

Pseudocyphellaria montagnei

SYNONYMS

Sticta montagnei C.Bab., *Ricasolia montagnei* (C.Bab.) Nyl., *Stictina montagneana* (C.Bab.) Shirley, *Lobaria montagnei* (C.Bab.) Hellb., *Stictina astictina* Nyl., *Sticta astictina* (Nyl.) Hellb., *Pseudocyphellaria astictina* (Nyl.) H.Magn., *Ricasolia luridescens* Stirt., *Lobaria luridescens* (Stirt.) Zahlbr.

FAMILY

Peltigeraceae

AUTHORITY

Pseudocyphellaria montagnei (C.Bab.) D.J.Galloway & P.James

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 a white medulla; a green photobiont; minute, sparse, white pseudocyphellae on the lower surface which itself is often glabrous or largely devoid of tomentum conferring a pale, *Lobaria*-like appearance; laminal phyllidia often copiously developed and obscuring thallus; phyllidiate margins to the apothecia which have dark-brown to black discs and a red-brown to grey-brown granular epithecium turning violet-purple in K; and a complex chemistry related to those of *P. durietzii*, *P. hookeri* and *P. physciospora* and characterised by a wide range of depsides (including gyrophoric acid that gives a fleeting C+ red reaction to the upper surface when dry and especially also to the lower surface), hopane-triol and stictic acid metabolites.

DISTRIBUTION

North Island: Northland (Three Kings Islands) to Cook Strait (Kapiti Island). **South Island:** Nelson (Kaihoka Lakes), Westland (Greymouth).

HABITAT

Mainly an epiphyte of northern coastal forest trees and shrubs, in moderate shade to full sunlight, occasionally on decaying logs and rocks. May be parasitised by the lichenicolous fungus *Arthonia santessoniana*.



Corticolous, Mahia Hawke's Bay. Photographer: Peter J. de Lange, Date taken: 19/02/2015, Licence: CC BY-NC.



Corticolous, Waima Far North. Photographer: Marley Ford, Date taken: 16/02/2020, Licence: CC BY.

DETAILED DESCRIPTION

Thallus ± orbicular, closely attached in rosettes or spreading, to 12 cm diam. Lobes rounded, ± radiating, imbricate, margins entire or delicately notched or incised, sinuous or ragged-phyllidiate. **Upper surface** glaucous-green to olivaceous when wet, pale greyish-green when dry, undulate or shallowly faveolate, lacunose, ridges smooth, matt or shining, without soredia, maculae or pseudocyphellae, often phyllidiate. **Phyllidia** dentate-subcoralloid, flattened, undulate, squamiform, marginal and laminal. **Photobiont** green. **Medulla** white. Lower surface pale yellowish-buff to whitish, slightly darker centrally, ± glabrous or with a sparse, thin, pale tomentum, wrinkled-bullate in parts, or ± papillate. **Pseudocyphellae** inconspicuous, very sparse, scattered, minute, erupting on ridges and papillae, decorticate area yellowish, or white. **Apothecia** laminal or marginal, sparse to moderately frequent, sessile to subpedicellate, 2-5 mm diam., disc matt, smooth, black, epruinose, margins thin, entire to crenate-striate to phyllidiate, pale. **Pycnidia** frequent, scattered, black, punctiform, minute. **Ascospores** brown, polaribilocular, fusiform-ellipsoid, 24-31 × (5-)7-10 µm.

Chemistry: Methyl evernate, tenuiorin, methyl gyrophorate, evernic, hopane-6 α ,7 β ,22-triol, norstictic (tr.), stictic, cryptostictic (tr.), constictic, hypostictic (tr.) and hyposalazinic (tr.) acids.

SIMILAR TAXA

Pseudocyphellaria montagnei is related to *P. hookeri* but has a green photobiont and is a more closely appressed bark species. It is distinguished from *P. durietzii* by the marginal and laminal phyllidia and the phyllidiate apothecial margins and in the morphology of the lower surface and pseudocyphellae. Some confusion has arisen over the correct taxonomic circumscription of this lichen since the pseudocyphellae on the lower surface are small, rather poorly developed and sparsely scattered.

SUBSTRATE

Corticolous, saxicolous

ATTRIBUTION

Fact sheet prepared by Marley Ford (4 August 2021). 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-montagnei/>