# Gentianella divisa

# **COMMON NAME**

gentian

## **SYNONYMS**

Gentiana bellidifolia var. divisa Kirk, G. divisa (Kirk) Cheeseman, Gentianella bellidifolia var. divisa (Kirk) T.N.Ho et S.W.Liu, Chionogentias divisa (Kirk) L.G.Adams

## **FAMILY**

Gentianaceae

## **AUTHORITY**

Gentianella divisa (Kirk) Glenny

## **FLORA CATEGORY**

Vascular - Native

## **ENDEMIC TAXON**

Yes

## **ENDEMIC GENUS**

Nο

## **ENDEMIC FAMILY**

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## **NVS CODE**

**GENDIV** 

## **CHROMOSOME NUMBER**

2n = 36

## **CURRENT CONSERVATION STATUS**

2017 | Not Threatened

# PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## **DISTRIBUTION**

Endemic. South Island, from Canterbury south along the main divide into Fiordland

## **HABITAT**

Alpine. A species of field field, ridge lines, stable scree slopes, snowbanks and cushion bog, herbfield and high elevation tussock grassland.





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



Harris Mountains, Otago, 1750m. Photographer: Jesse Bythell, Date taken: 24/01/2013, Licence: CC BY-NC.

#### **DETAILED DESCRIPTION**

Plants monocarpic, biennial, possibly triennial, height in flower 40–200 mm. Caudex unbranched, c.20 mm long. Root 2-6 mm diameter at stem base. Flowering stem terminal, 1.7-5.0 mm diameter at base, 1.4-4.0 mm diameter when dry, stem colour green, tinted slightly purple-black, or bronze, lateral branches of the flowering stem erect to decumbent, flowering stem leaves 0-4 pairs per stem, lowest pedicels from near base of flowering stem to near apex of flowering stem. Rosette of leaves absent to distinct from flowering stem leaves; leaves elliptic, orbicular, obovate or narrowly obovate, 16-65 × 7.5-21 mm wide, green, usually flat, sometimes V-shaped or channelled, slightly recurved or not; petiole indistinct, c.13 mm long, 2.8-8.0 mm wide at leaf base; leaf apex rounded. Flowering stem leaves narrowly ovate. Pedicels 1-2 per leaf axil, 7-50 mm long, 1.0-1.9 mm diameter. Flowers 11-60 per plant, 15-20 mm long, often female. Calyx 8.5-11.0 mm long, green or bronze, or green tinted purple-black at lobe apices, hairs at calyx-corolla fusion line absent; 4-7-lobed, lobes 5.0-9.0 mm long, 2.0-5.0 mm wide at base, plane but surface often rugose, apices acute, margins smooth or minutely denticulate, sinus hairs sparse to abundant. Corolla 4-6-lobed, 13.5-18.6 mm long, white; tube 3.0-5.6 mm long; lobes  $10.2-14.5 \times 5.2-9.5$  mm wide, hairs below sinus present; nectary 0.6–1.9 mm from corolla base. Filaments 8.5–13.4 mm long from corolla base, 0.9–2.4 mm wide. Anthers 1.9-2.8 mm long, anther wall blue-black, mouth yellow or orange-red, extrorse at anthesis. Stigma colourless, purple, crimson, or blue. Ovules 29-76 per ovary, ovary yellow or purple-black in maturity. Capsule 15-17 mm long.

#### **SIMILAR TAXA**

Recognised by the unbranched caudex, the single taproot, the flat,  $\pm$  orbicular leaves with obtuse apices and petiole up to 4 mm wide. The central flowering stem is equal in size to the many branches so giving a dense, even surface of flowers. The calyx lobes are wide, project along the lobe fusion lines or overlap each other more than usual, and are rugose on their outer surfaces, often with six calyx lobes. Can be confused with G. corymbifera but G. divisa is usually shorter, and with a much denser branching structure so that the main stem is difficult to see inside the mass of flowers.

#### **FLOWERING**

January - March

## **FLOWER COLOURS**

White, Yellow

## **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.

#### **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)

divisa: Divided

## 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-divisa/