

Xanthomendoza novozelandica

COMMON NAME

New Zealand sunburnt lichen

SYNONYMS

Xanthoria novozelandica Hillmann, *Oxneria novozelandica* (Hillmann) S.Kondratyuk & Kärnefelt

FAMILY

Teloschistaceae

AUTHORITY

Xanthomendoza novozelandica (Hillmann) Søchting, Kärnefelt & S.Y.Kondr.

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 the corticolous habit; rather small, rounded to irregular thalli, 1–1.5(–3.5) cm diam., with rather closely attached lobes, 1–3 mm long and to 1 mm wide, distinctly rhizinate at their margins; rhizines white, short, 40–250 µm long, often projecting beyond margins, and also found projecting from the thalline exciple below the disc of older apothecia; apothecia 0.6–2.6(–3.6) mm diam.; ascospores (13–)15–16(–20) × 7–8(–9) µm; conidia 3.8–4.1 × 0.9–1 µm; paraphyses inflated at their tips and filled with oil cells.

DISTRIBUTION

North Island: Taranaki (Stratford). **South Island:** Marlborough, Canterbury (Oxford, Godley Valley, Lake Ohau), Otago (Matukituki Valley, Teviot Valley, Pomahaka River, Taieri River, Brighton), Southland (Waikaia, West Dome, Waituna Lagoon, Tiwai Point). Probably more widely distributed.



Corticolous on exotic broom, Dipton Southland.
Photographer: Marley Ford, Date taken:
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Taringatura Scenic Reserve, Southland.
Photographer: Melissa Hutchison, Date taken:
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HABITAT

A corticolous species growing mainly on twigs and small branches of both native (*Carmichaelia compacta*, *Hoheria angustifolia*, *Olearia odorata*, *O. paniculata*, *Sophora microphylla*) and introduced (*Acer pseudoplatanus*, *Crataegus monogyna*, *Cytisus scoparius*, *Fagus sylvatica*, *Malus domestica*, *Pinus pinaster*, *Salix fragilis*) trees and shrubs. It is generally a small but regular component of the prominent orange-yellow "Xanthorion" association developed on introduced roadside trees and scrub (mainly *Cytisus scoparius*) where it associates with *Teloschistes chrysophthalmus*, *T. velifer* and *X. parietina* and with the grey or grey-green species *Physcia adscendens*, *P. jackii*, *Ramalina celastri* and *R. glaucescens*. Other lichens associating with *X. novozelandica* include: *Candelaria concolor*, *Candelariella reflexa*, *Haematomma babingtonii*, *Hyperphyscia adglutinata*, *Lecanora carpinea*, *L. flavidomarginata*, *L. symmicta*, *Lecidella eleaochroma*, *Melanelia inactiva*, *Phaeophyscia orbicularis*, and *Punctelia subalbicans*. Its small size, and the fact that it appears to be readily overgrown or displaced by its larger, faster-growing associates, has led to its being very much under-collected. It is not at all a rare species as earlier recorded.

DETAILED DESCRIPTION

Thallus foliose, orbicular, loosely attached, 1-5 cm diam., corticolous. **Lobes** short, 1-3 mm long and to 1 mm wide, margins crenulate, imbricate. **Upper surface** yellow or yellowish-green or greyish-green, matt, epruinose. **Lower surface** white, rhizinate. **Rhizines** short, white, sub-marginal, of horizontal, white fibrils, projecting beyond margins. **Apothecia** numerous, covering most of thallus, 1-3 mm diam., pedicellate, disc plane to subconvex, yellow-orange, margins thin, entire, concolorous with thallus. **Ascospores** 11-13 × 6-8 µm. **Pycnidia** globose, 200 µm diam., singly in prominent orange warts on upper surface. **Conidia** cylindrical, 3 × 0.8 µm.

Chemistry: Cortex K+ purple; containing parietin, teloschistin, fallacinal, and parietinic acid.

SIMILAR TAXA

Xanthomendoza novozelandica is a rather constant species throughout its range in New Zealand and like species of *Xanthoria* (q.v.), it varies in colour depending on the light regime of the substratum, though generally it is yellow-grey or yellow-green. Similar to *X. parietina* but with a larger thallus (to 10 mm diam., lobes 0.5 mm wide) and with some horizontal and submarginal white rhizines.

SUBSTRATE

Corticolous

ATTRIBUTION

Fact sheet prepared by Marley Ford (19 January 2024). 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.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/xanthomendoza-novozelandica/>