

# Veronica phormiiphila

## COMMON NAME

hebe

## SYNONYMS

*Veronica salicifolia* var. *paludosa* Cockayne, *Hebe salicifolia* var. *paludosa* (Cockayne) Cockayne et Allan, *Hebe paludosa* (Cockayne) D.A.Norton et de Lange

## FAMILY

Plantaginaceae

## AUTHORITY

*Veronica phormiiphila* Garn.-Jones

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## CHROMOSOME NUMBER

2n = 80

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## BRIEF DESCRIPTION

Bushy shrub bearing pairs of narrow pointed leaves and long white flower spikes inhabiting West Coast wetlands. Twigs hairy. Leaves to 86mm long by 14mm wide, gradually tapering to tip, margin hairy (lens needed). Leaf bud with small gap at base. Flowers white, narrow, in spikes to 19cm long.

## DISTRIBUTION

Endemic to Westland and northwest Otago, South Island, from the Grey Valley in the north to Big Bay in the south.

## HABITAT

It usually grows in lowland, mesotrophic wetlands.

## WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland

Usually is a hydrophyte but occasionally found in uplands (non-wetlands).



*Hebe paludosa*. Photographer: David A. Norton, Licence: CC BY-NC.



*Hebe paludosa* habit. Photographer: David A. Norton, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Bushy shrub to 5 m tall. Branches erect, old stems red-brown; branchlets green or red-brown, puberulent, hairs uniform (mostly) or bifarious; internodes 6-26 mm; leaf decurrencies obscure. Leaf bud distinct; sinus square to oblong, or small and rounded. Leaves erecto-patent (mostly) to patent (with age); lamina linear-lanceolate (mostly) or linear-elliptic, subcoriaceous, slightly m-shaped in transverse section, 30-86 x 5.5-11 (-14) mm; apex acuminate; brochidodromous secondary veins evident in fresh leaves; margin cartilaginous, minutely pubescent (with eglandular and sometimes glandular hairs), distantly denticulate or entire; upper surface dark green or yellowish-green, dull, with few stomata (not readily visible in fresh leaves), hairy along midrib and sometimes covered with minute glandular hairs (but these hairs usually not readily visible, even at high magnification); lower surface light green, hairy along midrib; petiole (1-) 2-3 (-4) mm, hairy along margins and above and below. Inflorescences with approximately 100-150 flowers, lateral, unbranched (one aberrant inflorescence seen with a single branch at base), 9.3-19 cm; peduncle 1.8-4cm, hairy (sometimes very sparsely); rachis 7.5-15 cm. Bracts alternate, linear or narrowly deltoid, subacute or acuminate, sometimes hairy outside (especially lowermost). Flowers hermaphrodite. Pedicels longer than or equal to bracts, (1-) 2-4 (-5) mm, sometimes recurved in fruit. Calyx (1.5-) 2-3 (-3.5) mm; lobes ovate or lanceolate or oblong or deltoid, obtuse to acute or acuminate. Corolla tube hairy inside and sometimes outside (around base of corolla lobes), 2.3-3.5 x 1.9-2.1 mm, shortly cylindric, longer than (usually) or equalling calyx; lobes white or tinged mauve at anthesis, lanceolate, obtuse or subacute, erect to suberect, longer than corolla tube, sometimes with a few hairs toward base on inner surface. Stamen filaments diverging with age (but probably erect for some time after anthesis), 6.5-8.5 mm; anthers purple or blue, 1.7-2.2 mm. Ovary sometimes sparsely hairy (especially near apex), 0.8-1.1 mm; ovules 12-16 per locule, in 1-2 layers; style 7-7.5 mm, sometimes sparsely hairy. Capsules obtuse or truncate or subacute, 3-4 x 2-2.5 mm, sometimes hairy, loculicidal split extending ¼-½-way to base. Seeds flattened (sometimes strongly), ellipsoid to discoid, not winged to only weakly winged, straw-yellow to pale brown, 0.8-1.3 x (0.6-) 0.7-1.1 mm, micropylar rim 0.2-0.3 mm.

## SIMILAR TAXA

A recently recognised species (Norton & de Lange 1998) based on *V. salicifolia* var. *paludosa* (Cockayne 1916). It was included in *Hebe salicifolia* by Moore (in Allan 1961), but with the suggestion that it might be a hybrid between that species and *H. gracillima* (now *V. leiophylla*). It is generally distinguished from *V. salicifolia*, with which it co-occurs, by its narrower, more evenly tapered leaves, conspicuously hairy branchlets (although branchlets of *V. salicifolia* vary from glabrous to bifariously or uniformly hairy), usual wetland habitat, and chromosome number ( $2n = 80$ , rather than 40). Differences from *V. leiophylla* are less clear-cut. *V. phormiiphila* generally has longer and more tapered leaves than *V. leiophylla*, but that species sometimes has similar leaves, and some short-leaved specimens of *V. phormiiphila* (e.g. CANU 35236) are scarcely different from many specimens of *V. leiophylla*. Because of the similarity between *V. phormiiphila* and *V. leiophylla*, defining the northern limit of the former (and southwest limit of the latter) is difficult, and requires further assessment.

## FLOWERING

January (-March)

## FLOWER COLOURS

White

## FRUITING

March-May

## 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'.

## TAXONOMIC NOTES

In Bayly & Kellow (2006) the same northern limit is given for *V. phormiiphila* as Norton & de Lange (1998) but refer plants from some nearby localities to *V. leiophylla*. Limited study of leaf flavonoids (Mitchell et al. 2007) suggests that *V. phormiiphila* has a profile distinguished from, but roughly intermediate between, those of *V. leiophylla* and *V. salicifolia*. The possibilities that *V. phormiiphila* is recently derived from *V. leiophylla* or *V. salicifolia*, might be a stable hybrid between them, or may intergrade with one or other of them (particularly *V. leiophylla*, as suggested by Wardle 1975, using the name *H. gracillima*), are worthy of further investigation.

## ATTRIBUTION

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

## 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. 270.
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- Mitchell, K. A., Kellow, A. V., Bayly, M. J., Markham, K. R., Brownsey, P. J., & Garnock-Jones, P. J. 2007. Composition and distribution of leaf flavonoids in Hebe and Leonohebe (Plantaginaceae) in New Zealand—2. “Apertae”, “Occlusae”, and “Grandiflorae”. New Zealand Journal of Botany, 45(2), 329-392.
- Norton, D. A. and de Lange, P.J. 1998. Hebe paludosa (Scrophulariaceae) - a new combination for an endemic wetland Hebe from Westland, South Island, New Zealand. New Zealand Journal of Botany 36:531-8.
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## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

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