

Gentianella magnifica

COMMON NAME

scree gentian

SYNONYMS

Gentiana bellidifolia var. *magnifica* Kirk, *Gentiana divisa* var. *magnifica* (Kirk) Allan

FAMILY

Gentianaceae

AUTHORITY

Gentianella magnifica (Kirk) Glenny

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

GNTDIV

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: DP, RR

2009 | At Risk – Naturally Uncommon | Qualifiers: ST

2004 | Range Restricted

DISTRIBUTION

Endemic. New Zealand: South Island, (Marlborough (Rachel and Crimea Ranges), North Canterbury, Mt Captain and Mt Miromiro)

HABITAT

Alpine. In mobile and stable scree, comprised mostly of finely shattered black argillite. Rarely in and around rock outcrops on sparsely vegetated gravel pavements



Mt Barefell, above Barefell Pass. Photographer: Cathy Jones, Licence: CC BY.



Shot of habitat of *Gentianella magnifica*. Photographer: Cathy Jones, Licence: CC BY.

DETAILED DESCRIPTION

Plants monocarpic or polycarpic, biennial or perennial, height in flower 75–190 mm. Caudex unbranched, 70–80 mm long. Root 8–13 mm diameter at stem base and 400–800 mm long. Flowering stems terminal and lateral, 10–40 per plant, terminal flowering stem 5.7–7.3 mm diameter at base, green; lateral flowering stems erect; flowering stem leaves 2–6 pairs per stem, lowest pedicels from near apex of flowering stems. Rosette of leaves absent from flowering plants, lower stem leaves narrowly elliptic, 35.0–105.0 × 10.0–15.5 mm, green, margins sometimes crimson, flat or channelled, apex acute; petiole absent, leaves 4.4–9.2 mm wide at base. Flowering stem leaves narrowly ovate. Pedicels 1 per leaf axil, 10–52 mm long, 1.4–1.5 mm diameter. Flowers 45–256 per plant, 19–26 mm long. Calyx 12.3–20 mm long, green, hairs at calyx–corolla fusion line absent or present; lobes 8.5–10.0(–14.5) mm long, 4.3–5.4 mm wide at base, plane, apices acute, margins smooth, sinus hairs abundant. Corolla 17.2–24.5 mm long, white, veins uncoloured; tube 4.7–8.1 mm long; lobes 12.4–16.4 × 8.0–10.8 mm, hairs below sinus present; nectary 1.6–3.3 mm from corolla base. Filaments 10.7–16 mm long from corolla base, 1.2–1.5 mm wide. Anthers 2.0–2.9 mm long, anther wall blue-black, mouth yellow, extrorse at anthesis; pollen yellow. Stigma colourless. Ovules 9–37 per ovary, ovary turning dark purple in maturity. Capsule 19–25 mm long. Seeds 1.1–1.5 mm diameter.

SIMILAR TAXA

Similar to *Gentianella divisa* but larger in most dimensions; with fewer ovules (9–23 per ovary, cf. 29–56 per ovary in *G. divisa*), and the seeds are larger (1.1–1.5 mm diameter c.0.74 mm diameter in *G. divisa*). *Gentianella divisa* does not usually grow in such fine-grained, mobile screes as *G. magnifica* and so far as is known it is not present in the same mountain ranges as *G. magnifica*.

FLOWERING

February - March

FLOWER COLOURS

White, Yellow

FRUITING

April - 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

THREATS

A Naturally Uncommon, Range-restricted and biologically sparsely distributed species known from very few, widely scattered sites. Most populations are small but there are no known threats in its high elevation (up to 1900 m a.s.l.) habitats and the species seems for the moment at least to be secure.

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)

magnifica: Meaning 'splendid'

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-magnifica/>