Gentianella chathamica subsp. nemorosa

COMMON NAMES
central North Island gentian, forest gentian

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | At Risk – Naturally Uncommon | Qualifiers: Sp, DPS, DPT
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

FLOWER COLOURS
Red/Pink, White

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

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
Monatne 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.

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.

GENUS
Gentianella

FAMILY
Gentianaceae

AUTHORITY
Gentianella chathamica subsp. nemorosa Glenny

SYNONYMS
None (described in 2004)

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
December – April

FRUITING
February - May

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

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)
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
Jump to current conservation status

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

25 May 2026