Gentianella calcis subsp. taiko

COMMON NAMES
Pareora gentian

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Threatened – Nationally Critical | Qualifiers: DPT, RR
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

FLOWER COLOURS
Violet/Purple, White

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 differnces from *G. astonii* T.N.Ho et S.W.Liu see under *G. calcis* subsp. *calcis*.

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.

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).

GENUS
Gentianella

FAMILY
Gentianaceae

AUTHORITY
Gentianella calcis subsp. taiko Glenny et Molloy

SYNONYMS
None

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
(March)-April-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
GENCST

CHROMOSOME NUMBER
2n = 36

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
Jump to current conservation status

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.

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-taiko/

PDF DATE
25 May 2026