# Veronica armstrongii

**COMMON NAME** Armstrong's whipcord

#### **SYNONYMS**

Leonohebe armstrongii (J.B.Armstr.) Heads, Veronica armstrongii Kirk nom. superf., nom. illeg., Hebe armstrongii (J.B.Armstr.) Cockayne et Allan

#### FAMILY

Plantaginaceae

**AUTHORITY** Veronica armstrongii J.B.Armstr.

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Trees & Shrubs - Dicotyledons

NVS CODE HEBARM

CHROMOSOME NUMBER 2n = 84

**CURRENT CONSERVATION STATUS** 2017 | Threatened – Nationally Endangered | Qualifiers: DP, RR, RF

## **PREVIOUS CONSERVATION STATUSES**

2012 | Threatened – Nationally Endangered | Qualifiers: RF, RR 2009 | Threatened – Nationally Endangered | Qualifiers: RF 2004 | Threatened – Nationally Endangered

#### **BRIEF DESCRIPTION**

Spreading low shrub bearing narrow short scaly twigs inhabiting the mountain valleys of western Canterbury. Twigs 1.5-2mm wide. Leaves scale-like, pointed, clasping stem, with a hairy margin (lens needed). Flowers white, in groups of 6-8 at tips of twigs.

#### **DISTRIBUTION**

Endemic. South Island, Canterbury. Initially recorded from the headwaters of the Rangitata River where it now seems to be extinct. Populations are now known from near Castle Hill and in the Pukio Valley. Past records from North West Nelson are based *H. ochracea* M.B.Ashwin, those from the Clarence, *H. hectorii* (Hook.f.) Cockayne et Allan, and those from Kurow seem to be the result of accidental inclusion of cultivated specimens with a wild collection of *H. annulata* (Petrie) Cockayne et Allan.





Enys Scientific Reserve, in netted enclosure, December 1994. Photographer: Gillian M. Crowcroft, Licence: All rights reserved.



Enys Scientific Reserve, Castle Hills. Photographer: Melissa Hutchison, Date taken: 10/11/2016, Licence: CC BY-NC.

# HABITAT

Apparently confined to strongly leached terraces and moraines. Often growing in association with bog pine (*Halocarpus bidwillii*) dominated vegetation.

# **DETAILED DESCRIPTION**

Bushy whipcord hebe up to  $2.5 \times 1.0$  m but usually less. Branches erect or ascending, internodes (0.7-)0.9-1.6 mm, branchlets including leaves 1.5-2(-3) mm wide, leaf bases hairy, fused together, nodal joint distinct or obscure, usually exposed. Leaves persistent on old branchlets, but eventually falling to leave distinctive rings up the stems. Leaves fused, appressed (when fresh) spreading when drying. Leaf not thickened near apex, apex obtuse, apiculate or subapiculate, margin ciliate, lower surface yellowish-green, veins not evident. Inflorescences terminal, unbranched, with (2-)8(-10) flowers. Flowers sessile, calyx 1.5-2 mm, 3-lobed, lobes ovate or oblong, obtuse or emarginate. Corolla tube hairy inside, 1-1.7 x 1.3-1.6 mm, equal to or shorter than calyx, lobes ovate or elliptic to broadly oblong, obtuse, suberect to patent, longer than corolla tube, white or mauve, if mauve fading to white with age. Stamen filaments 2-3 mm, anthers yellow or tinged pink 1.4-1.6 mm. Ovary globose, 0.8-1 mm. Capsules obtuse 2.3 x 1.6 mm.

# SIMILAR TAXA

Closely allied to *Veronica annulata* and *V. salicornioides*, and has been confused with *V. ochracea*. It occurs in the wild with none of these species. It is most likely to be confused with *V. annulata* from which it differs by the more slender branchlets, slightly mucronate (leaves with a fine, sharp leaf extension), and by the foliage being less tightly overlapping and not so appressed to the stem. Other key differences between Veronica armstrongii and *V. annulata* are that *V. annulata* is diploid (2n = 42) and *V. armstrongii* tetraploid (2n = 84) and both species are ecologically separated (see also *V. annulata*). Can also be confused with bog pine (*Halocarpus bidwillii*) with which it often grows. Presence of flowers or fruit will give the hebe away, but when they are not present the following features can aid in correct identification. *Veronica armstrongii* can be distinguished from bog pine by the leaves not smelling when crushed (bog pine contains resins that smell when the leaves are crushed) and by the presence of rings along older branches (bog pine stems have no distinct rings). Bog pine stems are held erect, while those of *V. armstrongii* are angled, almost whorled, to form a distinct architecture.

**FLOWERING** October - January

FLOWER COLOURS Violet/Purple, White

FRUITING December to November

## **PROPAGATION TECHNIQUE**

Easily grown from fresh seed and semi hardwood cuttings. Dislikes humidity. It has been observed that cultivated plants, particularly those grown in the North Island rarely flower. It would seem that a cold winter and very hot, dry summer is the stimulus needed to ensure good flowering.

## THREATS

Seriously threatened through loss of habitat. This species usually grows amongst bog pine (*Halocarpus bidwillii*) on free-draining leached teraces, a Critically Endangered ecosystem type (Holdaway *et al.* 2012) that is colloquially known as "Wilderness". Of the two populations known, one is on Public Conservation Land, where it is actively managed, and the other is on Crown Pastoral Lease where there is ample evidence of recruitment occurring. A third population from the Rangitata catchment is considered extinct.

## **ETYMOLOGY**

**veronica**: Named after Saint Veronica, who gave Jesus her veil to wipe his brow as he carried the cross through Jerusalem, perhaps because the common name of this plant is 'speedwell'. The name Veronica is often believed to derive from the Latin vera 'truth' and iconica 'image', but it is actually derived from the Macedonian name Berenice which means 'bearer of victory'.

**armstrongii**: Named either after Joseph Francis Armstrong (1820-1902) or his son John Beattie Armstrong (1850-1926).

## WHERE TO BUY

Occasionally sold in garden centres. This species was quite commonly cultivated in the 1970s but since then it has been virtually replaced by *Veronica* (*Hebe*) ochracea, which is often sold as *Hebe armstrongii* or *H. armstrongii* 'James Stirling'. Some garden centres have now correctly relabelled their stock of that cultivar as *H. ochracea* 'James Stirling'. In the North Island *Veronica armstrongii* will not flower unless it has experienced a very cold winter.

# **NOTES ON ETYMOLOGY**

Named after Joseph Francis Armstrong, who collected the type specimen.

# ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (1 October 2006). Habitat and threat information updated by J.L. Gosden (6 June 2022). Description based on Bayly & Kellow (2006).

## **REFERENCES AND FURTHER READING**

Bayly, M.J.; Kellow, A.V. 2006: Hebes, identification, classification and biology. Wellington, Te Papa Press. Holdaway, R.J.; Wiser, S.K. et al. 2012: Status assessment of New Zealand's naturally uncommon ecosystems. *Conservation Biology 26(4)*: 619-629.

Johnson, P.N.; Molloy, B.P.J. 1988: Nigger (now renamed as Pukio) Stream, Esk Valley. Botanical report on wetlands and bog pine scrublands. DSIR Report.

Debra W, Gibbons B, Pieter P and D Kelly (2023). No loss of genetic diversity evident in severely bottlenecked Veronica armstrongii population. Trilepidea - Newsletter of the New Zealand Plant Conservation Network. <u>Issue 223</u> <u>September 2023</u>).

# NZPCN FACT SHEET CITATION

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

**MORE INFORMATION** https://www.nzpcn.org.nz/flora/species/veronica-armstrongii/