Syzygium maire

COMMON NAME

swamp maire, maire tawake, waiwaka

SYNONYMS

Eugenia maire A.Cunn.

FAMILY

Myrtaceae

AUTHORITY

Syzygium maire (A.Cunn.) Sykes et Garn.-Jones

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

Nο

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

SYZMAI

CHROMOSOME NUMBER

2n = 22

CURRENT CONSERVATION STATUS

2017 | Threatened - Nationally Critical | Qualifiers: DP

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Tree with pale bark and sometimes erect aerial roots bearing pairs of yellowish-green oval pointed leaves and white brushy flowers and red blunt-tipped fruit inhabiting wet sites in warmer parts of New Zealand. Leaves 4–5 cm long by 1–1.5 cm wide. Flowers 1 cm wide and with many projecting white filaments, in clusters.





Adult tree, Coromandel. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Flowers, Coromandel. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DISTRIBUTION

Endemic. New Zealand: North Island (from Te Paki south), South Island (to Rarangi near Blenheim). Now often scarce or absent over large parts of its former range due to the clearance of swamp forest.

HABITAT

Mostly found in coastal and lowland riparian forest in waterlogged ground, on the margins of swamps and streamsides. Also found in some of montane forest and cloud forest of Northland (e.g., Tutamoe), the western Waikato (Pirongia, Taumatatotara and Tawarau) and the lower margins of Egmont National Park where high rainfall and poor drainage provide ideal conditions for this tree to establish on hill slopes, tablelands and with karst landscapes.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

Almost always is a hydrophyte, rarely in uplands (non-wetlands).

DETAILED DESCRIPTION

Glabrous tree to c. 16 m high. **Trunk** up to 0.8 m dbh, solitary or with several arising from base, often with knees and where the root plate is exposed frequently bearing pneumatophores. **Bark** smooth, pinkish grey, grey-brown or white, flaking in soft or brittle, irregular shards. **Branches** numerous, spreading, branchlets numerous, spreading, 4-angled. **Leaves** opposite, subcoriaceous, adaxially yellow-green to green, glossy often bearing small galls and leaf blisters, midrib impressed, side veins slightly impressed scarcely evident when veiwed from above; abaxial surface pale green, midrib prominently raised, side veins evident when fresh or dried; margins entire, sinuate or undulate; petioles 5–10 mm long, slender, brittle. **Lamina** 15–60 × 10–25 mm, usually elliptic, sometimes broadly elliptic. **Inflorescences** in cymose 5–30-flowered clusters, up to 100 mm diameter. **Pseudopedicels** slender. **Hypanthium** 2–3 mm long at anthesis, obconic; calyx lobes very short and broad, persistent on fruit. **Petals** 2–3 mm diameter, orbicular, white, forming calyptrum in bud, caducous. **Stamens** numerous, 5–12–(18) mm long, white, in 6–8 (or more) indistinct whorls, filaments 4.5–17.5 mm long, white, anthers basifixed, pollen white. **Style** 5–18 mm long, distinctly broader than stamens and tapering, cream to yellow-green. **Ovary** adnate to base of hypanthium. **Fruit** 10–15 mm diameter, subglobose, broad-ellipsoid or elliptic-ovoid, flesh deep crimson, glossy. **Seed** 1, 6–11 mm long, obovate, testa dull, very hard, covered in fibres, striped pale orange-yellow and pale brown, brown or greybrown.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the Myrtaceae of New Zealand

SIMILAR TAXA

Syzygium maire is unlikely to be confused with any other indigenous plant. It could possibly be confused with monkey apple (<u>S. smithii</u>) which sometimes grows with <u>S. maire</u> in urban forest remnants, and which differs from <u>S. maire</u> by the calyx lobes which are fused into the calyptrum rather than free, and also by the divergent rather than parallel anther sacs.

FLOWERING

November-July

FLOWER COLOURS

White

FRUITING

January-December

PROPAGATION TECHNIQUE

Can be grown from seeds and cuttings. Cuttings are, as a rule, fickle. Seed will germinate readily if the fruits are first steeped in water and the fleshy covering allowed to rot off. Seed can then be sown on damp potting mix (ideally in trays partially immersed in water—which must never be allowed to dry out). Seedlings are delicate and resent root disturbance so need to be treated carefully when pricking out. Nevertheless once seedlings have established (after they have reached 500 mm or more tall) they are easily handled, provided they aren't allowed to dry out. *Syzygium maire* is a beautiful tree for a waterlogged situation and will flourish in shaded or sunny situations. It is, however, frost tender and drought intolerant.

THREATS

Conservation status raised to Nationally Critical in 2017, following the arrival of myrtle rust in NZ. In addition, many populations now qualify as "Living Dead" as they persist (and are in slow terminal decline) as remnants within partially drained farmland (previously riparian forest). Learn more at myrtlerust.org.nz.

ETYMOLOGY

syzygium: From the Greek syzygos 'joined', referring to the paired leaves

ATTRIBUTION

Factsheet prepared by: P.J. de Lange (5 November 2005). Description based on Webb et al. (1988), Webb & Simpson (2001) and observations made from fresh material.

Status updated 1 Nov 2019 by C C Ogle, following de Lange et al. (2018).

REFERENCES AND FURTHER READING

Cameron EK, Cutting M. 1995. Maire tawake at Browns Bay, Auckland. <u>Auckland Botanical Society Journal 50:</u> 66–70.

de Lange PJ, Rolfe JR, Barkla JW, Courtney SP, Champion PD, Perrie LR, Beadel SM, Ford KA, Breitwieser I, Schönberger I, Hindmarsh-Walls R, Heenan PB, Ladley K. 2018. Conservation status of New Zealand indigenous vascular plants, 2017. *New Zealand Threat Classification Series 22*. Department of Conservation, Wellington, NZ. 82 p. https://www.doc.govt.nz/globalassets/documents/science-and-technical/nztcs22entire.pdf.

Webb CJ, Simpson MJA. 2001. Seeds of New Zealand Gymnosperms and Dicotyledons. Manuka Press, Christchurch. 428 p.

Webb CJ, Sykes WR, Garnock-Jones PJ. 1988. Flora of New Zealand, Volume IV. Naturalised Pteridophytes, Gymnosperms, Dicotyledons. Botany Division, Department of Scientific and Industrial Research, Christchurch, NZ. 1365 p.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/syzygium-maire/