

## EXOSTRATUM

David G. Catcheside†

*Exostratum* L.T.Ellis, *Lindbergia* 11: 22 (1985); from the Greek *exo-* (outside) and *stratos* (a layer), in reference to the the continuous outer layer of chlorocysts.

Type: *E. blumei* (Nees ex Hampe) L.T.Ellis

Plants slender, forming thick green to whitish dull tufts. Stems erect, with numerous rhizoids from leaf axils. Leaves tristichous, erect, ascending with a sheathing base and a long narrow lanceolate or linear limb or subula. Lamina at the leaf base with long and narrow hyalocysts, these becoming shorter above and  $\pm$ isodiametric distally and in the subula; marginal rib of long narrow hyalocysts in 2–4 layers covered by chlorocysts in the subula, in 1 (–3) layers at the leaf base. Costa with 4–8 rows of leucocysts in T.S., these enclosing a central row of chlorocysts, the cells 4–7-angular, the whole covered with adaxial and abaxial rows of chlorocysts.

Capsules erect, small. Peristome teeth 16, narrowly lanceolate, with papillose ridges; preperistome smooth.

A genus of four species in South, South-east and East Asia, Malesia, Melanesia and the Pacific region; one species in north-eastern Australia.

### References

- Bartram, E.B. (1939), *Mosses of the Philippines* 70–76.
- Eddy, A. (1990), *A Handbook of Malesian Mosses* 2: 30–49.
- Enroth, J. (1990), Bryophyte flora of the Huon Peninsula, Papua New Guinea XXXVI. Leucobryaceae (Musci), *Acta Bot. Fennica* 139: 65–120.
- Gangulee, H.C. (1971), *Mosses of Eastern India and adjacent regions* 1(2): 431–446.
- Ellis, L.T. (1985), A taxonomic revision of *Exodictyon* Card. (Musci: Calymperaceae), *Lindbergia* 11: 9–37.

### **Exostratum blumei** (Nees ex Hampe) L.T.Ellis, *Lindbergia* 11: 25 (1985)

*Syrhopodon blumei* Nees ex Hampe, *Bot. Zeitung (Berlin)* 5: 921 (1874); *Exodictyon blumei* (Nees ex Hampe) M.Fleisch., *Musci Frond. Archip. Ind. Exsicc.* 58 (1899). T: Java [Indonesia], *C.L.Blume s.n.* in Herb. A.Braun, formerly in Herb. Nees (B, destroyed); lecto: L; isolecto: BM, NY.

*Exodictyon subscabrum* (Broth.) Cardot, *Rev. Bryol.* 26: 7 (1899); Australian reports.

Illustrations: E.B.Bartram, *op. cit.* pl. 6, fig. 85, as *Exodictyon blumei*; H.C.Gangulee, *op. cit.* 445, fig. 208, as *Exodictyon blumei*; L.T.Ellis, *op. cit.* 13, fig. 1g, h; 17, fig. 3a, b; 18, fig. 4b; 26, fig. 10; 27, fig. 11; 28, fig. 12; A.Eddy, *op. cit.* 38, fig. 189; J.Enroth, *op. cit.* 111, fig. 27.

Plants slender. Leaves 3–4 mm long, narrow, subulate; apex acute, dentate; superficial chlorocysts of costa mostly with apically directed spines, 7–100  $\mu$ m long, usually smooth, rarely indistinctly papillose; hyaline lamina in subula 0–2 cells wide; marginal rib usually of a few long narrow hyalocysts adjacent to 1 or more chlorocysts that occasionally enclose the hyalocysts. Gemmae frequent, linear, of a few to many  $\pm$ quadrate cells.

Occurs on tree trunks and logs in north-eastern Qld. Also in southern India, Sri Lanka, SE Asia, Malesia, the Philippines, China and New Caledonia.

Qld: Bellenden Ker, *H.Flecker 3134* (CANB).

Cite as: D.G.Catcheside, *Australian Mosses Online*. 13. Calymperaceae: *Exostratum*.

[http://www.anbg.gov.au/abrs/Mosses\\_Online/Calymperaceae\\_Exostratum.pdf](http://www.anbg.gov.au/abrs/Mosses_Online/Calymperaceae_Exostratum.pdf) (2012)