

Epilobium melanocaulon

COMMON NAMES

willowherb

BIOSTATUS

Native – Endemic taxon

CURRENT CONSERVATION STATUS

2023 | Not Threatened

[Jump to previous conservation statuses](#)

CATEGORY

Vascular

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

FLOWER COLOURS

Violet/Purple, White

DETAILED DESCRIPTION

Much-branched, stoutly tap-rooted, erect, perennial herb forming shrublets 0.1-0.3 m tall. Branches arising from the base (rarely above). Stems purple-black, maroon (sometimes green), with dense strigulose lines decurrent from the margins of the petioles. Leaves sessile to subsessile, mostly opposite towards base, alternate in or near inflorescence, dark dull green, purple-black or maroon, midvein scarcely visible to prominently so, lateral veins not evident, 1-3 on each side of midrib; petioles if present 1-2 mm long; lamina 3-12(-20) x 1-4(-6) mm, narrowly elliptic to elliptic, apex acute (often apiculate), base attenuate, margins remotely, coarsely serrate, teeth 2-4 on each side. Inflorescence erect. Flowers erect. Ovaries 6-14 mm long, glabrous, green to purple-black, sessile or on pedicels 2 mm long. Floral tube 0.2-0.6 x 1.0-1.4 mm, glabrous. Sepals not keeled, 2-8-4.5 x 0.9-1.1 mm. Petals 5.0-6.5 x 2.3-3.0 mm, white, flushed pink after pollination, the notch 0.5-1.0 mm deep. Anthers 0.4-0.5 x 0.25-0.3 mm, yellow; filaments of the longer stamens 1.5-2.3 mm long, those of shorter ones 0.8-1.5 mm long, the anthers of the longer stamens shedding pollen directly on the stigma at anthesis. Style 2.1-2.6 mm high, white; stigma 0.8-1.9 mm x 0.45-0.9 mm, short-clavate, surrounded by the anthers of the longer stamens at anthesis. Capsules 18-38 mm long, brown, glabrous, sessile or on pedicels up to 9 mm long. Seeds 0.9-1.1 mm long, purple-brown, orange or orange-brown usually tinged purple, obovate, finely reticulate-mamillate; coma 4.0-6.5 mm long, white, caducous.

SIMILAR TAXA

Epilobium melanocaulon is unlikely to be confused with any other *Epilobium* in New Zealand, indigenous or otherwise. The densely branched, erect, shrubby growth habit, and purple-black stems; coarsely toothed, dark green, purple-black or maroon leaves and dark brown capsules are diagnostic of this species.

DISTRIBUTION

Endemic. New Zealand: North and South Islands from Rotorua and Lake Waipapa (Waikato River Hydroelectric dam) south.

HABITAT

lowland to alpine. Usually riparian, in open braided river and gravelly river beds and watercourses. Also on moraines, scree slopes, and in gravel on lake margins. Rarely in urban areas, often found in the eastern South Island growing along railway tracks.



Hawkdun range, February. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Lake Te Anau, Fiordland. Photographer: John Barkla, Licence: CC BY.

GENUS

Epilobium

FAMILY

Onagraceae

AUTHORITY

Epilobium melanocaulon Hook.f.

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

FLOWERING

December - April

FRUITING

February - June

LIFE CYCLE AND DISPERSAL

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

PROPAGATION TECHNIQUE

An attractive species well suited to a rocky garden situation. Excellent as a pot plant for terrace situation. Inclined to be short-lived so best grown from fresh seed or cuttings and treated as an annual. In good conditions will self-establish but not inclined to be weedy like many other epilobia.

ETYMOLOGY

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

melanocaulon: Black stemmed

NVS CODE

EPIMEL

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 Not Threatened [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 (28 October 2012). Description adapted from Raven & Raven (1976) and Webb & Simpson (2001).

MORE INFORMATION

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

PDF DATE

25 May 2026