

# Peltigera didactyla

## FAMILY

Peltigeraceae

## AUTHORITY

Peltigera didactyla (With.) J.R.Laundon

## 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 terricolous/muscicolous habit; the presence of laminal, orbicular soralia (frequently reacting C+ pink), and a ±tomentose upper surface on small, cochleate lobes that are also often attacked by white to orange or pinkish lichenicolous fungi. The juvenile, sorediate phase is eventually superseded by a fertile, non-sorediate phase.

## DISTRIBUTION

**North Island:** South Auckland (Kawhia, Napier–Taupo Road). **South Island:** Nelson (St Arnaud Range, Travers Range, Reefton), Canterbury (Lake Tekapo, Mt Sebastopol, Rangitata River mouth), Otago (Matukituki Valley, Pigeon Island Lake Wakatipu, Dunstan Mountains, Mt Bengier, Gem Lake, Lake Onslow, Deep Stream, Taieri Mouth), Southland (Argyle Burn, Oreti Plains, Doubtful Sound, Greenhills).

A widespread, cosmopolitan lichen known from North America, Great Britain, Scandinavia, Greenland, Svalbard, Europe, Asia, South America, Africa, Australia, South Georgia, South Orkney Islands, South Shetland Islands, and Antarctica.

## HABITAT

On damp, often bare soil or among mosses, or in subalpine turf, commonly at roadside verges among moss and pebbles at edge of bitumen, or at edges of gravel paths or in weedy, mossy banks in gardens, s.l. to 1500 m. It is normally a rather ephemeral, short-lived, fast-growing, pioneer species in disturbed habitats (e.g. clay banks, washouts and slips, alongside roads), commonly attacked by lichenicolous fungi such as the orange-pink *Illsporium carneum*, and by *Corticifraga fuckelii* and *C. peltigerae*.



Terricolous, Redhill South Auckland.  
Photographer: Marley Ford, Date taken:  
23/11/2021, Licence: CC BY-NC.



Local in subalpine moss fields, Cragieburn  
Canterbury. Photographer: Marley Ford, Date  
taken: 27/11/2023, Licence: CC BY.

## DETAILED DESCRIPTION

**Thallus** orbicular, small, often cochleate. 0.5–2(–3) cm diam. **Lobes** 1–2 (rarely 3–5) cm long, 0.5–1(–2) cm wide, plane to ascending, 100–200 µm thick. **Margins** entire, often incurled. **Upper surface** coriaceous, dark slate blue-black, suffused dark red-brown when wet, brownish grey or pale greyish green, suffused red-brown when dry, tomentose; tomentum most apparent in fertile, non-sorediate lobes, thinly arachnoid, continuous or discontinuous in scattered, rather tattered patches at margins and centrally; sorediate. **Soralia** marginal and laminal in rounded to oblong, erose spots or patches, disappearing in older, usually fertile specimens; soredia coarse, granular, grey-blue to red-brown. **Lower surface** pale whitish or brownish pink. **Veins** distinct, raised, 0.5–1.0 mm wide, whitish to pale-buff, darkening centrally, interstitial spaces conspicuous, white, fibrous. **Rhizines** simple at first, soon becoming fasciculate, ±penicillate at maturity, to 2.5 mm long, rather sparse at margins, common at centre. **Apothecia** on ascending, revolute lobes, 2–4 mm diam., rounded to irregular-elongate, disc red-brown to brown-black, matt, epruinose, margins pale-buff, crenulate–corrugate. **Ascospores** elongate–fusiform, 5–7-septate, 55–70 × 3–4 µm. **Chemistry:** Medulla TLC–, all reactions negative; soredia C± pink-red (fading rapidly) containing gyrophoric acid. Specimens from high-alpine habitats (e.g. Dunstan Mountains) have very thick, ±upright lobes and develop a thick, white, fibrous tomentum at the margins (often ±loosely attached and sloughing off), and copious white, penicillate rhizines below; the laminal soralia are often poorly developed. A particularly robust form from Doubtful Sound, Fiordland [Murray 3946 and identified by James Murray as *P. canica* var. *canica*] has broad, ±rounded lobes (1–2 cm broad and 3–5 cm long) that are uniformly tomentose and with ±scabrid–areolate patches at margins and occasionally centrally. It has scattered submarginal (rarely central) soralia, containing coarse, granular, blue-grey soredia (C+ pink), and characteristic flocculent–entangled, short rhizines associated with narrow, raised veins on the lower surface, the rhizines often projecting as a fringe at lobe margins. The Fiordland and high-alpine specimens, although much larger than the typical, small, cochleate forms from disturbed habitats in rural and urban areas, are here maintained in *P. didactyla* pending further study of the variation of this species in New Zealand.

## SIMILAR TAXA

It is distinguished from *P. ulcerata* by its thinner, ±tomentose lobes.

## SUBSTRATE

Terricolous, muscicolous

## ATTRIBUTION

Fact sheet prepared by Marley Ford (29 August 2021). Brief description, Distribution, Habitat, and sections copied and Features adapted from Galloway (2007).

## REFERENCES AND FURTHER READING

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/peltigera-didactyla/>