

# Epilobium pedunculare

## COMMON NAME

willowherb

## SYNONYMS

*Epilobium nummulariifolium* var. *pedunculare* (A.Cunn.) Hook.f., *Epilobium caespitosum* Hausskn., *Epilobium linnaeoides* Hook.f.

## FAMILY

Onagraceae

## AUTHORITY

*Epilobium pedunculare* A.Cunn

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## NVS CODE

EPIPED

## 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 (but scarce north of Auckland), South, Stewart, Antipodes, Auckland, Campbell, Macquarie Islands. Naturalised in Great Britain & Ireland.

## HABITAT

Coastal to montane. Usually in forest especially on damp lightly shaded and sparsely vegetated banks and along shaded stream sides. Also found in damp sites within tussock grassland, and amongst or growing from the bases of sedges (*Carex* spp.) in swamps.



Atene, Wanganui River, leaves. Photographer: Colin C. Ogle, Date taken: 10/10/2014, Licence: CC BY-NC.



Atene, Whanganui River, leaves. Photographer: Colin C. Ogle, Date taken: 10/10/2014, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Creeping perennial herb forming diffuse mats up to 0.5 m diameter, stems prostrate, rooting at nodes; strigulose or with short erect hairs on lines decurrent from the margins of the petioles. Leaves opposite, green to coppery, dull to ± coppery, the lateral veins inconspicuous, usually 2-3 on each side of the midrib; petioles 0-5 mm long; lamina 2.5-14 × 2.5-15 mm, very broadly ovate to orbicular, subacute to rounded at the apex, obtuse to truncate at the base, serrate with 3-14 teeth on each side. Flowers erect arising from the axils of ordinary leaves with the stems continuing to grow beyond them. Ovaries 8-25 mm, glabrous; on a pedicel 3-50 mm long. Floral tube 0.7-0.9 × 0.9-1.5 mm. Sepals 1.7-3.5 × 0.6-1.0 mm, prominent in bud and opened flowers, not keeled, glabrous, with much extended, light-coloured apices. Petals 3.0-5.0 × 1.9-2.6 mm, notch 0.6-1.0 mm deep, white (rarely pink). Stamen filaments white of two types: long (0.5-2.0 mm long) and short (0.6-1.0 mm long), Anthers 0.2-0.25 × 0.1-0.15 mm, yellow. Style 0.7-1.8 mm long, white; stigma 1.2-1.9 × 0.5-0.9 mm, white, clavate, surrounded by the anthers at anthesis. Capsule 20-50 mm long, subglabrous to glabrous, on a pedicel 45-100 mm long. Seeds 0.6-1.0 mm long, orange-brown, narrowly elliptic, narrowly obovate-elliptic or narrowly oblong-obovate, finely reticulate-mammillate; coma 5-7 mm long, white, caducous.

## SIMILAR TAXA

*Epilobium pedunculare* is a very distinctive species that is perhaps most similar to *E. rotundifolium* with which it may share a common ancestry (see comments by Raven & Raven 1976). From *Epilobium rotundifolium* and indeed other epilobia, *E. pedunculare* is distinguished by the opposite, sharply serrated leaves (each bearing 5-14 teeth on either side); by the creeping stems which root at the nodes and grow beyond the flowering portion; by the stem indumentum which is not evenly pubescent, bearing instead short, erect, bristly hairs; flowers which are borne in leaf axils, floral tube 0.7-0.9 × 0.9-1.5 mm; white (rarely pink) petals, and seeds that lack an obvious cellular rim. Large forms of *E. pedunculare* (i.e. those that match the type of *E. linnaeoides*) unless flowering can be confused with *E. rotundifolium*, especially as the young growth is often tinged coppery.

## FLOWERING

September - May

## 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. Not as invasive as other species. A rather attractive ground cover for a damp, shaded site in most gardens and soil types

## ETYMOLOGY

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

**pedunculare**: Flowers stalked

## WHERE TO BUY

Not commercially available

## TAXANOMIC NOTES

Raven & Raven (1976) treated *Epilobium linnaeoides* Hook.f. as part of *E. pedunculare*. *Epilobium linnaeoides* was described from specimens collected from Campbell Island and is the typical form of *E. pedunculare* sensu Raven & Raven (1976) found in the southern North Island, South, Stewart, Chatham and subantarctic Islands. Some botanist regard *E. linnaeoides* as a distinct species in its own right noting that in some parts of the country it grows sympatrically (and more rarely syntopically) with *E. pedunculare*. However, in this particular case as Raven & Raven (1976) point out *E. linnaeoides* differs from *E. pedunculare* by its larger size and overall more robust growth habit. There are no other significant differences, on which basis it seems that the retention of two species as advocated by some botanists has little to commend it. Further, plants matching the description of *E. linnaeoides* collected from the Chatham Islands and cultivated in Auckland over a period of some 12 months reverted in size to the "typical" form of *E. pedunculare*, while seed collected from the Chatham Islands also reverted. Under these circumstances, and pending further study it seems better to retain the circumscription of *E. pedunculare* offered by Raven & Raven (1976).

## ATTRIBUTION

Fact Sheet Prepared for NZPCN by: P.J. de Lange (30 August 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-pedunculare/> (Date website was queried)

## MORE INFORMATION

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