

# Veronica odora

## COMMON NAME

hebe

## SYNONYMS

*Hebe odora* (Hook.f.) Cockayne, *Leonohebe odora* (Hook.f.) Heads, *Veronica buxifolia* Benth., *Hebe buxifolia* (Benth.) Cockayne et Allan, *Veronica buxifolia* var. *patens* Cheeseman, *Veronica anomala* J.F.Armstr., *Hebe anomala* (J.F.Armstr.) Cockayne, *Veronica haustrata* J.B.Armstr., *Veronica buxifolia* var. *odora* (Hook.f.) Kirk, *Veronica elliptica* var. *odora* (Hook.f.) Cheeseman, *Hebe buxifolia* var. *odora* (Hook.f.) Andersen, *Hebe buxifolia* (Benth.) Andersen var. *buxifolia*

## FAMILY

Plantaginaceae

## AUTHORITY

*Veronica odora* Hook.f.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

HEBODO

## CHROMOSOME NUMBER

2n = 42, 84

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## BRIEF DESCRIPTION

Rounded shrub bearing pairs of small oval leaves with a low ridge on the underside inhabiting mountains south from central North Island and Auckland Islands. Leaves 4.5–11.5 mm long by 2.3–5.4 mm wide, with abrupt shoulder at base. Leaf bud with small gap at base. Several flower spikes at tip of twigs.

## DISTRIBUTION

Widespread, south from the Huiarau Range, Lake Waikaremoana, on mountains of North Island, South Island, Stewart Island/Rakiura and the Auckland Islands. (see notes below)

## HABITAT

It grows in montane to penalpine grassland, shrubland, bogs and flushes.



In cultivation. Prostrate form. Photographer: Jeremy R. Rolfe, Date taken: 23/11/2004, Licence: CC BY.



Mt Taranaki, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Spreading low or bushy shrub (varies from a rounded bush to very lax and open) to 0.9–(1.7) m tall. **Branches** spreading or decumbent or ascending or erect, old stems brown or red-brown or grey or black (at least when dry); branchlets green, puberulent or pubescent, hairs bifarious; internodes (0.9)–1.3–4.5 mm; leaf decurrencies evident and usually swollen; leaves abscising above nodes and lower part of petioles remaining attached to stem. **Leaf bud** distinct; sinus broad and shield-shaped. **Leaves** erect to patent; lamina ovate or lanceolate to elliptic or obovate or sometimes almost circular, rigid and coriaceous, concave, (3.6)–4.5–11.5 × 2.3–5.4 mm; apex subacute; base truncate; midrib thickened below; margin glabrous, usually entire or sometimes minutely crenulate; upper surface dark green, glossy, without evident stomata (usually) or with many stomata (on many plants from Arthur's Pass area), glabrous; lower surface green (paler than upper); petiole 0.5–1.5–(2.2) mm, glabrous. Inflorescences mostly terminal and lateral but sometimes only terminal, unbranched, (0.6)–1–2.8 cm; peduncle 0.13–0.36 cm, bifariously hairy or glabrous; rachis 0.5–1.7 cm, hairy (usually bifariously). **Bracts** opposite and decussate, free, ovate, subacute. **Flowers** hermaphrodite (although E. M. Low (pers. comm. 2005) suggests that some populations include female plants). **Pedicels** absent. **Calyx** 3.5–5 mm; lobes elliptic, subacute to obtuse. **Corolla tube** hairy inside, c. 3–3.5 × c. 1.5 mm, narrowly cylindrical, approximately equalling or longer than calyx; lobes white at anthesis, narrowly to broadly elliptic, obtuse, patent to recurved, equalling or longer than corolla tube, sometimes sparsely hairy inside. **Stamens**: filaments 2–3.2 mm; anthers pink, 1.9–2.4 mm. **Ovary** ovoid or globose, 0.7–1.2 mm; ovules c. 8–13 per locule; style c. 5.5–7 mm. **Capsules** subacute or obtuse, 3.9–4.5 × c. 3.4–3.6 mm, loculicidal split extending  $\frac{1}{4}$ – $\frac{1}{2}$ -way to base. **Seeds** flattened, ellipsoid (sometimes broadly), not winged to only weakly winged, straw-yellow to pale brown, 1.2–1.8 × 0.9–1.3 mm, micropylar rim 0.3–0.6 mm.

## SIMILAR TAXA

Distinguished from similar species of "Buxifoliatae" (see Bayly & Kellow 2006) by the combination of: bracts not extending beyond tips of calyces; inflorescences that consist of a terminal spike, beneath which there are usually also lateral spikes in the axils of the uppermost leaf pairs; no stomata on the upper leaf surface, except in many specimens from the Arthur's Pass area; leaves that are sharply keeled beneath (along the midrib) throughout their length; leaf buds that are usually not closely surrounded by several imbricate leaf pairs (particularly when compared with *Veronica masoniae* and *V. pauciramosa*); free anterior calyx lobes; and corolla lobes that are comparatively narrow relative to their length (particularly when compared with *V. masoniae* and *V. mooreae*). Leaves are variable in shape and size. *Veronica odora* is sometimes confused with *V. venustula* and *V. brachysiphon* with which it may co-occur in subalpine shrubland on North Island and South Island, respectively. It is readily distinguished from both these species by: its shield-shaped leaf bud sinus; terminal clusters of inflorescences; and flowers and fruits that are sessile and subtended by coriaceous and comparatively larger bracts.

## FLOWERING

(November)–December–January–(March)

## FLOWER COLOURS

White

## FRUITING

December–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'.

**odora**: Latin. (odorus = having a smell, usually sweet-smelling), presumably refers to the flowers, which Hooker (1844), when naming the species, described as having a "delicious fragrance" (this feature is apparently not, however, always found in the species).

## TAXONOMIC NOTES

Its distribution may extend, in the north, to the Raukumara Ra. (as implied by Druce 1980; Eagle 1982), but there are no specimens from this area at WELT, CHR or AK.

Some botanists regard *Hebe anomala* (J.F.Armstr.) Cockayne / *Veronica anomala* J.F.Armstr. as a species distinct from *Veronica odora*.

Two chromosome races in *V. odora* were treated by Druce (1980, 1993) and Eagle (1982) as distinct species. Diploid plants, assumed to be typical *V. odora*, are recorded from North Island, northern South Island and the Auckland Islands, while tetraploids are recorded at a range of South Island localities (from Island Pass, Nelson, southwards) and on Stewart Island/Rakiura (Dawson & Beuzenberg 2000). Although there is possibly a correlation between ploidy and flavonoid profile (Markham *et al.* 2005), no consistent morphological differences between the two chromosome races have been identified.

## ATTRIBUTION

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

## REFERENCES AND FURTHER READING

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## NZPCN FACT SHEET CITATION

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

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/veronica-odora/>