

# Gentianella calcis subsp. taiko

## COMMON NAME

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

2017 | Threatened – Nationally Critical | Qualifiers: RR

## PREVIOUS CONSERVATION STATUSES

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.



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### 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/>