SAULOMA1

Heinar Streimann†

Sauloma (Hook.f. & Wilson) Mitt., J. Linn. Soc., Bot. 4: 89 (1859); Suppl. 1: 116 (1859); derivation not known.

Hookeria sect. Sauloma Hook.f. & Wilson, in J.D.Hooker, Fl. Nov.-Zel. 2: 122 (1854).

Type: S. tenella (Hook.f. & Wilson) Mitt.

Dioicous. Plants soft, slender, pale, prostrate with erect branches. Leaves densely imbricate, elongate-oblong to lanceolate; border and costa usually absent. Laminal cells rhomboidal to hexagonal. Rhizoids numerous, predominantly white.

Calyptra smooth, entire or fringed at the base. Seta short. Capsules oval to oblong. Peristome double; teeth furrowed along the median line; processes well developed.

This genus of five species is known from South America, East Africa, SE Asia and Australasia; one species in south-western and south-eastern Australia.

Reference

Streimann, H. (2000), Taxonomic studies on Australian Hookeriaceae (Musci). 3. The genera *Calyptrochaeta*, *Daltonia*, *Hookeriopsis* and *Sauloma*, *J. Hattori Bot. Lab.* 88: 101–138.

Sauloma tenella (Hook.f. & Wilson) Mitt., J. Linn. Soc., Bot. 4: 89 (1859)

Hookeria tenella Hook.f. & Wilson, in J.D.Hooker, Fl. Nov.-Zel. 2: 122 (1854). T: "Banks' Peninsula, Northern and Middle Islands", New Zealand, Lyall; holo: BM.

Hookeria zetterstedtii Müll.Hal., Linnaea 37: 158 (1872); Homalia zetterstedtii (Müll.Hal.) A.Jaeger, Ber. Thätigk. St. Gallischen Naturwiss. Ges. 1875–76: 295 (1877) [Ad. 2: 199]; Sauloma zetterstedtii (Müll.Hal.) A.Jaeger, Ber. Thätigk. St. Gallischen Naturwiss. Ges. 1877–78: 468 (1879) [Ad. 2: 372]; Distichophyllum zetterstedtii (Müll.Hal.) Mitt., Trans. & Proc. Roy. Soc. Victoria 19: 77 (1882). T: "Nova Hollandia" [Australia], Zetterstedt; holo: BM.

Hypnum lepidopiloides Müll.Hal., Öfvers. Förh. Kongl. Svenska Vetensk.-Akad. 24: 576 (1868), nom. inval. (in synon.)

Illustrations: G.A.M.Scott & I.G.Stone, Mosses of Southern Australia 395, pl. 74 (1976); H.Streimann, op. cit. 134, fig. 19; W.R.Buck, D.H.Vitt & W.M.Malcolm, Key to the Genera of Australian Mosses 29 (2002); D.Meagher & B.Fuhrer, A Field Guide to the Mosses and Allied Plants of Southern Australia 103 (2003).

Dioicous. Plants to 2 cm long. Stems erect, pale to medium green or somewhat golden; stem and branch tips often silvery. Leaves often secund, closely imbricate, erect to erecto-patent when dry, erect when moist, glossy, narrowly triangular to ovate-triangular, 2.10–3.35 mm long, 0.52–0.75 mm wide, acuminate; base tapered; margin entire, slightly recurved above, with a single plica at mid-leaf (often mistaken for the costa); costa absent or very short. Laminal cells thin-walled, linear-rhomboidal; upper cells 50–90 \times 7–10 (–13) μm ; median cells 80–135 \times 10–15 μm ; basal cells to 175 \times 20 μm , resembling weak alar cells; cells near the basal margin shorter, and with a row of broad isodiametric cells across the base. Rhizoids axillary, white, brown at the base, richly branched, 10–15 μm at the base; cells c. 100–120 μm long.

Perigonia rounded, lateral or terminal, red-brownish. Perigonial leaves c. 1.5 mm long. Antheridia numerous, $400-500 \times 100-110$ µm; paraphyses hyaline, to 600 µm long, 12-20

Cite as: H.Streimann, Australian Mosses Online. 11. Hookeriaceae: Sauloma. http://www.anbg.gov.au/abrs/Mosses_Online/Sauloma.pdf (2012)

¹ Family Saulomataceae [fide Goffinet, B., Buck, W.R. & Shaw, A.J. (2012), Classification of the Bryophyta. http://www.eeb.uconn.edu/people/goffinet/Classificationmosses.html].

μm wide; cells 100-125 μm long. Perichaetial leaves 1.50-1.88 mm long, 0.50-0.62 mm wide; median cells $100-175 \times 12-15$ μm; cells near the basal margin shorter, slightly broader. Calyptra mitrate, smooth, 1.3-1.6 mm long, fringed below, black above, grading to white below. Seta reflexed below the capsule, c. 6 mm long, dark red above, even darker below. Capsules c. 1 mm long, oval to oval-oblong; neck constricted; operculum 0.5-1.0 mm long, conical-rostrate, with a long beak. Peristome teeth joined at the base, lanceolate-subulate, 300-350 μm long, c. 50 μm at the base; apex filiform, transversely striolate; median line broadly furrowed; trabeculae projecting laterally; basal membrane 25-35% the height of the teeth; endostome segments lanceolate-subulate, almost the same size as the teeth, widely split between articulations. Spores smooth, 8-10 (-15) μm diam.

Known from south-western W.A., south-eastern Qld, eastern N.S.W., A.C.T., Vic. and Tas.; grows on tree trunks and treelet stems, *Eucalyptus* bases, on the ground and on logs, stumps, rocks and rock faces (including limestone). Also in New Zealand and southern South America.

W.A.: Beedelup Falls, c. 18 miles [c. 29 km] W of Pemberton, *D.H.Norris* 25975 (NY). Qld: Balfour Ra., 29 km SE of Nanango, *H.Streimann* 9335 (CANB). N.S.W.: Yarrangobilly Caves, 40 km NW of Adaminaby, *H.Streimann* 7623 (CANB, L). A.C.T.: Tidbinbilla Nature Reserve, 25 km SW of Canberra, *H.Streimann* 1417 (CANB, H, L, MO, NICH). Vic.: Club Terrace—Combienbar road, 6 km N of Club Terrace, *H.Streimann* 35586 (CANB). Tas.: Higginbothams Ck, Humbug State Recreation Area, *A.Moscal* 25662 (HO).

The secund or often falcate habit of *Sauloma tenella* can resemble the branch tips of some *Sematophyllum* species where the tips usually point away from the substatum.

Capsules were especially common between July and January.