

Notoparmelia signifera

SYNONYMS

Imbricaria saxatilis var. *signifera*, *Parmelia saxatilis* var. *signifera*

FAMILY

Parmeliaceae

AUTHORITY

Notoparmelia signifera (Nyl). A.Crespo, Ferencova & Divakar

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 thick, leathery thalli; the lack of soredia and isidia; and the presence of salazinic acid in the medulla. Although reasonably constant in morphology, specimens of *Notoparmelia signifera* show considerable variation in colour and texture, depending on the degree of exposure of the habitat. In damp, sheltered sites, lobes are thinner, larger and paler coloured, whereas in exposed habitats lobes are thicker, more crowded, lobular-incised, generally smaller, and much darker coloured.

DISTRIBUTION

North Island: Kaimanawa Ranges. **South Island:** Nelson to Southland, both E and W of the Main Divide. **Stewart Island:** (Mt Anglem to Port Pegasus). **Auckland Island. Campbell Island.**

Notoparmelia signifera is the most commonly encountered *Notoparmelia*/*Parmelia* in the mountains of New Zealand. Known also from SE Australia and Tasmania.

HABITAT

Alpine-subalpine, from s.l. (Port Pegasus) to 2,500 m, saxicolous or terricolous (particularly common on schist outcrops and tors in subalpine to high-alpine sites on Central Otago mountains), rarely overgrowing prostrate vegetation on exposed alpine soils, but never on tree bark.



Port Hills, Christchurch. Photographer: Melissa Hutchison, Date taken: 30/04/2022, Licence: CC BY-NC.



Longwood Range, Southland. Photographer: Melissa Hutchison, Date taken: 28/05/2022, Licence: CC BY-NC.

DETAILED DESCRIPTION

Thallus thick, coriaceous, orbicular to spreading, to 10 cm diam., closely to loosely attached, saxicolous or terricolous. **Lobes** narrow (5-10 mm wide), relatively short (to 25 mm long), often forming secondary, imbricate, clustered, ascending lobules centrally, margins entire to \pm phyllidiate or lacerate, incised at apices, sinuous, often black and shining. **Upper surface** smooth, often wrinkled-convolute at centre, leathery, brownish-grey or reddish-brown or blackened, olive greenish-brown to red-brown at margins and there conspicuously white-maculate, mottled, pseudocyphellae evident towards lobe margins, sigmoid or forming a cracked reticulum of white lines in older parts. **Lower surface** smooth, black, moderately rhizinate. **Rhizines** black, simple or branched. **Apothecia** rare, subpedicellate, to 8 mm diam., disc red-brown, matt, plane or concave, imperforate, margins entire at first, becoming fissured with age, thalline exciple strongly maculate-cracked, pseudocyphellate. **Ascospores** ellipsoid, 10-14 \times 7-8 μ m.

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

SIMILAR TAXA

The lack of soredia and isidia distinguish *Notoparmelia signifera* from *Parmelia saxatilis* and *P. sulcata*. It is distinguished from *Notoparmelia protosignifera* by the medullary chemistry (*N. protosignifera* has protocetraric and not salazinic acid); and from corticolous *Notoparmelia tenuirima* by the smaller ascospores, the paucity of pycnidia, the imperforate apothecial discs, the thicker thallus, smaller, crowded lobes with phyllidiate-lacerate margins, and a pattern of white maculae or pseudocyphellae at the margins, which do not expose medullary hyphae (Galloway & Elix 1983: 409). It is also exclusively saxicolous or terricolous.

SUBSTRATE

Saxicolous, terricolous, rarely overgrowing prostrate vegetation (never on bark)

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (1 May 2023). 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.
Galloway D.J.; Elix J.A. 1983: The lichen genera *Parmelia* Ach. and *Punctelia* Krog in Australasia. *New Zealand Journal of Botany* 21: 397-420.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/notoparmelia-signifera/>