

Alectryon excelsus subsp. grandis

COMMON NAME

Three Kings tītoki

SYNONYMS

Alectryon excelsus var. grandis Cheeseman, Alectryon grandis (Cheeseman) Cheeseman

FAMILY

Sapindaceae

AUTHORITY

Alectryon excelsus subsp. grandis (Cheeseman) de Lange et E.K.Cameron

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

ALEESG

CHROMOSOME NUMBER

2n = 32

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Vulnerable | Qualifiers: CD, DP, IE

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Vulnerable | Qualifiers: CD, IE

2009 | Threatened – Nationally Vulnerable | Qualifiers: IE, Inc, OL

2004 | Threatened – Nationally Critical

BRIEF DESCRIPTION

Small tree with spreading branches and a dark fluted trunk of the Three Kings Islands. Leaves with 2-4 offset pairs of glossy dark green leaflets. Flowers red, in small, clustered, sprays. Fruit fleshy red partly surrounding a black seed and expanding from a furry brown capsule.

DISTRIBUTION

Endemic to the Three Kings Archipelago, where it is known from Great (Manawa Tawhi) and West Islands.

HABITAT

Coastal Forest, where it often grows along the more exposed margins. Occasionally it is found as a subcanopy tree within the dense kanuka (*Kunzea* aff. *ericoides*) forest that dominates the Three Kings Islands.



Castaway Stream, Great Barrier Island, October. Photographer: Peter J. de Lange, Licence: CC BY-NC.



Flowering specimen, Ex Cult. Baylis Stream, Great Island, Three Kings. Photographer: Ewen Cameron, Licence: CC BY-NC.

DETAILED DESCRIPTION

Small spreading shrub tree 2-7 x 3-10 m; multitrunked from base. Branches stout, erect, all parts invested with fine, velutinous, ferruginous hairs. Bark brown, lenticillate. Adult leaves light to dark green, vernicose, imparipinnate, alternate 14-70 mm long. Leaflets 2-4 pairs; lamina 90-160 x 60-90 mm, subcoriaceous, broadly oblong or ovate, apex obtuse, subacute often acuminate, base cuneate, truncate to oblique, upper leaf surface vernicose, bullate; lamina margin entire. Inflorescences axillary 90-120 mm long, sparingly branched panicles. Flowers bisexual or staminate. Petals absent. Stamens 5-8 in bisexual and 6-10 in staminate flowers, crimson. Stigma ovoid, in staminate flowers ovary tholiform, style absent, in perfect flowers broadly urceolate, style 1.5-2 mm, erect. Fruits sessile, 1-2-lobed, 15-20 x 10-14 mm, pubescent, globular, carina 3-5 mm long on one side. Seed 8-10 x 6-9 mm, subglobose, black, lustrous, sarcotesta fleshy, scarlet, papillose.

SIMILAR TAXA

Titoki (*Alectryon excelsus* Gaertn. subsp. *excelsus*) could be confused with Three Kings Titoki. However, this subspecies is much taller (up to 15 m tall), and usually has a single trunk. The compound leaves have (3-)5(-7) pairs of smooth edged (or toothed) generally narrower leaflets whose surfaces are matt or glossy but never bullate. There are no major differences in the flowers or the fruits.

FLOWERING

October to December

FLOWER COLOURS

Red/Pink

FRUITING

December to April

PROPAGATION TECHNIQUE

Fresh seed germinates readily. However, as most seed comes from trees planted nearby titoki (*A. excelsus* subsp. *excelsus*) it is difficult to obtain pure seed, and many plants sold by nurseries are F1 hybrids. Hybrids are now commonly seen in street plantings around Auckland City.

THREATS

In the past this tree was virtually eliminated by goats. Since goats were eradicated in 1946, Three Kings titoki has gradually increased in range, and is now found in scattered sites across most of the eastern side of Great Island. A single tree has also been reported from West Island.

ETYMOLOGY

alectryon: In Greek mythology Alectryon was punished and turned into a rooster by Ares after failing to keep watch, possible refers to a cockscomb

excelsus: Tall

grandis: Big

ATTRIBUTION

Description based on de Lange et al. (1999).

REFERENCES AND FURTHER READING

de Lange, P.J.; Cameron, E.K.; Murray, B.G. 1999: *Alectryon excelsus* subsp. *grandis* (Sapindaceae): a new combination for an uncommon small tree endemic to the Three Kings Islands, New Zealand. *New Zealand Journal of Botany* 37: 7-16.

NZPCN FACT SHEET CITATION

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

<https://www.nzpcn.org.nz/flora/species/alectryon-excelsus-subsp-grandis/> (Date website was queried)

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/alectryon-excelsus-subsp-grandis/>