

Epilobium macropus

COMMON NAME

willowherb

FAMILY

Onagraceae

AUTHORITY

Epilobium macropus Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

EPIMAC

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 Island (Central Volcanic Plateau and main axial ranges south), South Island (mostly easterly).

HABITAT

Montane to alpine on the margins of (and sometimes partially immersed in) mountain streams, seepages and soaks.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

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



Craigieburn Valley, Canterbury. Photographer: Jane Gosden, Date taken: 04/01/2011, Licence: CC BY-NC-SA.



Craigieburn Valley, Canterbury. Photographer: Jane Gosden, Date taken: 29/04/2011, Licence: CC BY-NC-SA.

DETAILED DESCRIPTION

Dense, creeping, mat-forming perennial herb of sodden ground, the stems 20-200 mm long, creeping and rooting below; stems pubescent all round with short bristly hairs. Leaves usually crowded and overlapping or shorter than the internodes they subtend, opposite, with the uppermost occasionally alternate, bright yellowish-green, not shining, paler and occasionally slightly glaucous beneath, the lateral veins not obvious, 2-3 on each side of the midrib, elliptic to narrowly ovate, acuminate at the apex, obtuse to acute at the base, 6-15 × 3-8 mm, entire or very obscurely denticulate with c.2-4 minute teeth along each margin; petioles 2-3 mm long, distinct. Flowers arising individually from the axils of the leaves. Ovaries 15-20 mm long, glabrous or sparsely clothed with short erect hairs, often purplish, on a pedicel 5-25 mm long. Floral tube 1.3-2.0 × 1.5-2.2 mm. Sepals 3.0-6.0 × 1.3-1.8 mm, often tinged purple, not keeled, chartaceous, membranous, glabrous or sparsely invested with short erect hairs. Petals 6.5-12.0 × 4.0-8.0 mm, notch 1.5-3.0 mm deep, white, very rarely flushed pink initially but flushing pink after pollination. Stamens filaments white, of two types: long (2.5-5.0 mm long) and short (1-3 mm long), Anthers 0.9-1.0 × 0.4-0.5 mm, bright yellow. Style 4.5-9.0 mm long, white but purplish near the base, stigma 1.2-2.7 × 0.7-1.6 mm, broadly clavate, held above anthers in early anthesis. Capsule 30-65 mm long, stout, glabrous, on a pedicel 10-120 mm long. Seeds 0.5-1.0 mm long, orange to orange-brown, oblong-obovate, elliptic-obovate or obovate, finely reticulate; coma 7.5-11.0 mm long, orange to orange-brown; coma 2.5-7.0 mm long, white, usually persistent.

SIMILAR TAXA

A very distinctive species easily recognised by its mat-forming growth habit and ecological preference for growing in running water. Raven & Raven (1976) suggest (on morphological grounds) a close relationship with *E. chionanthum* with which it has a superficial resemblance and both species are distinguished from all other New Zealand epilobia by sharing an orange to orange-brown, long persistent coma. From *E. chionanthum*, *E. macropus* differs by the stems which are evenly pubescent throughout with short, erect, bristly hairs (rather than mostly glabrous but strigulose along lines decurrent from the margins of the petioles below), with only the very uppermost leaves alternate (mostly opposite rarely with a few alternate in the inflorescence), and by the fruiting pedicels 10-120 mm long (12-28 mm long in *E. chionanthum*).

FLOWERING

November- March

FLOWER COLOURS

White

FRUITING

FR:

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown from fresh seed and rooted pieces. However to flourish it needs to be planted on the margins of streams or kept in partially immersed pots with the water changed frequently. Does not tolerate high humidity and drought. *Epilobium macropus* is a very attractive species that despite being tricky to cultivate deserves to be more widely grown.

ETYMOLOGY

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

macropus: Big foot

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact sheet prepared for NZPCN b: P.J. de Lange (28 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

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

MORE INFORMATION

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