

# Pseudocyphellaria crassa

## FAMILY

Lobariaceae

## AUTHORITY

*Pseudocyphellaria crassa* D.J.Galloway

## FLORA CATEGORY

Lichen – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Lichens - Foliose

## CURRENT CONSERVATION STATUS

2018 | At Risk – Naturally Uncommon | Qualifiers: Sp

## BRIEF DESCRIPTION

Characterised by the linear-elongate, subdichotomously to irregularly branched lobes, with entire to minutely notched, thickened margins, with projecting, punctate, yellow pseudocyphellae; a reticulate-faveolate upper surface without isidia, maculae, phyllidia, pseudocyphellae or soredia; a white medulla; a cyanobacterial photobiont; a thickly felted-tomentose red-brown to chocolate-brown lower surface with conspicuous, vivid-yellow pseudocyphellae; occasional, marginal apothecia with a dark red-brown to black, epruinose disc and a coarsely verrucose-scabrid, dentate-coronate exciple; and a complex chemistry of depsides, hopane triterpenoids, depsidones and yellow pigments.

## DISTRIBUTION

**North Island:** Wellington (Ruahine Ranges). **South Island:** Nelson (Tasman Mts, Lake Rotoiti), Canterbury (Boyle River, Peel Forest), Otago (Haast Pass, Makarora).

## HABITAT

An epiphyte of subalpine successional shrubs and trees (especially *Kunzea* and *Leptospermum*) in moderate shade and high humidity, 300–1050 m.



Corticolous on kahikatoa (*Leptospermum scoparium* var. *scoparium*), Kahurangi Nelson. Photographer: Peter J. de Lange, Date taken: 02/02/2022, Licence: CC BY-NC.



Corticolous on kahikatoa (*Leptospermum scoparium* var. *scoparium*), Kahurangi Nelson. Photographer: Peter J. de Lange, Date taken: 02/02/2022, Licence: CC BY-NC.

## DETAILED DESCRIPTION

**Thallus** spreading, ± loosely attached, margins ± free and subascendent, to 20 cm diam. **Lobes** linear-elongate, 5-10 mm wide and 3-5 cm long, ± lacinate, subdichotomously to irregularly branching, margins entire or slightly incised, slightly thickened, ± incurled, brown-pubescent, apices crenulate, sinuous or truncate. **Upper surface** reddish when wet, pale greyish-fawn or tinged yellowish when dry, shallowly reticulate-faveolate, uneven or smooth, shining, without soredia, isidia, maculae or pseudocyphellae. **Medulla** white. **Photobiont** blue-green. **Lower surface** densely and thickly tomentose to the margins, or with a narrow, glabrous, marginal zone, tomentum dense, brown to blackish. **Pseudocyphellae** yellow, scattered, round to irregular, frequent, verruciform, 0.1-1.0 mm diam., sunk in tomentum or protruding from it, margins conspicuous, pale to dark brown or black. **Apothecia** marginal or submarginal, 0.5-3.0 mm diam., sessile to subpedicellate, disc concave at first and entirely obscured by margins, plane at maturity, matt, brown-black, margins thick, persistent pale buff or flesh-coloured, coarsely scabrid-crenulate appearing ± denticulate or coronate, thalline exciple corrugate-scabrid, pale flesh-coloured. **Ascospores** greenish-brown, fusiform-ellipsoid, 1-3-septate, 23-30 × (3-)7-10 µm.

**Chemistry:** Pulvinic acid, pulvinic dilactone, calycin, tenuiorin, methyl gyrophorate, hopane-6 $\alpha$ ,7 $\beta$ ,22-triol, stictic, constictic and norstictic acids.

## SIMILAR TAXA

The nature of the tomentum and the margins of the lobes separate it from *P. maculata*. It is closely related to *P. carpoloma* but is distinguished from it by the thicker lobes, the thick, dark tomentum on the lower surface, and by the blue-green photobiont.

## SUBSTRATE

Corticolous

## ETYMOLOGY

**crassa:** Thick, fleshy, dense or fat

## ATTRIBUTION

Fact sheet prepared by Marley Ford (12 February 2022). Brief description, Distribution, Habitat, Features, and Similar taxa sections copied from Galloway (1985, 2007).

## REFERENCES AND FURTHER READING

Galloway D.J. 1985: *Flora of New Zealand: Lichens*. Wellington: PD Hasselberg, Government Printer. 662 pp.  
Galloway D.J. 2007: *Flora of New Zealand: Lichens, including lichen-forming and lichenicolous fungi*. 2nd edition. Lincoln, Manaaki Whenua Press. 2261 pp.

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/pseudocyphellaria-crassa/>