Veronica flavida

SYNONYMS

Hebe flavida Bayly, Kellow et de Lange

FAMILY

Plantaginaceae

AUTHORITY

Veronica flavida (Bayly, Kellow et de Lange) Garn.-Jones

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER

2n = 40

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Bushy small tree with pairs of yellowish narrow leaves and upright flower spikes inhabiting upland western Northland. Leaves to 135mm long, by 29mm wide, central vein yellowish. Leaf bud without a gap. Flowers white, with a tube around equal the teeth of the green base, in erect spikes 4-25cm long.

DISTRIBUTION

Endemic to Northland, North Island, where it occurs with certainty between Warawara Forest and Waikaraka Valley in the north and Tangihua Forest in the south.

HABITAT

Grows mostly in upland areas, above approximately 250 m a.s.l., often in cloud forest.





Veronica flavida flowering in cultivation, Oratia Native Plant Nursery, Oratia, West Auckland. Photographer: Peter J. de Lange, Date taken: 04/06/2016, Licence: CC BY.



Veronica flavida - Type Specimen in the wild, Old Mountain Road, Waima Forest. Dr Rhys O. Gardner stands by for scale. Photographer: Peter J. de Lange, Date taken: 12/02/2001, Licence: CC BY.

DETAILED DESCRIPTION

Small tree (usually) or bushy shrub to 8 m tall. Branches erect, old stems brown or grey; branchlets green, puberulent to pubescent, hairs uniform; internodes (2.5-) 6-20 (-27) mm; leaf decurrencies evident (sometimes weakly). Leaf bud distinct; sinus absent. Leaves erecto-patent to patent; lamina linear-lanceolate to narrowly elliptic or oblanceolate, thin or subcoriaceous, flat or slightly m-shaped in transverse section (30-) 50-100 (-135) x (6-) 10-20 (-29) mm; apex acuminate or acute; brochidodromous secondary veins evident in fresh leaves; margin narrowly cartilaginous, puberulent, entire or distantly denticulate; upper surface light to dark green (with midrib and base of lamina usually yellow), dull, with few or without evident stomata, hairy along midrib; lower surface light green, hairy along midrib and sometimes covered with minute glandular hairs (when young) or rarely glabrous. Inflorescences with 60-140 (-155) flowers, lateral, unbranched (although one small secondary branch seen on one inflorescence of WELT 80664), (4-) 7-16 (-24.5) cm; peduncle (0.7-) 1-3 (-4.5) cm; rachis (2.8 -) 5.5-14 (-20.5) cm. Bracts alternate, lanceolate or narrowly deltoid, acute, hairy outside. Flowers hermaphrodite. Pedicels 1.5-4.2 mm. Calyx 2.1-2.7 mm; lobes linear or narrowly deltoid, acute or acuminate, hairy outside. Corolla tube hairy inside and sometimes outside (near base of corolla lobes), 1.5-3 x 1.7-2.7 mm, funnelform, shorter than or equalling calyx (usually asymmetrically divided - anterior side is approximately equal to calyx, but posterior is shorter); lobes white or tinged mauve to pink at anthesis (sometimes very faintly), lanceolate (sometimes narrowly) or ovate or elliptic, subacute (usually) or obtuse, suberect to patent, longer than corolla tube, sometimes sparsely hairy inside. Stamen filaments 5.5-6.8 mm; anthers violet or purple or blue, 1.5-2.5 mm. Ovary sometimes hairy, approximately 0.8-1 mm; ovules approximately 9-13 per locule; style 4-7.2 mm, sometimes hairy. Capsules, obtuse or subacute, 2.5-4 x (2-) 2.5-3.5 mm, sometimes hairy, loculicidal split extending ½-¾-way to base. Seeds flattened (sometimes strongly), more or less broad ellipsoid to discoid, pale brown, (0.8-) 0.9-1.4 (-1.6) x 0.7-1.2 mm, Micropylar rim 0.1-0.3 mm.

SIMILAR TAXA

The three, species it most closely resembles are V. stricta (of which var. stricta occurs in Northland). V. rivalis and V. ligustrifolia. V. stricta has a similar shrubby habit and superficial appearance (although it doesn't grow as tall as V. flavida often does), but is readily distinguished by its flowers, which have corolla tubes much longer than the calyces. V. rivalis has flowers similar to V. flavida, with short corolla tubes, but differs most substantially in having leaves that are generally narrower both in absolute terms and in proportion to their length (they are (3-) 4-9(-12) wide, and linear or linear-lanceolate), and in that it is a low-growing shrub, usually not exceeding 1.2 m in height, that apparently grows exclusively on riverbanks, in the zone of vegetation subjected to occasional flooding. Differences from V. ligustrifolia are less clear-cut, but V. flavida often has longer leaves that are more conspicuously tapered toward the apex and a larger habit, and usually occupies more upland habitats. Flavonoid chemistry distinguishes V. flavida from all samples of V. stricta and V. rivalis, but not consistently from samples of V. ligustrifolia (Mitchell et al. in prep.). See also 'Taxonomic Notes' below.

FLOWERING

January-June

FLOWER COLOURS

White

FRUITING

March-June (-September)

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easy from fresh seed and semi-hardwood cuttings. A fast growing species which often forms a small tree 5-6 m tall.

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'.

flavida: Pale yellow

TAXONOMIC NOTES

A new species described herein. It is distinguished from most species bythe combination of: a shrub to tree habit (up to approximately8 m tall, with trunk 10 cm dbh); no leaf bud sinus; corolla tubes shorter than or equalling calyx; mostly subacute corolla lobes; leaves with the upper surface of the petiole and base of midvein usually conspicuously yellow; and inflorescences that are usually held erect, even in fruit.

Specimens of *V. flavida* are not uniform in appearance. They vary in leaf shape and size, inflorescence length, and in the hairiness of stems, ovaries, undersides of leaf midribs and outer surfaces of calyx lobes. On some specimens the leaves are tightly arranged and restricted to the apices of branchlets, whereas on others the leaves are more widely spaced along the branchlets; these features probably vary with plant age and the degree of exposure of both whole plants and individual branches. Some herbarium specimens that might be *V. flavida* cannot be identified with certainty without flowers, or without further information on habit or habitat. These include narrow-leaved, lowland specimens from Herekino (e.g. CHR 316527) and Warawara Forest (AK 175866) that might be *V. rivalis* or *V. flavida*.

Lowland specimens from Waipoua Forest, near the mouth of Ohae Stream (e.g. WELT 83433, AK 153629) and Kararoa Road (e.g. WELT 81935), are only tentatively identified as *V. flavida*, and their relationships to *V. ligustrifolia* and *V. rivalis* are worthy of further consideration. These specimens have reasonably long, broad leaves, and flowers (where present) with short corolla tubes. Some from Ohae Stream have flavonoid profiles generally similar to *V. flavida*, but in cultivation in Wellington have different flowering times and paler leaves than any other specimens of *V. flavida*. Vegetation around Ohae Stream is highly modified, and these *Veronica's* might not be indigenous there.

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. 194-195.

Mitchell, K. A., Markham, K. R. and Bayly, M. J. (2001). Flavonoid characters contributing to the taxonomic revision of the *Hebe parviflora* complex. *Phytochemistry* 56: 453-61.

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-flavida/