

# Convolvulus verecundus f. verecundus

## COMMON NAME

trailing bindweed, tussock bindweed

## SYNONYMS

*Convolvulus verecundus* Allan subsp. *verecundus*

## FAMILY

Convolvulaceae

## AUTHORITY

*Convolvulus verecundus* Allan f. *verecundus*

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Lianes & Related Trailing Plants - Dicotyledons

## NVS CODE

CONVER

## CHROMOSOME NUMBER

2n = 22

## CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Vulnerable | Qualifiers: DP

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: DP

2009 | At Risk – Declining | Qualifiers: DP

2004 | Sparse

## DISTRIBUTION

Endemic. New Zealand: South Island (eastern from the Clarence River (probably now historic) south to Central Otago, probably now most abundant in the Mackenzie Basin and upper Waitaki River Valley).

## HABITAT

Mainly montane (rarely lowland) (c. 200–1000 m a.s.l.) sparsely vegetated short tussock, or on rock outcrops such as limestone, within regions subjected to regular summer-dry conditions. It has also been found in semi-arid habitats dominated by introduced weeds.



At Otematata Station, upper Waitaki.  
Photographer: David A. Norton, Licence: CC BY-NC.



Pisa Flats. Photographer: John Barkla, Licence: CC BY.

## DETAILED DESCRIPTION

Low-growing perennial herb, with creeping rhizomatous stems, short ascending to spreading branches, and lianoid stems up to 200 mm; lianoid stems with a sparse to moderate covering of retrorse hairs. **Leaves** in rosettes and alternate on stems, 6.5–12.0 × 4.0–12.5 mm, deltoid, deltoid ovate to ± broad-oblong, grey, grey-green, to silver grey, moderately to densely hairy with hairs antrorse and appressed; veins obscure; margin with 4–6 pairs of teeth, undulate; base truncate, obtuse, occasionally oblique or slightly cordate; apex usually retuse, occasionally obtuse; petiole channelled, sparsely to moderately covered with retrorse and antrorse hairs. **Pedicel** 5–30–(55) mm long, 0.4–1.2 mm diam., moderately hairy. **Sepals** 3.9–4.1 × 3.5–3.8 mm, obovate to ovate, green; abaxial surface sparsely to moderately hairy, adaxial surface glabrous; margin fimbriate and translucent; apex subacute to obtuse. **Corolla** 12–19 mm long in bud, 20–25 mm wide when open, white, rarely pink, five lobes fused their full length, lobe apex fringed with hairs; tube 5–8 mm long, pale green; abaxial surface with midline of petal with pink bands with sparse appressed hairs on upper half. **Nectary** annular, 0.3–0.4 mm tall, yellow. **Style** 2-cleft, white; fused portion 6.0–9.0 mm long, c. 0.2 mm wide; stigmata 2.5–4.0 × c. 0.5 mm. **Ovary** c. 1.0 × 1.0–1.2 mm, cream. **Filaments** 4.0–4.6 mm long, c. 0.5 mm wide at base, tapering to c. 0.2 mm at apex, white; margin with scattered short hairs on lower half; fused to base of corolla tube. **Anthers** 1.7–2.0 mm long, white. **Capsule** 5.8–6.2 mm long, 4.5–7.5 mm wide, chartaceous, globose, with 2–4 seeds, lower half enclosed in persistent calyx, style base remnant persistent. **Seeds** segment-shaped and broader toward apex with a rounded dorsal and two flattened lateral faces meeting at an acute ventral edge, or rounded and broadly obovate without distinct angles, almost triangular to terete in section; 2.8–3.9 × 2.4–3.0 mm; apex and base rounded; hilum concave. **Testa** black-brown overlaid and ornamented with grey nut-brown, dull, glabrous, moderately covered in low ridges and tubercles, sometimes forming ridges on margins.

## SIMILAR TAXA

*Convolvulus waitaha* and *C. fractosaxosa*, from both of which it differs by its lianoid stems up to 200 mm long, more or less uniformly deltoid, deltoid-ovate to broad oblong leaves with smaller basal lobes, and which lack filiform or linear terminal lobes. *Convolvulus verecundus* f. *glaberrimus* differs by the glabrate brown-green rather than hairy silvery-grey leaves.

## FLOWERING

November–January

## FLOWER COLOURS

Red/Pink, White

## FRUITING

December–March

## LIFE CYCLE

Seeds are wind dispersed (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Difficult. Easily grown from fresh seed which germinates readily but does not thrive in cultivation. It particularly resents humid conditions. Probably best in a well drained pot within an alpine house.

## THREATS

Threats are complex, and varied. It cannot be doubted that this species has declined from the Waitaki Valley as a consequence of hydroelectricity development of that river system. It may also have gone extinct in Marlborough, where it appears to have always been scarce. Recent field work and accounts from field workers indicate that this species exists in naturally sparse, widely scattered and mostly stable populations (Heenan et al. 2003).

## ETYMOLOGY

**convolvulus**: From Latin convolvere, which means to twine around

## ATTRIBUTION

Fact sheet prepared by P.J. de Lange (5 September 2019). Description from Heenan & Molloy (2019).

## REFERENCES AND FURTHER READING

Heenan PB, Molloy BPJ, de Lange PJ. 2003. Species of *Convolvulus* (Convolvulaceae) endemic to New Zealand. *New Zealand Journal of Botany* 41(3): 447–457. <https://doi.org/10.1080/0028825X.2003.9512862>.

Heenan PB, Molloy BPJ. 2019. Five new and Nationally Threatened taxa of *Brachyscome*, *Cardamine*, *Convolvulus*, *Geranium* and *Ranunculus* obligate to vulnerable limestone habitats, eastern South Island, New Zealand. *Phytotaxa* 415(1): 32–48. <https://doi.org/10.11646/phytotaxa.415.1.2>.

## NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/convolvulus-verecundus-f-verecundus/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/convolvulus-verecundus-f-verecundus/>