

Epilobium astonii

COMMON NAMES

Aston's willowherb

BIOSTATUS

Native – Endemic taxon

CATEGORY

Vascular

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

SIMPLIFIED DESCRIPTION

A fairly large hairy Epilobium similar to *E. pubens* but larger in most features, and highly branched, preferring dryer montane to alpine rocky areas in the eastern central part of the North Island axial ranges.

FLOWER COLOURS

Red/Pink, White

DETAILED DESCRIPTION

Heavily branched, erect perennial herb forming compact bushes up to 300 x 300 mm; entire plant pubescent, hairs admixed erect eglandular and glandular, with the stems completely glandular hairy. Leaves opposite to subopposite except for the inflorescence where alternate; lateral veins c.3 each side of midrib, evident but not prominent; petiole 2-6 mm long, finely winged; lamina 13-33 x 7-154 mm, dull green, narrowly obovate, apex acute, base attenuate, margins serrulate, bearing 8-24 teeth. Inflorescence and flowers nodding. Pedicels 2-8 mm long. Ovaries 12-35 mm long, glandular puberulent, admixed with erect eglandular and appressed glandular hairs. Floral tube 1.8-2.8 x 2.2-3.2 mm, internally bearing a conspicuous ring of long hairs. Sepals 1.8-2.8 x 2.2-3.2 mm, not keeled, hairs admixed glandular/eglandular. Petals 7.3-13.0 x 7.0-8.0 mm, white flushed pink or pink; apical notch 1.8-3.5 mm deep. Anthers 2.7-2.9 x 0.8-1.0 mm, yellow, filaments white, those of long stamens 2.0-3.6 mm, short 1.0-2.2 mm long. Style 4.0-5.0 mm, white, often with long hairs near base; stigma 2.0-3.0 x 1.3-2.0 mm, white, broadly clavate. Capsule 2.9-4.2 mm, finely glandular/eglandular pubescent, with pedicel slightly elongated (up to 9 mm long). Seeds 0.9-1.1 x 0.4-0.5 mm, dark brown, obovoid, papillose, the coma 3.5-5.0 mm, deatched readily or persistent.

SIMILAR TAXA

Allied to *Epilobium pubens* A.Rich. from which it differs by its much larger, compact, bushy, rather than slender scarcely branched growth habit; by its longer sepals (5.0-6.5 cf 2.5-2.8 mm) and petals (7.3-13.0 cf. 3.5-7.0 mm); and by its restriction to subalpine or alpine usually greywacke rock habitats of the main axial ranges of the North Island, rather than being a widespread species of no particular substrate preference, and ranging from coastal habitats to the upper montane forest and subalpine scrub.

DISTRIBUTION

Endemic. North Island on the main axial ranges from the high points of the Raukumara Range south to the Raukumara and northern Ruahine Ranges.

HABITAT

A subalpine to alpine species (760-1370 m a.s.l.) favouring greywacke (mainly the arenite facies) but also known from limestone. Usually found on cliff faces, often along canyon and gorge walls, sometimes on exposed boulders along ridge lines.



Kaimanawa Range. Jan 1973. Photographer: Colin C. Ogle, Licence: CC BY-NC.



Kaimanawa Range. Jan 1974. Photographer: Colin C. Ogle, Licence: CC BY-NC.

SUBSTRATE DETAILS

Greywacke and limestone

CURRENT CONSERVATION STATUS

2023 | At Risk – Naturally Uncommon | Qualifiers: RR

THREATS

Not threatened. Listed because it is a narrow range endemic of limited geographic extent. It is regarded as common in the few places from which it has been recorded.

DETAILED TAXONOMY

FAMILY

Onagraceae

AUTHORITY

Epilobium astonii (Allan) Raven et Engelhorn

SYNONYMS

Epilobium pubens var. *astonii* Allan

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

ECOLOGY

FLOWERING

December - February

FRUITING

January - April

PROPAGATION TECHNIQUE

Easily grown in a pot or in a rock garden in full sun. Dislikes high humidity. Quite drought tolerant.

OTHER INFORMATION

ETYMOLOGY

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

astonii: After Aston

CHROMOSOME NUMBER

$2n = 36$

PREVIOUS CONSERVATION STATUSES

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

2012 | At Risk – Naturally Uncommon | Qualifiers: RR

2009 | At Risk – Naturally Uncommon

2004 | Range Restricted

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.

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 16 July 2005. Description adapted from Raven & Raven (1976) with seed description adapted from Webb & Simpson (2001).

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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

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