

Myrsine coxii

COMMON NAME

swamp matipo, swamp mapou, Cox's matipo

SYNONYMS

Suttonia coxii (Cockayne) Cockayne, *Rapanea coxii* (Cockayne) W.R.B.Oliv.

FAMILY

Primulaceae

AUTHORITY

Myrsine coxii Cockayne

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

MYRCOX

CHROMOSOME NUMBER

2n = 46

CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: DP, IE, RF

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: DP, IE, RF

2009 | At Risk – Declining | Qualifiers: RF, IE, DP

2004 | Range Restricted

BRIEF DESCRIPTION

Erect bushy shrub with erect branches and twigs bearing small oval leaves with uneven edges inhabiting wet sites on the Chatham Islands. Leaves 7-20mm long by 5-12mm wide, clustered along twigs. Fruit purple.

DISTRIBUTION

Endemic. Chatham Islands, Rekohu (Chatham Island), Rangiauria (Pitt Island) and on Rangatira (South-East Island). Most common in the southern part of Rekohu though there are sporadic occurrences in the north-west (near Point Somes and Ocean Bay). Very uncommon on Rangiauria.

HABITAT

A species of waterlogged peaty ground in forest and along lake margins as well as a prominent woody species in restiad bogs on the Chatham Islands. In forested habitats it is usually found in dense stands along stream sides, and on margins of clears. In the Tuku-a-Tamatea Nature Reserve on Rekohu it is a widespread canopy tree in the dense forest that covers the peaty ridges, valley heads and slopes. In these situations it frequently forms small trees.



Myrsine coxii. Photographer: Peter J. de Lange, Licence: CC BY-NC.



Myrsine coxii. Photographer: Peter J. de Lange, Licence: CC BY-NC.

WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland

Usually is a hydrophyte but occasionally found in uplands (non-wetlands).

