

Pseudocyphellaria crocata

SYNONYMS

Lichen crocatus L.

FAMILY

Peltigeraceae

AUTHORITY

(L.) Vain.

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Foliose

CURRENT CONSERVATION STATUS

Not Evaluated

BRIEF DESCRIPTION

Characterised by rather variable lobes; an undulate to densely reticulate-faveolate upper surface; a white medulla; a cyanobacterial photobiont; yellow soralia (both laminal and marginal) on the upper surface; yellow pseudocyphellae on the lower surface; and a complex chemistry of depsides, hopane triterpenoids, depsidones and yellow pigments.

DISTRIBUTION

North Island: Northland (Three Kings Islands) to Wellington. **South Island:** Nelson (Kaihoka Lakes) to Southland (Bluff Hill). **Stewart Island:** (Mt Anglem to Table Hill). **Chatham Islands. Snare Islands. Auckland Islands. Campbell Island.**

The most widespread species in the genus, it is known from Great Britain, West Scandinavia, Macaronesia, St Helena, South Africa, Madagascar, Réunion, Prince Edward Island., India, Sri Lanka, Malaysia, Indonesia, the Philippines, Japan, Hawai'i, Papua New Guinea, New Caledonia, Norfolk Island, Solomon Island, Samoa, Fiji, Tahiti, Galápagos Island, Juan Fernández, North, Central and South America and Australia.

HABITAT

Throughout, widespread and common, on rocks in open grassland, and on twigs or bark of lowland trees and shrubs or at treeline in subalpine habitats, also on roadside rocks and occasionally on rock walls in parks and gardens, s.l. to 1950 m. It is rarely seen in areas of high rainfall or high cloud cover, preferring drier, open habitats exposed to full sun.



Path side corticolous macrolichen, Waimanga Rotorua. Photographer: Marley Ford, Date taken: 22/01/2022, Licence: CC BY-NC.



Thallus underside, Waimanga Rotorua. Photographer: Marley Ford, Date taken: 22/01/2022, Licence: CC BY-NC.

DETAILED DESCRIPTION

Thallus 5-7(-10) cm diam., rigid, lobate, attached centrally, margins mainly free. Lobes ± broadly rounded to deeply lacinate, margins partly imbricate, apices rounded or incised, crenulate to sinuous, often subsascent, not isidiate or phyllidiate. **Upper surface** pale brownish-yellow with greenish tint, to red-brown or dark chocolate brown, ± densely reticulate-faveolate, ridges strongly defined, lacunae deep or shallow, shining, ridges with ± numerous low warts bursting into yellow soredia, often confluent and spreading, usually smaller or lacking at margins. **Medulla white**. **Photobiont** blue-green. **Lower surface** densely tomentose to margins, pale ochraceous-buff at margins, dark brown to blackish centrally, sometimes margins ± reticulate with yellowish-buff ridges and bullae visible. **Pseudocyphellae** yellow, scattered, sparse to ± frequent, 0.2-0.4 mm diam., ± sunk in tomentum, punctiform near margins. **Apothecia** rare, 1-2 mm wide, sessile on ridges, disc deep red-brown or blackish, occasionally faintly pruinose, concave to plane, margins thin, pale reddish-brown, ± smooth to wrinkled. **Ascospores** 1-septate, (18-)22-30 × 5-9(-12) µm.

Chemistry: Tenuiorin, methyl gyrophorate, gyrophoric acid (tr.), hopane-7β,22-diol, hopane-6α,7β,22-triol, 7β-acetoxypopan-6α,22-diol (tr.), 6α-acetoxypopan-7β,22-diol (tr.), physciosporin (tr.), norstictic (tr.), stictic, cryptostictic (tr.), and constictic acids, pulvinic acid, pulvinic dilactone and calycin.

SIMILAR TAXA

Pseudocyphellaria crocata is related to *P. neglecta* but distinguished from it by the entire margins which lack phyllidia. It is also much less fertile.

An aggregate taxon of many similar un-named species.

SUBSTRATE

Corticolous, saxicolous, terricolous

ATTRIBUTION

Fact sheet prepared by Marley Ford (24 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-crocata/>