# Pachycladon cheesemanii

# **COMMON NAME**

dryland cress

## **SYNONYMS**

Sisymbrium novae-zelandiae Hook.f., Ischnocarpus novae-zelandiae (Hook.f.) O.E.Schulz

# **FAMILY**

Brassicaceae

#### **AUTHORITY**

Pachycladon cheesemanii Heenan et A. Mitch.

## **FLORA CATEGORY**

Vascular - Native

#### **ENDEMIC TAXON**

Yes

## **ENDEMIC GENUS**

Νo

## **ENDEMIC FAMILY**

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## **NVS CODE**

**PACCHE** 

## **CHROMOSOME NUMBER**

2n = 20

## **CURRENT CONSERVATION STATUS**

2017 | Threatened - Nationally Endangered | Qualifiers: DP, RR, Sp

## **PREVIOUS CONSERVATION STATUSES**

2012 | Threatened – Nationally Vulnerable | Qualifiers: Sp

2009 | Threatened – Nationally Vulnerable | Qualifiers: Sp

2004 | Gradual Decline

## **DISTRIBUTION**

Endemic. New Zealand: South Island (east of the main divide from Marlborough south to the northern portion of Southland).

## **HABITAT**

Lowland to subalpine tussock grassland, grey scrub, boulderfalls, talus, stable scree, rock overhangs and cliff faces. Now virtually confined to inaccessible habitats such as cliff faces, rock overhangs and amongst dense grey scrub.





Pachycladon cheesemanii, Hector Mountains. Photographer: John Barkla, Licence: CC BY.



Pachycladon cheesemanii, Old Woman Range. Photographer: John Barkla, Licence: CC BY.

#### **DETAILED DESCRIPTION**

Robust, green, perennial herb, up to 500 mm tall. **Basal leaves** 15–80 mm long, simple, initially sparsely covered with branched hairs, becoming glabrescent with age; early basal leaves elliptic, entire or with a few blunt serrations, later leaves pinnatifid to pinnatisect, lobed 2–4 times in opposite to subopposite pairs; lamina,  $10-60 \times 8-30$  mm; petioles 5–20 mm long. **Stem leaves** 1–4, lower ones similar to basal leaves, upper up to  $10 \times 3$  mm, linear, minutely serrated. **Inflorescences** 150–500 mm long, up to 2.75 mm diameter at base, racemose; peduncle, pedicels, and siliques without glaucous bloom. **Pedicels** 10–15 mm long, glabrous. **Sepals**  $3.3-3.5 \times 1.4-1.5$  mm, green with pale margins, oblong to elliptic, apex subacute. **Petals**  $5.0-6.7 \times 1.5-2.2$  mm, white, obovate to obovate–spathulate, apex obtuse. **Filaments** 4–6, 3.3-4.2 mm long; anthers yellow. **Ovary** dorsiventrally compressed, green, glabrous; style indistinct, virtually absent; ovules 90-165. **Siliques** up to 60 mm long, green, without glaucous bloom, compressed, usually curved, glabrous. **Seeds** 0.8-1.1 mm long, pale brown, short–oblong.

#### **SIMILAR TAXA**

Most likely to be confused with the very similar <u>Pachycladon exile</u> (Heenan) Heenan et A.Mitch, which is a much smaller plant than *P. cheesemanii* with a circular ovary. *P. exile* is now only known from a single site in the Waitaki Valley (see fact sheet for that species for further information).

### **FLOWERING**

September-February

## **FLOWER COLOURS**

White

## **FRUITING**

October-March

## **PROPAGATION TECHNIQUE**

Difficult and should not be removed from the wild

#### **THREATS**

Formerly widespread along the eastern side of the South Island from the Wairau River, Marlborough to northern Southland. Although it is still found within this range but populations usually small and widely scattered. The exact cause of its decline is not clear though it is palatable and browsing animals and introduced pests of brassiaceous crops may be partially responsible for its loss from some areas. Another probable factor in its decline has been the spread of naturalised plants into the open tussock grassland, stablised scree, talus and boulderfield habitats it once favoured. Many of the extant populations now occur in dark rock overhangs, where competition from the normally higher-light demanding weed species is less.

### **ETYMOLOGY**

**cheesemanii**: Named after Thomas Frederick Cheeseman (1846 - 15 October 1923) who was a New Zealand botanist and naturalist who, in 1906, produced The Manual of the New Zealand Flora.

## WHERE TO BUY

Not commercially available

#### **ATTRIBUTION**

Fact Sheet prepared for NZPCN by P.J. de Lange 1 July 2007. Description by P.B. Heenan and published in de Lange et al. (2010)

# REFERENCES AND FURTHER READING

de Lange PJ, Heenan PB, Norton DA, Rolfe JR, Sawyer JWD. 2010. Threatened Plants of New Zealand. Canterbury University Press, Christchurch. 471 p.

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Pachycladon cheesemanii Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

https://www.nzpcn.org.nz/flora/species/pachycladon-cheesemanii/ (Date website was queried)

#### **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/pachycladon-cheesemanii/