

Gentianella serotina

COMMON NAME

gentian

SYNONYMS

Gentiana serotina Cockayne, *Chionogentias serotina* (Cockayne)
L.G.Adams, *Oreophylax serotinus* (Cockayne) Á.Löve nom. inval.

FAMILY

Gentianaceae

AUTHORITY

Gentianella serotina (Cockayne) T.N.Ho et S.W.Liu

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

GENSER

CHROMOSOME NUMBER

$2n = 36$

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: South Island (Canterbury, Otago, Southland)

HABITAT

Montane to subalpine. Mostly in tall and short tussocklands and shrub tussocklands of *Festuca novae-zelandiae*, *Chionochloa macra*, *C. rigida*, and *C. flavescens*. Also on river terraces, valley floors, less often on hillslopes and ridges, usually in well-drained soils, sometimes fringing tarns, rarely on limestone outcrops.



DETAILED DESCRIPTION

Plants polycarpic, height in flower 80–300 mm. Caudex unbranched or branched, 10–100 mm long, shaggy with dead leaf bases. Root 2.0–6.7 mm diameter at stem base. Flowering stems lateral only, or terminal on rosette-bearing branches, 1–13 per plant, largest flowering stem 1.9–3.0 mm diameter at base, 1.0–2.0 mm diameter when dry, stem colour green or tinted crimson or purple-black, lateral flowering stems erect or decumbent, flowering stem leaves 1–5 pairs per stem, lowest pedicels from near apex of flowering stem. Rosette of leaves present and distinct from flowering stem leaves, leaves linear to narrowly elliptic, 32.0–160.0 × 3.5–15.0 mm wide, green or tinted crimson or purple-black below and on petiole and veins, sometimes leaf surface speckled purple-black, V-shaped or channelled, recurved or not, apex acute, petiole absent to distinct, 15.0–40.0 × 1.1–3.7–4.0 mm. Flowering stem leaves narrowly elliptic, sessile. Flowers 1–130 per plant, 15–21 mm long. Pedicels 1 or 2 per leaf axil, 12–26 mm long, 0.8–1.4 mm diameter. Calyx 7.4–13.8 mm long, green or green tinted purple-black, hairs at calyx–corolla fusion line absent or present; lobes 4.6–9.7 mm long, 2.0–3.0 mm wide at base, plane, apices acute, margins smooth to denticulate, sinus hairs sparse, rarely abundant. Corolla 14.1–19.5 mm long, white or pale lilac, veins mostly uncoloured, sometime darkly striped magenta; tube 4.3–6.2 mm long; lobes 9.6–13 mm long, 5.6–9.5 mm wide, hairs below sinus present; nectary 0.3–2.2 mm from corolla base. Filaments 7.0–11.2 mm long from corolla base, 0.65–1.4 mm wide. Anthers 1.8–3.2 mm long, anther wall blue-black, mouth yellow, extrorse at anthesis. Stigma colourless. Ovules 15–64 per ovary. Capsule 13–22 mm long.

SIMILAR TAXA

Allied to *G. bellidifolia* from which it differs by its usually taller growth habit; longer, narrower, flatter leaves; usually more flowering stems and flowers per plant. The flowering stems of *G. serotina* tend to be decumbent while Otago and Southland plants of *G. bellidifolia* tend to be erect from the base. *G. serotina* resembles *G. corymbifera* subsp. *gracilis* and grows in the same habitat but differs in being polycarpic rather than biennial, in having only lateral flowering stems, and by having thinner flowering stems (2.8–3.0 mm cf. 4.2–5.3 mm diameter). Some *G. serotina* populations have high lilac flowers with dark magenta corolla veins

FLOWERING

February – April

FLOWER COLOURS

Violet/Purple, White

FRUITING

April – June

LIFE CYCLE

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)

serotina: Late flowering

WHERE TO BUY

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-serotina/>