Gentianella decumbens

COMMON NAME
gentian

SYNONYMS
None (described in 2004)

FAMILY
Gentianaceae

AUTHORITY
Gentianella decumbens Glenny

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 | At Risk – Naturally Uncommon | Qualifiers: RR

PREVIOUS CONSERVATION STATUSES
2012 | At Risk – Naturally Uncommon | Qualifiers: RR
2009 | At Risk – Naturally Uncommon
2004 | Range Restricted

Iron Hill, Cobb, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

Gentianella decumbens. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DISTRIBUTION
Endemic. New Zealand: South Island (north-west Nelson)

HABITAT
Alpine. Usually on summit fellfields or along ridge lines on skeletal or stony soils.

DETAILED DESCRIPTION
Plants polycarpic, height in flower 80–200 mm, plants 170–400 mm diameter. Caudex branched, 40–220 mm long, stolons absent. Root 3.1–6.2 mm diameter at stem base. Flowering stems 1–27 per plant, lateral only, decumbent, green or crimson, largest stems 1.4–2.5 mm diameter; stem leaves 4–9 pairs per stem with internodes often short, the last pair often at the calyx base, sometimes sheathing the stem; lowest pedicels from near apex of flowering stem. Leaf rosette of leaves absent to distinct from flowering stem leaves. Basal leaves elliptic, leaf apex acute to rounded, 16.0–48.0 × 5.3–10.4 mm wide, green without tinting, often turning yellow with age, V-shaped or channelled, recurved toward the leaf apex; petiole moderately distinct, 12–30 mm long, 2.2–3.6 mm wide at leaf base. Pedicels 1 per leaf axil, 0–19 mm long, 1.1–1.7 mm diameter. Flowers 3–72 per plant, 16–20 mm long, rarely female. Calyx 8.0–12.0 mm long, green, hairs at calyx–corolla fusion line present; lobes 5.2–8.4 mm long, 2.6–5.1 mm wide at base, apices acute, margins recurved, smooth to minutely denticulate, sinus hairs abundant. Corolla 14.0–19.8 mm long, white; tube 2.8–6.3 mm long; lobes 10.5–13.4 × 7.3–11.1 mm wide, hairs below sinus abundant; nectary 1.0–2.3 mm from corolla base. Filaments 9.0–12.5 mm long from corolla base, 0.9–1.1 mm wide. Anthers 2.3–2.7 mm long, anther wall blue-black, mouth yellow, extrorse at anthesis. Stigma colourless. Ovules 26–60 per ovary, ovary yellow in maturity. Capsules 18–29 mm long.

SIMILAR TAXA
Distinguished from other New Zealand Gentianella by the long prostrate branches, with plants circular in outline, with the flowers on the perimeter; by the numerous flowering stems (up to 27) per plant), leaves with are green and glossy without secondary pigments; and up to 48 mm long; calyx lobes which range from 2.3–5.1 mm wide; and by the nectary which is located 1.0–2.3 mm from the corolla base.

FLOWERING
January – March

FLOWER COLOURS
White, Yellow

FRUITING
February - April

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

PROPAGATION TECHNIQUE
Difficult. Should not be removed from the wild

THREATS
A Naturally Uncommon, range-restricted endemic which is sparsely to locally abundant within its key habitats. There are no known threats, and all the known populations occur within Kahurangi National Park.

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)
decumbens: From the Latin decumbere ‘to lie down, recline’, in botany refers to creeping plants with upright tips

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
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

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/gentianella-decumbens/