Veronica saxicola

COMMON NAME Maungaraho Rock hebe

SYNONYMS Hebe saxicola de Lange

FAMILY Plantaginaceae

AUTHORITY Veronica saxicola (de Lange) Heenan

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY

STRUCTURAL CLASS Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER 2n = 40

CURRENT CONSERVATION STATUS 2017 | Threatened – Nationally Critical | Qualifiers: OL

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Critical | Qualifiers: OL 2009 | Threatened – Nationally Critical | Qualifiers: OL, Sp 2004 | Not Threatened

BRIEF DESCRIPTION

Low growing shrub bearing pairs of narrow dark green leaves inhabiting rock outcrops near Tokatoka in Northland. Leaves leathery, to 67mm long by 30mm wide, paler underneath. Leaf bud without gap at base. Flowers white to pinkish, in spikes to 120mm long.

DISTRIBUTION

Endemic. New Zealand: North Island, near Tokatoka

HABITAT

A lithophyte confined to a single andesitic rock outcrop where it grows in the less vegetated boulder falls, cliffs, rock ledges, upper slopes, and main summit area.





In cultivation. Photographer: Jeremy R. Rolfe, Date taken: 21/10/2007, Licence: CC BY.



Base of leaf bud. In cultivation. Photographer: Jeremy R. Rolfe, Date taken: 21/10/2007, Licence: CC BY.

DETAILED DESCRIPTION

Compact shrub, 0.2–0.8 × 0.4–1.0 m. Mature branchlets purple-grey, fading to grey on 2–3-year-old wood; branchlets fleshy, greenish yellow drying purple-black, flattened and ridged, glabrous; internodes 1–10× diameter. Leaf bud olive-green, midrib pink; sinus absent. Leaves 20-67 × 12-30 mm, patent or erecto patent, lamina lanceolate, oblanceolate, elliptic or broadly elliptic, firmly fleshy, adaxial surface ± dull olive-green or dark green with pale yellow midrib, ± glabrous, except for sparse minute eglandular hairs at leaf base; abaxial surface dull pale green, apex cream, obtuse to subacute, base attenuate; margin entire, glabrous, often tinged pink fading to greenish yellow. Inflorescences with 20–130 flowers, lateral, racemose, simple, 20–100(–120) mm long; flowers crowded on rachis, spiraled, mature flower buds dark lavender. Peduncle and rachis with minute spreading eglandular hairs, yellow-green or green, peduncle 40-100 mm long. Bracts alternate, foliose, olive-green, falcate, lanceolate to linear-lanceolate, acute, 3-4 mm long, margins involute, minutely puberulent. Pedicels erecto-patent to spreading 2.0–3.5 mm long, yellow-green, rarely pinkish-green darkening to green-brown on fruiting racemes, minutely eglandular ciliate. Flowers protandrous, hermaphrodite, faintly but distinctly sickly sweet-scented. Calyx lobes 3.80–4.50 × 2.8–4.15 mm, yellow-green or dark green, lanceolate to ovate, subacute to acute, basal 1/3 overlapping, outer surface ± glabrous, usually with very sparse, diffusely scattered minute sessile glands; margin pale pink to dark carmine, mostly eglandular ciliolate, rarely with sparse glandular hairs near base. Corolla initially pale lavender (rarely lilac), tube and basal portion of lobes soon fading to white at anthesis, usually followed progressively by the more distal portions, until ultimately coloured completely white after pollination. Corolla tube $1.0-1.5 \times 0.8-1.2$ mm, narrowly funnelform, included within calyx lobes, pale lilac-white or white; outer surface glabrous, inner usually glabrous, very rarely with occasional hairs near the base, greenish white, lobes longer than tube, broadly lanceolate to ovate, subauriculate and minutely ciliolate at base, subacute (4.2–)5.0–6.3 × (2.0–)4.0–5.0 mm, erect to suberect, margins inrolled at first becoming reflexed with age. Stamen filaments 8–14 mm long, lilac at anthesis fading to white with age, curving outwards after dehiscence, base glabrous, rarely sparsely ciliate; anthers 0.8-1.0(-1.5) mm long, initially violet fading to lilac and then red-brown following dehiscence, acute, pollen cream to dirty-white. Nectarial disc glabrous, fleshy, green. Style 8-12 mm long, lavender at anthesis fading to white following pollination, glabrous; stigma capitate, yellow. Ovary 1.0 × 0.8 mm, pale pink, narrowly ovoid, ovoid to ovoid-cylindrical, glabrous, occasionally with minute, sparse eglandular hairs along loculicidal suture line. Capsules latiseptate, 3.5–4.3 × 3.2–3.9 mm, dark amber-brown, suborbicular to broadly ovate or broadly rhomboid, subacute, glabrous, septicidal to base, loculicidal for 1/8-1/4 length. Seeds ± flattened, ovate to discoid, narrowly winged, surfaces slightly papillate, amber, 1.4-1.8 × 1.3-2.0 mm.

SIMILAR TAXA

Veronica saxicola is closely related to V. perbella (de Lange & Rolfe 2008). From that species, V. saxicola is distinguished by its ecology, smaller stature, shorter and wider leaves with dull rather than glossy upper leaf surfaces, less colourful flowers that open pale lavender or lilac soon fading to white, shorter corolla tube, broader lanceolate to ovate, subacute corolla lobes, mostly glabrous ovaries, and glabrous capsules. Hebe saxicola also has a different flavonoid chemistry. Veronica saxicola is also similar to V. adamsii from which it differs by its diploid (2n = 40) rather than tetraploid (2n = 80) chromosome number, absence of a leaf-bud sinus, and sparsely pubescent ovaries.

FLOWERING September – November

FLOWER COLOURS Lavender, White

FRUITING December – February

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown from semi-hardwood cuttings. Does best in full sun, planted in a fertile, well drained soil. Responds well to heavy pruning following flowering. Reasonably drought tolerant

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'.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 9 January 2010. Description based on de Lange & Rolfe (2009).

REFERENCES AND FURTHER READING

de Lange, P.J.; Rolfe, J.R. 2008: *Hebe saxicola* (Plantaginaceae) – a new threatened species from western Northland, North Island, New Zealand. *New Zealand Journal of Botany 46*: 531-545. 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

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