Carpodetus serratus

COMMON NAMES
marbleleaf, putaputawētā, piripiriwhata

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Not Threatened
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

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

FLOWER COLOURS
White

Rotoiti Mainland Island, Nelson Lakes National Park. Photographer: John Sawyer, Licence: CC BY-NC.

Stokes Valley, Lower Hutt. Photographer: Jeremy R. Rolfe, Date taken: 08/12/2014, Licence: CC BY.

DETAILED DESCRIPTION
Monoecious small tree up to 10 m tall. Trunk slender, bark rough, corky, mottled grey-white, often knobbled 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).

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.

GENUS
Carpodetus

FAMILY
Rousseaceae

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

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
November-March

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

LIFE CYCLE AND DISPERSAL
Fleshy berries are dispersed by frugivory (Thorsen et al., 2009).

WETLAND PLANT INDICATOR STATUS RATING
FACU: Facultative Upland
Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).

EXTRA INFORMATION
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).

ETYMOLOGY
carpodetus: Fruit bound together (girdled)
serratus: Saw-toothed

NVS CODE
CARSER

CHROMOSOME NUMBER
2n = 30

PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened
2012 | Not Threatened
2009 | Not Threatened
2004 | Not Threatened
Jump to current conservation status

REGIONAL CONSERVATION STATUSES
Auckland: 2025 | Regionally Not Threatened | Qualifiers: DPS, DPT Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.
Otago: 2025 | Regionally Not Threatened Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Otago conservation status information is sourced from the "Conservation Status of Indigenous Vascular Plants in Otago, 2025" Jarvie S et al. (2025) report.

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 Interesitng 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.

ATTRIBUTION

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

MORE INFORMATION

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

PDF DATE

08 June 2026