

# Carmichaelia vexillata

## COMMON NAME

Dwarf broom

## SYNONYMS

None

## FAMILY

Fabaceae

## AUTHORITY

Carmichaelia vexillata Heenan

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

CARVEX

## CHROMOSOME NUMBER

2n = 32

## CURRENT CONSERVATION STATUS

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

## PREVIOUS CONSERVATION STATUSES

2009 | At Risk – Declining | Qualifiers: RF

2004 | Serious Decline

## BRIEF DESCRIPTION

Rare low growing leafless shrub consisting of erect flattened yellow-green branches with a blunt orange or red tip. Branches 1.5-3 wide, grooved, tip rounded. Flowers pea-like, pink with darker streaks, in clusters. Fruit a dry sharp-tipped pod with many hard seeds and which does not split open.

## DISTRIBUTION

Eastern South Island to South Canterbury and Otago.

## HABITAT

Recent moraines, alluvium, river terraces, terrace risers, disturbed soils, and soils derived from schist parent material.



Photographer: Cathy Jones



Photographer: Cathy Jones

## FEATURES

Dwarf, spreading broom, up to 15cm tall, 40cm wide. Stems stout, curved upwards or horizontal. Branchlets linear, 20-95mm long, 1.5-4mm wide, finely grooved, may be sparsely hairy when young, hairless at maturity; green-yellow, tips often red in winter. Simple leaves on seedlings and occasionally on mature plants, 4-7.5mm long, 2-4.5mm wide, with scattered hairs on both surfaces; leaves on flattened stems usually reduced to a hairless triangular scale. Flowers 4-5.5mm long, 2-2.5mm wide, in clusters of 2-3; purple with whitish margins, sometimes cream with purple veins; main petal upright and taller than lower petals, sepals hairless, tip of sepal long and pointed. Pod oblong, compressed, dark brown to black or light grey. Seeds 4-13 per pod, oblong, yellow to olive green with black mottling.

## SIMILAR TAXA

*Carmichaelia monroi*, *C. astonii*, *C. corrugata*. *C. vexillata* has thin stems. The main flower petal is upright and taller than the two lower united petals. In *C. monroi* the main petal is smaller than the lower petals. *C. astonii* has hairy stems and is larger overall. *C. corrugata* has underground stems.

## FLOWERING

October to March

## FLOWER COLOURS

Cream, Purple

## FRUITING

November to May

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Easy from fresh seed and semi hardwood cuttings. Dislikes humid climates.

## THREATS

At threat from weeds and browsing animals which inhibit flowering and fruit set. However, it must be recognised that without browsing animals many of the habitats occupied by this broom would vanish due to weed regrowth. This species survival now requires a delicate balance of allowing some browsing to reduce weeds but not too much which will damage or even kill *Carmichaelia*.

## ETYMOLOGY

**carmichaelia**: After Carmichael, a botanist

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 1 August 2003. Description based on Heenan (1995)

## REFERENCES AND FURTHER READING

Heenan, P. B. 1995: A taxonomic revision of *Carmichaelia* (Fabaceae-Galegeae) in New Zealand (part I). *New Zealand Journal of Botany* 33: 455-475.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 2009 Vol. 11 No. 4 pp. 285-309

## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

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