

Clianthus puniceus

COMMON NAME

kākābeak, kōwhai ngutu-kākā, kākā beak

SYNONYMS

Donia punicea G.Don, *Clianthus puniceus* (G.Don) Lindley var. *puniceus*

FAMILY

Fabaceae

AUTHORITY

Clianthus puniceus (G.Don) Sol. ex Lindl.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Yes

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

CLIPUN

CHROMOSOME NUMBER

$2n = 32$

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Critical | Qualifiers: CD, EW

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Critical | Qualifiers: CD, OL, RF

2009 | Threatened – Nationally Critical | Qualifiers: CD, OL, RF

2004 | Threatened – Nationally Critical

BRIEF DESCRIPTION

Rare small bushy shrub with drooping clusters of pink, red or white sharp-tipped flowers. Leaves with many pairs of dull green leaflets arranged along a central stalk. Flowers 80mm long, with faint white stripes at centre. Fruit a green pea-like pod that splits releasing the numerous hard small blotched seeds.

DISTRIBUTION

Endemic. North Island. Exact historic range is unclear because Maori planted this species around their settlements. Indeed it has even been suggested that none of the historic sites, or the sole existing one are natural but stem from past Maori plantings. Whatever the case, the few herbarium specimens and historical writings suggest this species might have been endemic to Northland and the eastern Auckland portion of the Hauraki Gulf.



Flower panicle of cultivated strain of *Clianthus puniceus*. In cultivation. Photographer: Jeremy R. Rolfe, Licence: CC BY.



Foliage of Moturemu Island, 2003. Photographer: Bec Stanley, Licence: CC BY-SA.

HABITAT

Exact habitat preferences are uncertain. Historic records rarely provide any habitat details, and with many it is difficult to determine if the specimens come from Maori plantings. The only known wild population grows in short coastal scrub on talus at the base of eroding mudstone (turbidite) cliffs. Some old herbarium specimens and visits to locations where kakabeak had once been recorded from suggest that the type of habitat the species occupies now is probably indicative of its former habitat preferences.

DETAILED DESCRIPTION

Shrub 0.8-3 m tall. Wood soft, stems "watery" easily broken. Branchlets weakly ascending, often decurved. Leaves 15 cm long, imparipinnate, with 15-20 pairs of subsessile leaflets. Leaflets, dull green to grey-green, upper surface dull, 150-250 mm, linear-oblong, apex retuse or rounded. Inflorescences racemose, 15-25-flowered, located in leaf axils near branch apices. Flowers 80 mm, scarlet, pink or entirely white. Standard ovate-acuminate, 60 mm, either scarlet or pink, in which case striped longitudinally with white, or entirely white and lacking stripes; wings 30 mm long, lanceolate-falcate; keel 60 mm long, falcate-acuminate, either scarlet or pink in which case the broader base is usually blotched with white, or entirely white without other markings. Pods long persistent, 80 mm, at first green and turgid, drying black and splitting open for entire length. Seeds numerous, c.1-1.5 mm diam, grey various striped or blotched with black, embedded in wispy grey, floccose hairs.

SIMILAR TAXA

Clianthus maximus differs by the dark green, glossy leaves and larger, very dark red flowers which are blotched dark purple-black near the base (rarely with faint white stripes) while the spur is uniformly dark red.

FLOWERING

May flower throughout the year. However plants are most usually found in flower between August and January

FLOWER COLOURS

Red/Pink

FRUITING

Seed pods may be present at anytime of the year

LIFE CYCLE

Seeds are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easily grown from seed, semi-hardwood cuttings, and stem layerings. Plants tend to be short-lived in cultivation (2-4 years), and benefit from hard pruning after flowering. Kakabeak is vulnerable to a range of common garden pests which include slugs and snails, it can be severely defoliated, by these animals, and young plants may be killed completely. Caterpillars, mites - which cause witches broomsm - and various fungal diseases will also kill plants. To combat these problems grow plants in fertile, well drained, sunny sites free from surrounding shrubs.

THREATS

At serious risk of extinction. As of 2005 only one naturally occurring plant is known from the wild, at a single site near the Kaipara Harbour. At this site kakabeak is vulnerable to summer droughts, competition from weeds, and browsing animals, including rodents. Plants from this site are in cultivation.

ETYMOLOGY

clianthus: From Greek 'kleios' glory and 'anthos' flower, meaning glory flower

puniceus: Blood red

CULTURAL USE/IMPORTANCE

Formerly common in cultivation and widely sold. In the early 1990s plants of the closely related, and less disease prone *Clianthus maximus* were bought into commercial horticulture (sold as cv. Kaka King), and these have virtually replaced horticulture lines of *C. puniceus*. There is now a very real chance that some garden lines of *C. puniceus* (which may represent historic extinct populations) have died out.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 1 October 2003. Description adapted from Heenan (2000).

REFERENCES AND FURTHER READING

Heenan, P.B. 2000: *Clianthus* (Fabaceae) in New Zealand: a reappraisal of Colenso's taxonomy. *New Zealand Journal of Botany* 38(3): 361-371.

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* 11: 285-309

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/clianthus-puniceus/>