

# Gentianella chathamica subsp. nemorosa

## COMMON NAMES

central North Island gentian, forest gentian

## BIOSTATUS

Native

## CATEGORY

Vascular

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## FLOWER COLOURS

Red/Pink, White

## DETAILED DESCRIPTION

Plants monocarpic, biennial, height in flower 25–300 mm. Caudex unbranched, stolons absent. Root 0.7 mm diameter at stem base. Flowering stems terminal only or terminal and lateral, 1–2 per plant, largest flowering stem 1.6 mm diameter at base, stems tinted crimson, lateral flowering stems erect, flowering stem leaves 1–3 pairs per stem, lowest pedicels from near base of flowering stem. Rosette of leaves distinct to not very distinct from flowering stem leaves; leaves ovate, elliptic or orbicular, 18–44 × 3.6–15.2 mm, green often tinted crimson below, flat, not recurved, apex rounded; petiole indistinct, 3–20 × 0.9–2.2 mm. Flowering stem leaves ovate, sessile. Pedicels 1 per leaf axil, 3.5–17.0 mm long, 0.8 mm diameter. Flowers 6–70 per plant, 6.0–8.8 mm long. Calyx 5.8–7.9 mm long, green, hairs at calyx–corolla fusion line present; lobes 4.2–6.1 mm long, 1.2–2.5 mm wide at base, plane, apices acute or obtuse, margins minutely denticulate, sinus hairs absent or sparse. Corolla 4.5–9.8 mm long, white with crimson veins; tube 2.0–2.5 mm long; lobes 5.0–7.1 mm long, 2.1–3.0 mm wide, hairs below sinus absent or sparse; nectary indistinct, 0.2–0.6 mm from corolla base. Filaments 4.2–6.0 mm long from corolla base, 0.3–0.5 mm wide. Anthers 0.4–1.1 mm long, anther wall blue-black, mouth yellow, extrorse at anthesis; pollen yellow. Female flowers absent. Stigma crimson, blue or purple. Ovules 9–30 per ovary. Capsule 6.5–9.5 mm long.

## SIMILAR TAXA

Distinguished from *Gentianella chathamica* subsp. *chathamica* (which is endemic to the Chatham Islands by its restriction to the Central North Island mountains and Volcanic Plateau), the plants usually having two or more flowering stems; 9–30 ovules per ovary; anthers that are 0.4–1.1 mm long; crimson, and blue or purple stigmas. Of the North Island species it is distinguished from *G. bellidiflora* by the biennial habit, consistent presence of terminal flowering stems, and from *G. grisebachii* (with which it often grows) and *G. montana* subsp. *ionostigma* by the pedicels 3–17 mm long and anthers 0.4–1.1 mm long. *Gentianella chathamica* subsp. *nemorosa* is probably better treated as a distinct species.

## DISTRIBUTION

Endemic. New Zealand: North Island (Kaimai Ranges south to the northern Ruahine Range)

## HABITAT

Montane to alpine. Mostly in deep drifts of leaf litter on poorly drained ground in beech (*Nothofagus*) dominated forest but also in cloud forest, and in montane to alpine bogs.



Silicaq Track, 4 Feb. Photographer: Mike Wilcox, Licence: All rights reserved.

## CURRENT CONSERVATION STATUS

2023 | At Risk – Naturally Uncommon | Qualifiers: Sp, DPS, DPT

## THREATS

A Naturally Uncommon, range-restricted endemic which is sparsely to locally abundant within its mostly central North Island range. There are no known threats, though it is known from very few plants in the northern part of its range and these are vulnerable to plant collectors.

## DETAILED TAXONOMY

### FAMILY

Gentianaceae

### AUTHORITY

*Gentianella chathamica* subsp. *nemorosa* Glenny

### SYNONYMS

None (described in 2004)

### ENDEMIC TAXON

Yes

### ENDEMIC GENUS

No

### ENDEMIC FAMILY

No

## ECOLOGY

### FLOWERING

December – April

### FRUITING

February - May

### LIFE CYCLE

Seeds dispersed by ballistic projection, wind and water (Thorsen et al., 2009)

### PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild.

## OTHER INFORMATION

### WHERE TO BUY

Not Commercially Available

### 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)

**chathamica:** From the Chatham Islands

**nemorosa:** From the Latin *nemorosus* 'pertaining to woods or groves'

### NVS CODE

GENCSN

### CHROMOSOME NUMBER

$2n = 36$

## PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, Sp

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

2009 | At Risk – Naturally Uncommon

2004 | Range Restricted

## REFERENCING AND CITATIONS

### REFERENCES AND FURTHER READING

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

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora.

*Perspectives in Plant Ecology, Evolution and Systematics* 11: 285-309

### ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (October 2004). Description modified from Glenny (2004)

### MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/gentianella-chathamica-subsp-nemorosa/>

### PDF DATE

03 October 2024