

Carmichaelia corrugata

COMMON NAME

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

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