

Gentianella saxosa

SYNONYMS

Gentiana saxosa G.Forst., *Gentiana saxosa* var. *recurvata* Kirk, *Gentiana hookeri* J.B.Armstrong pro parte, *Chionogentias saxosa* (G.Forst.) L.G.Adams, *Oreophylax saxosus* (G.Forst.) Á.Löve nom. inval.

FAMILY

Gentianaceae

AUTHORITY

Gentianella saxosa (G.Forst.) Holub

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

GENSAX

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: South Island (Otago, Southland, Fiordland), Stewart Island/Rakiura.

HABITAT

Coastal. On rock outcrops, coastal turf-lands, sand dunes.

WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

Rarely is a hydrophyte, almost always in uplands (non-wetlands).



Bluff coast, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Gentianella saxosa. Photographer: John Barkla, Licence: CC BY.

DETAILED DESCRIPTION

Plants polycarpic, height in flower 40–170 mm. **Flowering stems** terminal and lateral or lateral only, 2–16 per plant, stems tinted purple-black, lateral flowering stems decumbent, 1.4–2.8 mm diameter, flowering stem leaves 4–5 pairs per stem, lowest pedicels from halfway up flowering stem. **Rosette leaves** narrowly elliptic to elliptic, leaf apex rounded, 17.8–87 mm long, 3.2–17.5 mm wide, green, not recurved; petiole distinct, 14.5–64 × 0.7–3.4 mm at leaf base. **Pedicels** 1 per axil, 10–67 mm long, 1.4–1.5 mm diameter. **Flowers** 9–82 per plant, 15.0–24.2 mm long. **Calyx** 6.8–8.8 mm long, green; lobes 4.5–6.2 mm long, 2.0–3.2 mm wide at base, distinctly recurved, apices acute, margins minutely denticulate, sinus hairs absent. **Corolla** 13.7–15.7 mm long, white, veins uncoloured; tube 3.5–4.0 mm long; lobes 9.6–11.2 mm long, 6.7–7.4 mm wide; nectaries 2.5–3.7 mm from corolla base. **Filaments** 7.6–8.1 mm long from corolla base, 0.7–0.8 mm wide. **Anthers** 2.0–2.1 mm long, anther wall blue-black, mouth yellow, extrorse at anthesis. **Stigma** colourless. **Ovules** 30–44 per ovary. **Capsule** 10.0–19.3 mm long.

SIMILAR TAXA

Most closely allied to *G. stevenii* Glenny from which it is distinguished by the elliptic to narrowly elliptic leaves, recurved calyx lobes, purple-black flowering stems, colourless corolla veins, and larger anthers (2–2.1 cf. 1–1.5 mm). It is found from Fiordland and Otago south to Stewart Island/Rakiura, whereas *G. stevenii* is endemic to north Westland.

FLOWERING

December–February

FLOWER COLOURS

White, Yellow

FRUITING

March–May

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Probably the only New Zealand gentian to be easily grown but still considered difficult. A free draining but damp soil in a semi-shaded or cool but sunny situation seem to suit it. Dislikes humidity.

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)

saxosa: Rock dweller

WHERE TO BUY

Occasionally available from specialist native plant nurseries.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (October 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(3): 361–530. <https://doi.org/10.1080/0028825X.2004.9512910>.

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/gentianella-saxosa/>