

Gentianella filipes

COMMON NAME

gentian

SYNONYMS

Gentiana filipes Cheeseman, *Chionogentias filipes* (Cheeseman)
L.G.Adams

FAMILY

Gentianaceae

AUTHORITY

Gentianella filipes (Cheeseman) 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

GENFIL

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: RR

2009 | At Risk – Naturally Uncommon

2004 | Range Restricted

DISTRIBUTION

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

HABITAT

Alpine grasslands dominated by *Poa colensoi*, marble scree and talus, rock crevices, peat bog, gravel riverbed. Mainly overlying marble, where it is usually found in skeletal soils.



At Mt Arthur. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Gentianella filipes. Photographer: Sandra Wotherspoon, Licence: CC BY-NC.

DETAILED DESCRIPTION

Plants annual, monocarpic, height in flower 20–140 mm. Caudex unbranched, 25–35 mm long. Root 0.5–0.9 mm diam. at stem base. Flowering stems terminal and lateral, 2–8 per plant, central flowering stem 0.9–1.9 mm diameter at base; stem colour green, tinted crimson or purple-black, lateral flowering stems erect to decumbent, flowering stem leaves 1–5 pairs per stem, lowest pedicels from near base of flowering stem to near apex of flowering stem. Rosette of leaves absent from flowering plants, basal leaves narrowly elliptic or elliptic or ovate, 9–20 × 2.6–6.4 mm wide, green, flat, not recurved, apex acute or rounded; petiole distinct or indistinct, 3.5–8.8 mm long, 1.0–2.6 mm wide at leaf base. Flowering stem leaves elliptic to ovate, apices rounded or acute. Pedicels 1 per leaf axil, 4.5–32 mm long, 0.7–1.8 mm diameter, 0.5–0.7 mm diameter. Flowers 1–81 per plant, 8.2–13 mm long, sometimes female. Calyx 6.0–8.5 mm long, green tinted purple-black, at lower lobe margins, hairs at calyx–corolla fusion line absent or present; 4–5-lobed, lobes 2.6–5.0 mm long, 2.2–5.2 mm wide at base, strongly ridged between the lobes, plane or recurved, margins smooth, apices acute, sinus hairs abundant. Corolla 7.6–12 mm long, white, sometimes tinted purple at corolla tips; tube 2.6–4.6 mm long; lobes 4.5–8.3 × 3.3–5.9 mm wide, hairs below sinus absent or present; nectary 0.4–1.1 mm from corolla base. Filaments 4.3–7.8 mm long from corolla base, 0.6–0.9 mm wide. Anthers 0.8–1.4 mm long, anther wall blue-black, occasionally pale blue, mouth yellow, extrorse or horizontal at anthesis. Stigma colourless. Ovules 11–32 per ovary. Capsule 8–9 mm long.

SIMILAR TAXA

Recognised by its gregarious growth habit, annual life cycle, abundant flowers, absence of basal rosettes in flowering plants, and small tap root. The base of each calyx lobe is recurved and there is a prominent ridge on the calyx below each sinus. The calyx lobes are mostly short and wide, and very unequal. The flowers are small (12–13 mm long) as are the basal leaves (to 20 mm long).

FLOWERING

January – April

FLOWER COLOURS

Violet/Purple, White

FRUITING

March - 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 endemic which is sparsely to locally abundant. There are no known threats. 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)

filipes: Thread-like stalks

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-filipes/>