

# Carmichaelia corrugata

## COMMON NAME

common dwarf broom

## SYNONYMS

None (first described in 1883)

## FAMILY

Fabaceae

## AUTHORITY

Carmichaelia corrugata Colenso

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

CARCOG

## CHROMOSOME NUMBER

2n = 96

## CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Vulnerable | Qualifiers: RF, Sp

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: DP, RF, Sp

2009 | Not Threatened

2004 | Not Threatened

## BRIEF DESCRIPTION

Rare, very low-growing leafless shrub consisting of erect flattened yellow-green branches with a blunt orange tip. Branches 1.5-3.5mm wide, grooved, blunt-tipped. Flowers pea-like, pink with dark purple centre, in pairs. Fruit a dry pod with 4-6 hard seeds and which only partly opens.

## DISTRIBUTION

Endemic. New Zealand: South Island (Marlborough, Canterbury including Banks Peninsula, and Otago).

## HABITAT

Inhabiting sparsely vegetated gravel and sand soils, stone and gravel ridges, river terraces (especially dry sandy hummocks), river beds, and disturbed sites.



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## DETAILED DESCRIPTION

Dwarf, rhizomatous shrub, up to 20–80 mm tall, 1 m wide, forming a dense mat or tufts of cladodes. **Rhizomes** becoming increasingly stout and woody with age, 5–400 × 1–5 mm. **Cladodes** linear, striate, compressed, erect, yellow-green to orange-green, glabrous, 20.0–70.0 × 1.5–3.5 mm; apex subacute to obtuse, yellow to yellow-green; leaf nodes 2–12. **Leaves** simple, broad-obovate to broad-elliptic, fleshy, entire, green, present on seedlings and absent on mature plants, 5.5–8.0 × 3.0–5.0 mm; adaxial and abaxial surfaces with scattered hairs; apex emarginate to retuse; base cuneate to narrow-obtuse; petiole sparsely hairy, 2.0–2.5 mm long. Leaves on cladodes reduced to a scale, triangular, glabrous, 0.6–1.5 × 0.8–1.4 mm; apex acute. **Inflorescence** a 1–2-flowered raceme. **Peduncle** glabrous or sparsely hairy, green, 5–15 mm long. **Bracts** triangular, glabrous, pale green, 0.5–1.0 mm long; apex obtuse; margin hairy. **Pedicele** glabrous or hairy, pale green, 3.0–7.5 mm long. **Bracteoles** at top of pedicel, triangular, glabrous, green and often flushed red, c. 0.2 × c. 0.2 mm; margin hairy; apex acute. **Calyx** campanulate, c. 2.5 × c. 2.5 mm; inner surface glabrous, green; outer surface glabrous or sparsely hairy, green. **Calyx lobes** triangular, flushed red, c. 0.5 mm long; apex acute; margin hairy or glabrous. **Bud** green. **Standard** obovate, patent, 8–10 × 6–8 mm; upper surface central area purple, margin white, sometimes purple–green veined; lower surface green, margin cream–green, sometimes purple–green veined; apex retuse; claw pale green, c. 1.5 mm long. **Wings** oblong, shorter than keel, 5.0–6.5 × c. 2.0 mm; upper surface distal area purple, proximal area green; lower surface white, sometimes purple–veined; auricle triangular, pale green, apex obtuse, c. 1.25 mm long; claw pale green, c. 1.5 mm long. **Keel** 6.0–8.0 × 2.5–3.0 mm; distal area of adaxial surface purple, proximal area pale green; distal area of abaxial surface purple–green, proximal area pale green; auricle triangular, pale green, with obtuse apex, c. 0.75 mm long; claw pale green, 2.0–2.5 mm long. **Stamens** 7.5–9 mm long; lower filaments connate for c.  length and outside filaments free for 1.5–2.5 mm. **Pistil** exerted beyond stamens, c. 10 mm long; style with a ring of hairs below stigma, and sometimes a few scattered hairs on upper surface; ovules 9–11. **Pod** elliptic-oblong, laterally compressed, weakly falcate, black, brown, or grey, 7.5–15.0 × 3.0–4.0 mm; one valve partially dehiscent from base; beak on adaxial suture, slightly upturned, stout, pungent, 1.5–2 mm long. **Seeds** oblong-reniform, 2–9 per pod, black, brown, tan, or olive green, 1.2–2.0 × 1.0–1.5 mm.

## SIMILAR TAXA

Distinguished from *C. uniflora* Kirk by its larger diameter rhizome; partially dehiscent pod; cladodes which are broader, more robust, often longer, and yellow–green or orange–green in colour; and by the usually two-flowered inflorescence.

## FLOWERING

October–May

## FLOWER COLOURS

Violet/Purple, White

## FRUITING

November–June

## PROPAGATION TECHNIQUE

Easily grown from seed and hardwood cuttings. A beautiful shrub which deserves wider cultivation.

## THREATS

Threatened by browsing livestock, goats, hares and rabbits, as well as loss and modification of the dryland habitats it often occupies.

## ETYMOLOGY

**carmichaelia**: After Carmichael, a botanist

**corrugata**: From the Latin corrugatus 'wrinkled'

## WHERE TO BUY

Not Commercially Available.

## ATTRIBUTION

Description adapted from Heenan (1996). Fact Sheet prepared by Peter J. de Lange (2 May 2008).

## REFERENCES AND FURTHER READING

Heenan PB. 1995. A taxonomic revision of *Carmichaelia* (Fabaceae - Galegeae) in New Zealand (part I). *New Zealand Journal of Botany* 33(4): 455–475. <https://doi.org/10.1080/0028825X.1995.10410618>.

## NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/carmichaelia-corrugata/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/carmichaelia-corrugata/>