

Epilobium melanocaulon

COMMON NAME

willowherb

FAMILY

Onagraceae

AUTHORITY

Epilobium melanocaulon Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

EPIMEL

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 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.

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.

FLOWERING

December - April

FLOWER COLOURS

Violet/Purple, White

FRUITING

February - June

LIFE CYCLE

Minute papitate 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

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (28 October 2012). 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 melanocaulon* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/epilobium-melanocaulon/> (Date website was queried)

MORE INFORMATION

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