Carmichaelia australis

COMMON NAME
common broom

SYNONYMS
Carmichaelia violacea Kirk; Carmichaelia solandri G.Simpson; Carmichaelia subulata Kirk; Carmichaelia rivulata G.Simpson; Carmichaelia robusta Kirk; Carmichaelia silvatica G.Simpson; Carmichaelia ovata G.Simpson; Carmichaelia hookeri Kirk; Carmichaelia cunninghamii Raoul; Carmichaelia flagelliformis Benth.; Carmichaelia egmontiana (Cockayne et Allan) G. Simpson; Carmichaelia aligera G.Simpson; Carmichaelia arenaria G.Simpson

FAMILY
Fabaceae

AUTHORITY
Carmichaelia australis R.Br.

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

NVS CODE
CARAUS

CHROMOSOME NUMBER
2n = 32

CURRENT CONSERVATION STATUS
2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES
2009 | Not Threatened
2004 | Not Threatened

BRIEF DESCRIPTION
Common small tree with many flattened green twigs clustered at the top of grey-brown branches. Twigs flattened, grooved, 2-8mm wide with scattered small inconspicuous leaves. Leaves with three leaflets. Flowers small, white with a purple centre, clustered along twigs. Fruit a small dry pointed pod containing 1-3 hard orange seeds.

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 × 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 sparingly 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 × 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 sparingly hairy, light green. Leaves on cladodes reduced to scales, < 0.5 mm long, broad-triangular, glabrous, apex subacute, margin hairy. Stipules c.1.0 × c.1.5 mm, free, broad-triangular, upper surface glabrous, lower surface glabrous orrglabrescent, 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 sparingly hairy, pale green. Calyx 1.3-1.7 × 1.7-2.2 mm, campanulate, green, outer surface glabrous to moderately hairy. Calyx lobes 0.2-0.4 mm long, triangular, inner surface glabrous, appressed to corolla or rarely weakly spreading, apex acute. Standard 4.0-6.0 × 5.0-6.5 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 4.0-5.0 × 1.7-2.2 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 3.2-4.2 × 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 6.5-15 × 2.0-5.5 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 × 1.7-2.8 mm, oblong to reniform, orange, red, green, or yellow-green and often with black mottling, usually persistent on replum.

SIMILAR TAXA
Recognised by the upright or spreading shrub with erect, spreading or drooping pods; the pod valves usually dehiscent when mature and the seeds remaining attached to the replum. For more details see Heenan (1996).

FLOWERING
October - February

FLOWER COLOURS
Violet/Purple, White

FRUITING
November - May

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

PROPAGATION TECHNIQUE
Easily grown from seed and hardwood cuttings.

ETYMOLOGY
carmichaelia: After Carmichael, a botanist
australis: Southern

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.

MORE INFORMATION