



## SCHISMATOMMA <sup>1</sup>

Gintaras Kantvilas <sup>2</sup>

*Schismatomma* Flot. & Körb. ex A.Massal., *Ric. Auton. Lich. Crost.*: 55 (1852).

Type: *S. pericleum* (Ach.) Branth. & Rostr.

Thallus crustose, ecorticate, containing crystals of calcium oxalate, with or without soredia, lacking a prothallus. Photobiont trentepohlioid, with cells irregularly roundish, 8–20(–30) µm diam. Ascomata apothecia, roundish to irregularly elongate, pseudolecanorine, somewhat immersed to sessile. Disc brown-black, epruinose or whitish-pruinose. Thalline margin thin, sometimes becoming excluded or discontinuous with age, typically containing some algal cells. Proper exciple thin, brown, sometimes carbonised at least in part, K+ olive. Hypothecium hyaline to dark brown, K+ olive. Hymenium hyaline, not interspersed, hemiamyloid, KI+ pale blue, overlain by a brownish, crystalline, K+ olive epithelial layer. Asci cylindrical, 8-spored, of the *myrticola*-type: tholus weakly KI+ pale blue except for a thin, darker staining internal cap; ocular chamber short and blunt. Paraphysoids sparsely branched, slender; apices usually slightly expanded. Ascospores transversely 3-septate, curved, hyaline, acicular-fusiform, non-halonate; locules ± cylindrical. Conidiomata pycnidia, immersed. Conidia bacilliform. Chemistry: roccellic acid and atranorin occur in some species.

A genus of c. 10 species, widely distributed in temperate areas and found mostly on bark. The genus has been gradually subdivided into smaller units over the years (Tehler 1993), most recently by Ertz *et al.* (2015), chiefly on the basis of molecular data, with one recent segregate, *Ocellomma*, represented in Tasmania. *Schismatomma* is distinguished from other crustose members of the Roccellaceae by the irregularly roundish to elongate apothecia with a thalline margin, the *myrticola*-type asci, and the acicular-fusiform, 3-septate ascospores.

Key references: Tehler (1993); Kantvilas (2004); Ertz *et al.* (2015).

### 1 *Schismatomma occultum* (C.Knight & Mitten) Zahlbr.

*Cat. Lich. Univ.* 2: 560 (1924); —*Platygrapha occulta* C.Knight & Mitten, *Trans. Linn. Soc. London* 23: 104 (1860).

Thallus pale brownish to cream, sometimes with a pinkish tinge, to 90 µm thick, forming small rather discontinuous patches to c. 60 mm wide, in section KI–. Apothecia 0.1–0.4 mm wide, usually roundish but occasionally elongate or stellate, scattered or crowded together; thalline margin poorly developed, visible as a thin, raised, often incomplete rim surrounding the disc, in section poorly differentiated from the thallus and mostly lacking algal cells; disc plane to convex, dark brown to brown-black, epruinose; proper exciple 6–15 µm thick, brown, becoming ± carbonised beneath the hymenium. Hypothecium hyaline to brown, 10–20 µm thick. Hymenium 60–80 µm thick; asci (45–)50–65 × 10–12 µm; paraphysoids 1–1.5 µm thick, simple or occasionally bifurcate, with apices brownish, minutely spinulose, 2–4 µm thick. Ascospores (24–)26–34.5–40 × 2–2.7–3 µm; wall < 0.5 µm thick. Pycnidia not seen.

Chemistry: nil.

1 This work can be cited as: Kantvilas G (2023). *Schismatomma*, 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/schismatomma/> (accessed 31 October 2022).

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

Widely scattered along the East Coast and on the Furneaux Islands, mostly in coastal heathland, scrub and dry sclerophyll forest, where it occurs on small branches and twigs. It is also known from New Zealand and south-eastern mainland Australia.

Wind Song Property, 42°21'S 147°55'E, 40 m, 2017, G. Kantvilas 388/17 (HO, S); Cape Portland, Musselroe Wind Farm, 40°48'35"S 148°06'23"E, 20 m, 2018, G. Kantvilas 242/18 (HO); Fortescue Bay camp ground, 43°09'S 147°58'E, 2 m, 2020, G. Kantvilas 267/20 (HO).

## REFERENCES

- Ertz D, Tehler A, Irestedt M, Frisch A, Thor G, van den Boom P (2015) A large-scale phylogenetic revision of Roccellaceae (Arthoniales) reveals eight new genera. *Fungal Diversity* **70** 31–53.
- Kantvilas G (2004) A contribution to the Roccellaceae in Tasmania: new species and notes on *Lecanactis* and allied genera. *Symbolae Botanicae Upsalienses* **34(1)** 183–203.
- Tehler A (1993) The genus *Schismatomma* (Arthoniales, Euscomycetidae). *Opera Botanica* **118** 1–38.

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