Carmichaelia carmichaeliae

COMMON NAME
pink broom

SYNONYMS
Notospartium carmichaeliae Hook.f.

FAMILY
Fabaceae

AUTHORITY
Carmichaelia carmichaeliae (Hook.f.) Heenan

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

NVS CODE
CARCAR

CHROMOSOME NUMBER
2n = 32

CURRENT CONSERVATION STATUS
2012 | Threatened – Nationally Critical | Qualifiers: RF, RR

PREVIOUS CONSERVATION STATUS
2009 | Threatened – Nationally Critical | Qualifiers: RF, RR
2004 | Threatened – Nationally Vulnerable

BRIEF DESCRIPTION
Rare small tree with untidy, greenish-yellow leafless twigs inhabiting valleys in Marlborough. Twigs oval in cross section, smooth, tending to droop. Flowers small, pink with darker streaks, clustered into conspicuous sprays. Fruit in a 1-4cm long dry flattened pod containing up to 10 hard black mottled seeds.

DISTRIBUTION
Endemic. South Island, Marlborough, north of the Awatere fault.

HABITAT
Lowland to montane. A species of alluvial terraces, gorges, cliff faces and steep valley sides.
FEATURES
Leafless, spreading to upright, shrub or small tree up to 5 m tall. Branchlets slender, 120–400 × 1.8–4.0 mm, drooping, green, compressed. Leaves on branchlets reduced to a triangular scale, glabrous, < 0.8 mm long. Inflorescence a raceme, up to 30 mm long, with up to 20 flowers; pedicel 1.0–3.5 mm long, sparsely hairy. Calyx 1.5–2.4 × 1.5–2.4 mm, outer surface sparsely hairy to glabrescent, or glabrous, green; lobes 0.4–0.6 mm long, triangular. Flowers pink with dark pink veins, up to 8 mm long. Standard 7.0–7.5 × 6.3–6.6 mm, obovate, recurved; wings 5.3–7.8 × 1.0–1.7 mm, oblong, shorter than keel; keel 6.6–8.5 × 2.1–3.2 mm. Stamens 6.0–7.5 mm long. Pistil 7.8–8.4 mm long, exserted beyond stamens, ovary glabrous. Pods 10.0–36.0 × 2.5–4.0 mm, linear, laterally compressed, constricted between the seeds, the seed outline often visible through the dry fruit wall, and the lower filaments are usually persistent on mature fruits, indehiscent; beak up to 4 mm long, narrowly triangular, tapering to the persistent style; with up to 10 seeds. Seeds 2.0–3.5 mm long, reniform to reniform-triangular, light green-yellow, buff or orange-brown, often with black mottling.

SIMILAR TAXA
Carmichaelia carmichaeliae and C. glabrescens have a similar growth habit, branchlets, and flowers. Carmichaelia carmichaeliae differs from C. glabrescens by the pods being weakly constricted between the seeds, the seed outline often visible through the dry fruit wall, and the lower filaments are usually persistent on mature fruits. C. glabrescens pods are shorter and broader, there are no constrictions between seeds, the seed outline is not visible through the fruit wall, and the lower filaments are usually absent from mature fruits. C. glabrescens grows south of the Awatere fault.

FLOWERING
November to January

FLOWER COLOURS
Red/Pink

FRUITING
January to December

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

PROPAGATION TECHNIQUE
Easy from fresh seed. Semi hardwod cuttings can be struck with difficulty. An excellent species for a steep, free draining bank, cliff face or rock wall. Does well in any soil provided it is free draining. This species should be planted in full sun. It is intolerant of heavy shade and humidity.

THREATS
Threatened by aerial spraying for gorse (Ulex europaeus L.) and broom (Cytisus scoparius (L.) Link), browsing animals, (especially goats, cattle, possums and deer) and habitat loss through competition from weeds.

ETYMOLOGY
carmichaelia: After Carmichael, a botanist

WHERE TO BUY
Occasionally available from specialist native plant nurseries.

ATTRIBUTION
Fact Sheet prepared for NZPCN by P.J. de Lange 1 July 2007. Description by P.B. Heenan based on Allan (1961) and published in de Lange et al. (2010)

REFERENCES AND FURTHER READING