

Muehlenbeckia astonii

COMMON NAME

shrubby tororaro, wiggywig, mingimingi

SYNONYMS

None

FAMILY

Polygonaceae

AUTHORITY

Muehlenbeckia astonii Petrie

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER

2n = 20

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Endangered | Qualifiers: CD, RF

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Endangered | Qualifiers: CD, RF

2009 | Threatened – Nationally Endangered | Qualifiers: CD, RF

2004 | Threatened – Nationally Vulnerable

BRIEF DESCRIPTION

Rare brownish shrub with tangled zig-zagging branches bearing small heart shaped leaves and white fruit with a black seed on top. Twigs orange. Leaves 2-15mm wide, with large dent at tip, on a 3-10mm long often brown grooved stalk, in clusters. Flowers small.

DISTRIBUTION

Endemic. North and South Islands. In the North Island known from Honeycomb Light (Eastern Wairarapa) south to Cape Palliser and just west of Sinclair Head. In the South Island in Marlborough formerly present on the Wairau Bar and Wither Hills, now known only from Clifford Bay, the lower Awatere Catchment to Cape Campbell and Kekerengu. Also in North Canterbury, on Banks Peninsula near Lake Forsyth and on Kaitorete Spit. An old herbarium specimen in Kew suggests it may have once been in the lower Waitaki Valley, South Canterbury.

HABITAT

Coastal to lowland. This species is associated with “grey” scrub communities, largely confined to drier lowland parts of eastern New Zealand. It is found on moderate to high fertility soils. The plant is often found in association with *Coprosma crassifolia* Colenso, *Coprosma propinqua* A.Cunn., *Muehlenbeckia complexa* (A.Cunn.) Messn. (small-leaved pohuehue), *Discaria toumatou* Raoul (matagouri), *Olearia solandri* Hook.f. (coastal tree daisy), *Ozothamnus leptophyllus* (G.Forst.) I.Breitwieser et J.M.Ward (tauhinu) and *Rubus squarrosus* Fritsch (leafless lawyer).



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DETAILED DESCRIPTION

Deciduous, gynodioecious shrub forming dense, interwoven masses up to 4 x 4 m. Stems 10-20 mm diam., maroon-black, cane-like, numerous, arising from a stout, woody, rootstock, 0.5-1 m diam. Branches numerous. Branchlets slender, flexuous, divaricating and interlacing. Leaves in fascicles of 2-5 on short branchlets, or widely spaced along elongated emergent branchlets; petiole slender 3-10 mm; leaf lamina 2-15 mm diam., broadly-obcordate, rarely pandurate or entire; apex usually notched 1(-4) times, cuneately narrow to base. Flowers green or white, on short, axillary fascicles. Male and perfect flowers present on the same plant, the male flower bearing 8 functional stamens, and a rudimentary gynoecium; perfect flowers with functional stamens and gynoecium; female flowers on separate plants, ovary bluntly trigonous; stigmas 3, fimbriate, androecium rudimentary. Fruit an exposed 2-2.5 x 1.25 mm trigonous, dull black rugose nut; surrounding tepals white, succulent.

SIMILAR TAXA

Muehlenbeckia complexa is somewhat similar but this is a scrambler, not a shrub and has twining, tangled, tomentose, orange-brown young stems with no distinct trunk nor thickened branches. The nuts of *M. complexa* fruits has shiny faces, while those of *M. astonii* are distinctly rugose

FLOWERING

August - January (- May).

FLOWER COLOURS

Green, White

FRUITING

October - June.

PROPAGATION TECHNIQUE

Easy from fresh seed and hardwood cuttings, which should be taken in winter. An excellent shrub for hedges and wind breaks. Once established very drought tolerant. The deciduous habit is unusual, and the bare, interlacing, wiry dark stems in winter are as attractive as the bright green foliage seen in summer. The fleshy white fruits are sugary, edible, and attract birds and lizards to the garden. Will hybridise with other *Muehlenbeckia* species, so if pure seed is needed grow well away from other species. Most horticultural stock is female and so will not set viable seed. Male plants have varying frequencies of perfect flowers, and so can set viable seed.

THREATS

The survival in the wild of *Muehlenbeckia astonii* is threatened by lack of regeneration due to competition from exotic grasses, browsing animals and trampling. It is also threatened by loss of its original habitat through disturbance, fragmentation and fire. Many of the shrubby tororaro that survive in the wild are single plants isolated from others of their species. Because male and female flowers occur on separate plants, these specimens have no opportunities to reproduce.

ETYMOLOGY

muehlenbeckia: Named after a botanist named Muehlenbeck

astonii: After Aston

WHERE TO BUY

Commonly available from most commercial plant and specialist native plant nurseries.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange December 2004. Original description by P.J. de Lange.

REFERENCES AND FURTHER READING

de lange, Peter and Cathy Jones (2000). Shrubby tororaro (*Muehlenbeckia astonii*) recovery plan (2000-2010). Threatened Species Recovery Plan 31. Department of Conservation

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Muehlenbeckia astonii* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/muehlenbeckia-astonii/> (Date website was queried)

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/muehlenbeckia-astonii/>