

Gentianella calcis subsp. taiko

COMMON NAMES

Pareora gentian

SYNONYMS

None

FAMILY

Gentianaceae

AUTHORITY

Gentianella calcis subsp. *taiko* Glenny et Molloy

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

2017 | Threatened – Nationally Critical | Qualifiers: RR

2012 | Threatened – Nationally Critical | Qualifiers: EF, OL

2009 | Threatened – Nationally Critical | Qualifiers: OL, EF

2004 | Threatened – Nationally Critical

DISTRIBUTION

Endemic. South Island: near Pareora (Limestone Valley Road)

HABITAT

A limestone endemic confined to shaded sites on limestone bluffs and boulders, and associated rendzina soils, in lowland areas.

DETAILED DESCRIPTION

Perennial tufted herb. Petiole distinct, 15-50 mm long. Rosette leaves narrowly elliptical 42-75 mm long, 4.4-8.8 mm wide, green, weakly V-shaped in cross-section, slightly recurved, apex acute to obtuse; margins minutely serrulate. Cauline leaves, linear, recurved, smaller than rosette leaves. Flowering stems, purple-black, 1-5 per plant. Pedicels 6.5-12 mm long, 0.75-0.9 mm diam. Flowers 28-65 per plant, 1-18 per flowering stem, 16-18 mm long. Calyx green, tinted purple black, 6.8-9.8 mm long, green tinted purple; lobes 4.5-7.2 mm long, 1.3-1.8 mm wide at base, strongly recurved, apices acute, margins minutely serrulate. Corolla 11.7-19.0 mm long, veins colourless; tube 3.6-4.7 mm long; lobes 7.8-14.3 x 3.6-6.9 mm, margins usually toothed; nectary 0.8-2.2 mm from corolla base, V-shaped to pocket-like with distinct smooth-margined flap. Filaments 6.5-9.4 mm long from corolla base, 0.40-0.65 mm wide. Anthers 1.5-2.2 mm long. Ovules 14-24 per ovary. Capsules 13-16.5 mm long.



Photographer: Melissa Hutchison, Date taken: 05/03/2024, Licence: CC BY-NC.



Photographer: Melissa Hutchison, Date taken: 05/03/2024, Licence: CC BY-NC.

SIMILAR TAXA

Distinguished from the other subspecies of *G. calcis* Glenny et Molloy by its wide leaves (4.4-8.8 mm). Also the leaves are rather long and only slightly V-shaped in cross-section. Secondary branching of the flowering stems is minimal. The corolla is rather large (14.6-19 mm long), uniformly white, and the nectary flap has an untoothed margin. For differences from *G. astonii* T.N.Ho et S.W.Liu see under *G. calcis* subsp. *calcis*.

FLOWERING

(March)-April-May

FLOWER COLOURS

Violet/Purple, White

FRUITING

Unknown

PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild.

THREATS

Under severe threat from the spread of *Pilosella officinarum*, *Festuca rubra*, and pasture grasses, as well as habitat loss due to changes in land use (e.g. changes in grazing intensity), and through browsing from feral goats. Limestone quarrying is a long-term threat, and the very small population is vulnerable to erosion, boulder and rock falls. Previously recorded as *Gentiana* aff. *astonii* (b) (CHR 529111; Pareora River) 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

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 on 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-taiko/>

PDF DATE

01 October 2024