

Pseudocyphellaria dissimilis

FAMILY

Peltigeraceae

AUTHORITY

Pseudocyphellaria dissimilis (Nyl.) D.J.Galloway & P.James

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Foliose

CURRENT CONSERVATION STATUS

2018 | Not Threatened | Qualifiers: SO

BRIEF DESCRIPTION

Characterised by linear-elongate to shallowly rounded, subdichotomously to irregularly branched lobes, that are often canaliculate and with entire to isidiate or phyllidiate margins; a smooth to shallowly wrinkled upper surface that is minutely maculate and papillate ($\times 10$ lens) and with laminal isidia and phyllidia; a white medulla; a cyanobacterial photobiont; a pale-brownish often costate lower surface with rather sparse, short tomentum, and scattered, white, fleck-like pseudocyphellae; and a two-hopane chemistry.

DISTRIBUTION

Northland: Northland (Kawerua) to Wellington. **Southland:** Nelson to Southland. **Stewart Island:** (Mt Anglem to Port Pegasus). **Auckland Islands.**

Known also from Papua New Guinea, Norfolk Island, Juan Fernandez and E Australia from Queensland to Tasmania.

HABITAT

Throughout, lowland, coastal and inland in humid, low-light habitats (the most common species of the genus in deep shade), occasionally subalpine, s.l. to 700 m. It grows readily on damp soil, among mosses or on rocks on the forest floor, on tree roots and on tree trunks in moderate to dense shade, but it is rare on twigs. A significant nitrogen-fixer in these habitats.



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DETAILED DESCRIPTION

Thallus linear-lacinate, suborbicular to spreading, 5-10(-20) cm wide, loosely to closely attached. **Lobes** linear-elongate to shallowly rounded to \pm dichotomously branching, thin and rather brittle, imbricate centrally, apices discrete, margins entire at apices or \pm bifurcate, highly dissected in older parts, isidiate, often \pm subcanaliculate, margins \pm thickened. **Upper surface** dark leaden grey to bluish-black when wet, pale lilac-brown to grey-brown when dry, smooth, shining, not tomentose, without soredia, maculae or pseudocyphellae. Isidia mainly marginal, occasionally laminal, flattened, or terete, not tomentose, concolorous with thallus. Medulla white. **Photobiont** blue-green. **Lower surface** pale buff or white at margins, darker brown to ochre centrally, glabrous, slightly wrinkled at margins, tomentose centrally, glabrous in a narrow marginal zone, elsewhere tomentose, tomentum to margins in older lobes, short, regular, whitish, silky. **Pseudocyphellae** white, minute, fleck-like, 0.1-0.6 mm wide, rarely to 1 mm wide, rather sparse, flat, sunk in tomentum. **Apothecia** submarginal to scattered, 1.5-3.0 mm diam., disc red-brown, margins pale whitish, irregularly dentate-lacerate or crenulate, thalline exciple pale, corrugate-verrucose.

Ascospores brown, oblong-fusiform, 1-3-septate, $24-42 \times 8-11 \mu\text{m}$. It may be parasitised by the lichenicolous fungi **Arthonia fuscopurpurea*, **Plectocarpon gallowayi* and **Pyrenidium actinellum*.

Chemistry: 7 β -acetoxy-hopan-22-ol, hopane-15 α ,22-diol, \pm gyrophoric acid.

SIMILAR TAXA

Some forms with sparse marginal isidia are difficult to distinguish from *P. cinnamomea*. It is distinguished from *P. fimbriatoides* by the glabrous isidia, which are never tomentose.

SUBSTRATE

Corticolous, terricolous

ATTRIBUTION

Fact sheet prepared by Marley Ford (21 September 2021). Brief description, Distribution, Habitat, Features, and Similar taxa sections copied from Galloway (1985) & Galloway (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-dissimilis/>