

# Geranium solanderi

## COMMON NAME

Solander's geranium

## SYNONYMS

*Geranium dissectum* var. *pilosum* Hook.f.; *Geranium dissectum* var. *australe* Benth.; *Geranium carolinianum* var. *australe* (Benth.) Fosberg; *Geranium dissectum* f. *tasmanica* Gand.; *Geranium drummondii* Carolin

## FAMILY

Geraniaceae

## AUTHORITY

*Geranium solanderi* Carolin

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## NVS CODE

GERSOL

## CHROMOSOME NUMBER

2n = 52

## CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: DP, SO

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: DP, SO

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Indigenous. North, South and Chatham Islands (including many northern offshore islands). Indigenous to Australia.

## HABITAT

Coastal to montane (0-600 m a.s.l.). Formerly widespread in short tussock grasslands, on lava fields, clay pans and on rocky coastal headlands.



*Geranium solanderi*. Photographer: Peter J. de Lange, Licence: CC BY-NC.



*Geranium solanderi*. Photographer: Peter J. de Lange, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Perennial herb 0.12–1.0 m tall. **Rootstock** 2.4–19.1 mm diam., without fusiform roots. **Stem** erect to ascending, with straight, patent to retrorse, non-appressed, eglandular hairs 0.4–1.8 mm long. **Basal leaves** in a ± deciduous rosette; lamina 12–45 × 14–57 mm, polygonal in outline, cordate, palmatifid (divided for 0.5–0.8 of its length), pilose, with ± erect, eglandular hairs; segments 5–7, obtriangular, 2.2–6.8 mm at the base; petioles to 180 mm long, with patent, eglandular hairs 0.4–1.7 mm long; stipules 2.2–8 × 0.5–2.1 mm, with eglandular hairs on abaxial surface and on the margin, glabrous adaxially. **Inflorescence** 2-flowered cymules, solitary; peduncles (4)–40–(61) cm long, with patent to retrorse, not appressed, eglandular hairs 0.3–2.0 mm long; bracteoles 1.5–7.4 × 0.3–0.8 mm, lanceolate, with eglandular hairs on abaxial surface and on the margin, glabrous adaxially; pedicels 8–34 mm long, with patent to retrorse, not appressed, eglandular hairs 0.2–2.0 mm long; pedicel and peduncle together usually overtopping the subtending leaf. **Sepals** (3.2)–4.2–5.2–(6.3) × 1.6–2.7 mm, lanceolate, with scarious margins 0.1–0.2 mm wide, with eglandular hairs 0.1 mm long on the abaxial side (and eglandular hairs 0.4–1.8 mm long on the margin), glabrous adaxially. **Petals** (3)–6–(8.1) × 1.4–4.2 mm, entire, without claw, glabrous on both sides, ciliate on the basal margin, purplish. **Filaments** 2.4–4.5 mm long, yellowish, glabrous on both sides, ciliate on the basal margin, with hairs up to 0.1–0.3 mm long; anthers 0.4–0.8 × 0.2–0.7 mm, yellowish. **Nectaries** glabrous. **Gynoecium** 2.5–4.8 mm long, yellowish. **Fruit** 13.1–20.6 mm long; mericarps 2.2–3.2 × 1.1–1.8 mm, smooth, with erect-patent, eglandular hairs 0.1–1.5 mm long, usually blackish; rostrum 8.8–15.1 mm long, without a narrowed apex, with erect-patent, eglandular hairs 0.1–1.1 mm long; stigmatic remains (0.6)–1–1.4–(1.6) mm long, with 5 hairy lobes. **Seeds** 1.6–2.2 × 0.9–1.6 mm, reticulate.

## SIMILAR TAXA

Most frequently confused with *G. retrorsum* DC. from which it differs by the long hairs of the petiole and pedicel being straight, patent or curved and retrorse but never appressed rather than distinctively retrorse and appressed, and by the dorsal alveolae of the seed being mostly 5–6- rather than 4–6-sided, and up to >0.1 mm rather than c. 0.1 mm diameter. The rootstock of *G. retrorsum* is often turnip-shaped, whereas in *G. solanderi* the root is more like a long tapering parsnip or carrot.

## FLOWERING

September–April

## FLOWER COLOURS

Violet/Purple

## FRUITING

October–June

## LIFE CYCLE

Seed dispersed by wind, ballistic projection and possibly attachment (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Easily grown from fresh seed. Thrives in a sunny, well drained soil in full sun. It can become invasive but is easily controlled. A very attractive plant well worth cultivating.

## THREATS

It has declined from large parts of its former range due to rabbit browsing and the spread of taller, faster growing weeds. If these factors continue it may well qualify in the not too distant future as Threatened.

## ETYMOLOGY

**geranium:** From the Greek geranos 'crane', the fruit of the plant resembling the head and beak of this bird, hence the common name cranesbill.

**solanderi:** Named after Daniel Carlsson Solander (19 February 1733 - 13 May 1782) who was a Swedish naturalist and an apostle of Carl Linnaeus.

## ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (14 April 2008). Description adapted from Aedo et al. (2005), supplemented with observations based on fresh and cultivated specimens.

## REFERENCES AND FURTHER READING

Aedo C, Fiz O, Alarcón ML, Navarro C, Aldasoro JJ. 2005. Taxonomic revision of *Geranium* sect. *Dissecta* (Geraniaceae). *Systematic Botany* 30: 533–558.

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.

## NZPCN FACT SHEET CITATION

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

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/geranium-solanderi/>