Veronica pinguifolia

COMMON NAME

SYNONYMS Hebe pinguifolia (Hook.f.) Cockayne et Allan

FAMILY Plantaginaceae

AUTHORITY Veronica pinguifolia Hook.f.

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Trees & Shrubs - Dicotyledons

NVS CODE HEBPIN

CHROMOSOME NUMBER 2n = 80

CURRENT CONSERVATION STATUS 2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

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

BRIEF DESCRIPTION

Low growing bushy shrub beating pairs of thick blue-green strongly dished and often red-edged oval leaves on an erect reddish stem. Leaves 7-16mm long, variable in width. Leaf bud without gap at base. Flowers white, in a spike to 2cm long towards the tip of twigs.

DISTRIBUTION

South Island - Mountains east of the Main Divide, from the Bryant Range to the Kakanui Mountains

HABITAT

Open alpine areas, on rocks and debris slopes, sometimes in grassland.





L. Lyndon, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



L. Lyndon, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Spreading low shrub (openly branched, or compact) to 0.4 (-0.8) m tall. Branches decumbent or spreading or erect, old stems dark brown or grey; branchlets green (tinged maroon, especially at nodes) or red-brown, puberulent, hairs bifarious; internodes (0.5-) 1-7 (-10) mm; leaf decurrencies evident. Leaf bud distinct; sinus absent (usually), or small and acute to rounded. Leaves erect or erecto-patent; lamina lanceolate (often broadly) to ovate or obovate, fleshy, concave, (3-) 7-16 (-22) x (2-) 4-9 (-12) mm; apex rounded or sometimes subacute; midrib very slightly thickened below; margin usually minutely papillate and rarely glandular-ciliate (toward leaf base), often tinged red; upper surface glaucous (usually) or glaucescent, with many stomata, glabrous; lower surface glaucous (usually) or glaucescent. Inflorescences with (4-) 12-22 flowers, lateral, unbranched, 1-2.8 (-3.4) cm, about equal to or longer than subtending leaves; peduncle 0.3-1.5 (-2.1) cm; rachis 0.3-1 (-1.5) cm. Bracts opposite and decussate (or apparently so) or lowermost pair opposite, then subopposite or alternate above, ovate (often narrowly) or deltoid, subacute. Flowers hermaphrodite or female (on different plants). Pedicels absent or if evident then always shorter than bracts, 0-0.8 mm. Calyx (2-) 2.7- 3.2 (-4) mm; lobes elliptic or oblong or ovate, subacute to obtuse. Corolla tube glabrous; tube of hermaphrodite flowers 2-3 x approximately 1-1.5 mm, cylindric or narrowly funnelform, approximately equalling calyx; tube of female flowers 2-2.5 x approximately 1.5-1.8 mm, cylindric or narrowly funnelform, approximately equalling calyx; lobes white at anthesis, ovate or lanceolate or elliptic, obtuse, suberect to recurved, longer than corolla tube. Stamen filaments 4.5-5 mm; anthers magenta, 2.1-2.3 mm; sterile anthers of female flowers magenta or buff, 1.4-1.6 mm. Ovary ovoid or globose, hairy, 0.5-1.1 mm, apex (in septum view) obtuse or slightly didymous; ovules approximately 8-13 per locule, in 1 layer (but sometimes a few more or less overlapping); style (4-) 5-7.5 mm, hairy. Capsules obtuse or truncate, 3-4.5 x 2.5-3.2 mm, usually hairy, loculicidal split extending 1/4-way to base. Seeds flattened, ellipsoid to oblong, more or less smooth, brown (sometimes pale), 0.9-1.7 x 0.6-1.1 mm, micropylar rim 0.3-0.6 mm.

SIMILAR TAXA

A variable species, distinguished from most others by the combination of the shape and size of the glaucous leaves, glabrous leaf margins, sessile flowers, and the length of bracts relative to calyces. The limits of the species are not well defined, and differences from *V. buchananii* (see Taxonomic Notes below) are problematic. It has sometimes been confused with *V. baylyi* (see Taxonomic Notes below), and specimens are sometimes misidentified as *V. decumbens* and vice versa (see notes under that species).

No single character has been found to distinguish *V. pinguifolia* and *V. buchananii* consistently, and they are generally distinguished here on combinations of characters. *V. pinguifolia* plants are often taller (although sprawling, they do not tend to form dense mats) and usually have more distinct leaf buds, these not closely surrounded by recently diverged leaf pairs (except in some Marlborough specimens). They mostly have larger leaves (although shape is variable) that are not keeled when fresh (although they may appear so when dry, as the fleshy lamina shrinks away from the midrib). They may have more slender, less corky stems, and bracts and calyces that are usually shortly ciliolate with glandular hairs (but sometimes long-ciliate with eglandular hairs). In contrast, *V. buchananii* tends to be more mat-forming (except for "var. *exigua*-like" plants) and lower growing, with leaf buds closely surrounded by recently diverged leaves. It often has smaller leaves (although shape is variable) that are more keeled. It also often has thicker, more corky stems, and has calyces and bracts that often have longer cilia.

FLOWERING

December-February (-April)

FLOWER COLOURS

Cream, White

FRUITING January-April

LIFE CYCLE

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

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'.

pinguifolia: From the Latin pinguis 'fat, plump' and folium 'leaf', in reference to the thickness of the leaves

TAXONOMIC NOTES

Some specimens of *V. pinguifolia* / *V. buchananii* have not been identified with certainty, and the distribution maps for both species are based only on specimens about whose identities we are reasonably confident. As defined here, there is some geographic overlap between the two species. Further investigation of their variation, relationships and circumscriptions would be worthwhile.

Included here in *V. pinguifolia* are specimens from the north of the species' range (e.g. Mount Starveall, Travers Range, St Arnaud Range, Hodder Valley, Black Birch Range) that sometimes have a small but distinct sinus in the leaf bud (a feature seen only rarely on plants from other areas). In this respect, these specimens resemble *V. baylyi*, a name that has sometimes been applied to them. They can be distinguished from that species by usually red-edged leaves that are paler green (under a glaucous bloom), larger, strictly opposite bracts, and blunt and usually hairy capsules. Some of these northern specimens (particularly those from Black Birch Range) are quite small-leaved and, in this respect, may also resemble *V. buchananii*. However, given their geographic distance from that species, the resemblance is probably coincidental, and a close relationship does not seem likely.

Both diploid and tetraploid chromosome numbers are recorded in *V. pinguifolia*, but chromosome variation has not been correlated with variation in morphology. Some vouchers for chromosome counts (diploid from Mount Peel, Canterbury; tetraploid from Mount Somers and Mount Winterslow) have been identified here as *V. cf. pinguifolia*. These specimens are cultivated and sterile and cannot be identified with certainty. *V. pinguifolia* does, on the basis of other specimens, occur on Mount Peel and Mount Somers but is not otherwise known from Mount Winterslow.

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. 136-138.

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

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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