

Ailanthus altissima

COMMON NAMES

tree of heaven

FAMILY

Simaroubaceae

AUTHORITY

Ailanthus altissima (Mill.) Swingle

FLORA CATEGORY

Vascular – Exotic

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

AILALT

CONSERVATION STATUS

Not applicable

DETAILED DESCRIPTION

Smooth stems with pale grey bark, and twigs which are light chestnut brown, especially in the dormant season. Large compound leaves, 1-4 feet in length, are composed of 11-25 smaller leaflets and alternate along the stems. In late spring, clusters of small, yellow-green flowers appear near the tips of branches (Jil Swearingen pers. com). The wood of ailanthus is soft, weak, coarse-grained, and creamy white to light brown in colour. All parts of the tree, specially the flowers, have a strong, offensive odour, which some have likened to peanuts or cashews. (Rod Randall's database)

SIMILAR TAXA

One to several glandular pads/teeth on the at the base of the leaflets (Webb et al 1988).

FLOWERING

October, November

FLOWER COLOURS

Green, Yellow

FRUITING

Autumn

LIFE CYCLE

The species is dioecious, with male and female flowering on separate trees (Jil Swearingen pers. com.). Seeds are produced on female trees in late summer to early fall, in flat, twisted, papery structures called samaras, which may remain on the trees for long periods of time. Reproduces both sexually (seeds) and asexually (vegetative sprouts). Established trees produce numerous suckers from the roots and resprout vigorously from cut stumps and root fragments (*ibid.*). Prolific seed producer, One study reports that an individual tree can produce as many as 325,000 seeds per year (*ibid.*). Seeds are produced on female trees in late summer to early fall, in flat, twisted, papery structures called samaras, which may remain on the trees for long periods of time. (*ibid.*)

ORIGIN

China

REASON FOR INTRODUCTION

Ornamental



Adaxial surface of leaf. Whanganui.
Photographer: Colin C. Ogle, Date taken:
08/04/2013, Licence: CC BY-NC.



Coromandel, March. Photographer: John
Smith-Dodsworth, Licence: CC BY-NC.

ETYMOLOGY

ailanthus: From the Chinese ailanto, the native name for one of the species and meaning 'tall enough to reach the skies'

NATIONAL PEST PLANT ACCORD SPECIES

This plant is listed in the 2020 National Pest Plant Accord. The National Pest Plant Accord (NPPA) is an agreement to prevent the sale and/or distribution of specified pest plants where either formal or casual horticultural trade is the most significant way of spreading the plant in New Zealand. For up to date information and an electronic copy of the 2020 Pest Plant Accord manual (including plant information and images) visit the [MPI website](#).

ENVIRONMENTAL WEED (2024)

This plant is named in a list of 386 environmental weeds in New Zealand 2024 prepared by DOC. 759 candidate species were considered for inclusion on this new comprehensive list of environmental weeds in New Zealand. The species considered were drawn from published lists of weed species, lists of plants that must be reported or managed by law if observed, existing national and regional programmes and agreements for pest management, and species already managed by the Department of Conservation (DOC). Candidate species were then assessed to see if they were fully naturalised and whether they have more than minor impacts in natural ecosystems. Read the full report [here](#).

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/ailanthus-altissima/>

PDF DATE

17 September 2024