# Pachycladon exile

## **SYNONYMS**

Ischnocarpus exilis Heenan, Pachycladon exilis (Heenan) Heenan et A.D.Mitch. orth.var.

#### **FAMILY**

Brassicaceae

#### **AUTHORITY**

Pachycladon exile (Heenan) Heenan et A. Mitch.

## **FLORA CATEGORY**

Vascular - Native

### **ENDEMIC TAXON**

Yes

### **ENDEMIC GENUS**

Nο

#### **ENDEMIC FAMILY**

No

### STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

### **CHROMOSOME NUMBER**

2n = 20

## **CURRENT CONSERVATION STATUS**

2017 | Threatened - Nationally Critical | Qualifiers: CD, OL

### **PREVIOUS CONSERVATION STATUSES**

2012 | Threatened - Nationally Critical | Qualifiers: CD, OL

2009 | Threatened - Nationally Critical | Qualifiers: CD, OL

2004 | Threatened - Nationally Critical

#### **DISTRIBUTION**

Endemic. New Zealand: South Island (South Canterbury and North Otago. Formerly present in a number of sites along the Waitaki River and at Cape Wanbrow. Now apparently confined to a single site near Awahokomo Creek).

#### **HABITAT**

A species apparently favouring dry, exposed limestone rock and associated rendzina soils. It seems to require open ground to thrive and is intolerant of much competition with other plants.





Pachycladon exile basal leaves, Awahokomo Bluff, upper Waitaki. Photographer: Nick Head, Licence: CC BY-NC.



Adult Pachycladon exile, Awahokomo Bluffs, upper Waitaki. Photographer: Nick Head, Licence: CC BY-NC.

#### **DETAILED DESCRIPTION**

Slender, grey-green, thread-like perennial herb, up to 100 mm tall. **Basal leaves** 7–20 mm long, simple, initially densely invested with stellate hairs, becoming glabrescent with age; early basal leaves elliptic, entire or with a few blunt serrations, later leaves pinnatified to pinnatisect, lobed 2–4 times in opposite to subopposite pairs; lamina, 4–9  $\times$  1.5–5 mm. **Stem leaves** 1–4, lower ones similar to basal leaves, upper 3  $\times$  0.5 mm, linear, minutely serrated. **Inflorescences** racemose, 40–100 mm long, glaucescent, 3–10-flowered. **Pedicels** 8–12  $\times$  0.4–0.5 mm, glabrous. **Sepals** 1.8–2.4  $\times$  1–1.1 mm, green with pale margins, ascending, oblong to elliptic, subacute. **Petals** 3–5  $\times$  0.3–1 mm, white, obovate to obovate-spathulate, subacute. **Stamens** 4–6, anthers green to green-brown. **Style** 0.1–0.2 mm, green. **Siliques** 15–25  $\times$  0.7–1 mm, green to brown-green, terete, usually curved, glabrous. **Seeds** 0.6–0.9 mm, pale brown, short-oblong.

#### SIMILAR TAXA

Similar to <u>Pachycladon cheesemanii</u> Heenan et A.D.Mitch. but smaller in all parts and with an ovary circular (terete) in cross-section.

#### **FLOWERING**

October-November

#### **FLOWER COLOURS**

Green, White

#### **FRUITING**

October-December

### **PROPAGATION TECHNIQUE**

Easily grown from fresh seed. A short-lived, fairly non-descript plant which does best in a sunny exposed situation, growing within a fertile, free draining, soil. This is more of a plant for a specialist as it is not particularly attractive, and very prone to fungal diseases and insect damage. The foliage is edible.

### **THREATS**

Threatened by the very small number (< 50 individuals) of plants known from the wild. These plants are confined to a single limestone outcrop where they are at risk from the spread of weeds such as <u>Festuca rubra</u>, hawkweed (*Pilosella* spp.) and cocksfoot (<u>Dactylis glomerata</u>), and erosion caused by excessive rabbit browsing pressure on the associated rock outcrop vegetation.

#### **ETYMOLOGY**

exile: From the Latin exile (thin, slender, feeble, meager)

#### WHERE TO BUY

Not commericially 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) - see also Molloy et al. (1999)

### 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.

Molloy BPJ, Edgar E, Heenan PB, de Lange PJ. 1999. New species of *Poa* (Gramineae) and *Ischnocarpus* (Brassicaceae) from limestone, North Otago, South Island, New Zealand. *New Zealand Journal of Botany 37(1)*: 41–50. https://doi.org/10.1080/0028825X.1999.9512610.

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Pachycladon exile Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <a href="https://www.nzpcn.org.nz/flora/species/pachycladon-exile/">https://www.nzpcn.org.nz/flora/species/pachycladon-exile/</a> (Date website was queried)

## **MORE INFORMATION**

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