

# Parmotrema reticulatum

## COMMON NAME

Cracked sheet lichen

## SYNONYMS

*Parmelia reticulata*, *Rimelia reticulata*

## FAMILY

Parmeliaceae

## AUTHORITY

*Parmotrema reticulatum* (Taylor) M.Choisy

## 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 the corticolous/lignicolous/saxicolous habit; the ciliate lobe margins, laciniae with marginal to submarginal soredia; and the presence of atranorin, chloroatranorin, salazinic acid (major) and consalazinic acid (minor). Recent molecular studies on the *P. reticulatum* complex clarify the taxonomy of this group but this group still remains an aggregate in New Zealand.

## DISTRIBUTION

**North Island:** Northland (Three Kings Islands) to Wellington. **South Island:** Nelson to Southland. **Stewart Island.** **Auckland Islands.** **Campbell Island.**

## HABITAT

Very widely distributed on rock and wood in both coastal and inland habitats. A common and early coloniser of decorticated wood (fence posts, gates, farm railings), shade cloth, exotic trees (especially fruit trees) in parks and gardens; more commonly found in disturbed habitats than on native vegetation. A very widely distributed species worldwide, pantemperate, pansubtropical, and one of the most common foliose lichens in the world.



Lobe underside. Photographer: Marley Ford, Licence: CC BY-NC.



Saxicolous at Maunganui Bluff. Photographer: Marley Ford, Date taken: 22/09/2020, Licence: CC BY-NC.

## DETAILED DESCRIPTION

**Thallus** orbicular to spreading, loosely attached, to 12 cm diam., corticolous or saxicolous. **Lobes** rounded to sublinear, dissected, to 8 mm wide, crowded, margins sorediate, often revolute, ciliate. **Upper surface** dull, greenish-blue to pale greenish-grey, maculate at lobe tips (×10 lens), with patterned cracking continuing throughout thallus, sorediate. **Soralia** mainly marginal, causing lobe tips to become recurved and often capitate-hooded.

**Medulla** white, often rusty-red when wet (decomposition products of salazinic acid). **Lower surface** dark brown to black, with a variable, shining naked marginal zone. **Rhizines** central, simple or squarrosely branched, black.

**Apothecia** rare, pedicellate, to 8 mm wide, disc deeply concave when young, becoming ± plane with age, red-brown, perforate, thalline exciple sorediate, inflexed. **Ascospores** 13-16 × 9-11 µm. **Pycnidia** minute, black, punctiform, marginal.

**Chemistry:** Cortex K+ yellow; medulla K+ yellow→red, C-, KC+ red, Pd+ orange; containing atranorin, chloroatranorin, salazinic acid (major) and consalazinic acid (minor).

## SIMILAR TAXA

Similar to *P. perlatum* but distinguished by the reticulate cracking of the upper surface.

## SUBSTRATE

Corticolous, lignicolous, saxicolous

## ATTRIBUTION

Fact sheet prepared by Marley Ford (12 December 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.  
Kularatne K.I.A., & De Freitas, C. R. (2013). Epiphytic lichens as biomonitors of airborne heavy metal pollution. *Environmental and Experimental Botany*, 88, 24-32.

## NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/parmotrema-reticulatum/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/parmotrema-reticulatum/>