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
Dicotyledonous Trees & Shrubs

CHROMOSOME NUMBER
2n = 108

CURRENT CONSERVATION STATUS
2018 | At Risk – Declining

PREVIOUS CONSERVATION STATUS
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: Rangiauria (Pitt Island), Mangere, Little Mangere, Rabbit and Rangatira (South-East) Islands.

HABITAT
Coastal forest and scrub where it is often the dominant canopy species.
FEATURES
Tree up to 14m tall, trunk up to to 0.50m 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-oblung 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 acuminate. 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 2.2-2.7mm long, 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 - though very uncommon - on Rangatira and Little Mangere, and is being actively replanted as part of the forest restoration process on Mangere Island. One shrub is known from Rabbit Island. 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 present on Rangiauria, 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
REFERENCES AND FURTHER READING

CITATION
Please cite as: de Lange, P.J. (Year at time of access): Myoporum semotum Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. https://www.nzpcn.org.nz/flora/species/myoporum-semotum/ (Date website was queried)

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