

# Epilobium angustum

## COMMON NAME

willowherb

## FAMILY

Onagraceae

## AUTHORITY

*Epilobium angustum* (Cheeseman) P.H.Raven et Engelhorn

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## NVS CODE

EPIANG

## CHROMOSOME NUMBER

2n = 36

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, RR

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: RR

2009 | Not Threatened

2004 | Not Threatened

## BRIEF DESCRIPTION

Perennial herb. Habit creeping to mat forming. Leaves opposite, oval to ovate, rugose impressed on the upper surface. Pedicels and flowers generally erect. Capsules, pedicels and sepals sparsely to densely hairy. Internodes with few hairs, mostly in decurrent lines from the petioles on the newer growth.

## DISTRIBUTION

Endemic. South Island, east of the main divide from Marlborough to Fiordland.

## HABITAT

In the short turf around the margins of lakes and tarns and other seasonally inundated hollows of glacial origin; 180-820m. Generally in open clay or stony areas in places that are periodically inundated with water, barely venturing far into the surrounding tussock grassland.

## WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

Almost always is a hydrophyte, rarely in uplands (non-wetlands).



*Epilobium angustum*. Photographer: John Barkla, Licence: CC BY.



Mackenzie Basin, South Canterbury. Photographer: Peter J. de Lange, Date taken: 24/02/2016, Licence: Public domain.

## DETAILED DESCRIPTION

Small mat forming perennial herb, sometimes forming a dense turf. Stems creeping, with sparse glandular, round tipped hairs ascending or spreading, generally in two decurrent lines from the petioles, and mostly confined to the newer growth, sometimes also with scattered appressed hairs. Leaves opposite, entire, petiole to 1.5mm or subsessile, with 1-3 widely spaced and poorly defined teeth, 1.5-12mm long by 1-5mm wide, up to four lateral veins visible, oblong, ovate, or obovate in shape. Base of leaf attenuate to obtuse, apex subacute to obtuse. Upper leaf surface rugose-impressed and shiny, with the lower leaf surface smooth and dull. Leaves crowded and imbricate, but sometimes distant, copper coloured to green, often reflexed. Flowers held upright, borne individually from leaf axils. Ovaries, floral tube and sepals sparsely to densely hairy, pedicel sparsely hairy. Pedicels 2-6mm at flowering, elongating to 7-50-(80)mm as capsule matures. Ovaries 4-7-(10)mm, dull, green to red-brown. Floral tube 1.1-2.5mm across, 0.6-3mm deep. Sepals 0.7-1.3mm wide, 1.1-4mm long, lacking a keel. Petals 1.4-5.8mm wide, 2.9-8mm long, with a notch 0.7-1.6 mm deep, white. Stamens of two types, short and long, longer ones 0.6-3.5mm, shorter ones 0.2-1.2mm. Anthers yellow, 0.3-0.6mm by 0.5-1.3mm long. Stigma clavate to capitate 0.45-1mm wide by 0.7-1.2mm high, on a white style 1.1-7mm long. Capsules cylindrical and finely torulose, sparsely to densely hairy, 7-13-(16)mm long. Seeds smooth, 0.4-0.5mm wide, 0.75-0.95mm long, light-brown in colour, with swollen, translucent and cellular ventral surfaces, this being more obvious at the base and apex of the seed. The coma is 4-5mm, and is easily removed.

## SIMILAR TAXA

Similar to other small creeping *Epilobium* species; particularly *E. brunnescens* and *E. komarovianum*, both of which can be found in similar habitats. The species differs from *E. brunnescens*, and all other small *Epilobium* species except *E. komarovianum*, by having rugose-impressed (dimpled) upper leaf surfaces. *Epilobium angustum* differs from *E. komarovianum* (which also has rugose-impressed upper leaf surfaces) by the presence of glandular pubescence on the pedicel, ovary, sepals, and capsules. Those of *E. komarovianum* are subglabrate to very sparsely eglandular hairy. The seeds of *E. komarovianum* also lack the swollen ventral cellular rim of *E. angustum*. *Epilobium komarovianum* can often be found growing with *E. angustum*, but is more often in a band of slightly dryer higher ground, around pond and lake margins, sometimes descending into the wetter habitat of *E. angustum*.

## FLOWERING

November to April

## FLOWER COLOURS

White

## THREATS

The species is threatened by intensification of farming practices and land modification in some of the dryland areas where it most commonly occurs. These practices help destroy its habitat through ploughing, pugging, and other disturbance, as well as allowing the infiltration of more competitive exotic weed species into the delicate turf communities in which the species lives.

## SUBSTRATE

Mostly greywacke glacial debris clay and loess.

## ETYMOLOGY

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

## ATTRIBUTION

Fact sheet prepared by Rowan Hindmarsh-Walls for NZPCN (06 May 2020). Description adapted from Raven & Raven (1976).

## REFERENCES AND FURTHER READING

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

## NZPCN FACT SHEET CITATION

Please cite as: Hindmarsh-Walls, R. (Year at time of access): *Epilobium angustum* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/epilobium-angustum/> (Date website was queried)

**MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/epilobium-angustum/>