Epilobium chlorifolium

COMMON NAME

mountain willowherb

SYNONYMS

Epilobium chloraefolium

FAMILY

Onagraceae

AUTHORITY

Epilobium chlorifolium Hausskn.

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

EPICHL

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North and South Islands from Mt Hikurangi, the main axial ranges, Mt Taranaki and the Central Volcanic Plateau south.

HABITAT

Subalpine to Alpine. Mostly in tussock grassland and herbfield but extending into the bushline along stream sides. *Epilobium chlorifolium* has also been collected once, as a weed of gravel ballast in a railway shunting yard.





At the Hooker valley, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Craigieburn, Canterbury. Photographer: Jane Gosden, Date taken: 24/01/2011, Licence: CC BY-NC-SA.

DETAILED DESCRIPTION

Clumped perennial herb, branched from the base and sometimes also above, the stems 70-450 mm tall; stems with strigulose lines running down from the margins of the petioles, evenly pubescent with an increasing proportion of glandular hairs in the inflorescence. Leaves opposite, alternate in the inflorescence, dill, the lateral veins prominent, 3-4 on each side of the midrib; petioles 0-2 mm long; lamina 10-30 × 12-20 mm, narrowly ovate to broadly ovate, apex acute, base rounded to obtuse, margins serrulate with 3-9 teeth on each side. Flowers erect. Ovaries 10-18 mm long, densely glandular-pubescent, some with with a few strigulose hairs; on a pedicel 1-3 mm long. Floral tube 0.9-1.4 × 1.2-2.4 mm. Sepals 3.0-5.6 × 1.2-1.5 mm, keeled, sparsely glandular-pubescent, often abaxially strigulose. Petals 7-11 × 5-8 mm, notch 1.2-1.6 mm deep, white. Stamen filaments white of two types: long (2.2-4.5 mm long) and short (1.4-2.5 mm long), Anthers 1.0-1.7 × 0.4-1.0 mm, yellow. Style 3.3-5.2 mm long, white; stigma 1.2-2.2 x 0.5-0.8 mm, white, clavate, surrounded by the anthers at anthesis or held well above them. Capsule 39-52 mm long, glandular-pubescent, sometimes with a few strigulose hairs, on a pedicel 15-25 mm long. Seeds 1.3-1.7 mm long, brown, obovate, sometimes with a narrow truncated beak, base subacute, finely reticulate-mammillate; coma 5-11 mm long, white, caducous.

SIMILAR TAXA

Allied to basicolous *Epilobium wilsonii* with which it shares amolnst other characters pubescent ovaries whose indumentum is comprised solely of erect, glandular hairs. However, it differs from this narrow-range Kaikoura Coastline - South Marlborough endemic, by the much wider and less ecologically confined distribution; by the sepals which are 2.0-5.6 mm rather than 5.0-10.5 mm long in *E. wilsonii*; by the smaller petals (7-11 mm long cf. 10-18 mm long in *E. wilsonii*), and mostly smaller seeds 1.3-1.7 mm cf. 1.4-2.2 mm long) and distinctly longer coma (5-11 mm cf. 5-8 mm long in *E. wilsonii*).

FLOWERING

October - April

FLOWER COLOURS

White

FRUITING

October - July

LIFE CYCLE

Minute pappate seeds are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easily grown from fresh seed and rooted pieces. Does best in a rockery. Dislikes warm, humid climates where it is prone to getting powdery mildew.

ETYMOLOGY

epilobium: From the Greek epi- 'upon' and lobos 'a pod', the flowers appearing to be growing on the seed pod.

chlorifolium: Green leaved

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (1 September 2011) Description adapted from Raven & Raven (1976) and Webb & Simpson (2001)

REFERENCES AND FURTHER READING

Raven, P.H.; Raven, T.E. 1976: The genus *Epilobium* in Australasia. New Zealand DSIR Bulletin 216. 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.

Webb, C.J.; Simpson, M.J.A. 2011: Seeds of New Zealand Gymnosperms and Dicotyledons. Christchurch, Manuka Press.

NZPCN FACT SHEET CITATION

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https://www.nzpcn.org.nz/flora/species/epilobium-chlorifolium/ (Date website was queried)

MORE INFORMATION

 $\underline{\text{https://www.nzpcn.org.nz/flora/species/epilobium-chlorifolium/}}$