

# Peltigera membranacea

## SYNONYMS

Peltidea canina, Peltidea canina γ membranacea

## FAMILY

Peltigeraceae

## AUTHORITY

Peltigera membranacea (Ach.) Nyl.

## FLORA CATEGORY

Lichen – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Lichens - Foliose

## CURRENT CONSERVATION STATUS

2018 | At Risk – Naturally Uncommon | Qualifiers: DP, SO

## BRIEF DESCRIPTION

Characterised by the terricolous/corticolous habit; broad lobes with tomentose, downrolled margins and scattered tomentum on the upper surface; raised, anastomosing veins that are covered with an erect tomentum (×10 lens), the inter-vein interstices broadly polygonal, and discrete, long, slender, simple rhizines covered with erect tomentum (bottle-brush-like).

## DISTRIBUTION

**North Island:** Wellington (Ruapehu, Tiritea). **South Island:** Nelson (Matakitaki Valley), Marlborough (Blue Duck Scientific Reserve), Canterbury (Arthur's Pass, Banks Peninsula, Mt Cook), Otago (Deep Stream, Sandymount, Mt Cargill, Taieri Beach), Southland (Milford Sound, Argyle Burn, Invercargill). **Stewart Island:** (Ulva Island, Waituna Bay). It is still rather poorly collected and understood in New Zealand. Cosmopolitan. Known also from North America, W Europe (including Macaronesia, Great Britain and Scandinavia), Asia, and Tasmania (Australia).

## HABITAT

On damp soil, on rotting wood, stumps, among grasses and on damp rocks in rather open situations rather than in closed forest sites.



Terricolous in drain, Denniston Plateau, West Coast. Photographer: Marley Ford, Date taken: 04/06/2022, Licence: CC BY.



Terricolous in drain, Denniston Plateau, West Coast. Photographer: Marley Ford, Date taken: 04/06/2022, Licence: CC BY.

## DETAILED DESCRIPTION

**Thallus** spreading, large, to 20 cm diam. **Lobes** ± discrete to imbricate, 2-10 cm long and to 2 cm wide, margins entire, sinuous, often ascending. **Upper surface** greyish-yellow or yellowish or brownish-green, dull, thinly tomentose, especially at, or towards margins, wrinkled-plicate or uneven-corrugate, reflecting patterns of veining on lower surface. **Lower surface** whitish to brown, tomentose, with narrow, elevated veins. **Rhizines simple**, pale to black, rather sparse, to 10 mm long. **Apothecia** on extended, ascending lobules, 4-5 mm diam., rounded, often reflexed, disc reddish to brown-black, margins pale, crenulate, thin. Ascospores acicular, colourless or pale yellowish, 3-5-septate, 45-70 × 3-4 µm.

**Chemistry:** TLC-, all reactions negative.

## SIMILAR TAXA

It has a thinner thallus than *P. canina* and is also separated from this species by the above characters and the slightly longer spores.

## SUBSTRATE

Terricolous

Vitikainen (1994) opines that Southern Hemisphere collections named as *P. membranacea* “probably represent other species”; however, New Zealand collections agree well with material seen from Great Britain, Europe and Scandinavia. Colour morphs of *P. malacea*, *P. membranacea* and some other taxa are known (Holtan-Hartwig 1993; Goward et al. 1995). A recent study of British Columbia populations of *P. membranacea* investigates the relationship between thallus colour and genetic variability in the Nostoc photobionts (Miao et al. 1997).

## ATTRIBUTION

Fact sheet prepared by Marley Ford (3 September 2021). Brief description, Distribution, Habitat, Features and Extra information 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.
- Goward T.; Goffinet B. & Vitikainen O. 1995: Synopsis of the genus *Peltigera* (lichenized Ascomycetes) in British Columbia, with a key to the North American species. *Canadian Journal of Botany* 73: 91–111.
- Holtan-Hartwig J. 1993: The lichen genus *Peltigera*, exclusive of the *P. canina* group, in Norway. *Sommerfeltia* 15: 1–77
- Miao V.P.W.; Rabenau A. & Lee A. 1997: Cultural and molecular characterization of photobionts of *Peltigera membranacea*. *Lichenologist* 29: 571–586.
- Vitikainen O. 1994: Taxonomic revision of *Peltigera* (lichenized Ascomycotina) in Europe. *Acta Botanica Fennica* 152: 1–96.

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/peltigera-membranacea/>