Veronica macrocalyx var. macrocalyx

COMMON NAMES
hebe

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | At Risk – Naturally Uncommon | Qualifiers: Sp, DPS, DPT
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

SIMPLIFIED DESCRIPTION
Low growing shrub with erect twigs bearing pairs of small curved green thick fleshy oval leaves that hardly narrow to a broad leaf stalk inhabiting northern Arthur's Pass mountains. Leaves to 11 mm long, longer than wide. Flowers white, almost hidden by long narrow teeth of base.

FLOWER COLOURS
White

At Arthurs Pass (January). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

Arthurs Pass (January). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Mat-forming subshrub to 20 cm tall, 1 m diameter. Branches prostrate to decumbent, old stems brown; branchlets green to purplish, glabrous or puberulent, hairs bifarious; internodes 1-5.5 (-10.9) mm; leaves not readily abscising, persisting on stem, or decaying leaving basal parts attached. Leaf bud tightly surrounded by recently diverged leaves. Leaves decussate to slightly subdistichous, connate, erecto-patent to patent; lamina usually spathulate or elliptic to ovate, fleshy, concave, 5-16 x (2.5-) 3.5-9 mm; apex rounded to slightly retuse; midrib slightly thickened below and slightly depressed to grooved above; margins green or colourless smoothly cartilaginous, entire, not thickened, glabrous or glandular-ciliate, sometimes tinged red, entire or rarely shallowly toothed; upper surface green, dull to glossy, with many stomata, glabrous; lower surface green, dull to glossy; petiole (1-) 2-5 mm, hairy along margins. Inflorescences with 2-12 flowers per spike, 3-12 spikes per flowering head, terminal and lateral (arranged, often laxly, in a flowering head), unbranched, (0.5-) 1-3 (-4.3) cm (total length of flowering head), spikes about equal to subtending leaves (flowering head usually longer than subtending leaves); peduncle approximately 0.1 cm, hairy or glabrous; rachis 0.3-0.4 (-0.6) cm (longest when growing in shade). Bracts lowermost pair opposite, then subopposite or alternate above, connate or rarely free, lanceolate to linear or sometimes deltoid, subacute (usually) or obtuse, margins glabrous or hairy. Flowers hermaphrodite or female (on different plants). Pedicels absent. Calyx 5-9 mm, 4-5-lobed (5th lobe small, posterior); lobes green, linear (usually) or oblong, subacute to obtuse or occasionally acute, with minute mixed glandular and eglandular cilia (usually) or glabrous. Corolla tube glabrous; tube of hermaphrodite flowers (2.5-) 4-6 x 1.5-2.5 mm, cylindric, shorter to longer than calyx (sometimes); tube of female flowers 3-4 x 1.5-2.2 mm, funnelform, shorter than calyx; lobes white at anthesis, ovate (usually) to elliptic, subacute to obtuse, patent to recurved (with age), shorter than (usually) to longer than (rarely) corolla tube. Stamen filaments remaining erect, 0.5-1.3 mm; anthers magenta, 1-1.9 mm; sterile anthers of female flowers white, 0.8 -1.1 mm. Ovary narrowly ovoid to conical, 2-2.5 mm; ovules 18-28 per locule, in 1-3 layers; style 3-8 mm on hermaphrodite flowers, 5-6 mm on female flowers; stigma larger in female flowers. Capsules acute to subacute, 3.5-4.5 (-5.5) x 2-3.5 mm, loculicidal split extending ¼-½-way to base. Seeds flattened, ellipsoid or more or less discoid, straw-yellow, 0.7-1 x 0.5-0.9 mm, micropylar rim 0.1-0.3 mm.

SIMILAR TAXA

Distinguished from V. haastii, in which it was included by Cheeseman (1906) and Moore (in Allan 1961), by its: bright green, fleshy, petiolate and often subdistichous leaves; sometimes lax flowering head; usually linear calyx lobes; narrow acute capsule. V. var. macrocalyx is relatively uniform in morphology, all specimens having bright green, spathulate leaves with cartilaginous leaf margins and green, linear calyx lobes. V. var. humilis is more variable in terms of leaf shape (elliptic or rhomboidal to spathulate), leaf margins (smooth to papillose or erose), and calyx shape and length (lanceolate to linear).
The species commonly grows near V. epacridea.

DISTRIBUTION

Near Arthur’s Pass. Canterbury, South Island, between Mount Alexander in the north and upper Bealey Valley in the south.

HABITAT

It grows on alpine rock debris and scree.

GENUS

Veronica

FAMILY

Plantaginaceae

AUTHORITY

Veronica macrocalyx J.B.Armstr. var macrocalyx

SYNONYMS

Veronica haastii var. macrocalyx (J.B.Armstr.) Cheeseman, Hebe macrocalyx var. macrocalyx (J.B.Armstr.) G.Simpson, Hebe haastii var. macrocalyx (J.B.Armstr.) Cockayne et Allan, Leonohebe haastii var. macrocalyx (J.B.Armstr.) Heads

TAXONOMIC NOTES
Some specimens from Mt Rolleston (e.g. CHR 497122, WELT 17583), although clearly related to *V. macrocalyx* and geographically close to specimens of var. *macrocalyx*, do not fit comfortably in either of the varieties as circumscribed by Bayly & Kellow (2006).

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
(September-) November-March

FRUITING
(November-) December-April (-October)

LIFE CYCLE AND DISPERSAL
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'.
macrocalyx: From the Greek macros 'large' and calyx

CHROMOSOME NUMBER
2n = 42

PREVIOUS CONSERVATION STATUSES
2017 | At Risk – Naturally Uncommon | Qualifiers: DP, Sp
2012 | At Risk – Naturally Uncommon | Qualifiers: DP, Sp
2009 | At Risk – Naturally Uncommon
2004 | Range Restricted
Jump to current conservation status

REFERENCES AND FURTHER READING
Allan, H. H. 1961. Flora of New Zealand. Vol. 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. 116-118.
Cheeseman, T. F. 1906. Manual of the New Zealand Flora.1st edition. Wellington: Government Printer,
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

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

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/veronica-macrocalyx-var-macrocalyx/

PDF DATE
27 May 2026