

Carpodetus serratus

COMMON NAME

marbleleaf, putaputawētā, piripiriwhata

FAMILY

Rousseaceae

AUTHORITY

Carpodetus serratus J.R.Forst. et G.Forst.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

CARSER

CHROMOSOME NUMBER

2n = 30

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Small tree with smallish round or oval distinctively mottled (hence common name) toothed leaves; branchlets zig-zag (particularly when young).

DISTRIBUTION

Endemic. Widespread. North, South and Stewart Islands.

HABITAT

Coastal to montane (10-1000 m a.s.l.). Moist broadleaf forest, locally common in beech forest. A frequent component of secondary forest. Streamsides and forest margins.

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).



Mikimiki, Tararua Forest Park. Photographer: Jeremy R. Rolfe, Date taken: 06/01/1994, Licence: CC BY.



Mikimiki, Tararua Forest Park. Photographer: Jeremy R. Rolfe, Date taken: 06/01/1994, Licence: CC BY.

DETAILED DESCRIPTION

Monoecious small tree up to 10 m tall. Trunk slender, bark rough, corky, mottled grey-white, often knobbed due to insect boring. Juvenile plants with distinctive zig-zag branching which is retained to a lesser degree in branchlets of adult. Leaves broad-elliptic to broad-ovate or suborbicular; dark green, marbled; membranous becoming thinly coriaceous; margin serrately toothed; tip acute to obtuse. Juvenile leaves 10-30 mm x 10-20 mm. Adult leaves 40-60 mm x 20-30mm. Petioles c. 10 mm; petioles, peduncles and pedicels pubescent; lenticels prominent. Flowers in panicles at branchlet tips; panicles to 50 x 50 mm; flowers 5-6 mm diam.; calyx lobes c. 1 mm long, triangular-attenuate; petals white, ovate, acute, 3-4 mm long. Stamens 5-6, alternating with petals; filaments short. Stigma capitate, tip dark; ovules many. Fruit an indehiscent subfleshy-fleshy capsule, 4-6 mm diam., black when mature; cupped in remains of calyx. Seeds many per capsule, in 3-5 locules, small, 1-2 mm long; testa reticulate.

SIMILAR TAXA

Not likely to be confused with any other NZ shrub or small tree. Perhaps most similar to juvenile kaikōmako (*Pennatia corymbosa*) which does not have mottled leaves and the leaves are only toothed in the top half (reminiscent of a ducks foot).

FLOWERING

November-March

FLOWER COLOURS

White

FRUITING

January-February (though dried fruit present at any time)

LIFE CYCLE

Fleshy berries are dispersed by frugivory (Thorsen et al., 2009).

ETYMOLOGY

carpodetus: Fruit bound together (girdled)

serratus: Saw-toothed

NOTES

This species is damaged by the burrowing larvae of the native puriri moth (*Aenetus virescens*). Caterpillars create burrows in the trunk and feed on cambium at the burrow entrance, creating characteristic diamond-shaped feeding scars. The caterpillar hides the web entrance with a silken web. Heavy feeding can weaken trees, in particular those with thin trunks. For more information about the life-cycle of the puriri moth and a list of other host species follow this [link](#) (Martin, 2010).

ATTRIBUTION

Description adapted from Allan (1961), puriri moth information modified from Martin (2010).

REFERENCES AND FURTHER READING

Allan, H.H. 1961. Flora of NZ I. Government Printer, Wellington.

Martin, N.A. 2010. Puriri moth - *Aenetus virescens* fact sheet, retrieved from the website Interesting Insects and other Invertebrates.

http://nzacfactsheets.landcareresearch.co.nz/factsheet/OrganismProfile/Puriri_moth_-_Aenetus_virescens.html

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(4): 285-309.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/carpodetus-serratus/>