Epilobium hectorii

COMMON NAMES
willowherb

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | At Risk – Declining | Qualifiers: DPR, DPS, DPT
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

FLOWER COLOURS
White

DETAILED DESCRIPTION
Tufted, gracile, perennial herb 50-250 mm tall, often much-branched from base, perennating from basal buds; plants ± densely covered throughout with short, crisp, erect or appressed hairs, mostly confined to lines decurrent from the margins of the petioles, especially on upper part of stem. Leaves opposite, a few in inflorescence alternate, longer than or equal to the stem internodes; lateral veins not prominent, 2-3 on each side of the midrib; petiole 0-3 mm; lamina 3-20 × 1-4 mm, dull bluish-green to bronze-green, narrowly elliptic, base attenuate, apex subacute to rounded, serrulate with 0-10 weak teeth on each side. Inflorescence erect, the flowers often distributed well down the stem. Flowers erect. Ovaries 6-14 mm long, finely and uniformly stigulose, pedicellate, pedicels 1-6 mm long. Floral tube 0.6-1.3 × 1.2-2.0 mm, adaxially strigulose. Sepals 1.6-4.5 × 0.7-1.2 mm, ovate-lanceolate, not keeled, strigulose. Petals 2.5-8.2 × 1.8-4.3 mm, white, sometimes whitish-pink,if white then flushing pink after pollination, notch 0.9-1.4 mm deep. Stamen filaments white, of two types: long (0.5-3.2 mm long) and short (0.3-1.5 mm long). Anthers 0.5-1.2 × 0.3-0.5 mm, cream. Style 0.8-4.9 mm long, white; stigma 0.8-1.9 x 0.4-0.6 mm, white, clavate, surrounded by the longer or both sets of stamens at anthesis. Capsule 18-28 mm long, glaucescent, strigulose (rarely sparsely so) with denser lines of hairs conspicuous along edges of valves and sometimes with a green line along valve dehiscence, on a pedicel 13-27 mm long. Seeds 0.8-1.3 mm long, orange to orange-brown, oblong-obovate to obovate, apex rounded, base subacute, finely reticulate; coma 4-6 mm long, white, caducous.

SIMILAR TAXA
Epilobium hectorii is distinguished from other epilobia by the glaucescent to bronze-green leaves which are longer or equal to the internodes and narrowly elliptic, bearing 0-10 weak teeth either side; erect inflorescences; white (rarely whitish-pink) petals at anthesis; abaxially glabrous floral tube; by the absence of glandular hairs on the ovary, which is otherwise invested in fine, uniformly strigulose hairs; by the glaucescent, strigulose, capsules ranging from 18-28 mm long; and by the finely reticulate seeds. It is most similar to *Epilobium krulleanum* which was included within it by Raven & Raven (1976) but which is maintained here as a species. From *Epilobium hectorii*, *E. krulleanum* differs by its larger pink flowers whose petals range from 5.6-9.0 × 3.8-5.5 mm, and with a deeper notch (1.2-1.6 mm cf. 0.9-1.4 mm in *E. hectorii*), and by the seeds which are 1.3-1.8 mm long, brown, obovate and rather conspicuously papillate, and furnished with a longer coma (6-8 mm cf. 4-6 mm long in *E. hectorii*). *Epilobium krulleanum* is less widespread than *E. hectorii* being chiefly found in the intermontane basins of the upper Awatere and Clarence Rivers, South Marlborough, as well as the intermontane basins of Canterbury.

DISTRIBUTION
Endemic. New Zealand: North and South Islands from the Cental Volcanic Plateau and Kaimanawa Ranges south to Southland with a mainly easterly distribution.

HABITAT
Montane to alpine on open stony ground, within braided river beds, in tussock grassland, in frost flats and then often within ablation areas.

GENUS
Epilobium

FAMILY
Onagraceae

AUTHORITY
Epilobium hectorii Hausskn.

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
November - February

FRUITING
December - April

LIFE CYCLE AND DISPERSAL
Minute pappate seeds are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE
Easily grown from fresh seed. Dislikes humid conditions.

WHERE TO BUY
Not commercially available

ETYMOLOGY
epilobium: From the Greek epi- 'upon' and lobos 'a pod', the flowers appearing to be growing on the seed pod.
hectorii: Named after Sir James Hector, 19th century New Zealand geologist and botanist who was originally from Scotland

NVS CODE
EPIHEC

CHROMOSOME NUMBER
2n = 36

PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened
2012 | Not Threatened
2009 | Not Threatened
2004 | Not Threatened
Jump to current conservation status

REGIONAL CONSERVATION STATUSES
Otago: 2025 | Regionally At Risk – Regionally Declining | Qualifiers: DPR, DPS, DPT, NR, NStr, RR, Sp, TL Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Otago conservation status information is sourced from the "Conservation Status of Indigenous Vascular Plants in Otago, 2025" Jarvie S et al. (2025) report.

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.

ATTRIBUTION

Fact Sheet Prepared for NZPCN by P.J. de Lange (4 September 2011). Description adapted from Raven & Raven (1976) and Webb & Simpson (2001).

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/epilobium-hectorii/

PDF DATE

25 May 2026