

Epilobium insulare

COMMON NAME

willowherb

FAMILY

Onagraceae

AUTHORITY

Epilobium insulare Hausskn.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

EPIINS

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: DP, RR, Sp

PREVIOUS CONSERVATION STATUSES

2012 | Data Deficient | Qualifiers: RR

2009 | At Risk – Declining | Qualifiers: DP, RR

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North Island (from the Waikato River mouth and Bay of Plenty south), South Island, Chatham Islands.

HABITAT

Relatively open, marshy places; bogs, and about lake margins; sea level to 900 m.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

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



Pukerua Bay. Photographer: Colin C. Ogle, Licence: CC BY-NC.



Rotopapa Reserve, Te Waihora/Lake Ellesmere. Photographer: Melissa Hutchison, Date taken: 13/02/2021, Licence: CC BY-NC.

DETAILED DESCRIPTION

Loosely matted flaccid perennial herb, often much-branched, the stems 30–400 mm tall, creeping and rooting near the base; stems usually straw-coloured, strigulose all round least in the upper portions, with an admixture of glandular hairs in the inflorescence. **Leaves** much shorter than the internodes they subtend, opposite, alternate in the inflorescence, dull bluish-green, paler and occasionally slightly glaucous beneath (often tinged reddish especially along the lamina margin), the lateral veins visible, usually 2–3 on each side of the midrib; lamina 4–26 × 4–14 mm, narrowly to overly broadly ovate, apex acute or obtuse, base rounded, margins remotely, shallowly or rarely prominently serrulate, usually with 3–10 teeth on each margin; petioles distinct, 10–30 mm long.

Inflorescence erect. **Flowers** erect. **Ovaries** 10–18 mm long, glandular and strigulose, on a pedicel 2–11 mm long.

Floral tube 0.9–1.2 × 1.3–1.7 mm. **Sepals** 2.0–3.5 × 0.8–0.9 mm, weakly keeled, glandular and strigulose. **Petals** 3.3–6.2 × 1.6–3.5 mm, notch 0.7–2.0 mm deep, white. **Stamen filaments** white, of two types: long (1.2–3.0 mm long) and short (0.45–1.5 mm long). **Anthers** 0.3–1.0 × 0.3–0.5 mm, cream. **Style** 1.7–2.3 mm long, white tinged pink near the base, stigma 0.8–1.8 × 1.0–1.7 mm, broadly clavate surrounded by both or occasionally only the longer stamens at anthesis. **Capsule** 25–55 mm long, sparsely strigulose and glandular, on a pedicel 5–65 mm long. **Seeds** 0.8–1.1 mm long, orange to orange-brown, elliptic-oblong to elliptic-obovate, finely reticulate and scarcely to distinctly mamillate; coma 4–6 mm long, white, caducous.

SIMILAR TAXA

Epilobium insulare is most often confused with *E. chionanthum* especially as both species grow in similar habitats and are morphologically superficially similar. Indeed Raven & Raven (1976) venture the hypothesis that *E. insulare* is either a species that has evolved through hybridisation with *E. alsinoides* and *E. chionanthum*, or that it is an autogamous derivative of the mostly outcrossing, larger flowered and seeded *E. chionanthum*. From *E. chionanthum*, *E. insulare* is distinguished by its young stems which are evenly strigulose hairy all round rather than mostly glabrous, and where strigulose then only along lines decurrent from the margins of the petioles, distinctly red-margined leaves, smaller, more prominently notched petals (3.3–6.2 × 1.6–3.5 mm with the notch 0.7–2.0 mm deep in *E. insulare*; 6.0–11.0 × 4.5–6.0 mm with the notch 0.8–1.3 mm deep in *E. chionanthum*), and by the smaller seeds (0.8–1.1 mm long in *E. insulare* 1.4–1.8 mm long in *E. chionanthum*), and a white rather than grey coma.

FLOWERING

November–March

FRUITING

January–April

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown from fresh seed and rooted pieces. Does best when planted into a swamp or within a pot partially immersed in a pond.

ETYMOLOGY

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

insulare: From the Latin insula 'island', pertaining to or growing on islands

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Fact Sheet Prepared for NZPCN by: P.J. de Lange 28 August 2011. Description adapted from Raven & Raven (1976) and Webb & Simpson (2001).

REFERENCES AND FURTHER READING

Raven PH, Raven TE. 1976. The genus *Epilobium* in Australasia. *New Zealand DSIR Bulletin 216*. Government Printer, Wellington, NZ. 321 p.

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics 11*: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

Webb CJ, Simpson MJA. 2001. Seeds of New Zealand Gymnosperms and Dicotyledons. Manuka Press, Christchurch. 428 p.

NZPCN FACT SHEET CITATION

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(Date website was queried)

MORE INFORMATION

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