Myoporum semotum

SYNONYMS
None

FAMILY
Scrophulariaceae

AUTHORITY
Myoporum semotum Heenan et de Lange

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER
2n = 108

CURRENT CONSERVATION STATUS
2017 | At Risk – Declining | Qualifiers: CD

PREVIOUS CONSERVATION STATUSES
2012 | Threatened – Nationally Vulnerable | Qualifiers: CD, DP, IE, RR
2009 | Threatened – Nationally Vulnerable

BRIEF DESCRIPTION
Spreading tree bearing glossy leathery oval leaves with small teeth on the edge inhabiting the Chatham Islands. New growth very glossy, green. Flowers white with purple spots, at base of leaves.

DISTRIBUTION
Endemic. Chatham Islands: Rekohu / Wharekauri / Chatham Island, Rangihaute / Rangiauria / Pitt Island, Maunga're / Mangere, Tapuaenuku / Little Mangere, Wharekaikite / Rabbit and Hokorereoro / Rangatira / South-East Islands. Also collected once (2015) from the south-eastern end of Mahia Peninsula, that location was destroyed by spraying and road widening for access to a rocket launch pad sometime thereafter. Surveys of the area in 2022 failed to find further plants.

HABITAT
Coastal forest and scrub where it is often the dominant canopy species.

Chatham Islands. Nov 2008. Photographer: Peter J. de Lange, Licence: CC BY-NC.

Chatham Islands. Nov 2008. Photographer: Peter J. de Lange, Licence: CC BY-NC.

DETAILED DESCRIPTION

Tree up to 14m tall, trunk up to to 0.50 m dbh, bark smooth to lightly furrowed and pale brown to cream-brown. **Branchlets** prominently angled, smooth and usually lacking tubercules, but occasionally weakly tuberculate, glabrous, non-resinous, leaf scars raised. **Leaf bud and emerging leaves** usually black, resinous. **Leaves** 70–100 × 25–35 mm, ovate, broadly elliptic, oblong-broadly elliptic to occasionally elliptic, glabrous, discolorous, alternate, coriaceous; secretory cavities obscure, minute, immersed in lamina; base cuneate; margins finely serrate distally, sometimes entire; apex acute to sometimes subacute; abaxial surface with midrib prominently raised. **Flowers** 17.0–18.5mm in diameter, 1–5 per axil, variable number on same branch; pedicels terete, 3–12mm long, glabrous. **Sepals** 5, 1.3–3.0 × 0.7–1.0mm, narrowly triangular, attenuate, glabrous, apex acute. **Corolla bud** pale white, open flower white, pink-brown or purple to lavender-purple spotted on lobes and in tube; lobes 4.5–6.5 × 4.0–4.5 mm long, 3.5–5.5 mm across; outer surface of lobes and tube glabrous; inner surface of lobes and tube furnished with succulent hairs; tube hairs c. 0.15 mm long, lobe hairs up to 1.0 mm. **Stamens** 4; filaments 5.0-5.5 mm long, glabrous, tapered toward apex, exserted, inserted about one-third from base from base of corolla tube; anthers 0.9–1.3 × 0.7–0.9 mm,green, glabrous, ovoid, 3–5-locular with one ovule per locule; style 2.8–4.0mm long, white, with pilose patent hairs toward base. **Fruit** a drupe; exocarp white when immature, becoming purple when mature, drying brown; endocarp 5.0–9.0 × 4.0–5.5 mm, woody, hard, broadly elliptic, elliptic-oblong to ovoid, not compressed, prominently 3–5 angled, apex acute to apiculate, base obtuse; seed 2.8–3.0 × 0.9–1.1 mm, oblong, pale orange-yellow. Description from Heenan & de Lange (2011).

SIMILAR TAXA

Chatham Islands myoporum is distinguished from ngaio (*Myoporum laetum*) by the branchlets, petioles and leaf midribs that are usually smooth and lack prominent protruding tubercules, leaves that are broader and thicker, with margins often less serrate, and with secretory cavities that are more dense and less conspicuous as they are more deeply immersed in the mesophyll. It differs from the Kermadec ngaio (*Myoporum rapense* subsp. *kermadecense* by leaf, flower and fruit characters (see Sykes 1987; Chinnock 2007). The leaves of both species have obscure pellucid glands, but the leaves of *M. rapense* subsp. *kermadecense* are glandular-punctate and usually narrow-elliptic to elliptic-lanceolate, prominently serrated in the distal half to three-quarters and with the apex short to long acumninate. The leaves of the Chatham Islands myoporum have a smooth surface (not glandular-punctate), are broader with the marginal teeth smaller and confined to the distal one-third of the leaf or with the leaves entire and the leaf apex is acute to subacute. The flowers of *M. rapense* subsp. *kermadecense* are 11–15mm diameter and the style is usually hairy to near the apex, whereas the flowers of the Chatham Islands myoporum are 17.0–18.5mm in diameter and the style hairy at the base. The fruit of *M. rapense* subsp. *kermadecense* are smooth or slightly 3-angled and the seeds 2.2–2.7mmlong, whereas the fruit of the Chatham Islands myoporum are prominently 3–5-angled and the seeds 2.8–3.0mm long.

FLOWERING

November–February

FRUITING

May

PROPAGATION TECHNIQUE

As with ngaio, the Chatham Islands myoporum is easily grown from fresh seed and hardwood cuttings. Like ngaio too it is very fast growing, and tolerant of wind, salt burn and at least some drought. Plants are cold-sensitive.

THREATS

Threatened by unrestricted stock access and pig damage. The species is secure and abundant on Hokorereoro / Rangatira / South East Island, and it is being actively replanted as part of the forest restoration process on Mangere Island. Ten specimens are known from Wharekaikite / Rabbit Island. On Rekohu / Wharekauri / Chatham Island, scattered trees grow in sand dune forest near Cape Pattison, a single tree occurred at Kaingaroa but died following nearby vegetation clearance. One tree is known from Motuhinahina and Waiteki / Waitangi—however, large parts of the island may have trees (the island has not been specifically surveyed for this species). Where stock and pig access is restricted recruitment is evident with most size classes present. These observations suggest that with simple management, i.e. fencing and excluding browsing animals *Myoporum* populations should recover quickly. Currently there seems to be no ngaio (*Myoporum laetum*) present on Rangihaute, as it is very likely that it will hybridise with the Chatham Islands myoporum it is important to ensure that ngaio is not planted on that island.

ETYMOLOGY

myoporum: Shut pore
semotum: M the Latin word for remote or distant

ATTRIBUTION

Fact Sheet prepared for the NZPCN by: P.J. de Lange (22 April 2011). Description from Heenan & de Lange (2011).

REFERENCES AND FURTHER READING

Chinnock RJ. 2007. *Eremophila* and allied genera: a monograph of the plant family Myoporaceae. Rosenberg, Kenthurst, Australia.
Heenan PB, de Lange PJ. 2011. *Myoporum semotum* (Scrophulariaceae), a new tree species from the Chatham Islands. *New Zealand Journal of Botany 49(1)*: 17–26. https://doi.org/10.1080/0028825X.2010.526767.
Sykes WR. 1987. Kermadec ngaio (*Myoporum*, Myoporaceae). *New Zealand Journal of Botany 25(4)*: 595–601. https://doi.org/10.1080/0028825X.1987.10410090.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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