

Gentianella calcis subsp. waipara

COMMON NAME

Waipara gentian

SYNONYMS

None

FAMILY

Gentianaceae

AUTHORITY

Gentianella calcis subsp. *waipara* Glenny et Molloy

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Critical | Qualifiers: OL

2009 | Threatened – Nationally Critical | Qualifiers: OL

2004 | Threatened – Nationally Critical

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.

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.



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



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

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.

FLOWERING

March - May

FLOWER COLOURS

White, Yellow

FRUITING

Unknown

PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild.

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).

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)

WHERE TO BUY

Not Commercially Available

NOTES ON TAXONOMY

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

ATTRIBUTION

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

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.

MORE INFORMATION

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