

# Myrsine kermadecensis

## COMMON NAME

Kermadec mapou

## SYNONYMS

Rapanea kermadecensis (Cheeseman) Mez; Suttonia kermadecensis (Cheeseman) Cheeseman

## FAMILY

Primulaceae

## AUTHORITY

Myrsine kermadecensis Cheeseman

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

MYRKER

## CHROMOSOME NUMBER

2n = 46

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: CD, IE

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: CD, IE

2009 | At Risk – Naturally Uncommon | Qualifiers: OL, IE

2004 | Range Restricted

## BRIEF DESCRIPTION

Small tree bearing wavy dark green leaves and small purple or white fruit inhabiting the Kermadec Islands. Leaves bulging between the veins, 3-7cm long by 1-3.5cm wide. Fruit 6-9mm wide.

## DISTRIBUTION

Endemic. Kermadec Islands: Raoul Island.



Raoul Island. Photographer: Bec Stanley, Licence: CC BY-SA.



Raoul Island. Photographer: Peter J. de Lange, Date taken: 08/05/2009, Licence: CC BY-NC.

## HABITAT

A common and important shrub and subcanopy (rarely canopy) species of dry forest on Raoul Island. Near the coast it is often the sole species under dense canopy of *Metrosideros kermadecensis*. However it is more commonly found in association with *Coprosma petiolata*, *Myoporum rapense* subsp. *kermadecense* in the canopy gaps and near the shore line and further inland with *Macropiper excelsum* subsp. *psittacorum*, *Coprosma acutifolia* and *Melicytus* aff. *ramiflorus*. Although most common in dry forest it extends right up into the wet forest and is a sparse component of the wet forest developed along the ridge lines and crater rim.

## DETAILED DESCRIPTION

Gynodioecious shrub or tree up to 10 m tall; bark firm, rough, initially dark red-brown, aging grey. branches numerous more or less spreading to ascending. Leaves coriaceous, dark or light green, adaxially glossy; petioles stout, 6-15 mm long; lamina 30-680 × 25-40 mm, elliptic- to obovate-oblong, obtuse or apiculate, mostly entire, sometimes sparingly toothed toward leaf base; margins of shade foliage flat, otherwise slightly to strongly recurved. Inflorescences in many flowered fascicles. Pistillate flowers; greenish yellow with purple spotting or wine-red with purple spotting; calyx 1.0-1.5 mm, tube 0.4-0.6 mm, lobes 4-5, 0.6-0.9 × 0.6-0.8 mm, triangular, glandular, apex acute to subacute; Corolla 2.1-2.7 mm, tube 0.2-0.3 mm, lobes 4-5, 1.9-2.4 × 0.9-1.0 mm, elliptic, glandular, apex acute. Antherodes malformed, 0.75-1.15 × 0.5-0.6 mm, apiculus strongly recurved; pollen absent. Ovary 0.8-0.9 × 0.8-0.9 mm. Stigma 0.3-0.4 mm high, spreading, outer parts appressed to ovary ± 2.5 mm. diameter. Bisexual flowers, greenish yellow with purple spotting or wine-red with purple spotting; calyx 1.0-1.5 mm, tube 0.3-0.5 mm, lobes 4-5, 0.7-1.0 × 0.7-0.8 mm, triangular, glandular, apex acute. Corolla 2.7-3.1 mm, tube 0.2-0.3 mm, lobes 4-5, 2.5-2.8 × 1.1-1.3 mm, elliptic, glandular, apex acute. Anthers 1.1-1.8 × 0.8-1.2 mm, apiculus upright; pollen abundant. Ovary 0.75-0.9 × 0.75-1.0 mm. Stigma 0.75-0.8 mm high, upright. Fruit (8)-6-12 mm. diameter when fresh, globose, purple, dark violet-purple or black. Endocarp 3.2-3.5 × 4.0-5.5 mm; buff brown to pale brown with pale longitudinal veins; transversely elliptic to broadly elliptic, terete with 10-12 distinct longitudinal ridges; apex rounded with a small central dimple.

## SIMILAR TAXA

As the only species in the genus on the Kermadec Islands, *Myrsine kermadecensis*, when Raoul Island cannot be confused with any other plant there. However, limited material is in cultivation in New Zealand, and that could be confused with the Three Kings Islands endemic *M. oliveri* (also in limited cultivation). *Myrsine kermadecensis* differs vegetatively in that the adult leaves are mostly entire (only rarely toothed, and then sparingly so), and the leaves are uniformly dark (or light) glossy green rather than the sparingly toothed, dark green, yellow-green to green tinged pink leaves typical of *M. oliveri*. Both species also differ in their floral and fruit characters (see descriptions)

## FLOWERING

October - April

## FLOWER COLOURS

Green, Yellow

## FRUITING

August - May

## PROPAGATION TECHNIQUE

Easily grown from fresh seed. Difficult but can be grown from semi-hardwood cuttings

## THREATS

An abundant species on Raoul which is listed only because it occupies a restricted geographic area.

## ETYMOLOGY

**myrsine:** Myrrh

**kermadecensis:** From the Kermadec Islands

## WHERE TO BUY

Not commercially available

## ATTRIBUTION

Description adapted by P. J. de Lange from Allan (1961), Heenan (1998) and Webb & Simpson (2001) supplemented by field observations.

## REFERENCES AND FURTHER READING

Allan, H.H. 1961: Flora of New Zealand. Vol. I, Government Printer, Wellington

Heenan, P.B. 1998: Gynodioecy in *Myrsine kermadecensis* (Myrsinaceae). *New Zealand Journal of Botany* 36: 675-677.

Webb, C.J.; Simpson, M.J.A. 2001: Seeds of New Zealand gymnosperms and dicotyledons. Christchurch, Manuka Press.

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Myrsine kermadecensis* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/myrsine-kermadecensis/> (Date website was queried)

## MORE INFORMATION

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