

# Geranium brevicaule

## SYNONYMS

*Geranium sessiliflorum* subsp. *novae-zelandiae* Carolin var. *novae-zelandiae*; *Geranium sessiliflorum* var. *glabrum* Kunth; *Geranium sessiliflorum* var. *maculatum* G.Simpson et J.S.Thomson

## FAMILY

Geraniaceae

## AUTHORITY

*Geranium brevicaule* Hook.f.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## NVS CODE

GERBRE

## CHROMOSOME NUMBER

2n = 52

## CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Indigenous. North, South and Stewart Islands. In the North Island present south of Auckland. Common elsewhere. Present in south-east Australia and Tasmania.

## HABITAT

Coastal to subalpine (0-1,200 m a.s.l.). In open ground such as short or tall tussock grassland, frost flats, clay pans, freshly deposited alluvium or on rock outcrops.

## WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).



Terawhiti Station, Wellington. Photographer: Jeremy R. Rolfe, Date taken: 01/11/2006, Licence: CC BY.




Sugarloaf, Canterbury (flower and seed). Photographer: Jesse Bythell, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Herbs 2.5–15.5 cm tall. **Rootstock** 3.2–10.5 mm diameter, without fusiform roots. **Basal leaves** in a persistent rosette; lamina 7.8–25.6 × 8.9–31.8 mm, polygonal in outline, cordate (with basal leaf segments downward), palmatifid (divided for 0.53–0.74 of its length), pilose, with appressed, eglandular hairs; segments 5–7, obtriangular, 1.4–4.7 mm at the base; petioles up to 130 mm long, with patent to retrorse, appressed, eglandular hairs 0.3–1.2 mm long; stipules 2.7–8.8 × 0.9–2.5 mm, with scattered eglandular hairs on both surfaces and on the margin.

**Inflorescence** with cymules 1-flowered, solitary; peduncles 0–1.1–(1.6) cm long, with patent to retrorse, eglandular hairs 0.15–1.1 mm long; bracteoles 2–6.6 × 0.6–1.3 mm, linear-lanceolate, with scattered eglandular hairs on both surfaces and on the margin; pedicels 33–430 mm long, with patent to retrorse, eglandular hairs 0.15–1.1 mm long; pedicel not overtopping the subtending leaf. **Sepals** (3.3)–4.4–5.7–(7.1) × 1.4–3.1 mm, lanceolate, with scarious margins 0.1–0.2 mm wide, with erect-patent, eglandular hairs 0.3–0.6 mm long on the abaxial side (patent hairs 1–1.7 mm long on the margin), glabrescent adaxially. **Petals** 2.8–5.5–(6.5) × 1–3.1 mm, entire, without claw, glabrous, rarely with few cilia on the basal margin, deep pink to white. **Filaments** 1.6–3.0 mm long, yellowish, glabrous on both sides, ciliate on the basal margin, with hairs up to 0.1–0.2 mm long; anthers 0.4–0.7 × 0.2–0.7 mm, yellowish.

**Nectaries** glabrous. **Gynoecium** 2–3.4 mm long, unknown color. **Fruit** 8.4–17.6 mm long; mericarps 2.2–3.6 × 1.0–1.7 mm, smooth, with erect-patent, eglandular hairs 0.2–1.1 mm long, brownish; rostrum 5.1–11.7 mm long, without a narrowed apex, with erect-patent, eglandular hairs 0.1–0.6 mm long; stigmatic remains 0.9–1.2–(1.6) mm long, with 5 hairy lobes. **Seeds** 1.5–2.8 × 0.7–1.4 mm, finely reticulate; hilum  length of perimeter.

## SIMILAR TAXA

Easily recognised from other indigenous and naturalised *Geranium* species in NZ by its small, compact, growth habit, stout taproot, persistent basal leaves, very short flowering stems (mostly shorter than basal leaves) and its smooth seeds. It is a variable species and numerous colour morphs are known, the most common forms have either green or purple leaves. Plants with green mottled-purple or -brown leaves have previously been known as *G. sessiliflorum* var. *maculatum* - a colour variant no longer regarded as distinct.

## FLOWERING

Year round

## FLOWER COLOURS

Red/Pink, White

## FRUITING

Year round

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Easily grown from fresh seed. Various colour morphs have a genetic basis. With careful selection some attractive forms could be marketed. Excellent pot plant. Ideal for dry, well drained, sunny locations.

## 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.

**brevicaule**: With a short stem

## WHERE TO BUY

Not commercially available.

## TAXONOMIC NOTES

The most recent treatment of the genus confines *G. sessiliflorum* Cav. to South America (see Aedo, et al 2005). NZPCN agrees that Australasian plants do not match the South American plants, and so the earliest available name for Australasian plants is *G. brevicaule* Hook.f. but there remain problems within New Zealand plants referred by Aedo et al. (2005) to *G. brevicaule* (e.g., the status of *G. sessiliflorum* var. *arenarium* G.Simpson et J.S.Thomson, and also a range of potentially distinct races currently treated within a broad circumscription of *G. brevicaule*).

## ATTRIBUTION

Fact Sheet by P.J. de Lange (8 June 2006): Description from Aedo et al. (2005).

## REFERENCES AND FURTHER READING

- Aedo C, Navarro C, Alarcón ML. 2005: Taxonomic revision of *Geranium* sections *Andina* and *Chilensia* (Geraniaceae). *Botanical Journal of the Linnean Society* 149: 1–68. <https://doi.org/10.1111/j.1095-8339.2005.00432.x>
- 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 brevicaule* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/geranium-brevicaule/> (Date website was queried)

## MORE INFORMATION

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