

# Pseudocyphellaria homoeophylla

## SYNONYMS

Lobaria homoeophylla, Sticta amplificata, Sticta homoeophylla

## FAMILY

Lobariaceae

## AUTHORITY

Pseudocyphellaria homoeophylla (Nyl.) C.W.Dodge

## FLORA CATEGORY

Lichen – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Lichens - Foliose

## CURRENT CONSERVATION STATUS

2018 | Not Threatened

## BRIEF DESCRIPTION

Characterised by di- or trichotomously branching, linear-lacinate lobes with entire, sinuous margins and without isidia, maculae, phyllidia, pseudocyphellae or soredia; a glabrous, smooth to shallowly wrinkled or pitted upper surface that is distinctly coriaceous; a white medulla; a green photobiont; a red-brown to black lower surface with rather patchy tomentum and numerous, conspicuous white pseudocyphellae; mainly marginal apothecia with a coarsely scabrid, stellate-fimbriate, pinkish exciple; and a chemistry of hopane triterpenoids, stictic acid metabolites and usnic acid that gives the thallus a greenish yellow tinge.

## DISTRIBUTION

**North Island:** South Auckland (Te Aroha, Pirongia) to Cook Strait. **South Island:** Nelson to Fiordland, also in the Catlins. **Stewart Island/Rakiura:** (N coast to Mt Allen and Port Pegasus).

## HABITAT

Lowland to subalpine, sea level to 1440 m. It is mainly a rainforest species and is best developed in beech forest close to the Main Divide in South Island. It is especially common both as an epiphyte and as a forest floor species where it competes successfully with bryophytes (in some areas it may form extensive swards) in mid-elevation forests (200–600 m), and in areas dominated by *Fuscospora cliffortioides* [*Nothofagus solandri* var. *cliffortioides*] it is the dominant epiphyte up to treeline.



Lake Rotoroa. Photographer: Melissa Hutchison, Date taken: 14/01/2019, Licence: CC BY-NC.



Cannibal Gorge Hut, Lewis Pass. Photographer: Melissa Hutchison, Date taken: 29/04/2017, Licence: CC BY-NC.

## DETAILED DESCRIPTION

**Thallus** orbicular to spreading, often in dense swards, 10–20–(40) cm diam., loosely attached. **Lobes** broad, 1–3 cm wide, linear-elongate, dior trichotomously branching, to 12 cm long, apices discrete, contiguous to imbricate centrally, margins entire, sinuous, apices rounded or shallowly notched, without isidia, soredia, sinuses semicircular. **Upper surface** coriaceous, greenish or olivaceous when wet, yellowish-green to pale yellowish-grey when dry, smooth, shallowly wrinkled, undulate, matt or shining, without isidia, soredia, maculae or pseudocyphellae. **Medulla** white. **Photobiont** green. **Lower surface** pale buff or whitish at margins, dark brown, or black centrally, ± evenly tomentose, glabrous-wrinkled at lobe apices, tomentum short, dense, brown. **Pseudocyphellae** white, conspicuous, numerous, scattered, often crowded, to 1 mm diam. **Apothecia** emergent, submarginal or marginal, sparse to moderately common, 4–6 mm diam., subpedicellate, disc red-brown, epruinose, concave to plane, margins crenulate, pale whitish, thalline exciple corrugate-scabrid. **Ascospores** colourless to pale brownish, fusiform, 1–3-septate, 24–32 × 5–9 µm.

**Chemistry:** 7β-acetoxypopan-22-ol, hopane-7β,22-diol (tr.), hopane-15α,22-diol, norstictic, stictic, cryptostictic, constictic, methylstictic, hypostictic, hyposalazinic (tr.) and usnic acids.

It may be parasitised by the lichenicolous fungi *\*Arthonia maculiformis*, *\*A. pseudocyphellariae*, *\*Plectocarpon concentricum*, *\*P. opegraphoideum* and *\*Stigmidium schaereri*.

## SIMILAR TAXA

*Pseudocyphellaria homoeophylla* is the fertile counterpart species of *P. delisea*, however it is known only from New Zealand. *P. delisea* on the other hand, the presumptive derived species of *P. homoeophylla*, is widely distributed in south eastern Australia, the Subantarctic Islands and southern South America.

## SUBSTRATE

Corticolous, terricolous

## ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (30 November 2021). Brief description, Distribution, Habitat, Features, and Similar taxa sections copied from Galloway (1985, 2007).

## REFERENCES AND FURTHER READING

Galloway DJ. 1985. Flora of New Zealand Lichens. Government Printer, Wellington, NZ. 662 p.

Galloway DJ. 2007. Flora of New Zealand Lichens. Revised 2nd edition including lichen-forming and lichenicolous fungi. Manaaki Whenua Press, Lincoln, NZ. Two volumes: vol. 1 pp 1–1006; vol. 2 pp 1007–2261.

## MORE INFORMATION

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