



Carmichaelia juncea

Common Name(s):

none known

Current Threat Status (2012):

Threatened - Nationally Vulnerable

Distribution:

Endemic. North and South Islands. In the N. Island it was collected once in the 1840s from the Ngaruroro River, and has not been seen since. In the S. Island it was formerly known from North West Nelson, Marlborough, Canterbury, Westland, Otago and Southland. It is now only known from a small area near Puponga in North West Nelson, and in scattered sites from Franz-Josef Glacier south to near Haast.

Habitat:

Occurs on stable but unconsolidated river bed gravels and stony, sandy and grassy edges of lakes, where competition from other plants is limited, or in coastal shrubland and turfland on weathered conglomerate rock.

Features*:

Prostrate, sprawling, virtually leafless, shrub forming flat dull grey-green, yellow-green to very dark green mats up to 0.2 x 1.5 m. Branches up to 0.8 m, completely flat, rarely ascending. Cladodes linear, striate, compressed, green, grey-green, yellow-green to light brown, sparsely hairy, prostrate, 55-160 x 1.5-2 mm; apex subacute. Leaf nodes 8-15. Leaves 1-3(-5)-foliolate, somewhat fleshy; upper surface mottled brown, brown-green or green; undersides green; apex emarginated or retuse, base cuneate to obtuse, lamina margin sparsely hairy or glabrous.

Terminal leaflet 5.5-14 x 2-4 mm, oblong, lateral leaflets 3-5 x 1-2.5 mm, obovate. Leaves on cladodes reduced to a triangular scale < 1 mm long. Stipules free, 0.5-0.8 x 1 mm, broad-triangular, initially herbaceous, drying membraceous. Inflorescence a raceme, 1(-2) per node, bearing 4-6 flowers. Peduncle 2-4 mm long, hairy, green. Pedicel 1-1.5 mm, hairy, pale green flushed with red. Calyx 1.5 x 1.25 mm, campanulate, green, glabrous. Calyx lobes 0.1 mm long, broad-triangular to triangular. Bud pale green. Standard 4-5 x 4-5 mm, obovate, erect; distal and central portions of undersides purple, margins and proximal areas white or purple-veined; distal and central areas of upper surface white, proximal portion green or purple-veined; apex retuse, margins recurved; claw, c.1.5 mm long, pale green. Wings 3.5-4 x 1-1.5 mm, oblong, longer than keel, both surfaces white, sometimes purple-veined; claw 1-1.5 mm long, pale green. Keel 4.5 x 1.5 mm; distal area purple, white or purple-veined in central and proximal areas; claw 1.5-2 mm, pale green. Stamens 3.5 mm long. Pistil of similar length. Style with a ring of hairs below stigma. Pod, persistent, 3.5-6 x 1.75-2 mm, oblong, valves inflated, yellow-grey, dark grey, dark grey-black, usually indehiscent; beak 0.25-0.5 mm, slightly curved, stout, pungent. Seeds (1-)4(-6) per pod, 1.25-1.5 x 1 mm, oblong-reniform, brick red, orange, olive green, or green-yellow, usually mottled with black.

Flowering:

October - January

Fruiting:

November - March

Threats:

An apparently biologically sparse species, it is now extinct over much of its former range. Now presumed extinct in the N. Island. Its near loss from S. Island can be attributed to its natural rarity, thereby increasing its vulnerability to over collection. The flat creeping habit and requirement for open ground, has meant that it is vulnerable to weed competition. It is browsed by rabbits, possums and other livestock.

*Attribution:

Fact Sheet prepared for NZPCN by P.J. de Lange 30 November 2005. Description modified 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: 455-75.

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=56



Caption: *Carmichaelia juncea* in full flower

Photographer: Shannel Courtney



Caption: *Carmichaelia juncea* showing growth habit

Photographer: Shannel Courtney