

Xanthoparmelia sorediata

SYNONYMS

Chondropsis sorediata

FAMILY

Parmeliaceae

AUTHORITY

Xanthoparmelia sorediata (Elix & P.Child) O.Blanco, A.Crespo, Elix, D.Hawksw. & Lumbsch

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Foliose

CURRENT CONSERVATION STATUS

2018 | At Risk – Declining | Qualifiers: SO, Sp

BRIEF DESCRIPTION

Characterised by its vagant, unattached habit, with yellow-white terminal soredia on the upper surface and no rhizines on the lower surface.

DISTRIBUTION

South Island: Canterbury (Mackenzie Country), Otago (Central Otago in the catchments of the Clutha and Waitaki rivers).

Known also from Australia (Elix & Child 1987).

HABITAT

On bare, eroded soil in open grassland heavily grazed by sheep and rabbits where it is often associated with the lichens: *Cladia aggregata* agg., *Diploschistes muscorum* ssp. *bartlettii*, *Siphula coriacea*, *Xanthoparmelia concomitans*, *X. molliuscula*, *X. reptans*, *X. semiviridis* and *X. flavescens*, 640–700 m.

DETAILED DESCRIPTION

Thallus foliose, loose on soil, pale-yellow to pale yellow-green, becoming pale olive-green with age, forming rosettes 1–2 cm in diam., (when wet and expanded), rolling up into convex clumps or balls when dry, 0.5–1 cm diam.

Lobes linear-elongate, 1–2 mm wide, dichotomously branched, discrete, not imbricate, apices rounded, curling inwards when dry exposing the lower surface. **Upper surface** often shining, smooth, weakly maculate (×10 lens), sorediate, the apices (rarely the margins) becoming swollen and developing terminal, sublabriform soralia, the soredia farinose, yellow-white. **Medulla** white. **Lower surface** rarely shallowly canaliculate in part, pale-yellow to dull buff, minutely wrinkled, without rhizines. **Apothecia** very rare, sessile to subpedicellate, 0.5–2.0 mm diam., disc shallowly concave, reddish brown, thalline exciple smooth or becoming sorediate, concolorous with thallus.

Ascospores ellipsoidal, colourless, 5–6 × 2.5 µm.

Chemistry: Cortex K–; medulla K+ pale-brown, C–, Pd+ orange-red; containing usnic acid, fumarprotocetraric acid, succinprotocetraric acid and protocetraric acid (tr.).



Lower Manorburn Dam, Alexandra.
Photographer: Melissa Hutchison, Date taken:
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SIMILAR TAXA

Xanthoparmelia sorediata is distinguished from *X. semiviridis* by its deeper, duller colour and the presence of soralia. The two taxa are sympatric but of the two, *X. sorediata* is much more rare and scattered.

THREATS

Habitat loss and modification of the dryland habitats it occupies. Agricultural intensification (e.g. irrigation, fertilisation) and weed invasion.

SUBSTRATE

Vagrant (unattached, on the ground)

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (25 July 2021). Brief description, Distribution, Habitat, Features, Similar taxa and Life cycle sections copied from Galloway (2007).

REFERENCES AND FURTHER READING

Elix J.A. and Child P. 1987 [“1986”]: A new species of *Chondropsis* (lichenized Ascomycotina) from Australia and New Zealand. *Brunonia* 9: 113-115.

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/xanthoparmelia-sorediata/>