

Gentianella astonii subsp. astonii

COMMON NAME

Aston's gentian

SYNONYMS

Gentiana astonii Petrie, *Chionogentias astonii* (Petrie) L.G.Adams

FAMILY

Gentianaceae

AUTHORITY

Gentianella astonii subsp. *astonii* (Petrie) 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

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 | Qualifiers: ST

2004 | Range Restricted

DISTRIBUTION

Endemic. South Island, Marlborough from the upper Waima (Ure) River south to Mt Alexander

HABITAT

Montane to subalpine on limestone bluffs, gorges, scree and talus. often amongst low shrubs or in silver tussock grassland

DETAILED DESCRIPTION

Tufted perennial up to 150 mm tall when flowering. Flowering stems, 5-18 per plant, green or purple-black. Rosette leaves absent. Leaves linear, 16-32 x 1.4-2.8 mm, green to purple-green, flat, margins smooth; apex acute. Pedicels 1.5-2.2 mm long. Flowers 16-63 per plant, 13.5-24 mm long. Calyx 7-10 mm; lobes, green tinted purple-black, 5.2-6.2 x 1.3-2.3 mm, plane, margins smooth or minutely toothed. Corolla 10.4-17 mm, white, tube 2.7-4.0 mm; lobes 7.5-11 x 4.0-5.7 mm, margins minutely denticulate. Nectaries 1.9-2.9 mm from corolla base, widely V-shaped with a flap with an uneven margin. Filaments 6.0-7.2 mm from corolla base. Anthers 1.7-2.5 mm, anther wall yellow or blue-black. Ovules 27-30 per ovary. Capsule 8.4-15 mm.

SIMILAR TAXA

Distinguished from *G. astonii* subsp. *arduana* by the larger and narrower leaves (16-32 x 1.4-2.8 cf. 8.6-25 x 1.1-3.9 mm in subsp. *arduana*), larger anthers (1.7-2.5 cf. 1.1-2 mm in subsp. *arduana*), and 27-30 ovules per ovary cf. 13-28 ovules per ovary in subsp. *arduana*. From *G. calcis* Glenny et Molloy, *G. astonii* differs by the shorter leaves (9-32 cf. 30-83 in *G. calcis*), which are plane and without a recurved apex.

FLOWERING

March-April (-May)



FLOWER COLOURS

White, Yellow

FRUITING

April-August

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Can be grown but with some difficulty. Seems to do best in a lime-enriched, free draining potting mix within pot kept in semi-shaded.

THREATS

Abundant within the Waima River catchment, otherwise rather localised. There is some evidence to suggest that some of the smaller populations may be at risk from the spread of weeds

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)

astonii: After Aston

WHERE TO BUY

Occasionally sold by 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: 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-astonii-subsp-astonii/>