Veronica buchananii

COMMON NAME
hebe

SYNONYMS
Veronica buchananii var. exigua Cheeseman, Veronica buchananii var. major Cheeseman, Hebe buchananii var. major (Cheeseman) A.Wall, Hebe buchananii (Hook.f.) Cockayne et Allan

FAMILY
Plantaginaceae

AUTHORITY
Veronica buchananii Hook.f.

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

NVS CODE
HEBBUC

CHROMOSOME NUMBER
2n = 80

CURRENT CONSERVATION STATUS
2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES
2012 | Not Threatened
2009 | Not Threatened
2004 | Not Threatened

Rock & Pillar range, February. Photographer: John Smith-Dodsworth

Hebe buchananii, Kyeburn. Photographer: John Barkla

BRIEF DESCRIPTION
Low-growing sprawling bushy shrub forming patches up to 3m wide bearing pairs of small blue-green rounded leaves that are erect at the tip of the twig and become more spreading further down the twig. Flowers white, in short spike to 2.3cm long. Inhabits southern South Island mountains.

DISTRIBUTION
South Island mountains, mostly east of the Main Divide, from the Malte Brun Range, Aoraki/Mt Cook National Park, to the Longwood Range.

HABITAT
Open penalpine/subalpine areas on rocks, debris slopes, in low shrubland, or sometimes in grassland.

FEATURES
Spreading low shrub (often more or less mat-like, but sometimes more upright) to 0.3 m tall. Branches decumbent (usually) or erect, old stems dark grey or brown or black; branchlets red-brown, puberulent to pubescent, hairs bifarious; internodes (0.5-) 1-4 (-9) mm; leaf decurrencies swollen. Leaf bud tightly surrounded by recently diverged leaves; sinus absent. Leaves erect to erecto-patent; lamina obovate to broadly elliptic or rarely almost circular, fleshy to rigid, concave, (1.5-) 3-6 (-8) x (1-) 3-5 (-6) mm; apex obtuse to rounded; midrib slightly keeled or thickened below, only sometimes evident in fresh leaves; margin glabrous or ciliate and often minutely papillate, sometimes tinged red (on young leaves); upper surface glaucescent or glaucous, with many stomata, glabrous; lower surface glaucescent or glaucous (usually not quite as glaucous as upper surface). Inflorescences with 3-12 flowers, lateral (usually) or terminal, unbranched, (0.5-) 0.7-1.5 (-2.3) cm; peduncle 0.2-0.6 (-1.2) cm; rachis 0.3-1.2 cm. Bracts lowermost pair opposite, then subopposite or alternate above, broadly oblong or ovate or lowermost sometimes lanceolate, obtuse (usually) or subacute (sometimes lowermost pair). Flowers hermaphrodite. Pedicels absent (usually) or if present then always shorter than bracts. Calyx 2.3-3 (-3.4) mm; lobes ovate to oblong, subacute to obtuse, rarely hairy outside. Corolla tube glabrous, 1-1.9 x l.5-1.8 mm, funnelform, shorter than calyx; lobes white at anthesis, ovate to lanceolate or elliptic, obtuse, suberect to patent, longer than corolla tube. Stamen filaments 4-4.7 mm; anthers magenta, approximately 0.8-1.3 mm. Ovary broadly ovoid to globose, hairy (hairs often quite long), approximately 0.6-0.8 mm, apex (in septum view) obtuse or slightly didymous; ovules approximately 10-11 per locule; style 2.5-5 mm, hairy (especially toward base). Capsules, obtuse or subacute, (2-) 2.7-3.7 x 1.9-2.5 mm, hairy, loculicidal split extending ¼-½-way to base. Seeds weakly flattened, ovoid-ellipsoid to irregular, more or less smooth, pale brown, 1-1.5 x 0.6-1 mm, micropylar rim 0.3-0.4 mm.

SIMILAR TAXA
Differences from V. pinguifolia are not clear cut, no single character has been found to distinguish between the two species consistently, they are generally distinguished by 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 are not closely surrounded by recently diverged leaf pairs (except in some Marlborough specimens). V. pinguifolia 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). V. pinguifolia 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. V. buchananii also often has thicker, more corky stems, and has calyces and bracts that often have longer cilia.

FLOWERING
December - March

FLOWER COLOURS
White

FRUITING
February - April (-November)

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’.
buchananii: Named after John Buchanan (13 October 1819-1898) who was a New Zealand botanist and scientific artist and fellow of the Linnean Society.

TAXONOMIC NOTES

Distinguished from most species by the combination of small, glaucous leaves, leaf buds closely surrounded by pairs of recently diverged leaves, sessile flowers, bracts about the same length as calyces, and white corollas. Some specimens of *V. buchananii*/*V. pinguifolia* have not been identified with certainty, and the distribution of both species are based on specimens about whose identities are reasonably confident. There is some geographic overlap between the two species. Further investigation of their variation, relationships and circumscriptions would be worthwhile.

NOTES ON ETYMOLOGY

John Buchanan was one of the collectors of the type specimen for this species (Bayly and Kellow, 2006).

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. 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

MORE INFORMATION

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