



Carmichaelia nana

Common Name(s):

dwarf Broom

Current Threat Status (2012):

At Risk - Declining

Distribution:

Endemic. New Zealand: North Island (Central Volcanic Plateau and adjacent ranges); South Island (Marlborough, Canterbury, and Otago).

Habitat:

Lowland to alpine. Inhabiting stable but unconsolidated alluvial river beds and eyots, river terraces, moraines, shingle slopes, lahar mounds and inland volcanogenic dunes

Features*:

Dwarf, spreading shrub, 20-60 mm tall, 0.5 m wide, usually forming a dense mat of cladodes. Branches short, stout, often below ground level, 10-20 mm diameter. Cladodes linear, striate, compressed, usually erect and crowded, green or yellow-green, often hairy when young, glabrous at maturity, 10.0-50.0 × 1.5-2.5 mm; apex subacute, yellow, yellow-green, or red; leaf nodes 2-7. Leaves simple, obovate to broad-oblongate, fleshy, green, only occasionally present on seedlings and absent on adults, 4-5 × 1-2 mm; both surfaces hairy; apex retuse to obtuse; base cuneate; margins hairy; petiole glabrous or hairy, c.1 mm long. Leaves on cladodes reduced to a scale, narrow to broad-triangular, glabrous, < 1 mm long; apex subacute to obtuse. Stipules free, c.0.50 × c.0.25 mm; margin hairy. Inflorescence a raceme, 1-2 per node, each with 1-4 flowers. Peduncle glabrous to hairy, green, 3-4 mm long. Bracts triangular, glabrous, pale green becoming membranous, < 0.5 mm long; apex subacute to obtuse; margin hairy. Pedicel glabrous or hairy, pale green, 1-2 mm long. Bracteoles on pedicel, glabrous, < 0.5 mm long; apex acute; margin hairy. Calyx campanulate, green to green-yellow, 1.5-2.0 × 1.0-2.0 mm; inner surface glabrous; outer surface glabrous to sparsely hairy. Calyx lobes narrow- to broad-triangular, c.0.5 mm long; apex subacute to obtuse, red to green; margin hairy or occasionally glabrous. Bud pale purple. Standard obovate, spreading horizontally above wings and keel, 4.5-6.5 × 4-5 mm; upper surface purple, with white margins and purple-veined; lower surface white, purple-veined; apex retuse; margin recurved; claw pale green, c.1.25 mm long. Wings oblong, longer than keel, 3.50-5.50 × c.1.25 mm; both surfaces white, flushed purple, sometimes purple-veined; auricle rounded, pale green or white, < 0.25 mm long; claw pale green, c. 2 mm long. Keel 4.50-5.00 × c.1.25 mm; distal area of both surfaces purple, white in central and proximal areas, sometimes purple-veined; auricle rounded, pale green or white, c.0.25 mm long; claw pale green, c.2 mm long. Stamens 3.5-5.0 mm long; lower filaments connate for c.1/2 length and with outside filaments free for 1.75-2.25 mm. Pistil exserted beyond stamens, 4-6 mm long; style glabrous or with few scattered hairs on adaxial surface; ovules 4-8. Pod short- or broad-oblong, occasionally broad-elliptic or ovate, laterally compressed, brown, black, or yellow-green, one valve partially dehiscent from upper replum, other valve usually indehiscent or only weakly dehiscent, 5.0-7.0 × 4.5-5.5 mm; beak in a central apical position, straight or slightly curved, 1-3 mm long. Seeds oblong-reniform, 1-3 per pod, yellow, yellow-green, green, or black, occasionally with green or black mottling, 2.50-3.00 × 1.75-2.00 mm.

Flowering:

November – February

Fruiting:

January – 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=1600



Caption: *Carmichaelia nana*
Photographer: John Barkla



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