

## SCORPIURIUM

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*Scorpiurium* Schimp., *Syn. Musc. Eur.*, 2nd edn 855 (1876); from the Greek *scorpio* (a scorpion), probably in reference to the scorpion's tail-like curvature of dry branches in some species.

Type: *S. rivale* Schimp. [= *S. deflexifolium* (Solms) M.Fleisch. & Loeske]

Autoicous. Branches occasionally curved or only slightly curved when dry. Stem leaves erecto-patent to patent, straight or occasionally slightly homomalous, not plicate; costa single, smooth or ending in an abaxial spine; margin denticulate or finely denticulate above, slightly reflexed basally, otherwise plane. Median laminal cells short-linear, thin-walled or incrassate, eporose, smooth; alar groups extending far up along the basal leaf margin, not or scarcely decurrent. Branch leaves sometimes subcomplanate; costa ending in a spine more often than in stem leaves.

Seta mammillose above, finely mammillose to ±smooth below. Capsules inclined; operculum rostrate. Peristome: exostome with rather weakly developed trabeculae, red-brown; endostome with a low basal membrane; processes narrow and moderately broadly perforate; cilia vestigial or absent.

A mainly Eurasian genus of four species; one species is endemic to Australia and New Zealand.

### References

Hedenäs, L. (1996), Taxonomic and nomenclatural notes on Australian Brachytheciaceae (Musci), *Nova Hedwigia* 62: 451–465.

Hedenäs, L. (2002), An overview of the family Brachytheciaceae (Bryophyta) in Australia, *J. Hattori Bot. Lab.* 92: 51–90.

***Scorpiurium cucullatum* (Mitt.) Hedenäs, *Nova Hedwigia* 62: 452 (1996)**

*Hypnum cucullatum* Mitt., *Hooker's J. Bot. Kew Gard. Misc.* 8: 264 (1856); *Rhynchostegium cucullatum* (Mitt.) Mitt., *Trans. & Proc. Roy. Soc. Victoria* 19: 88 (1882); *Rhynchostegiella cucullata* (Mitt.) Broth. ex Paris, *Coll.* 28 (1909); *Eurhynchium cucullatum* (Mitt.) I.G.Stone & G.A.M.Scott, *J. Bryol.* 7: 605 ('1973') [1974]. T: Dargo, Vic., 18[?]; *F.Mueller* 10; holo: NY.

*Hypnum convolutifolium* Hampe, *Linnaea* 30: 641 (1860); *Amblystegium convolutifolium* (Hampe) A.Jaeger, *Ber. Thätigk. St. Gallischen Naturwiss. Ges.* 1877–78: 285 (1880) [Ad. 2: 549]; *Rhynchostegium convolutifolium* (Hampe) Paris, *Index Bryol.* 1126 (1898); *Rhynchostegiella convolutifolia* (Hampe) Broth., *Nat. Pflanzenfam.* 1(3): 1161 (1909). T: Dargo, Vic., 1855, *F.Mueller* 10; lecto: BM; isolecto: BM, *vide* L.Hedenäs (1996).

*Rhynchostegiella subconvolutifolia* Broth. & Watts, *Proc. Linn. Soc. New South Wales* 37: 381 (1912). T: Talbingo, Tumut River, N.S.W., 16 Jan. 1906, *W.W.Watts*; holo: H-BR.

Illustration: G.A.M.Scott & I.G.Stone, *The Mosses of Southern Australia* 411, pl. 79 (1976), as *Eurhynchium cucullatum*.

Plants minute to small, irregularly or pinnately branched, pale to medium green. Axillary hairs solitary, with 1 upper cell. Stem leaves concave or only slightly so, when dry strongly channeled to almost tubular due to the inflexed or inrolled margins, ovate to lanceolate-ovate, from far below gradually narrowing to an acuminate, short-acuminate, blunt or

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narrowly rounded point, the latter especially common in branch leaves; costa 17.0–54.5  $\mu\text{m}$  wide near the base, ending c. 55–85% up the leaf. Median laminal cells 25–83  $\times$  5.5–8.5  $\mu\text{m}$ ; alar cells oblate to rectangular, scarcely inflated, thin-walled or slightly incrassate, eporose, numerous, forming a well-differentiated ovate or ovate-triangular group that extends 15–35% of leaf length along the leaf margin.

Seta 5–11 mm long. Capsules short-cylindrical, curved along upper side, straight along lower, or symmetrical. Spores (13.0–) 14.5–17.5  $\mu\text{m}$ .

Known from Qld, N.S.W., Vic. and Tas.; usually found on bark near water courses, but occasionally on other substrata. Also in New Zealand.

Qld: Killarney–Boonah road, *I.G.Stone 14618* (MELU). N.S.W.: Bulga, *W.W.Watts 10800* (NSW). Talbingo, *W.W.Watts 8443* (NSW). Vic.: Dargo, *W.W.Watts 94* (NSW). Tas.: bank of Macquarie R., *ex Monash 941* (MELU).

*Scorpiurium cucullatum* is readily separated from other Australian Brachytheciaceae by its small size, large groups of alar cells that extend far up the leaf margins, and by the strongly inrolled leaf margins when dry. Leaf apices are commonly obtuse or even narrowly rounded. *Rhynchostegium nanopennatum* also has strongly inrolled leaf margins when dry, but the alar groups are undifferentiated or indistinct and consist of only a few cells.