## Carmichaelia australis

## Common Name(s):

common broom

## **Current Threat Status (2012):**

Not Threatened

#### **Distribution:**

Endemic. New Zealand: North and South Islands (except southern South Island)

#### **Habitat:**

Coastal to montane, on river terraces, stream banks, colluvium, rock outcrops, talus and fan toe slopes, among tussock grassland and grey scrub, on the edge and margins of dense bush, forest, and in swamps

#### Features\*:

Shrub,  $2-8 \times 2-5$  m. Branches up to 100 mm diameter, ascending and spreading. Cladodes 30.0-200.0 × 1.5-8.0 mm, ascending or spreading, linear, striate, weakly plano-convex to strongly flattened and compressed, green, yellow-green, or brown-green, glabrous to sparsely hairy, apex obtuse to subacute; leaf nodes 4-15. Leaves 1-3-foliolate, present on seedlings and rarely on adults, terminal leaflet larger; lamina 3.0-22.0  $\times$  1.3-16.0 mm, obovate to oblong, fleshy, green, sometimes with dark mottling, surfaces glabrous to moderately hairy, apex emarginate, base cuneate; petiole 1-10 mm long, glabrous to moderately hairy, green; petiolule < 0.25 mm long, glabrous or sparsely hairy, light green. Leaves on cladodes reduced to scales, < 0.5 mm long, broadtriangular, glabrous, apex subacute, margin hairy. Stipules c.1.0 × c.1.5 mm, free, broad-triangular, upper surface glabrous, lower surface glabrous orglabrescent, apex subacute, margin hairy. Inflorescence a raceme, 1-3 per node, each with 4-15 flowers. Peduncle 1-10 mm long, glabrous to moderately hairy, green, occasionally flushed red. Pedicel 2-4 mm long, glabrous to sparsely hairy, pale green. Calyx  $1.3-1.7 \times 1.7-2.2$  mm, campanulate, green, outer surface glabrous to moderately hairy. Calyx lobes 0.2-0.4mm long, triangular, inner surface glabrous, appressed to corolla or



Caption: Carmichaelia australis Photographer: Wayne Bennett



**Caption:** Carmichaelia australis **Photographer:** Wayne Bennett

rarely weakly spreading, apex acute. Standard  $4.0\text{-}6.0 \times 5.0\text{-}6.5$  mm, obovate, patent, positioned in central part of keel, keeled, apex retuse; inner surface white, sometimes with a purple blotch, purple-veined; outer surface white, green at base, purple-veined; claw c.1 mm long, pale green. Wings  $4.0\text{-}5.0 \times 1.7\text{-}2.2$  mm, oblong, longer than keel, apex obtuse; inner and outer surfaces white, purple-veined; auricle rounded, white; claw c. 1.5 mm long, pale green. Keel  $3.2\text{-}4.2 \times \text{c.}1.5$  mm, apex obtuse; distal part of inner and outer surfaces purple, proximal part white; auricle < 0.5 mm long, rounded, pale green; claw c.1.5 mm long, pale green. Stamens 3-4 mm long. Pistil c.4 mm long, exserted, glabrous. Pods  $6.5\text{-}15 \times 2.0\text{-}5.5$  mm, oblong, broad-oblong, elliptic, broad-elliptic, or sometimes orbicular, laterally compressed, erect or spreading, brown, grey, or black, valves dehiscent; beak 0.5-2.5 mm long, in a central apical position, stout, pungent-tipped. Seeds 1-5 per pod, 2.2-4.0  $\times$  1.7-2.8 mm, oblong to reniform, orange, red, green, or yellow-green and often with black mottling, usually persistent on replum.

# Flowering:

## Fruiting:

October - February

November - May

## **Threats:**

Not Threatened

## \*Attribution:

Description from Heenan (1996)

### References and further reading:

Heenan, P.B. 1996: A taxonomic revision of Carmichaelia (Fabaceae - Galegeae) in New Zealand (part II). New Zealand Journal of Botany 34: 157-177. For full synonymy see this paper.

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

# For more information, visit:

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