

Carmichaelia torulosa

COMMON NAME

Canterbury pink broom

SYNONYMS

Notospartium torulosum Kirk

FAMILY

Fabaceae

AUTHORITY

Carmichaelia torulosa (Kirk) Heenan

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

CARTOR

CHROMOSOME NUMBER

2n = 32

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Critical | Qualifiers: RF

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Endangered | Qualifiers: DP, RF

2009 | Threatened – Nationally Endangered | Qualifiers: DP, RF

2004 | Range Restricted

BRIEF DESCRIPTION

Rare small tree or large shrub with erect leafless twigs inhabiting inland Canterbury. Trunk very short. Twigs 1.2–2.5mm wide, rounded. Flowers lavender-pink with darker veins. Fruit a dry pod containing up to 15 hard seeds and which widens where a seed is present giving a distinctive horizontally ribbed appearance.

DISTRIBUTION

Endemic. New Zealand: South Island (Canterbury—Amuri Range (North Canterbury) to Te Ngawai River (South Canterbury)).

HABITAT

A plant of forest margins, especially riparian shrubland and low forest, and on rock bluffs. It has also been found within a wetland. Plants grow in a range of vegetation types from grassland and open shrubland to closed shrubland and low forest, though it is most commonly an emergent within open to dense shrubland.



Washpen Creek, Malvern Hills (January).
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Washpen Creek, Malvern Hills (January).
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DETAILED DESCRIPTION

Shrub or small tree up to 5 m tall. **Trunk** slender, brittle, usually branching close to base; branches slender, suberect to erect, leafless, initially red-green maturing grey to grey-green; branchlets numerous, suberect to erect, terete, dark green, 1.2–2.5 mm diameter. **Inflorescences** racemose, 1–(2) per node, up to c. 50 mm long, slender, 1–10 flowered, flowers not crowded. **Peduncle and pedicels** glabrate. **Bud** pale pink to lavender. **Flowers** up to 8 mm long, lavender-pink in central and proximal areas, purple-veined. **Calyx** glabrous except on the broad obtuse teeth; standard rather narrow. **Pods** c. 15–42 × 2 mm, subterete, strongly torulose; beak long, slender; seeds up to 15 per pod, **Seeds** reniform-elliptic to elliptic-oblong, up to 15 per pod, yellow-green, green, brown or orange-brown, marked or mottled with grey, dark purple-brown or black-brown 1.2–2.0 mm long.

SIMILAR TAXA

Distinguished from *Carmichaelia carmichaeliae* (Hook.f.) Heenan by the lavender-pink rather than pink flowers; seeds < 2.0 mm long, rather than > 2 mm long; strongly constricted rather than weakly constricted pods; and by its restriction to Canterbury.

FLOWERING

December–January

FLOWER COLOURS

Red/Pink, Violet/Purple

FRUITING

Throughout the year

LIFE CYCLE

Seeds are possibly dispersed by wind and granivory (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easily grown from seed. Difficult from cuttings. A very attractive shrub that should be more widely cultivated.

THREATS

Like most other New Zealand brooms this species is threatened by regeneration failure due to competition with the exotic grass swards; competition by exotic woody weeds such as gorse (*Ulex europaeus* L.) and Scotch broom (*Cytisus scoparius* (L.) Link); damage associated with plantation management (e.g., through felling trees or planting into Canterbury pink broom sites); and from deliberate and accidental spraying through its confusion as a weed species, or by its association with target species.

ETYMOLOGY

carmichaelia: After Carmichael, a botanist

WHERE TO BUY

Not commercially available

ATTRIBUTION

Description based on herbarium material held at AK.

REFERENCES AND FURTHER READING

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/carmichaelia-torulosa/>