# Parmelia sulcata

## **COMMON NAME**

Shield lichen

#### **FAMILY**

Parmeliaceae

#### **AUTHORITY**

Parmelia sulcata Taylor

#### **FLORA CATEGORY**

Lichen - Native

#### **ENDEMIC TAXON**

No

#### **ENDEMIC GENUS**

Νo

#### **ENDEMIC FAMILY**

Νo

#### STRUCTURAL CLASS

Lichens - Foliose

#### **CURRENT CONSERVATION STATUS**

2018 | Not Threatened | Qualifiers: SO

#### **BRIEF DESCRIPTION**

Characterised by the saxicolous habit; the reticulate, laminal soralia (developing from pseudocyphellae along the lobe ridges); the richly squarrosely branched rhizines; and salazinic acid in the medulla.

### **DISTRIBUTION**

**South Island:** Nelson southwards to Otago (Blue Mountains). **Stewart Island. Auckland Islands**.

Widespread in both Hemispheres, including Marion and Prince Edward Islands in the subantarctic.

## **HABITAT**

On rock in subalpine to alpine grasslands, also in coastal habitats, s.l. to 2000 m.

## **DETAILED DESCRIPTION**

**Thallus** closely to loosely attached, orbicular to spreading 3-15 cm diam., saxicolous, or corticolous. **Lobes** sublinear-elongate, subdichotomously branched, rather narrow (to 10 mm wide), margins entire, sinuous. **Upper surface** pale greenish-grey to blackish-grey often with a distinctly bluish tinge, shining, not maculate, occasionally white-pruinose, wrinkled-faveolate, pseudocyphellae prominent, coarse, elongate and reticulate, soon becoming sorediate. **Soredia** derived from pseudocyphellae, in lines as a coarse reticulum, or becoming confluent. **Lower surface** black with little or no naked marginal zone, densely rhizinate. **Rhizines** black, simple to squarrosely branched. **Apothecia** and **pycnidia** not seen in New Zealand material.

**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

Parmelia sulcata is similar to P. saxatilis, and in New Zealand the two species occupy similar habitats with Notoparmelia signifera, but it is distinguished from these species by the presence of soredia associated with the pseudocyphellae reticulum. N. erumpens is separated from P. sulcata by the erumpent, subcoralloid soredia, which are not associated with pseudocyphellae or arranged in any reticulate pattern.





Common saxicolous lichen in pasture, Banks Peninsula Canterbury. Photographer: Marley Ford, Date taken: 20/02/2020, Licence: CC BY.



Common saxicolous lichen in pasture, Banks Peninsula Canterbury. Photographer: Marley Ford, Date taken: 20/02/2020, Licence: CC BY.

#### **SUBSTRATE**

Saxicolous, corticolous

## **ETYMOLOGY**

sulcata: From the Latin sulcus 'furrow', meaning grooved

#### **ATTRIBUTION**

Fact sheet prepared by Marley Ford (1 February 2021). Brief description, Distribution, Habitat, and Features 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/parmelia-sulcata/