



## CALYCIDIUM<sup>1 2</sup>

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*Calycidium* Stirt., *Proc. Philos. Soc. Glasgow* 10: 292 (1877).

Type: *C. cuneatum* Stirton

Thallus foliose, composed of erect, ascending or decumbent, broadly dorsiventrally flattened lobes; upper surface a shade of green or olive-brown; lower surface whitish and wrinkled. Photobiont trebouxoid. Ascospores simple, ± globose to irregularly broadly ellipsoid, reddish brown, smooth or minutely verruculose, lacking adhering sterile fragments. Conidiomata unknown. Chemistry: xanthenes and sphaerophorin (±).

A genus of two species confined to the cool temperate rainforests of Tasmania, New Zealand and southern South America. Species of *Calycidium* are readily mistaken for poorly developed species of *Bunodophoron*, especially *B. scrobiculatum* or *B. macrocarpum*, both of which have similarly broadly flattened, sterile branches. The small foliose thallus, marginal, brown mazaedia, and subglobose, reddish brown spores are diagnostic.

Key references: Tibell (1987); Kantvilas (2000); Wedin (2002).

1 Thallus underside UV+ white (containing sphaerophorin); lobe margins incised; apothecia ± subpedicellate

1 *C. cuneatum*

Thallus underside UV+ orange (containing xanthenes); lobe margins undulate but not markedly incised; apothecia ± sessile

2 *C. polycarpum*

### 1 *Calycidium cuneatum* Stirt.

*Proc. Philos. Soc. Glasgow* 10: 292 (1877).

Thallus forming irregular patches to c. 15 cm wide; lobes loosely clustered to entangled, 1.5–10 mm wide, to 10(–15) mm long, sparsely divided, with somewhat recurved margins and appearing convex and slightly hooded, broadening from a narrowed base, apically usually distinctly notched and incised; upper surface smooth or occasionally weakly scrobiculate. Apothecia subpedicellate, 0.4–1.5 mm wide, numerous along the upper lobe margins, with a thin but distinct, whitish thalline rim. Ascospores (4.5–)5–5.8–7 × (4–)4.5–5.3–6.5(–7) µm.

Chemistry: sphaerophorin and an unidentified compound; medulla K–, KC–, C–, P–; underside UV+ white.

Known in Tasmania from subalpine elevations in the west and south-west, where it grows on low, horizontally-spreading branches in scrubby rainforest and tall, wet heathland; also known from New Zealand. It is listed as 'rare' under the *Tasmanian Threatened Species Protection Act 1995*.

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

2 This treatment was supported by the Australian Biological Resources Study's National Taxonomy Research Grant Program (grant no. 4-EHINNOL).

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

Hartz Lake, 43°14'S 146°46'E, 950 m, 1999, G. Kantvilas 462/99 (HO); eastern shore of Lake Dove, 41°40'S 145°58'E, 940 m, 2002, G. Kantvilas 555/02 (HO); Lake Cygnus, 43°08'S 146°14'E, 880 m, 2006, G. Kantvilas 489/06 (HO).

## 2 *Calycidium polycarpum* (Colenso) Wedin

*Lichenologist* 34: 67 (2002); —*Sphaerophorus polycarpus* Colenso, *Trans. Proc. N.Z. Inst.* 16: 361 (1884).

Thallus forming small tufts; lobes scattered, 1.5–10 mm wide, to 10 mm long, sparsely divided, plane to slightly convex, broadening from a narrowed base, with apices entire to crenulate, not incised; upper surface smooth. Apothecia sessile, 0.4–2 mm wide, occurring along the upper lobe margins, with a very thin thalline rim. Ascospores (4–)5–6.0–7.5(–9) × (4–)4.5–5.4–6(–9) μm.

Chemistry: 3-O-methyl-5,7-dichloronorlichexanthone, 3-O-methyl-2,5,7-trichloronorlichexanthone, plus additional unidentified xanthenes; medulla K–, KC–, C–, P–; underside UV+ orange.

Very uncommon in Tasmania and recorded only once, associated with *Bunodophoron* species and bryophytes on an ancient tree of *Nothofagus cunninghamii* at the margin of callidendrous rainforest; also known from New Zealand and southern South America. This species is very similar to *C. cuneatum* but is distinguished by chemical characters and by the sessile apothecia. Like *C. cuneatum*, it is listed as 'rare' under the *Tasmanian Threatened Species Protection Act 1995*.

Along the road to Corinna, S of Pieman River, 41°40'S 145°05'E, 70 m, 2000, G. Kantvilas 263/00 (HO).

## REFERENCES

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- Wedin M (2002) The genus *Calycidium* Stirt. *Lichenologist* **34** 63–69.

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