



## *Sicyos mawhai*

### Common Name(s):

mawhai, ambush vine

### Current Threat Status (2012):

At Risk - Relict

### Distribution:

Endemic. Kermadec Islands: (Heralds, Meyers, Raoul, Macauley, Hazard). New Zealand: Three Kings, North Island (formerly widespread in northern half) and northern offshore islands), South Island (formerly Marlborough Sounds). Now extinct in the South Island and probably extinct on the mainland of the North Island and on many near shore islands.

### Habitat:

Coastal species that has been collected from beach strands, including boulder beaches and banks, from coastal forest (especially forest margins), coastal shrubland and on offshore islands within sea-bird colonies.

### Features\*:

Herbaceous climber; stems annual, up to 14 m long, up to 2.5 mm diameter, sparsely hirsute with simple multicellular celled hairs and glandular hairs, glabrescent. Tendrils 3–5-branched. Leaves: petiole 25–135 mm long, minutely glandular hairy; lamina broadly ovate in outline, 45–135 × 60–165 mm wide, cordate with the basal sinus ± closed by overlapping lobes, acuminate, shallowly palmately 5- or 7-lobed, the lobes rounded–triangular, margins coarsely dentate with apiculate teeth. Male inflorescence a 14–35-flowered raceme 45–205 mm long; peduncle 35–125 mm long. Male flowers: pedicels 3.5–27 mm long; hypanthium broadly campanulate, 3.8–4.2 mm diameter; calyx lobes linear, c.1.2 mm long; corolla rotate, 7–13 mm in diameter, 5-lobed, the lobes rounded–triangular, 2.0–3.5 mm long; disc c.2 mm diameter; staminal column 1.8–2.2 mm long; staminal head 1.9–2.4 mm diameter. Female inflorescence a 6–20-flowered head; peduncle 12–35 mm long. Female flowers: subsessile; ovary ovate, 3.2–4.0 mm long, 2.0–2.6 mm diameter, echinulate with barbed aculei; hypanthium above the constriction broadly campanulate, c.2.4 mm diameter, abaxially scabridulous; calyx lobes linear, c.0.8 mm long; corolla 4–6.8 mm in diameter, glabrous abaxially and adaxially, glandular papillose on margins, white, 5-lobed; lobes triangular–ovate, 2.0–2.3 mm long; disc c.1.3 mm diameter; style c.1.8 mm long; stigma 2-branched, the branches recurved. Fruit ovate, 8.0–13.0 × 4.0–5.8 mm, obtuse or subacute, the surface glabrous or sparsely and minutely hairy, echinate; aculei dense, 2.2–3.6–6 mm long, retrorsely barbed. Seeds ± ellipsoidal, 5.6–6.0 × 3.8–4.5 mm, brown.

### Flowering:

In suitable conditions flowers are produced throughout the year.

### Fruiting:

In suitable conditions fruits are produced throughout the year.

### Threats:

*Sicyos mawhai* has vanished from much of its past range over the last 50 or so years (see comments by Cameron 1992). Currently it remains common only on the less accessible northern offshore islands (e.g., Three Kings, Poor Knights and Mokohinau Islands) and on the Kermadec Islands. *Sicyos mawhai* is susceptible to cucumber, watermelon and zucchini mosaic virus (Delmiglio & Pearson 2006) and this probably accounts for the sudden decline from the more modified parts of its range. Currently as there is no further evidence of decline and, being secure on the Kermadecs and some other island groups, this species, as *S. aff. australis* (a) (AK 252822; New Zealand) has been listed as "Relict" (de Lange et al. 2009).

### \*Attribution:

Fact Sheet Prepared for NZPCN by: P.J. de Lange 24 March 2012. Description based on Telford et al. (2012).

### References and further reading:

Cameron E.K. 1992: Decline of mawhai (*Sicyos australis*). *New Zealand Botanical Society Newsletter* 28: 11–12.

de Lange, P.J.; Norton, D.A.; Courtney, S.P.; Heenan, P.B.; Barkla, J.W.; Cameron, E.K.; Hitchmough, R.; Townsend, A.J. 2009: Threatened and uncommon plants of New Zealand (2008 revision). *New Zealand Journal of Botany* 47: 61–96.

Delmiglio, C.; Pearson, M.N. 2006: Effects and incidence of cucumber mosaic virus, watermelon mosaic virus and zucchini yellow mosaic virus in New Zealand's only native cucurbit, *Sicyos australis*. *Australasian Plant Pathology* 35: 29–35.

Telford, I.R.H.; Sebastian, P.; de Lange, P.J.; Bruhl, J.J.; Renner, S.S. 2012: Morphological and molecular data reveal three rather than one species of *Sicyos* (Cucurbitaceae) in Australia, New Zealand, and the islands of the South West Pacific. *Australian Systematic Botany* 25: 188–201.

### For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=6743](http://nzpcn.org.nz/flora_details.asp?ID=6743)



**Caption:** Burgess Island,

Mokohinau Trip

**Photographer:** Peter de Lange



**Caption:** Motukakarikitahi

**Photographer:** John Smith-

Dodsworth