Red Matipou, Mapau

Myrsine australis

This small indigenous tree, belonging to the Myrsinaceae family, grows to between 3 and 6 metres high, depending on its environment. It is often part of the initial regeneration in the forest fringe, which causes it to be often overlooked; it is though, in Māori tradition, regarded as a rākau tapu (sacred tree), where its main use, historically, was ceremonial.

(Image: Rob Tipa)

Identification & Cultivation: With short upright branches, the bark of the new growth is red, aging to dark brown. The foliage of red matipo or Mapau: "The leaves are coloured pale green with a yellow tinge on the top surface, while the underside of the leaf is a paler version of this. Measuring 3–6 cm in length to 1.5-2.5cm in width, the leaves are arranged alternatively on the stem and have a leathery texture. The leaf margins are normally wavy; however some uncommon forms may also have flat leaf margins. Each leaf blade is covered in round, translucent glands, and is connected to a red, approximately 5mm long, leaf stalk. These leaf stalks, also called petioles, can vary in colour and size, as a result of environmental conditions… Red matipo grows well on most soil types. It is indicated that a high level of phosphorus in the soil is beneficial to red matipo's growth, however it does grow with low soil phosphorus levels, with little variability, in comparison to other New Zealand native plants" (Wikipedia)

It is endemic to our islands, though, outside of New Zealand, there are a further 300 Myrsine species found throughout the world.

"*Myrsine australis* flowers between August and January, and produces fruit between September and December. Its flowers are clustered on small stalks on the branchlets where older leaves have already been lost. They are small and inconspicuous (like many other native flowers), from 1.5mm-2.5mm in diameter, and are a cream to whitish colour, covered in small orange glands. The flowers are unisexual, therefore some individuals produce only male flowers for pollen distribution, and other individuals produce only female flowers for fertilization and fruit growth. The petals of the flowers are lanceolate, obtuse, free, and revolute. Due to the occurrence of flowering and fruiting periods overlapping, some specimens can display both fruit and flowers at the same time.

Red matipo's fruits are drupes; a single seed encased in a hard core, covered with a fleshy outer layer. The fruits measure 2-4mm in diameter, are coloured dark brown to black. They are commonly dispersed by kereru, tui, silvereye, bellbird, and blackbird, who eat the fruit, and dispose of the seed once digested. The plant has the ability to retain a '*seed bank*', with some seeds remaining dormant for a year or more and germinating at random intervals and amounts Seeds typically require a chilling period to enable germination to occur; it is also suspected that after seed fall, embryos may still be developing. Therefore, germination can take nearly four to five times as long in comparison to other New Zealand natives such as *Hoheria angustifolia* and *Coprosma foetidissima,* which typically germinate far more rapidly. These time periods are rough averages as each specimen of *Myrsine australis* has its own natural variety and irregular pattern". (Wikipedia)

(Image of flowers & ripe seeds: Karina Hilterman)

Matipo foliage is not particularly favoured by grazing animals, though the seeds have been found in possum poo. The fruit is consumed by native birds, especially the Bellbird and Tui, Blackbirds like them too and via bird-droppings is an important seed dispersal method for its regeneration.

Part Used: Leaves

Harvesting: Harvest the leaves as needed, for remedies

Energetic Character: Astringent, yet moistening, bitter and slightly numbing.

Constituents: Flavonoids including rutin, triterpene saponins, embelin and glucuronic acid

Therapeutic Actions: Astringent, vascular protective, antimicrobial, anti-leukaemic, analgesic.

Medicinal Uses: Internally: cardiovascular disorders, constipation. Topically for toothache

Dosages: 3 to 9ml of a 1:2 strength fresh leaf liquid extract, or 1.5 to 4.5gms of fresh leaf per day, in 2 or 3 divided doses.

History & Mystery & Other Uses: "In Māori tradition māpou is regarded as a rākau tapu (sacred tree), and its main use historically was ceremonial. It was one of several rākau tapu from which tohunga routinely plucked a sprig, dipped it in sacred water, and sprinkled the water from the sprig onto people or items that required cleansing, with an appropriate karakia or blessing. The same ritual would be followed for a tangi. Sometimes a tohunga carried a staff fashioned from māpou as a badge of office.
Ethnographer Elsdon Best recorded that in the case of an illness, a person may take a wand of karamū (*Coprosma*), māpou, or maire (*Syzygium maire*), and touch the sick person with it, so the wairua or atua (spirit) of that person entered the wand. Without stopping to talk to anyone, the person then took the wand to a tohunga, who could tell them whether or not the person would recover from their ailments.
A pole of māpou was sometimes used in kūmara planting ceremonies. It was placed at the eastern end of a kūmara plantation as a mauri, or physical representation of Rongo, the guardian of agriculture.
The plant was also used in traditional Māori rongoā (medicine), notably for the treatment of toothache and for cleaning teeth. The bark of māpou was washed and boiled, and the fluid of the bark was squeezed and held in the mouth until the pain eased.
Scientists have found the plant contains embelin, a compound used in India as a remedy for skin disease, intestinal worms, and as a general tonic. Māpou leaves also contain rutin, which is used in the treatment of blood vessel problems, and glucuronic acid, used for the relief of certain arthritic conditions.
Timber from māpou is exceptionally strong and springy, and will not break easily under load. It was used in the manufacture of composite adze handles, and for making handles of carpenters' tools. It was also made into chairs, walking sticks, and fernroot beaters.
Scraps of the inner bark of māpou and the bruised leaves of kawakawa produce a red dye. Fibre was wrapped up with this mixture and left to steep for some time, and then dried in front of a fire.

(Image: A young Mapau; Karina Hilterman)

Māpou is a very attractive specimen tree or shrub that grows naturally in forest margins or scrub throughout the country. It is tough, hardy, and thrives in almost any soil as long as it is not waterlogged. It grows naturally in coastal areas, is very tolerant of strong winds, and its dense foliage and compact growth habit (usually of three to four metres) provides effective shelter grown as a hedge or shrub border on exposed sites. Its distinctive features are its pale green to yellowish wavy-edged leaves and bright red stems on new growth tips. It is often mistaken for one of the pittosporum family, and is actually very similar to kōhūhū (*Pittosporum tenuifolium*, which is also known as black matipo), except the latter has black stems rather than red stems on new growth. If you don't already have a māpou growing in your garden, it is a fine specimen to add to any native plantings." -Rob Tipa

References: Phil Rasmussen, Auckland, New Zealand, March 2010; de Lange, P. J. (2022): *Myrsine australis* Fact Sheet; Rob Tipa; Rob McGowan; Wikipedia.

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