# Myosotis oreophila

**SYNONYMS** None (first described in 1896).

FAMILY Boraginaceae

AUTHORITY Myosotis oreophila Petrie

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Herbs - Dicotyledons other than Composites

CURRENT CONSERVATION STATUS 2017 | Threatened – Nationally Critical | Qualifiers: EF, St, Sp

# **PREVIOUS CONSERVATION STATUSES**

2012 | Threatened – Nationally Critical | Qualifiers: EF, Sp, St 2009 | At Risk – Naturally Uncommon | Qualifiers: EF 2004 | Range Restricted

**DISTRIBUTION** Endemic. South Island: Central Otago.

## HABITAT

According to research by Rebecca Stanley Myosotis oreophila is now known from only one site where it is confined to c. 1.5 ha of fellfield (stony pavement of large and splintered blocks of schist) at 1590 m a.s.l. Here it grows with <u>Dracophyllum muscoides</u>, <u>Raoulia hectori</u> and a diverse array of lichens.





Myosotis oreophila. Photographer: Bec Stanley, Licence: CC BY-SA.



Myosotis oreophila. Photographer: Bec Stanley, Licence: CC BY-SA.

#### **DETAILED DESCRIPTION**

Loosely tufted perennial herb. Rosette-leaves up to  $40 \times 10$  mm, linear-spathulate, lamina tapering gradually into broad petiole of about the same length, tip obtuse, apiculate; hairs long, rather stiff, closely appressed, on upper surface almost touching mostly straight, some retrorse, on undersurface sparse, mostly all retrorse. Lateral branches few, ascending to erect, 70 mm or more long, leafy to cyme, internodes less than leaves. Stem-leaves c.  $15 \times 2$  mm, linear-oblong, tip subacute; hairs on upper surface mostly long, stiff, appressed, on undersurface sparser and about half of them retrorse. Cymes simple, ebracteate, compact and c.20 mm long in fruit; internodes and pedicels very short. Calyx 6-9 mm long, lobes cut to less than half calyx length, narrow-oblong and subacute, hairs on lobes long and slightly flexuous, long ones towards base slightly hooked with underlayer of shorter appressed retrorse hairs. Corolla one-half longer than the calyx, funnelform, white, the lobes 5, spreading, and obtusely rounded. Stamens 5, very slightly exserted; filaments about equal in length to anthers; anthers large, shortly exserted, springing from the base of the corolla lobes; scales obscure. Style twice as long as calyx, slender. Nutlet 1.8-2.4 × 1.0-1.2 mm, ovate to ovate-elliptic or oblong-elliptic, black.

#### **SIMILAR TAXA**

Recognised by the stamen filaments which are about the same length as the anthers, rosette-leaves which are distnctly broader than the stem leaves, by the stiff, smoothly appressed hairs - and especially by the presence of retrorse hairs on the rosette-leaves (especially the abaxial surface). In the original description of the species the naming author Petrie noted that the flowers of M. oreophila were purple (see Allan 1961). However, all subsequent gatherings of this species have white flowers - and it seems likely that flower colour is an artifact of drying, it having been observed that some white-flowered myosoti (such as for example M. colensoi) on drying, over time change their flower colour to pale blue. This phenomena is also present in Wahlenbergia, and was it seems the basis for the white-flowered Geum divergens being described as having yellow flowers (New Zealand Geum flowers fade to yellow in herbarium conditions - often within months of drying). Whether this observation accounts for Petrie's account of a purple-flowered Myosotis oreophila remains to be tested. Irrespective to date no purple-flowered M. oreophila has yet been seen in the wild.

FLOWERING

December - January

FLOWER COLOURS White

**FRUITING** January - April

## **PROPAGATION TECHNIQUE**

Unknown. Likely to be difficult. Probably best grown in an alpine house or rock garden

## THREATS

This species faces no specific threats though the population is very small (covering an area of 1.5 ha) and in terms of density and size it fluctuates widely from year to year indicating that it is (like many *Myosotis taxa*) an opportunistic species responding quickly to favorable temperatures and conditions (R. J. Stanley pers. comm.). Not thought to be palatable to hares which are present within its habitat. Hawkweed (*Pilosella officinarum*) has been found in the general area but there is no evidence that it competes with *Myosotis oreophila*. *M. oreophila*, in common with many alpine myosoti has better seed set if plants are outcrossed, though it can still set good quality seed through selfing. It was originally described from plants gathered on Mt Ida where it has never been seen since.

## **ETYMOLOGY**

myosotis: Mouse-eared oreophila: Mountain lover

WHERE TO BUY Not commercially available

**ATTRIBUTION** Fact Sheet prepared for NZPCN by P.J. de Lange. Description based on Allan (1961).

## **REFERENCES AND FURTHER READING**

Allan, H.H. 1961: Flora of New Zealand. Vol. I. Goverment Printer, Wellington.

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Myosotis oreophila Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <u>https://www.nzpcn.org.nz/flora/species/myosotis-oreophila/</u> (Date website was queried)

**MORE INFORMATION** https://www.nzpcn.org.nz/flora/species/myosotis-oreophila/