# Veronica rakaiensis

COMMON NAME hebe

SYNONYMS Hebe rakaiensis (J.B.Armstr.) Cockayne

**FAMILY** Plantaginaceae

**AUTHORITY** Veronica rakaiensis J.B.Armstr.

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Trees & Shrubs - Dicotyledons

NVS CODE HEBRAK

CHROMOSOME NUMBER 2n = 80

CURRENT CONSERVATION STATUS 2017 | Not Threatened

## **PREVIOUS CONSERVATION STATUSES**

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

#### **BRIEF DESCRIPTION**

Bushy shrub bearing pairs of narrow leaves often inhabiting upland stream valleys of the South Island. Leaves to24mm long by 8.8mm wide, widest towards tip. Leaf bud with no gap at base. Flowers white, in spikes to 5cm long. Leaf margin and outside of fruit with small hairs (lens needed).

## DISTRIBUTION

Widespread on South Island, chiefly on drier mountains east of the Main Divide, probably from the Inland Kaikoura Range in the north to the Blue Mountains in the southeast and the Takitimu Mountains in the southwest.

## HABITAT

Grows mostly on subalpine shrubland/scrub, often by streams.





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



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

#### **DETAILED DESCRIPTION**

Bushy shrub (often with a rounded habit) to 2 m tall. Branches erect, old stems dark grey or red-brown; branchlets green (with dark bands at nodes), puberulent to pubescent, hair, bifarious; internodes (1.7-) 2- 6 (-7.3) mm; leaf decurrencies evident. Leaf bud distinct; sinus absent. Leaves erecto-patent to patent; lamina oblanceolate or obovate or elliptic, subcoriaceous, concave, (6.4-) 8-20 (-24) x (2.9-) 4.8-7 (-8.8) mm; apex subacute; margin cartilaginous, minutely ciliolate (especially toward apex); upper surface light to dark green, glossy, with few to many stomata, glabrous or hairy along midrib; lower surface light green, glossy, almost always glabrous or very rarely hairy along midrib (seen only in CHR 401841, Glenroy Valley). Inflorescences with 12-48 flowers, lateral, unbranched, 1.7-4.5 cm: peduncle 0.47-0.87 cm; rachis (1-) 2-3.8 cm. Bracts alternate, ovate, subacute. Flowers hermaphrodite or female (on different plants). Pedicels longer than or equal to bracts, (0.5-) 1-2 (-4.3) mm. Calyx (1.3-) 1.5-2 mm; lobes ovate, subacute, rarely hairy outside (e.g. CHR 401841, 386298). Corolla tube hairy inside; tube of hermaphrodite flowers 0.4-1.4 mm, funnelform, shorter than or equalling calyx; lobes white at anthesis, obovate or elliptic (anterior only), obtuse (posterior sometimes emarginate), patent to recurved (with age), longer than corolla tube, papillate inside and usually ciliolate (often minutely or sparsely). Stamen filaments straight or slightly incurved at apex in bud, 1.7-2.5 mm (sterile approximately 1.7-2 mm; fertile approximately 2.2-2.5 mm); anthers mauve, approximately 1.2-1.4 mm: sterile anthers approximately 0.9-1 mm. Ovary hairy, approximately 0.6-0.8 mm; ovules approximately 10-13 per locule; style (2-) 3-4 mm, hairy (often sparsely) or apparently glabrous. Capsules obtuse or sub-acute, 3-3.8 x approximately 1.9-2.1 mm, hairy, loculicidal split extending 1/4-1/2-way to base (usually about 1/4). Seeds flattened (sometimes strongly), more or less broad ellipsoid, more or less smooth, brown, 0.8-1.6 x 0.7-1 mm, micropylar rim 0.2-0.4 mm.

#### **SIMILAR TAXA**

Similar to a number of small-leaved "Occlusae' (see Bayly & Kellow 2006), in particular *V. calcicola, V. subalpina, V. traversii, V. strictissima* and *V. glaucophylla*. It is recognised by the combination of its hairy ovaries and capsules (usually distinguishing it from most similar species, except *V. calcicola* and *V. glaucophylla*), short corolla tubes that are shorter than or equal to calyces (distinguishing it from *V. traversii*), and minutely hairy leaf margins (distinguishing it from *V. subalpina*). It is distinguished from *V. glaucophylla* by its light green, glossy (rather than glaucous) leaves, and usually from *V. calcicola* by having leaves that are mostly <20 mm long and ciliate corolla margins.

FLOWERING (November-) January-March

FLOWER COLOURS White

FRUITING January-May (-November)

#### **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'.

**rakaiensis**: Latin -ensis is an adjectival suffix implying origin or place, implies that the species occurs near the Rakaia River in Canterbury, the only province from which it was known when originally described.

#### **TAXONOMIC NOTES**

The disjunct, northernmost distribution record rests on a single specimen (CHR 386977. Hodder Valley, Marlborough). This is identified as *V. rakaiensis* on the basis of its leaf size and shape, hairy leaf margins, hairy ovaries and more or less sparsely ciliate corolla lobes. Unlike other *V. rakaiensis*, the specimen has corolla tubes longer than calyx lobes, although corollas are present only on unopened buds that are probably infested by insects and may not be properly formed. Further flowering specimens could help to verify or refute the occurrence of *V. rakaiensis* in this area, particularly given that the sometimes vegetatively similar *V. traversii* (which has longer corolla tubes) also occurs there.

It is possible that *V. rakaiensis* sometimes hybridises with *V. subalpina* - for example, in the Forbes Mountains (WELT 79939, 79942, 80885, 8089????. 80899, 80905 and 80907).

## ATTRIBUTION

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

## **REFERENCES AND FURTHER READING**

Bayly, M.J., Kellow, A.V. 2006. An illustrated guide to New Zealand Hebes. Wellington, N.Z.: Te Papa press pg. 160.

### NZPCN FACT SHEET CITATION

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

#### **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/veronica-rakaiensis/