

Epilobium purpuratum

COMMON NAME

purple willow herb

SYNONYMS

None

FAMILY

Onagraceae

AUTHORITY

Epilobium purpuratum Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

EPIPUR

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

2009 | At Risk – Naturally Uncommon

2004 | Sparse

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.



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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.

FLOWERING

November - January

FLOWER COLOURS

Red/Pink, White

FRUITING

November - April

LIFE CYCLE

Minute papillate 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.

THREATS

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

ETYMOLOGY

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

purpuratum: Purplish

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 6 January 2008. 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.

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Webb, C.J.; Simpson, M.J.A. 2011: Seeds of New Zealand Gymnosperms and Dicotyledons. Christchurch, Manuka Press.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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