Gentianella stevenii

COMMON NAME

Charleston gentian

SYNONYMS

Gentianella scopulorum Glenny - nom. illeg.

FAMILY

Gentianaceae

AUTHORITY

Gentianella stevenii U.B.Deshmukh et Kottaim.

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

Nο

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

2017 | Threatened - Nationally Critical | Qualifiers: CD, DP, EF, OL

PREVIOUS CONSERVATION STATUSES

2012 | Threatened - Nationally Critical | Qualifiers: CD, EF, OL

2009 | Threatened - Nationally Critical | Qualifiers: OL, EF, CD

2004 | Threatened - Nationally Critical

DISTRIBUTION

Endemic. South Island, west coast, near Charleston

HABITAT

Coastal, on rock ledges and associated coastal turfs, often within spray zone

DETAILED DESCRIPTION

Tufted perennial plant up to 130 mm tall when flowering. Flowering stems terminal and lateral, tinted crimson, 4-10 per plant. Rosette leaves with distinct petiole 19-30 mm long. Lamina orbicular 35-44 x 10-17.5 mm, green, not recurved, margin not thickened; apex rounded. Pedicels 1 per leaf axil, 1-16 mm long. Flowers 8-38 per plant, 12-15 mm long, perfect, rarely female. Calyx 6-8.2 mm, green; lobes 3.9-5.5 x 1.8-2.4 mm, plane. Corolla 9.5-14.8 mm, white, veins purple; tube 2.6-4.5 mm; lobes 9.6-10.5 x 3.3-5 mm, nectaries 0.7-1.2 mm from corolla base. Filaments 5-7.4 mm from corolla base. Anthers 1-1.5 mm, anther wall blue-black, mouth yellow, extrorse at anthesis. Stigma colourless. Ovules 16-30 per ovary. Capsule 10-11.8 mm.

SIMILAR TAXA

Most closely allied to G. saxosa from which it is distinguished by the orbicular leaves, plane calyx lobes, crimson flowering stems, purple corolla veins, and smaller anthers (1-1.5 cf. 2-2.1 mm). It is endemic to northern Westland, whereas G. saxosa occurs from Fiordland and Otago south to Stewart Island.

FLOWERING

(October-) November - February





Flowering adult plant near Charleston. Photographer: David A. Norton, Licence: CC BY-NC.



In Cult at Percy Scenic Reseve. January.
Photographer: Peter J. de Lange, Licence: CC
BY-NC.

FLOWER COLOURS

Violet/Purple, White

FRUITING

December - May

LIFE CYCLE

Seeds dispersed by ballistic projection, wind and water (Thorsen et al., 2009)

PROPAGATION TECHNIQUE

Easy to grow from seed. Does best in a sunny but cool and damp situation. One of the few New Zealand gentians to grow reasonably well in cultivation. Should not be removed from the wild

THREATS

Threatened by rock climbing, human traffic (trampling), goats, weeds and habitat deterioration. Previously recorded as Gentiana aff. saxosa (AK 7316; Charleston) in de Lange et al., 2004, Threatened and uncommon plants on New Zealand, New Zealand Journal of Botany 42: 45-76.

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)

WHERE TO BUY

Not commercially available

COMMENTS

Under intensive management by the New Zealand Department of Conservation. New populations have been established near Westport. At one time less than 40 plants were known from the wild in two small sites. <u>Story</u> in Issue 34 of Trilepdiea (September 2006).

ATTRIBUTION

Fact Sheet for NZPCN prepared by P.J. de Lange (1 November 2004). Description based on Glenny (2004) (see also de Lange et al. 2010)

REFERENCES AND FURTHER READING

de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J.W.D. 2010: Threatened Plants of New Zealand. Christchurch, Canterbury University Press. 471pp.

Deshmuku, U.B.; Kottaimuthu, R. 2021: A new replacement name for *Gentianella scopulorum* Glenny (Gentianaceae). *Phytotaxa 518*: 239–240

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

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Gentianella stevenii Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. https://www.nzpcn.org.nz/flora/species/gentianella-stevenii/ (Date website was queried)

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/gentianella-stevenii/