Crassula helmsii

COMMON NAMES
Helms's crassula, New Zealand pygmyweed

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Not Threatened | Qualifiers: SO, Sp
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

FLOWER COLOURS
White



Styx River, Christchurch. Photographer: Melissa Hutchison, Date taken: 02/12/2025, Licence: CC BY-NC.

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.



Photographer: Joe Potter Butler, Licence: CC BY-NC.

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.

DISTRIBUTION
?Endemic. In New Zealand known from the West Coast of the South Island from Karamea south to just south of Haast. Also found in Christchurch and around Te Waihora/Lake Ellesmere.
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.

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

GENUS
Crassula

FAMILY
Crassulaceae

AUTHORITY
Crassula helmsii (Kirk) Cockayne

SYNONYMS
Tillaea helmsii Kirk

TAXONOMIC NOTES
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.

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
Flowers may be present throughout the year

FRUITING
Fruit may be present throughout the year

LIFE CYCLE AND DISPERSAL
Minute follicles are dispersed by wind and water and possiblty 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.

WETLAND PLANT INDICATOR STATUS RATING
FACW: Facultative Wetland
Usually is a hydrophyte but occasionally found in uplands (non-wetlands).

ETYMOLOGY
crassula: From the Latin crassus ‘thick’, meaning ‘rather thick’

NVS CODE
CRAHEL

CHROMOSOME NUMBER
2n = 14

PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened | Qualifiers: SO, Sp
2012 | Not Threatened | Qualifiers: SO, Sp
2009 | At Risk – Naturally Uncommon
2004 | Sparse
Jump to current conservation status

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.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (1 February 2008). Description based on Webb et al. (1988). Some of this factsheet information is derived from Flora of New Zealand Online and is used under a Creative Commons Attribution 3.0 New Zealand licence.

MORE INFORMATION

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

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