Alectryon excelsus subsp. excelsus

COMMON NAME

New Zealand ash, tītoki

SYNONYMS

Alectryon excelsus Gaert., Alectryon excelsus Gaertn. var. excelsus

FAMILY

Sapindaceae

AUTHORITY

Alectryon excelsus Gaertn. subsp. excelsus

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

ALEEXC

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 tree with spreading branches and a dark fluted trunk. Leaves with 3-7 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. North and South Islands from Te Paki to Banks Peninsula

HABITAT

A widespread coastal to lowland forest tree. Often favouring well drained, fertile, alluvial soils along river banks and associated terraces. It is also a major component of coastal forests, particularly those developed within exposed situations or on basaltic or andesite volcanics. It is a common offshore island tree within the Hauraki Gulf. The large fruits are bird dispersed and so titoki trees often occur as a sparse components of most lowland forest types, throughout the North Island.





Seeds. Photographer: Wayne Bennett, Licence: CC BY-NC.



Foliage with seeds. Photographer: Wayne Bennett, Licence: CC BY-NC.

DETAILED DESCRIPTION

Tree between 10m and 20m tall. Branches stout, erect, all parts invested with fine, velutinous, ferrugineous hairs. Bark brown. Adult leaves dark green, matt when mature, imparipinnate, alternate 80-260 mm long. Leaflets 3-7 pairs; lamina 45-105 x 19-40 mm, subcoriaceous, lanceolate, oblong or narrowly-ovate, apex, subacute often acuminate, rarely obtuse; base cuneate, truncate to oblique, upper leaf surface matt; lamina margin entire or deeply serrated 1-4 times near apex. 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, 14-20 x 9-14 mm, pubescent, globular, carina 3-5 mm long on one side. Seed 7-10 x 4-8 mm, subglobose, black, lustrous, sarcotesta fleshy, scarlet, papillose.

SIMILAR TAXA

Alectryon excelsus subsp. grandis (Cheeseman) de Lange et E.K.Cameron which is a smaller shrub or tree, usually with a multi-trunked habit. The leaves of subsp. grandis are very glossy (vernicose), distinctly bullate, with 2-4 pairs of broadly oblong or ovate leaflets. A. excelsus subsp. grandis is an allopatric Three Kings Islands endemic.

FLOWERING

October - December (-June)

FLOWER COLOURS

Red/Pink

FRUITING

November - August

LIFE CYCLE

Arillate seeds are dispersed by frugivory (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easy from fresh seed. Grows quickly in suitable conditions, preferring well drained, fertile soils in full sun or partial shade. A popular street tree, and as the fruit is bird dispersed it often naturalises in gardens from street side plantings

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

TAXONOMIC NOTES

The exact status of Alectryon plants on the Poor Knights Islands needs further investigation. In some respects these plants appear intermediate between A. excelsus subsp. excelsus and subsp. grandis (de Lange et al. 1999).

POISONOUS PLANT

The round black seeds are best avoided despite limited information on their toxicity. many plants in the same family are poisonous. Click on this link for more information about Poisonous native plants.

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (1 August 2005). Description by P.J. de Lange based in part on de Lange et al. (1999).

REFERENCES AND FURTHER READING

Cameron, E.K. 1998. Frost resistance in titoki Alectryon. Auckland Botanical Society Journal 53: 15.

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.

Duguid, F. 1961. Flowering in titoki. Wellington Botanical Society Bulletin 32: 16

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora.

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NZPCN FACT SHEET CITATION

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

MORE INFORMATION

 $\underline{\text{https://www.nzpcn.org.nz/flora/species/alectryon-excelsus-subsp-excelsus/}}$