

Epilobium cinereum

COMMON NAME

willowherb

SYNONYMS

Epilobium billardioreanum subsp. *cinereum* (A.Rich.) P.H.Raven et Engelhorn

FAMILY

Onagraceae

AUTHORITY

Epilobium cinereum A.Rich.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

EPIBSC

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

An erect much branched perennial plant, often with an overall reddish look. Leaves fairly small, grey-green to reddish, narrow elliptic, and covered in strigulose hair, with prominent and widely spaced teeth. Flowers very rarely white, often rose tinted, on a strigulose hairy ovary and pedicel.

DISTRIBUTION

Indigenous. New Zealand: North, South, Stewart and Chatham Islands. Also Australia (Queensland, New South Wales, Victoria, South Australia and Tasmania). Naturalised at least on the Hawaiian Islands if not elsewhere in the Pacific.



Te rerenga, Coromandel. Dec. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Te rerenga, Coromandel. Dec. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

HABITAT

Coastal to upper montane. In open, often dryer habitats on banks and rock outcrops, as well as around lake, river and ephemeral wetland margins. Often a prominent urban weed, especially in derelict properties, old car yards, and in car parks. In these habitats it often associates with *Epilobium ciliatum*, *E. hirtigerum*, *E. tetragonum* and *Lachnagrostis filiformis*.

WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

Rarely is a hydrophyte, almost always in uplands (non-wetlands).

DETAILED DESCRIPTION

Erect, much branched perennial or annual herb 0.15-0.60 m tall, often reddish-tinged, not obviously stoloniferous; plants strigulose, inflorescence, densely so, hairs comprising an admixture of glandular or non-glandular erect hairs often also present, the stems pubescent all round, conspicuously exfoliating and often somewhat woody near the base. Leaves mostly opposite alternate alternate in the upper half, grey-green, often tinged reddish, densely strigulose, the lateral veins visible to prominent, usually 3-5 on each side of the midrib; lamina 5.0-23.0 × 1.5-7.0 mm, linear to narrowly elliptic, apex subacute to acute or obtuse, base attenuate, margins coarsely serrate, bearing 1-8 teeth on each side, shortly pedunculate or sessile. Inflorescence erect. Flowers erect. Ovary 10-24 mm long, on a pedicel 0-15 mm long, investiture usually densely though finely strigulose with an admixture of white or greyish-white, glandular or eglandular erect hairs. Floral tube 0.6-1.2 mm deep, 1.2-1.9 mm diameter, usually bearing a conspicuous ring of long hairs within. Sepals 2.5-7.5 × 0.8-1.7 mm, keeled, strigulose, bearing glandular or eglandular hairs also. Petals 3.5-12.0 × 2.0-6.5 mm, the notch 0.8-1.5 mm deep, rose-purple (very rarely white). Stamen filaments white of two types: long 1.5-5.0 mm long and short 1.0-4.5 mm. Anthers cream, 0.5-1.0 × 0.3-0.52 mm. Style 2.5-9.0 mm long, white. Stigma 1.5-4.0 × 0.9-1.5 mm, white, clavate, surrounded by (very rarely held well above) the anthers at anthesis. Capsule 30-68 mm long, densely strigulose, indumentum comprising an admixture of glandular and eglandular erect hairs; pedicel 6-20 mm long. Seeds 0.8-1.0 × 0.3-0.4 mm, brown, reticulate-mammillate to reticulate-papillose, obovoid, chalazal callus absent, apex rounded (not beaked); coma 7.0-10.5 mm long, white, breaking off readily.

SIMILAR TAXA

Epilobium cinereum is easily distinguished from all other epilobia except the threatened *E. hirtigerum* on account of its upright, heavily branched growth habit, finely puberulent, greyish (often red-tinged) stems, foliage, pedicels and capsules, and dark rose-purple flowers which open widely at anthesis. *Epilobium hirtigerum* is usually easily distinguished from *E. cinereum* on account of its larger overall size, glabrous stoloniferous winter growth habit, and by the stem hairs which in *E. hirtigerum* are in mixtures of long, spreading eglandular, shorter glandular and strigulose hairs. In the North Island at least, *E. hirtigerum* is further distinguished by its smaller, consistently white flowers which scarcely open.

FLOWERING

September - May

FLOWER COLOURS

Red/Pink

FRUITING

October - July

PROPAGATION TECHNIQUE

Very weedy and probably best not cultivated as it is inclined to spread rapidly. *Epilobium cinereum* is a common urban weed in many cities and towns of eastern New Zealand

ETYMOLOGY

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

cinereum: Ash-grey

NOTES ON TAXONOMY

Raven & Raven (1976) prefer to treat *Epilobium cinereum* as *E. billardierianum* subsp. *cinereum*. However, irrespective of their comments for Australia it is clear that in New Zealand *E. cinereum* is a widespread, morphologically stable unit that is only occasionally seen sympatric (and even syntopic) with the ecologically and morphologically distinct *E. billardierianum*. Further hybrids between both subspecies and *E. billardierianum* are as yet unknown from New Zealand, although Raven & Raven (1976) suggest that they are frequent in Australia. From a New Zealand perspective it is difficult to accept such morphologically distinct species as subspecies because of their reported behavior in Australia. Also, as with any *Epilobium*, given an opportunity hybridism is likely to happen, even with distinct relatives, as it is the main driver for speciation in the Australasian representatives of the genus. In this regard Raven & Raven (1976) are inconsistent, accepted at species rank other epilobia, which following their treatment of *E. billardierianum* should also be regarded as subspecies, or even merged.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 22 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.

Webb, C.J.; Simpson, M.J.A. 2001: Seeds of New Zealand Gymnosperms and Dicotyledons. Christchurch, Manuka Press.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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