# **Entelea arborescens**

COMMON NAME whau

SYNONYMS Apeiba australis A.Rich.

FAMILY Malvaceae

AUTHORITY Entelea arborescens R.Br.

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS Yes

ENDEMIC FAMILY No

STRUCTURAL CLASS Trees & Shrubs - Dicotyledons

NVS CODE ENTARB

CHROMOSOME NUMBER 2n = 32

CURRENT CONSERVATION STATUS 2017 | Not Threatened

# **PREVIOUS CONSERVATION STATUSES**

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

## **BRIEF DESCRIPTION**

Small bushy tree with large very thin jagged leaves with three points towards the tip attached to a stalk near the leaf base. Wood very light. Leaves 10-25cm long. Flowers white with yellow filaments, in flat clusters. Fruit distinctive, round, covered with long spines.

# DISTRIBUTION

Endemic. Three Kings, North (including Little and Great Barrier Islands) and South Islands. In the North Island, whau is locally common from Te Paki to about Kawhia and Mahia Peninsula south of there it is known from a few sites in the northern Taranaki, eastern Wairarapa, Cape Palliser, at Paekakariki and Wellington. In the South Island it is confined to the Golden Bay area of North-West Nelson. Whau naturalises easily and has become established in many places, especially around baches and urban plantings.

## HABITAT

Coastal to lowland forest or shrubland. Usually in open sites such as around recent slips, tree falls, cliff faces, boulder slopes, sand dunes or on the margins of streams, rivers, lagoons and lakes. Mostly near the coast however it may occur well inland in some places e.g., the Waikato River near Hamilton, Rotorua. Some inland and southern North island occurrences are thought to be derived from deliberate plantings by Maori.





Thames coast, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Thames coast, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

### **DETAILED DESCRIPTION**

Shrub or small spreading tree up to c. 8 m tall; trunk up to 0.25 m dbh; wood-weight very light; bark firm, grey, tearing in long fibrous strips when cut. branches numerous, upright than spreading; branchlets, leaves, petioles, inflorescences densely clad in soft whitish branched hairs; leaf-scars oval or lunate. Leaves alternate, softly membranous (wilting readily if picked), green, bright green to yellow green, ± glossy, veination distinct when fresh or dry; petioles 80-300 mm long, stout; stipules linear-acuminate, ± persistent. Lamina 50-100-150(-300) × 50-100-150-(260) mm, obliquely very broad-ovate, abruptly acuminate, cordate at base, margins doubly crenateserrate, sometimes obscurely lobed, 3-5-7-subpalmately lobed. Inflorescence a subumbellate many-flowered cyme. Flowers (3-)4-5-merous. Peduncle 100-300 mm long, stout, pedicels 10-40 mm long. Sepals free, 8-10-12 mm long, narrowly lanceolate to triangular, acuminate; petals (3)-4-5, 10-30 × 10-30 mm, orbicular to suborbicular, white, crumpled. Stamens numerous, mostly free sometimes connate at base, filaments 10-18(-20) mm long, white, anthers versatile, yellow. Ovary 5-10 mm long, broadly to narrowly globose or ovoid, hispid, 5-7locular, ovules numerous, style simple, stigma ± globular to broadly capitate, fringed or toothed. Fruit a bristly capsule 20-35 mm diameter, subglobose to globose, black to charcoal when ripe, invested by numerous, rigid, spinose, black to charcoal coloured hairs 15-25 mm long. Seeds numerous, 1.9-2.9 mm long, obovate, elliptic to broadly elliptic, glarbous, surface granular, orange-yellow, pale brown, or orange-brown. Description of seeds by Webb & Simpson (2001).

SIMILAR TAXA

None.

**FLOWERING** August - November

FLOWER COLOURS White, Yellow

FRUITING December - June

## LIFE CYCLE

The spiny capsules may be dispersed by animals (Thorsen et al., 2009). However, they are also buoyant in water, and may aid in wind dispersal as the mature capsules are often blown along beaches and dunefields. Entelea fruits are often found washed up along tidal creeks,

#### **PROPAGATION TECHNIQUE**

Easily grown from seed which germinates readily. A very fast growing small tree ideal for coastal situations. Does best when planted in sunny, free draining soils but is also tolerant of semi-shade and seasonally damp ground. Reasonably drought tolerant. Cold sensitive. Whau is one of the fatest growing native trees and is an excellent plant to use in coastal situations to establish shelter for other plantings. Whau is however, rather short-lived (up to 15 years) although once established if often self sows.

#### **THREATS**

Not Threatened. However, recent field work gathering samples for a Marsden study into the possible past use of whau by maori indicates that whau is much less common in the North island than it once was. browsing pressure from cattle, goats and horses, clearance of coastal scrub of housing and the spread of invasive woody shrubs and trees into many northern coastal areas may be threatening some populations.

#### **ETYMOLOGY**

**entelea**: Perfect (the pistil and stamens are in the same flower) **arborescens**: Becoming a tree

#### **ATTRIBUTION**

Fact Sheet Prepared for NZPCN by: P.J. de Lange 10 February 2011. Description of seeds by Webb & Simpson (2001).

## **REFERENCES AND FURTHER READING**

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

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 11: 285-309

## NZPCN FACT SHEET CITATION

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

# **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/entelea-arborescens/