Coriaria arborea var. arborea

COMMON NAME

tutu, tree tutu

FAMILY

Coriariaceae

AUTHORITY

Coriaria arborea R.Linds. var. arborea

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

CORAVA

CHROMOSOME NUMBER

2n = 40

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Common robust much-branched large shrub inhabiting disturbed areas. Twigs square in cross-section, bearing pairs of 50-80mm long glossy green elliptical leaves that do not have a leaf stalk. Flowers in drooping spikes up to 30cm long. Fruit black.

WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

Rarely is a hydrophyte, almost always in uplands (non-wetlands).

FLOWER COLOURS

Green

LIFE CYCLE

Fleshy berries are dispersed by frugivory (Thorsen et al., 2009).

ETYMOLOGY

coriaria: From the Latin corium 'hide', possibly from the use of some

species for tanning leather

arborea: From the Latin arbor 'tree', meaning tree-like





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



Reikorangi Valley, Waikanae. Photographer: Jeremy R. Rolfe, Date taken: 19/03/1986, Licence: CC BY.

POISONOUS PLANT

Tutu is the classic poisonous plant of NZ. It is a widely distributed native species found throughout New Zealand, particularly along stream banks and in regenerating native bush. Some of the first animals introduced to NZ by Captain Cook in the 18th Century were poisoned by it. The plant caused losses in cattle and sheep. All parts of all Coriaria species are poisonous except the succulent black, soft fleshy petals surrounding the seeds (the seeds themselves are also poisonous). Poisoning is usually through eating the seeds, berries or poisonous honey. Tutin acts on the central nervous system leading to symptoms of nausea, vomiting, burred vision, weakness and seizures or convulsions and can lead to a comatose state. Breathing is usually affected, so too is memory. Toxic honey is contaminated as a result of bees visiting tutu (Coriaria arborea) with honey dew being excreted onto the leaves of the plant by the tiny toxic sap sucking passion vine hopper (Scolypopa australis) and then bees gathering the honeydew.

Tutin, and its derivative, hyenanchin are extremely toxic to humans, but only a few areas in NZ regularly produce toxic honey. These include the Coromandel Peninsula and Eastern Bay of Plenty and the Marlborough Sounds. A number of people have been killed, incapacitated and hospitalised over the years from eating toxic honey. The last recorded case from commercial honey was in 1974 involving 13 patients. There have been 9 cases since 1974 with the last known poisonings occurring in 1991 in the Eastern Bay of Plenty area and 2008 in the Coromandel. See also the 2008 news item about toxic honey causing illness in the Coromandel.

Click on this link for more information about Poisonous native plants.

REFERENCES AND FURTHER READING

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

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/coriaria-arborea-var-arborea/