

Epilobium purpuratum

COMMON NAMES

purple willow herb

BIOSTATUS

Native

CATEGORY

Vascular

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

FLOWER COLOURS

Red/Pink, White

DETAILED DESCRIPTION

Decumbent, glabrous to glabrescent somewhat succulent perennial herb. Stems 40-200 mm long, distinctly purple-black, sometimes rooting at nodes. Petiole 1-17 mm long, fleshy. Leaves 4-16 x 3-8 mm, dark green, opposite, rather crowded, firmly fleshy to almost succulent, dark green, broadly elliptic to rotund, obtuse to rounded at apex, base broadly cuneate to rounded, margins entire, or obscurely serrulate with up to 4 blunt teeth on each side. Flowers solitary in leaf axils, at first pendant becoming erect in fruit. Pedicel 10-35 mm long, bright purple. Ovaries 7-13 mm long, bright purple, glabrous. Floral tube 1-1.2 mm deep, 1.5-1.8 mm diameter, glabrous. Sepals 3-4.4 x 1-1.3 mm, bright purple, not keeled, glabrous or with a few strigose hairs. Petals 4.5-9 x 3-4 mm, white with pink veins, flushed pink after pollination, notch 1-1.8 mm deep. Anthers 0.8-0.9 x 0.4-0.5 mm, yellow. Long filaments 2-2.8 mm long, short 0.8-1.8 mm long, white. Style 1-1.4 mm, white, stigma 1.5-2 x 0.6-0.8 mm, white, clavate. Capsule 12-40 mm long, purple, glabrous, erect, pedicel elongating, 10-65 mm long. Seeds 1-1.2 x 0.4-0.5 mm, brown, papillose, coma 4-6 mm, white, caducous.

SIMILAR TAXA

A distinctive species recognised immediately by the rather succulent, fleshy, thick-set, dark green with dark purple underside leaves 4-16 mm long, purple-black stems, and purple capsules. In its high alpine habitat it is frequently found in association with the similar *E. prophyrium* which has a pink flush to the upper leaf surface and a curved pink rather than straight, erect, purple capsule.

DISTRIBUTION

Endemic. South Island Mt Cook Region and eastern Otago (Mt Earnslaw, Hector's Col, West Matukituki, Pisa and Rock & Pillar Ranges)

HABITAT

A high altitude alpine species occupying sites between 1300-1850 m in elevation. It is a species of unstable to fairly stable screes, fine grained gravels lodged within boulderfalls, and on occasional a rupestral dwelling on shaded ledges and cliff faces.

CURRENT CONSERVATION STATUS

2023 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp

THREATS

A naturally uncommon, narrow range endemic of high-elevation habitats. There is no evidence that it has ever been threatened by browsing animals.



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DETAILED TAXONOMY

FAMILY

Onagraceae

AUTHORITY

Epilobium purpuratum Hook.f.

SYNONYMS

None

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

ECOLOGY

FLOWERING

November - January

FRUITING

November - April

LIFE CYCLE AND DISPERSAL

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

PROPAGATION TECHNIQUE

Unknown. Has been cultivated in the past and probably does well in an alpine house.

OTHER INFORMATION

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.

purpuratum: Purplish

NVS CODE

EPIPUR

CHROMOSOME NUMBER

$2n = 36$

PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

2009 | At Risk – Naturally Uncommon

2004 | Sparse

REFERENCING AND CITATIONS

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 6 January 2008. Description adapted from Raven & Raven (1976) and Webb & Simpson (2001).

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Epilobium purpuratum* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

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

MORE INFORMATION

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

PDF DATE

31 October 2024