

Gentianella calcis subsp. waipara

COMMON NAMES

Waipara gentian

BIOSTATUS

Native – Endemic taxon

CURRENT CONSERVATION STATUS

2023 | Threatened – Nationally Critical | Qualifiers: DPT, RR

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CATEGORY

Vascular

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

FLOWER COLOURS

White, Yellow

DETAILED DESCRIPTION

Perennial tufted herb. Petiole distinct. Rosette leaves linear 58-78 mm long, 3.0-6.9 mm wide, green or tinted purple-black, V-shaped in cross-section, recurved, apex rounded; margins minutely serrulate. Cauline leaves linear, smaller than rosette leaves. Flowering stems, green to purple-black, 1-4 per plant. Pedicels 19 mm long, 0.8 mm diam. Flowers 7-25 per plant, c.15 mm long. Calyx 5.6-10 mm long, green or red-brown, sometimes purple-black on margins; lobes 4.5-8.1 mm long, 1.3-1.6 mm wide at base, margins minutely serrulate, apex acute, plane or recurved. Corolla 9.4-14 mm long, veins colourless; tube 2.8-4.0 mm long; lobes 6.6-10 x 4.5-5.4 mm, margins finely serrulate or entire; nectary 1.2-1.4 mm from corolla base, with or without pocket, pocket margins smooth. Filaments 5.4-7.6 mm long from corolla base, 0.4-0.7 mm wide. Anthers 1.6-2.2 mm long. Ovules 11-28 per ovary. Capsules 9.3-11.6 mm long.

SIMILAR TAXA

Part of the *Gentianella calcis* Glenny et Molloy complex. It differs from subsp. *manahune* by the colourless corolla veins and from the other two subspecies by corolla size (9.4-14 mm long, cf. 13.8-19 mm in subsp. *taiko* and subsp. *calcis*). Glenny (2004, N.Z.J.Bot. 42(3), p. 474) provides a range of comparative vegetative and flora characters distinguishing this subspecies from the others. For differences between it and *G. astonii* subsp. *arduana* Glenny et Molloy see notes under that taxon entry.

DISTRIBUTION

Endemic. South Island. North Canterbury near Waipara Gorge, White Rock, Weka Pass, Waipara River, North and South Dean, and at one site at Duntroon, North Otago.

HABITAT

A limestone endemic growing on bluffs and ridge lines, in cracks, rock joints, clefts, ledges, talus and rendzina soils. Lowland areas.

THREATS

Under severe threat from the spread of *Pilosella officinarum* L. and pasture grasses, habitat loss due to changes in stocking regimes, and through browsing from feral goats. Limestone quarrying is a long-term threat, while the diffuse, typically small populations are very vulnerable to erosion and rock falls. Previously recorded as *Gentiana* aff. *astonii* (a) (CHR 529112; Mt Brown) in de Lange et al. (2004).



North Canterbury. Photographer: Alice Shanks, Licence: CC BY-SA.



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GENUS

Gentianella

FAMILY

Gentianaceae

AUTHORITY

Gentianella calcis subsp. waipara Glenny et Molloy

SYNONYMS

None

TAXONOMIC NOTES

The unusual disjunction between North Canterbury and North Otago is matched by morphology and it has been suggested that the Dunroon plant should be regarded as an allied but as yet unnamed entity (B.P.J. Molloy pers. comm.).

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

FLOWERING

March - May

FRUITING

Unknown

PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild.

ETYMOLOGY

gentianella: Little Gentiana (named after Gentius, 6th century king of Illyria, who found the roots of the yellow gentian to have a healing effect on his malaria-stricken troops)

NVS CODE

GENCSW

PREVIOUS CONSERVATION STATUSES

2017 | Threatened – Nationally Critical | Qualifiers: CD, OL

2012 | Threatened – Nationally Critical | Qualifiers: OL

2009 | Threatened – Nationally Critical | Qualifiers: OL

2004 | Threatened – Nationally Critical

[Jump to current conservation status](#)

REFERENCES AND FURTHER READING

de Lange et al., 2004: Threatened and uncommon plants of New Zealand. *New Zealand Journal of Botany* 42: 45-76.

Glenny, D. 2004: A revision of the genus *Gentianella* in New Zealand. *New Zealand Journal of Botany* 42: 361-530.

ATTRIBUTION

Fact Sheet for NZPCN prepared by P.J. de Lange (1 November 2004). Description modified from Glenny (2004).

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/gentianella-calcis-subsp-waipara/>

PDF DATE

25 May 2026