# **Usnea inermis**

FAMILY Parmeliaceae

AUTHORITY Usnea inermis Motyka

FLORA CATEGORY Lichen – Native

ENDEMIC TAXON No

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Lichens - Fruticose

**CURRENT CONSERVATION STATUS** 2018 | Not Threatened | Qualifiers: SO

## **BRIEF DESCRIPTION**

Characterised by the corticolous habit; the tufted to somewhat elongate, yellow-green thallus that may sometimes have black banding or even be completely superficially blackened; irregularly to densely branched; terete to angular-compressed branches, 1–1.5 mm wide at base, with long secondary branchlets parallel to primary branches; soralia are sparse to frequent with isidiomorphs. Soralia become eroded-pulverulent when the isidiomorphs fall off or break down to soredia. Isidiomorphs can be black tipped. There are three chemotypes: psoromic acid, squamatic acid or nil acids. All of these will give a K negative spot test.

## DISTRIBUTION

**North Island**: Northland (Warawara Range, Kawerua, Bay of Islands, Aorangi Island, Hen & Chickens Island, Great Barrier Island, Little Barrier Island), Auckland (Auckland City), South Auckland (Mt Maungatawhiri Coromandel Peninsula, Great Mercury Island, Slipper Island, Whale Island, Rotorua, Hamilton), Wellington (Kapiti Island, Mokopuna Island). **South Island**: Marlborough (d'Urville Island), Canterbury (Riccarton Bush, Prices Valley, Mt Sinclair Banks Peninsula), Otago (Omarama, Shag Valley, Waikouaiti River, Flagstaff, Wairongoa, Waipori, Maungatua), Southland (the Wilderness, Borland Bog). **Stewert Island**: (Islet Cove, Port Pegasus). Known also from Australia.

## HABITAT

Coastal and lowland to subalpine on scrub. On trees and shrubs in coastal forest; frequent on introduced trees and shrubs and on decorticated wood (fenceposts, gates etc.).

## **DETAILED DESCRIPTION**

**Thallus** glossy, smooth, branching rather irregular, corticolous. **Branches** 1-1.5 mm wide at base, tapering towards apices, terete or irregularly subterete, to angular-compressed, slightly faveolate- impressed in parts, Branches are tapering and often forked at the apex, these may be blacktipped. Occasionally papillate. **Soralia** sparse to frequent, flat, becoming subconvex and, later eroded- pulverulent, rarely completely investing branches in spreading, convex soralia. **Apothecia** not seen.

**Chemistry**: There are three chemotypes, psoromic acid, squamatic acid or nil acids. All three give a K negative spot test result, however the psoromic acid chemotype gives a bright yellow result with P.





Windfall, Huia Auckland. Photographer: Marley Ford, Date taken: 31/07/2020, Licence: CC BY.



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#### SIMILAR TAXA

Subalpine collections from *Discaria* and *Melicytus alpinus* are often superficially blackened and strongly resemble species of sect. *Neuropogon*. Yellow/green forms of *U. inermis* can be confused with *Usnea torulosa*. The lack of norstictic acid can distinguish *U. inermis* from *U. acromelana*.

Could also be confused with *U. cornuta* and *U. dasaea*, but *U. inermis* can be distinguished from the other species chemically because it is never K+. *Usnea cornuta* and *U. dasaea* are both K+ but *U. dasaea* will slowly turn a deep dark red because of the galbinic acid. Also the axis is very narrow in *U. cornuta*, with a lax medulla.

#### SUBSTRATE

Corticolous, lignicolous.

#### ETYMOLOGY

inermis: Not spiny, unarmed

#### **ATTRIBUTION**

Fact sheet prepared by Marley Ford (2 May 2021). Brief description, Distribution, Habitat, Features, and Similar taxa sections copied from Galloway (1985, 2007), with suggestions from Dr Jennifer Bannister.

#### **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/usnea-inermis/