Carmichaelia hollowayi

COMMON NAMES
Holloway's broom

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Threatened – Nationally Critical | Qualifiers: CD, DPT, RR, RF
Jump to previous conservation statuses

In flower. Photographer: John Barkla, Licence: CC BY.

CATEGORY
Vascular

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

SIMPLIFIED DESCRIPTION
Rare low-growing shrub with many yellowish erect leafless orange-tipped branches inhabiting limestone in the Waitaki Valley. Branches 3.5mm wide, with rounded tip. Flowers small, pea-like, white with dark purple centre, in small clusters. Fruit a long-lasting sharp-tipped dry pod containing 1-3 hard olive seeds.

Pods and seed. Photographer: John Barkla, Licence: CC BY.

FLOWER COLOURS
Violet/Purple, White

DETAILED DESCRIPTION
Dwarf, suckering broom, up to 0.5 x 1(-2) m. Branches 10-30 mm diam., stout, horizontal, spreading, cladodes virtually leafless, 50-80(-100) x 3.5 mm, erect to spreading, yellow-green, apex rounded, never sharp-tipped. Leaves when present, simple, 4.5-12.5 x 1.8-4.5 mm, obovate to oblanceolate, green. Inflorescence a (1-)2-3-flowered raceme, flowers dark purple. Standard 7-8 x 7-8 mm, broad-orbicular, erect, purple or red-purple, margins white. Wings 5.5-6.5 x 2.5-3 mm, oblong, white, purple veined, keel 5 x 3.5 mm, distally tinged purple otherwise white or purple-veined. Pods long persistent, 8-11 x 4.8-6 mm, broad elliptic, laterally compressed, valves very flat. Seeds 2.5-2.9 x 2.4-2.6 mm, reniform, 1(-2) per pod, yellow-green or green with black mottling.

SIMILAR TAXA
Carmichaelia hollowayi is identified by the pod, which is conspicuously laterally compressed and by the cladode apex which is rounded rather than sharp-tipped like Waitaki forms of C. petriei Kirk and C. australis R.Br. It is one of three native brooms (the others are C. astonii G.Simpson and C. glabrescens (Petrie) Heenan) naturally confined to limestone rock and associated soils.

DISTRIBUTION
Endemic. South Island, where it is only known from limestone outcrops on the south bank of the Waitaki River.

HABITAT
Limestone bluffs, outcrops, colluvium and their associated rendzina soils.

THREATS
There are less than 250 adult plants in the wild found in three populations. Because the species suckers, exact numbers of adult plants cannot be determined and it is likely than there are far fewer than currently believed. Although two of the three known populations occur on protected or covenanted land, the species remains at serious risk at all sites from browsing animals and from competition by tall grasses, shrubs and hawkweeds. Aside from these issues recruitment failure (in part linked to weed control) seems to be critical problem.

GENUS
Carmichaelia

FAMILY
Fabaceae

AUTHORITY
Carmichaelia hollowayi G.Simpson

SYNONYMS
None

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
November - December

FRUITING
January - May

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

PROPAGATION TECHNIQUE
Easily grown from fresh seed. Can also be grown by hardwood cuttings but these can be slow to take root. Plants will not tolerate humid conditions, and require a sunny, well drained, fertile soil.

ETYMOLOGY
carmichaelia: After Carmichael, a botanist

NVS CODE
CARHOL

CHROMOSOME NUMBER
2n = 32

PREVIOUS CONSERVATION STATUSES
2017 | Threatened – Nationally Critical | Qualifiers: CD, RR, RF
2012 | Threatened – Nationally Critical | Qualifiers: CD, RF, RR
2009 | Threatened – Nationally Critical | Qualifiers: CD, RF, RR
2004 | Threatened – Nationally Critical
Jump to current conservation status

REFERENCES AND FURTHER READING
de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J.W.D. 2010: Threatened Plants of New Zealand. Christchurch, Canterbury University Press. 471pp.
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

ATTRIBUTION
Fact sheet prepared for NZPCN by P.J. de Lange 1 October 2003. Description adapted from Heenan (1995) - see also de Lange et al. (2010).

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/carmichaelia-hollowayi/

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27 May 2026