

Crassula helmsii

COMMON NAME

Helms's crassula, New Zealand pygmyweed

SYNONYMS

Tillaea helmsii Kirk

FAMILY

Crassulaceae

AUTHORITY

Crassula helmsii (Kirk) Cockayne

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

CRAHEL

CHROMOSOME NUMBER

2n = 14

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO, Sp

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened | Qualifiers: SO, Sp

2009 | At Risk – Naturally Uncommon

2004 | Sparse

DISTRIBUTION

?Endemic. In New Zealand known only from the West Coast of the South Island from Karamea south to just south of Haast.

Naturalised in Britain where it is regarded as a serious weed.

HABITAT

Coastal to lowland, in shallow pools of fresh water or in damp usually shaded places, such as under rock overhangs, near waterfalls, and in shallow, slowly moving water. Occasionally it has been collected growing in exposed conditions on cobble beaches and gravel bars, but only where there is abundant fresh water flowing close to the surface.

WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland

Usually is a hydrophyte but occasionally found in uplands (non-wetlands).



In cultivation ex north-west Nelson.
Photographer: Jeremy R. Rolfe, Date taken:
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DETAILED DESCRIPTION

Perennial, decumbent, herb forming diffuse to extensive mats. Stems green, pink or white, succulent, prostrate, rooting at nodes, ascending at tips, heavily branched. Leaves fused at base 2-7(-10) x 0.7-2 mm, 0.5-0.8 mm thick when fresh, narrowly lanceolate, oblong-lanceolate or elliptic-lanceolate, flattened above, strongly convex below, apex rounded or acute. Flowers solitary in leaf axils, fragrant, stellate, 4-merous, 3-4 mm diam.; pedicels 2-7 mm, not elongating at fruiting. Calyx lobes 1-2 x 0.5-0.6 mm, triangular-ovate, acute or subacute. Petals 1.2-2 x 0.8-1 mm, broadly elliptic-ovate, white with pink flush or pink, subacute > calyx. Scales 0.7 mm, oblanceolate. Follicles smooth. Seed 0.5 mm. The white to pale pink flowers are sweetly scented.

SIMILAR TAXA

Distinguished from all other indigenous species of *Crassula* by the broadly-elliptic petals, whose length is 1.7x the width, and by the leaves which are 2-10 x 0.7-2 mm. In some respects it resembles a diminutive or elongated form of *C. moschata* G.Forst. - a strictly coastal, always terrestrial species, which has much larger flowers, and thicker leaves. *C. helmsii* can be very variable.

FLOWERING

Flowers may be present throughout the year

FLOWER COLOURS

White

FRUITING

Fruit may be present throughout the year

LIFE CYCLE

Minute follicles are dispersed by wind and water and possibly also by attachment (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easy from rooted pieces, and stem cuttings. Does best in damp soils or partially submerged. Can become invasive in some modified situations.

THREATS

This species appears to be rather uncommon with a patchy distribution throughout its range in New Zealand.

ETYMOLOGY

crassula: From the Latin crassus 'thick', meaning 'rather thick'

NOTES ON TAXONOMY

Crassula helmsii, which was first described from New Zealand, has often been treated as indigenous to New Zealand and Australia. However the New Zealand plant is much smaller and more delicate than the Australian plant, and recent studies have shown that it can be distinguished from Australian plants by its diploid ($2n = 14$) rather than hexaploid ($2n = 42$) chromosome number, different nrDNA ITS sequence, and ecology. On this evidence Australian plants might better be referred to as *C. recurva* (Hook.f) Ostenf. However, further sampling from both countries is needed to confirm these observations. It would appear that it is the New Zealand plant which is naturalised in Britain.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 1 February 2008. Description based on Webb et al. (1988)

REFERENCES AND FURTHER READING

Webb CJ, Sykes WR, Garnock-Jones PJ 1988. Flora of New Zealand. Vol. IV. Botany Division, DSIR, Christchurch.
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

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/crassula-helmsii/>