB). N.S.W.: Yarrangobilly Caves, *W.W.Watts 8734* (NSW). A.C.T.: CSIRO, Black Mtn, *E.D'Arney 349* (CANB). Vic.: Grampians Natl Park, *A.C.Beaglehole 4182* (MEL). Tas.: near Parsons Bay, Tasman Penin., *W.A.Weymouth 613* (AD, HO).

This moss is characterised by comal tufts of slender leaves with broad, clasping bases, coloured rhizoids and long setae with pyriform capsules. Apart from gemmae (bulbils and tubers), deciduous shoots can also disperse this species.