

# Epilobium petraeum

## COMMON NAME

rock willow herb

## SYNONYMS

None

## FAMILY

Onagraceae

## AUTHORITY

Epilobium petraeum Heenan

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## CURRENT CONSERVATION STATUS

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

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp

2009 | At Risk – Naturally Uncommon

2004 | Sparse

## DISTRIBUTION

Endemic. South Island from the Kaikoura Ranges (Mt Fyffe) south to the Mt Cook Region of Canterbury.

## HABITAT

A species of exposed, steep, partially stable, sparsely vegetated greywacke rock outcrops, stable to partially stable scree in and near margins of rock outcrops, and occasionally found on partially stable and exposed stream margins.

## DETAILED DESCRIPTION

Compact, densely spreading, glabrous herb producing shrublets up to 400 x 100 mm. Old stems prostrate to spreading; new stems erect, red; not rooting at nodes. Petiole 5-7 mm, slender, channelled, appressed to the stem or slightly spreading. Leaves 15-24 x 4-7 mm, opposite, ovate, elliptic, or broad-elliptic, glossy, erect or spreading, longer than internodes, 3-5 teeth on each margin, upper surfaces dark-green and sometimes flushed red, uppersides red, margin and midrib usually red, base cuneate, apex obtuse to retuse. Inflorescence terminal, conspicuous; flowers perfect, erect; pedicel 2-4 mm long, green; bud pink. Sepals 4, 4-4.5 x 1.2-1.4 mm, oblong, not keeled, red, apex acute. Petals 4, 5-6 x 1.9-2.1 mm, obovate, white, apex notch 0.5-0.8 mm deep. Floral tube 1-1.2 mm deep, c. 2 mm wide. Ovary 12-14 mm, green; style 2.3 mm, white; stigma 1 x 0.4 mm, yellow; filaments white, unequal, longer 2-2.5 mm, shorter 1-1.2 mm. Capsule 35-55 x 1.4-1.8 mm, scarlet-red; pedicel 10-24 mm, scarlet-red. Seeds 1-1.1 x 0.4-0.45 mm, pale brown, papillose but usually flat on one surface; proximal end constricted with acute apex; chalazal end with a very short, inconspicuous neck; coma 4-5 mm long, white, caducous.



Mt Hutt (January). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Craigieburn Range. Photographer: Jane Gosden, Date taken: 26/12/2021, Licence: CC BY-NC.

## SIMILAR TAXA

Distinguished by the low, spreading, compact habit, all parts glabrous, red stems, opposite, dark-green and glossy leaves with the upper midrib usually red, the leaves not obscuring the internodes, a floral tube 1-1.2. mm deep, and papillose 1-1.1. x 0.4-0.45 mm seeds with a non-persistent coma. It is most similar to *E. brevipes* Hook.f. which is a glabrescent shrub of similar habitats, with leaves that are initially opposite becoming alternate toward the stem apices. The leaves are narrowly elliptic to elliptic with acute rather than obtuse to retuse apices. A key difference is that the leaf apex in *E. brevipes* has a distinct apiculus (like a lump of gum) which is absent in *E. petraeum*. Furthermore the stem leaf junction of *E. brevipes* has a miniscule tuft of strigulose hairs.

## FLOWERING

December - January

## FLOWER COLOURS

White

## FRUITING

January - March

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Easily grown in a pot kept in an alpine house or in a rock garden. Prefers a fertile, free draining soil and full sun. Intolerant of warm, humid climates.

## THREATS

A widespread, naturally uncommon, biological sparse species of high alpine rock habitats. There is no evidence of decline.

## ETYMOLOGY

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

**petraeum:** Loves rocks

## WHERE TO BUY

Not commercially available

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 6 June 2004. Description adapted from Heenan (1996).

## REFERENCES AND FURTHER READING

Heenan, P. B. 1996: *Epilobium petraeum* (Onagraceae), a new species of alpine willow-herb from New Zealand. *New Zealand Journal of Botany* 34(1): 41-45.

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

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Epilobium petraeum* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/epilobium-petraeum/> (Date website was queried)

## MORE INFORMATION

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