

# Gentianella grisebachii

## COMMON NAME

forest gentian, common gentian

## SYNONYMS

*Gentiana grisebachii* Hook.f., *Gentiana montana* f. *grisebachii* (Hook.f.) Kirk, *Gentiana novae-zelandiae* J.B.Armstr., *Gentiana montana* f. *novaezelandiae* (J.B.Armstr.) Kirk, *Gentiana montana* var. *novae-zelandiae* (J.B.Armstr.) Cheeseman, *Gentiana matthewsii* Petrie, *Gentiana grisebachii* var. *matthewsii* (Petrie) Cheeseman, *Chionogentias grisebachii* (Hook.f.) L.G.Adams, *C. matthewsii* (Petrie) L.G.Adams

## FAMILY

Gentianaceae

## AUTHORITY

*Gentianella grisebachii* (Hook.f.) 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

GENGRI

## 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: North (from Mt Pirongia and the Raukumara Ranges south), South and Stewart Islands.

## HABITAT

Usually montane to alpine but also lowland in southern part of range. Mainly present in moderately acid to acidic bogs, swamp forest, cloud forest, and poorly drained subalpine scrub, tussock grassland and rough pasture.

## WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland

Usually is a hydrophyte but occasionally found in uplands (non-wetlands).



Ruahine range, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Thomson Mountains, Otago. Photographer: Jesse Bythell, Date taken: 20/02/2023, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Plants monocarpic, biennial, height in flower 40–290 mm. Caudex unbranched, 7–15 mm long. Root 1.4–4.0 mm diameter at stem base. Flowering stems terminal and lateral or lateral only, 2–8 per plant, largest flowering stem 0.6–2.7 mm diameter at base, stem green, tinted crimson-orange, or purple-black, lateral flowering stems erect or decumbent, flowering stem leaves 3–6 pairs per stem, lowest pedicels from near base of flowering stem to near apex of flowering stem. Rosette of leaves absent from flowering plants, leaves narrowly elliptic or elliptic or ovate, 9.1–65.0 × 2.3–16.0 mm wide, green or tinted purple-black, flat or V-shaped, not recurved; apex acute or rounded; petiole distinct, 11–18 mm long, 0.7–3.6 mm wide at leaf base. Flowering stem leaves elliptic, ovate to narrowly ovate. Flowers 3–49 per plant, 6.7–20.0 mm long. Pedicels 1 per leaf axil, 10–80 mm long (elongating after flowering to 17–85 mm), 0.5–1.4 mm diameter. Calyx 5.5–11.6 mm long, green, tinted purple-black at the apices, hairs at calyx–corolla fusion line present; lobes 4.2–7.8 mm long, 0.9–2.6 mm wide at base, plane, apices narrowly acute, margins smooth, sinus hairs absent or sparse. Corolla 6.4–16 mm long, white, occasionally with purple-grey tinting on the corolla lobes, veins uncoloured, purple or purple-grey; tube 1.5–3.8 mm long; lobes 4.9–12.5 × 2.1–8.6 mm wide, hairs below sinus absent or present; nectary 0.4–1.2 mm from corolla base. Filaments 3.6–8.6 mm long from corolla base, 0.3–1.1 mm wide. Anthers 0.5–3.4 mm long, anther wall blue-black, rarely pink, mouth yellow, pale orange or orange-red, extrorse, occasionally horizontal at anthesis; pollen yellow or pale orange. Stigma colourless. Ovules 23–72 per ovary. Capsule 7.2–20.0 mm long.

## SIMILAR TAXA

Distinguished by its usually small, slender stems and preference for moderately acidic to acidic bogs and other poorly drained, sparsely vegetated habitats. Although highly variable it is easily separated from other *Gentianella* its large number of gracile dark purple or bronze scapes, the pedicels which greatly elongate after flowering; by its narrowly triangular calyx lobes; and also (for most of its range) by its small flowers that scarcely open.

## FLOWERING

January – May

## FLOWER COLOURS

Violet/Purple, White

## FRUITING

February - August

## 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)

**grisebachii**: After Grisebach

## WHERE TO BUY

Not commercially available.

## ATTRIBUTION

Fact Sheet for NZPCN prepared by P.J. de Lange (1 November 2004). Description modified from Glennly (2004)

## REFERENCES AND FURTHER READING

Glennly, 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-grisebachii/>