



Carmichaelia monroi

Common Name(s):

stout dwarf broom

Current Threat Status (2012):

Not Threatened

Distribution:

Endemic. New Zealand: South Island (Marlborough and Canterbury)

Habitat:

Inhabiting stable slopes, terraces, eyots within braided river; also amongst loose rock, scree debris, and eroding soils at the interface between rock outcrops and unstable scree and the adjacent tussock and shrub vegetation.

Features*:

Dwarf, spreading shrub, up to 0.15-0.25 × 0.40-1.00 m. Branches stout, ascending and horizontal, 10-35 mm diameter. Cladodes linear, striate, compressed, erect to spreading, green to green-bronze, often hairy when young, glabrous at maturity, 22-75 × 2-6 mm; apex obtuse, yellow, green, bronze, or red; leaf nodes 2-4. Leaves simple, oblanceolate, fleshy, green to green-bronze, present on seedlings and occasionally mature plants, 5.0-8.0 × 2.0-4.5 mm; both surfaces with scattered hairs; apex emarginate to retuse; base cuneate; petiole glabrous or sparsely hairy, 1.5-2 mm long. Leaves on cladodes reduced to a scale, broadly triangular, glabrous, 0.5-0.6 × 0.9-1.1 mm; apex obtuse. Stipules free, broad-triangular, 0.25-0.40 × 0.75-0.90 mm; upper surface glabrous; lower surface hairy, becoming glabrous with age; apex subacute; margin hairy. Inflorescence a raceme 1-2 per node, each with 1-3 flowers. Peduncle hairy, green, 6-8 mm long. Bracts triangular, glabrous, pale green to tan, < 0.5 mm long; apex acute; margin hairy. Pedicel hairy, pale green, 3-4 mm long. Bracteoles at base of calyx, sometimes absent, glabrous, < 0.4 mm long; apex subacute; margin hairy. Calyx campanulate, 2.5-3.0 × c.2.0 mm; inner surface glabrous, green; outer surface hairy, green. Calyx lobes triangular, green and often flushed red, < 1 mm long; outer surface densely hairy; apex acute, often black; margin hairy. Standard obovate, patent when young, reflexed at maturity, positioned at proximal area of keel, keeled, 6-7 × 5-6 mm; distal and central areas of upper surface purple, proximal area pale green, margins white, sometimes purple-veined; distal and central area of lower surface white, proximal area pale green, sometimes purple-veined; apex retuse; margins recurved; claw pale green, c.3 mm long. Wings oblong, shorter than keel, 7-8 × c.2 mm; distal and central areas of adaxial surface purple, proximal area green; distal and central areas of abaxial surface white, proximal area pale green; auricle triangular, pale green, apex subacute, c.1 mm long; claw pale green, c.2 mm long. Keel 8.5-10.0 × 3.0-4.0 mm; distal and central areas of upper surface purple, proximal area pale green; auricle triangular, pale green, with subacute apex, c.1.5 mm long; claw pale green, 3.0-3.5 mm long. Stamens 8.5-10.0 mm long; lower filaments connate for c. 2/3 length and outside filaments free for 2.5-3.5 mm. Pistil slightly exerted beyond stamens, 8.5-11.0 mm long; style bearded on upper surface; ovary weakly falcate, glabrous; ovules 11-12. Pod oblong or oblanceolate, laterally compressed, often weakly falcate, brown, dark brown, or black, usually indehiscent, 11.0-15.0 × 3.5-5.5 mm; beak on adaxial suture, stout, pungent, < 1 mm long. Seeds oblong-reniform, 3-11 per pod, dull yellow or orange, brown-green, or olive green, often with black mottling, 2.0-2.5 × 1.5-2.0 mm.

Flowering:

November - January

Fruiting:

December - May

Threats:

Not Threatened

*Attribution:

Description adapted from Heenan (1995)

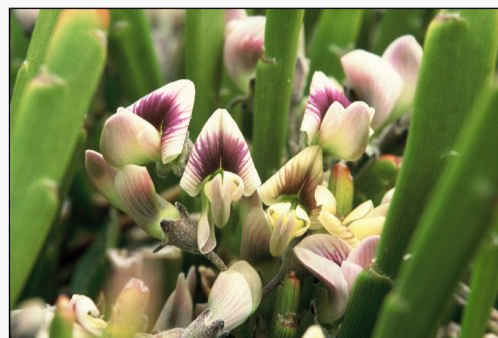
References and further reading:

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

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1599



Caption: Rachael Range

Photographer: Gillian Crowcroft



Caption: Rachael Range, Molesworth

Photographer: Gillian Crowcroft