



POLYMERIDIUM ¹

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Polymeridium (Müll.Arg.) R.C.Harris, in S.C. Tucker & R.C. Harris, *Bryologist* 83: 12 (1980).

Type: *P. contendens* (Nyl.) R.C.Harris

Thallus crustose, sometimes endophloeodal, ecorticate. Photobiont *Trentepohlia*. Ascomata perithecia, hemispherical to pyriform, solitary or aggregated and fused, erumpent or exposed, not in pseudostromata; perithecial wall black, rarely covered by thalline tissue, in section completely carbonised, not differentiated internally, occasionally with K⁺ red pigments. Ostiole apical, rarely eccentric. Interascal hyphae richly branched and anastomosed, sometimes inspersed, embedded in a hyaline, non-amyloid, gelatinous matrix. Asci clavate to cylindrical, typically with a distinct 'tail' or pedicel, 4–8-spored, non-amyloid, at maturity lacking an ocular chamber. Ascospores hyaline, ellipsoid to fusiform, transversely septate or muriform, smooth-walled, sometimes KI⁺ violet. Conidiomata pycnidia, rare. Chemistry: some species contain lichexanthone.

A genus of about 20 corticolous, chiefly tropical species, mostly characterised by the trentepohlioid photobiont, perithecia with an ostiole that is usually apical, richly anastomosed paraphyses, and transversely septate or muriform ascospores. In the Tasmanian lichen flora, it is nearest to *Dictyomeridium*, which differs in having an eccentric ostiole and muriform ascospores; the distinction between these two genera is supported by DNA-sequence data.

Key references: Aptroot (2009); Aptroot & Lücking (2016).

1 *Polymeridium albocinereum* (Kremp.) R.C.Harris

Bol. Mus. Paraense Emilio Goeldi, Ser. Bot. 7: 625 (1991) [1993].

Thallus whitish grey, effuse, smooth, to c. 70 µm thick and 40 mm wide; prothallus absent; photobiont cells very sparse, 10–12 × 8–10 µm. Perithecia hemispherical, 0.3–0.4 mm wide, solitary, exposed or covered at the base by a thin veil of thalline tissue; ostiole apical, c. 30 µm wide. Interascal hyphae not inspersed, 1–1.5(–2) µm thick. Asci 8-spored, 80–95 × 28–35 µm. Ascospores 35–41.5–48(–50) × (7–)7.5–8.4–9(–10) µm, transversely 7–8(–9)-septate, fusiform, smooth-walled, with ± cuboidal-rectangular locules. Pycnidia not seen.

Chemistry: nil.

A pantropical species, very rare in Tasmania where it is known from a single collection from the bark of *Leptospermum lanigerum* at the margins of rainforest; in Australia also known from Queensland. The ascospores of the Tasmanian specimen are somewhat larger and with fewer septa than the 28–39 × 6–9 µm with 7–11 septa cited in the literature (Aptroot 2009).

Yarlington Tier, 42°32'S 147°18'E, 620 m, 1987, G. Kantvilas 145/87 (HO).

1 This work can be cited as: Kantvilas G (2023). *Polymeridium*, version 2023:1. In MF de Salas (Ed.) *Flora of Tasmania Online*. 2 pp. (Tasmanian Herbarium, Tasmanian Museum and Art Gallery: Hobart). <https://flora.tmag.tas.gov.au/lichen-genera/polymeridium/>

2 Tasmanian Herbarium, Tasmanian Museum & Art Gallery, PO Box 5058, UTAS LPO, Sandy Bay, TAS 7005, Australia.

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