



## STEPHANOCYCLOS<sup>1 2</sup>

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*Stephanocyclos* Hertel, *Lecideaceae Exsiccatae* 5: nr. 96 (1983).

Type: *S. henssenianus* Hertel

Thallus crustose. Photobiont a unicellular green alga with cells globose, 6–12 µm diam. Ascomata apothecia, lecideine, sessile and basally constricted, roundish to irregularly distorted and angular in outline. Disc black to brown-black, epruinose, at first plane, soon becoming umbonate and gyrose. Proper exciple persistent, black, crenate and radially cracked, becoming inrolled with rather angular folds, in section cupulate, opaque brown-black, composed of amorphous, compact hyphae. Hypothecium hyaline to brown-black, often poorly differentiated from the exciple. Hymenium hyaline, amyloid, entire or divided into locules by carbonised tissue extending downwards from the epithecium to the exciple. Paraphyses slender, ± simple, anastomosed here and there, 1–1.5 µm thick, mostly not capitate, sometimes with slightly enlarged, brownish apices. Asci clavate, 8-spored, of the *Porpidia*-type: tholus well-developed, amyloid, with a more intensely amyloid tube structure; ocular chamber not developed. Ascospores simple, hyaline, ellipsoid, halonate, thin-walled. Conidiomata pycnidia, immersed. Conidia filiform. Chemistry: no substances detected by TLC.

A monotypic, saxicolous genus, originally described from subantarctic Marion Island. The rather angular, black apothecia with a “folded in” margin and intensely gyrose-umbonate, lumpy disc are very distinctive.

Key references: Hertel (1983); Fryday & Hertel (2014).

### 1 *Stephanocyclos henssenianus* Hertel

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Thallus endolithic to inapparent, at best discernible as a diffuse, dull greyish or rusty brown area at the base of the apothecia; medulla l-. Apothecia 1–3 mm wide, single or clustered together in groups of 2–4(–6); proper exciple in section 60–200 µm thick laterally, sometimes massive at the base. Hypothecium 30–110 µm thick, sometimes interspersed with oil droplets. Hymenium 90–130 µm thick, diffusely brownish in the upper part, rarely with traces of a blue-green, N+ crimson pigment; asci (70–)90–110 × 20–30 µm. Ascospores (12–)13–17.9–22(–23) × (5–)7–8.4–11(–12) µm. Conidia not seen in Tasmanian material, reported (Hertel 1983) as 15–22 × 0.7–1 µm.

Relatively common in the south-west where it grows on exposed boulders or small pebbles of quartzite or conglomerate in buttongrass moorland and alpine heathland. Tasmanian specimens display virtually no sign of an epilithic thallus and are seen as scattered, lumpy, black apothecia only. In contrast, specimens seen from the subantarctic islands have a well-developed thallus. The characteristic gelatinous halo of the ascospores tends to be stripped away by the addition of K to apothecial sections.

1 This work can be cited as: Kantvilas G (2023). *Stephanocyclos*, 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/stephanocyclos/>

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

Mt McCall, 720 m, 1984, P. James & G. Kantvilas 224/84 (BM, HO); western side of Little Percy River, 6 km E of Innes Peak, 42°39'S 145°40'E, 320 m, 1985, G Kantvilas 168/85 (HO); Mt Tyndall, 41°56'S 145°35'E, 1050 m, 1986, G. Kantvilas 71/86 (HO).

## REFERENCES

- Hertel H (1983) *Lecideaceae Exsiccatae ausgegeben von der Botanischen Staatssammlung München. Fasc. V* (No. 81-100).
- Fryday AM, Hertel H (2014) A contribution to the family Lecideaceae s.lat. (Lecanoromycetidae inc. sed., lichenized Ascomycota) in the southern subpolar region; including eight new species and some revised generic circumscriptions. *Lichenologist* **46** 389–412.

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