# Cetraria aculeata

# **COMMON NAME**

spiny heath lichen

#### **SYNONYMS**

Lichen aculeatus Schreb., Coelocaulon aculeatum (Schreb.) Link

#### **FAMILY**

Parmeliaceae

# **AUTHORITY**

Cetraria aculeata (Schreb.) Fr.

#### **FLORA CATEGORY**

Lichen - Native

# **ENDEMIC TAXON**

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#### **ENDEMIC GENUS**

No

#### **ENDEMIC FAMILY**

Nο

#### STRUCTURAL CLASS

Lichens - Foliose

## **CURRENT CONSERVATION STATUS**

2018 | Not Threatened | Qualifiers: SO

## **DISTRIBUTION**

**South Island:** Nelson (Mt Arthur), Canterbury (Mt Peel, Blue Mountain Four Peaks Range, Kirkliston Range), Otago (Strachan Creek Burke Valley, Duncan's Knob, East Matukituki Valley, Humboldt Mountains, Pisa Range, Dunstan Mountains, Old Man Range, Garvie Mountains, Umbrella Mountains). **Stewart Island:** (Mt Anglem).

Not recorded from the North Island.

Widely distributed in alpine and polar regions of the Northern Hemisphere, at high elevations in South and East Africa, in South America from Peru to Tierra del Fuego, the Falkland Islands, South Orkney and South Shetland Island and the Palmer Peninsula, Antarctica, and from alpine areas in New South Wales, Victoria and Tasmania.





Terricolous, Arthur's Pass Canterbury. Photographer: Marley Ford, Date taken: 03/06/2022, Licence: CC BY.



Terricolous, Arthur's Pass Canterbury. Photographer: Marley Ford, Date taken: 03/06/2022, Licence: CC BY.

## **HABITAT**

Exposed alpine grassland, cushion vegetation, soil stripes and hummocks and fellfield, on the ground, on mossy rocks or straggling amongst low vegetation, never on bare rock.

# **DETAILED DESCRIPTION**

**Thallus** fruticose, shrubby, erect, forming clumps 3-10 cm tall, loosely attached to the substrate and often dying below, **pseudopodetia** solid, brittle when dry, terricolous or muscicolous. **Surface** glossy, greyish-brown to brown or dark reddish-brown or blackened. **Branches** 1-2 mm thick, terete or partly deflated-angular, repeatedly branched, margins with small, thorny spines. **Apothecia** rare, terminal, concolorous with thallus, with subulate cilia on the thalline margin. **Ascospores** ellipsoid, minute,  $5-9 \times 3-4 \mu m$ 

**Chemistry:** Medulla and pseudocyphellae K-, KC-, C-, Pd-, UV-; containing lichesterinic and protolichesterinic acids.

#### **SIMILAR TAXA**

Cetraria aculeata differs from *C. muricata* in the size and surface structure of the lobes and the structure of the pseudocyphellae. *C. aculeata* has large lobes 2–4(–10) cm tall, while the lobes in *C. muricata* are up to 3 cm tall, and the lobes in *C. aculeata* are up to 1 mm wide, while those of *C. muricata* reach only 0.5 mm diam. Lobe segments in *C. aculeata* are terete, angular or slightly flattened, while lobe segments in *C. muricata* are terete. Lobe surfaces in *C. aculeata* can be distinctly faveolate with longitudinal furrows, whereas in *C. muricata* the lobe surface is smooth. Pseudocyphellae in *C. aculeata* are distinct, up to 1 mm long and depressed, while those in *C. muricata* are smaller, up to 0.3 mm long and not distinctly depressed. *C. aculeata* is distinguished from *C. islandica* ssp. antarctica by its narrower, richly branched and entangled, ±terete lobes. It may be confused at times with some ecotypes of *Cladia* aggregata, but is distinguished from this species by its white, loosely packed medulla (×10 lens), which contrasts with the completely hollow pseudopodetia of *Cladia* aggregata.

# **SUBSTRATE**

Terricolous, muscicolous

## **ETYMOLOGY**

aculeata: From the Latin aculeus 'stinger', aculeatus means 'barbed', 'stinging' or 'prickly'

#### **ATTRIBUTION**

Fact sheet prepared by Marley Ford (4 February 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/cetraria-aculeata/