

# **Veronica treadwellii**

## **COMMON NAME**

hebe

## **SYNONYMS**

*Hebe brockiei* G.Simpson et J.S.Thomson, *Hebe treadwellii* Cockayne et Allan

## **FAMILY**

Plantaginaceae

## **AUTHORITY**

*Veronica treadwellii* (Cockayne & Allan) Garn.-Jones

## **FLORA CATEGORY**

Vascular – Native

## **ENDEMIC TAXON**

Yes

## **ENDEMIC GENUS**

No

## **ENDEMIC FAMILY**

No

## **STRUCTURAL CLASS**

Trees & Shrubs - Dicotyledons

## **NVS CODE**

HEBTRE

## **CHROMOSOME NUMBER**

$2n = 40$

## **CURRENT CONSERVATION STATUS**

2017 | Not Threatened

## **PREVIOUS CONSERVATION STATUSES**

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## **BRIEF DESCRIPTION**

Low growing bushy shrub to 30cm tall bearing pairs of oval dished leaves inhabiting wetter mountains of central South island. Leaves 13–29mm long by 5.5–12mm wide. Leaf bud without gap at base. Flowers white, in spike to 3cm long towards tip of twigs.

## **DISTRIBUTION**

Mountains of Nelson on Canterbury and Westland, on or west of the Main Divide, from Bald Knob Ridge to the Selbourne Range.

## **HABITAT**

Grows in subalpine shrubland and penalpine grassland.



In cultivation. Photographer: Jeremy R. Rolfe, Date taken: 03/11/2003, Licence: CC BY.



Hebe treadwellii. Photographer: John Barkla, Licence: CC BY.

## DETAILED DESCRIPTION

Spreading low shrub to 0.3 m tall. Branches decumbent or ascending, old stems dark brown or red-brown; branchlets green or red-brown, pubescent to puberulent or glabrous, hairs bifarious; internodes 1.5-10 (-11.5) mm; leaf decurrencies evident (sometimes weakly). Leaf bud distinct; sinus absent. Leaves decussate to somewhat subdistichous, erecto-patent; lamina elliptic to oblanceolate or obovate, subcoriaceous to fleshy, concave, (10.7-) 13-29 (-31.6) x (4.2-) 5.5-12 (-14.6) mm; apex subacute to obtuse; 2 lateral secondary veins sometimes evident at base of fresh leaves; midrib slightly depressed to grooved above; margin usually cartilaginous, glabrous; upper surface light to dark green, glossy, with many stomata (but these not always readily visible), glabrous or hairy along midrib; lower surface green or light green, dull or glossy. Inflorescences with (5-) 8-34 flowers, lateral, unbranched, 1.5-3.1 cm, about equal to or slightly longer than subtending leaves; peduncle 0.5-1.4 cm; rachis (0.7-) 0.9-2.2 cm. Bracts alternate (sometimes with lowermost pair more or less opposite), linear or lanceolate or ovate or oblong or deltoid, obtuse to acute. Flowers, hermaphrodite or female (on different plants). Pedicels 0-2.5 mm. Calyx 2.1-3.3 mm; lobes, oblong to lanceolate or deltoid, acute to subacute. Corolla tube glabrous; tube of hermaphrodite flower 1.9-3.5 x 1.3-2 mm, cylindric or funnelform and sometimes contracted at base, equalling or longer than calyx; tube of female flower 1.3-1.8 x 1.5-1.7 mm, contracted at base, shorter than or equalling calyx; lobes white at anthesis, ovate (anterior sometimes narrowly) or elliptic or oblong-elliptic, obtuse (but sometimes appearing subacute because of margin in-rolling), suberect to patent, longer than or equalling corolla tube. Stamen filaments 1.5-4.5 mm; anthers pink (sometimes pale) or cream; sterile anthers of female flowers yellow, 0.9-1.2 mm. Ovary conical to ovoid; ovules approximately 12-17 per locule, in 1-2 layers; style 3.5-10.5 mm; stigma larger in female flowers. Capsules acute or obtuse, (2.5-) 2.9-5 x 1.6-3 mm, loculicidal split extending  $\frac{1}{4}$ - $\frac{1}{2}$ -way to base. Seeds flattened, ellipsoid to discoid, not winged to only weakly winged, straw-yellow or pale brown, 0.9-1.5 x 0.8-1.1(-1.3) mm, micropylar rim 0.3-0.6 mm.

## SIMILAR TAXA

Often confused with, *V. subalpina*. It is distinguished from this species primarily on the basis of habit, but also tends to have relatively broader, dish-like, obovate or oblanceolate to elliptic leaves, and sometimes longer corolla tubes. It also has a different flavonoid profile (Mitchell et al. 2007). Near the type locality, Sealy Range (Aoraki/Mt Cook area), and presumably at other locations where *V. treadwellii* and *V. subalpina* occur in close proximity, the two species are readily distinguishable in the field, on the basis of habit and leaf shape. Reliable identification of herbarium specimens is problematic, because of variation in leaf shape in both species, and because details of habit are often lost when plants are pressed. For this reason, the distribution of *V. treadwellii* may be underestimated.

## FLOWERING

December - February

## FLOWER COLOURS

White

## FRUITING

(December-) February (-October)

## LIFE CYCLE

Seeds are wind dispersed (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Placed *incertae sedis* by Moore (in Allan 1961), but generally recognised as a distinct species by subsequent authors (e.g. Wardle 1975; Druce 1980; Heads 1993; Wilson & Galloway 1993; Wilson 1996; Parsons et al. 1998).

## 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'.

**treadwellii:** Named in honour of Charles H Treadwell (1862-1936)

## ATTRIBUTION

Description adapted by M. Ward from Bayly & Kellow (2006).

## REFERENCES AND FURTHER READING

- Allan, H. H. 1961. Flora of New Zealand. Volume 1. Wellington: Government Printer.
- Bayly, M.J., Kellow, A.V. 2006. An illustrated guide to New Zealand Hebes. Wellington, N.Z.: Te Papa press pg. 156-157.
- Druce, A. P. 1980. Trees, shrubs, and Lianes of New Zealand (including wild hybrids). Unpublished checklist held at Landcare Research, Lincoln, New Zealand. (Copy also held in the library of the Museum of New Zealand Te Papa Tongarewa, Wellington.)
- Heads, M. J. 1993. Biogeography and biodiversity in Hebe, a South Pacific genus of Scrophulariaceae. *Candollea* 48: 19-60.
- Mitchell, K. A., Kellow, A. V., Bayly, M. J., Markham, K. R., Brownsey, P. J., & Garnock-Jones, P. J. 2007. Composition and distribution of leaf flavonoids in Hebe and Leonohebe (Plantaginaceae) in New Zealand—2. "Apertae", "Occlusae", and "Grandiflorae". *New Zealand Journal of Botany*, 45(2), 329-392.
- Parsons, M. J., Douglass, P. and Macmillan, B. H. 1998. Current Names for Wild Plants in New Zealand. Lincoln: Manaaki Whenua Press.
- Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285-309
- Wilson, H. D. and Galloway, T. 1993 Small-leaved Shrubs of New Zealand. Christchurch: Manuka Press.
- Wilson, H. D. 1996. Wild Plants of Mount Cook National Park. 2nd edn. Christchurch: Manuka Press.

## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/veronica-treadwellii/>