DETAILED DESCRIPTION

Shrub or small gynodioecious tree up to 12 m tall, with extensively creeping underground network of stems, these emitting offset plants up to 10 m away from parent plant; trunk 0.1-0.2 m dbh, usually multi-trunked and branching from base, bark red-brown to dark brown. usually clean of lichens and bryophyte growth (except in restiad bogs). Branches numerous, fastigate (i.e. like a pitch fork), close set, in open conditions densely set and crowded, in swamp forest markedly less so; branchlets, slender, numerous densely packed and leafy along entire length in open situations, less so in shaded sites, lenticellate, yellow-green to dark green or red-green, young growth finely clad in short (0.1-0.3 mm) stiff hairs becoming glabrous with age. Leaves alternate, usually very densely clustered and crowded along branchlets and short lateral branchlets, coriaceous, finely pubescent when young becoming glabrous with age, adaxially dark green (shaded sites or in forest) or yellow-green (very rarely with dark red blemishes), abaxially slightly paler, oil gland numerous, minute, colourless or pink-tinged; midrib indistinct from lamina, concolorous with lamina, scarcely raised above, slightly so below, finely pubescent, indumentum shedding with age; petioles wanting, 1-4(-10) mm long. Lamina 8-10-20(-25) × 5-10-14 mm, inrolled, obovate, oval, occasionally oblong, apex retuse, emarginate or obtuse, cuneately narrowed at apex, margins entire, thickened, finely ciliolate when young. Inflorescence in (1-)2-3(-6)-flowered fascicles. Flowers cream, pale yellow or wine-red, occasionally darkly spotted purple-black; pedicels 0.8-1.2 mm long, elongating to 10 mm in fruit. Pistillate flowers: often solitary or in pairs, calyx 0.8-1.2 mm, tube 0.2-0.45 mm, lobes 4, 0.6-0.8 × 0.3-0.4 mm, broadly ovate, erecto-patent, subacute, margins ciliolate; corolla 2.0-2.5 mm, tube wanting, lobes 4, erecto-patent, 1.2-1.6 × 0.6-1.0 mm, broadly elliptic, copiously covered in oil glands, these colourless or tinged pink, margins ciliolate, cilia white or pink-tinged. Antherodes absent or malformed, 0.23-0.28 × 0.10-0.18 mm, apiculus recurved or absent; pollen absent. Ovary 2.4-3.2 × 1.8-2.6 mm, ellipsoid, green, often pink-tinged, copiously spotted in oil glands. Stigma sessile, 2.0-2.1 mm diameter, 4-armed, white, often pink-tinged. Staminate flowers: calyx 0.8-1.4 mm, tube 0.2-0.4 mm, lobes 4, erecto-patent, 0.6-0.8 × 0.4-0.6 mm, ovate, margins minutely ciliolate, cilia pinkish; corolla 2.2-2.9 mm, tube 0.2-0.6 mm, lobes 4, spreading (with apices strongly decurved at anthesis), 2.4-3.2 × 1.2-2.0 mm, elliptic, margins ciliolate, pinkish, apex obtuse. Stamens 4(-5), filaments 0.4-0.6 × 0.11-0.14 mm, pinkish, stamens red or pink, apiculus recurved. Ovary absent or malformed. Bisexual flowers: calyx 0.8-1.4 mm, tube 0.2-0.4 mm, lobes 4, erecto-patent, 0.6-0.8 × 0.4-0.6 mm, ovate, margins minutely ciliolate, pinkish; corolla 2.2-2.9 mm, tube 0.2-0.6 mm, lobes 4, spreading (with apices strongly decurved at anthesis), 2.3-2.9 × 1.2-1.31 mm, elliptic, margins fimbriate, cilia pinkish, apex rounded or obtuse. Stamens (4-)5, filaments 2.4-3.2 × 1.2-2.0 mm, pinkish, stamens red, apiculus recurved. Ovary 2.4-3.2 × 1.8-2.6 mm, ellipsoid, green, often pink-tinged, copiously spotted in oil glands. Stigma sessile, 2.0-2.1 mm diameter, 4-armed, white, often pink-tinged. Drupe 1-seeded, 6-8 mm diameter, dark violet to purple-black, globose, purplish. Endocarp 3.2-4.0 × 3.2-3.8 mm, globose (rarely broadly elliptic), light greenish yellow or yellow, surface ± smooth, without obvious veins.

SIMILAR TAXA

None. *Myrsine coxii* is easily distinguished from *M. chathamica* (with which it often grows) by its columnar growth habit, fastigate branching pattern, and much smaller, inrolled oval to oblong emarginate, or orbiculate leaves. *Myrsine coxii* is the only species of the two to extent out into restiad bog, and furthermore it is the only one to extensively root sucker - in some cases up to 10 m from the parent plant. The hybrid *M. chathamica* × *M. coxii* is occasionally seen.

FLOWERING

May - September

FLOWER COLOURS

Red/Pink, Yellow

FRUITING

July - November

PROPAGATION TECHNIQUE

Difficult. Has been successfully grown from root suckers. Seed is rarely available but if fresh germinates easily. *Myrsine coxii* dislikes drying out and humidity. Best results are obtained where specimens are planted in peaty, damp soils in a shaded site.

THREATS

Myrsine coxii is scarce in the northern two-thirds of Rekohu (Chatham Island) and on Rangiauria (Pitt Island). It is numerically abundant within forest remnants and restiad bogs of the southern tablelands of Rekohu. Recent surveys have shown that what people in the past had recorded as seedlings were root suckers and that genuine seedlings are scarce. Flowering although frequent does not seem to produce much fruit. Therefore it has been listed as Declining by the New Zealand Vascular Threat Listing Panel. Irrespective, it is clear that the observations of recruitment failure urgently need further research.

ETYMOLOGY

myrsine: Myrrh

ATTRIBUTION

Fact sheet prepared by P.J. de Lange for NZPCN (1 June 2013)

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/myrsine-coxii/>