### Plant in Focus, May 2024

## Toona ciliata Australian Red Cedar



**Toona ciliata Australian Red Cedar**: As occurs with other subtropical deciduous trees, *Toona* spring leaves appear in shades from red, through orange to yellow. Unlike Northern Hemisphere temperate trees, it does not put on a grand display of colourful autmmn leaves.

#### Introduction

Toona ciliata Australian Red Cedar is in the family Meliaceae.

A forest tree in the Mahogany family which grows throughout S.E. Asia, from Afghanistan to Papua New Guinea and Australia. Indigenous names are Polai in the Illawarra and Woolia on the Richmond River in NSW.

In Australia the trees natural habitat is the subtropical forests of NSW and Queensland much of which has been extensively cleared. The Australian population was formerly treated as a distinct species *Toona Australis*. The southern most limit of natural distribution is south of Ulladulla on NSW coast. It also occurs naturally on Norfolk Island

The tree grows best in an environment with high light levels but in the relative darkness of the rainforest understory it is less susceptible to attack by the native Cedar tip moth. The moth lays its eggs on the tree's leading shoot allowing the larvae to burrow into the stem. This causes dieback and a multi-branched tree with little commercial value. The tree exudes a chemical which the female tip moth seeks out. Attempts at revegetation in NSW and Queensland have been largely unsuccessful.

This moth does not attack commercial plantings of Asian/African/Australian native Meliaceaes in South America. As a result successful planting of *Toona ciliata* is being observed in many parts of Brazil, including genetic improvement and clonal production.

#### Uses

The highly prized timber is reddish in colour, easy to work and very highly valued. It was used extensively for furniture, wood panelling and construction including ship building. It was referred to as "Red Gold" by early Australian settlers. Heavily and unsustainably exploited in 19th & 20th centuries, almost all large trees have been cut out and the species is essentially extinct. Availability of timber is now limited. It is currently harvested in New Guinea. Two of the largest trees still standing are in the Adelaide Botanic Gardens.

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**Above: Toona ciliata Australian Red Cedar:** Its timber was used by the Victorian Railways in the construction of wooden railway carriages in the 19th and 20th centuries. It was often used as a veneer and in conjunction with other Australian timbers. Photo: Victorian Railways second class carriage type BE.

Marcus Wong Wongm, Wikipedia CC BY-SA 4.0.



**Left:** *Toona ciliata*: Freshly sawn timber shows colours ranging from deep red through to very light brown.
Photo: Johannesburg, South Africa.
Androstachys, Wikimedia Commons CC BY-SA 3.0

It is not generally an economically viable plant species although there is forestry in the Atherton Tableland. Commercial replanting fails due to the tip moth.

#### **Description**

Toona cilata has extended compound leaves up to 90 cm with 10-14 pairs of leaflets. The species can grow to around 60 m (200 ft) high and the trunk can reach 3 m (10 ft) in girth with large branches that create a spreading crown. It is one of Australia's few native deciduous trees with leaves falling in Autumn and growing back in Spring. The new leaf growth is reddish pink in colour. It produces masses of white flowers that are very small and tubular. Fruits are a green capsule which senesce to a brown colour and then open into a star shape to release seeds which are small and winged.

Conservation status: Of least concern

#### Also in GBG are other Meliaceae species:

Toona sinensis (syn. Cedrela sinensis) Pink Cedar, Melia azedarach White Cedar.

**References**: Wikipedia, Jubaea Vol. 10, issue 4, 1995



#### Toona ciliata Australian Red Cedar

Above: Part of an inflorescence.
Below: Leaf twig.

Both photos: Cairns, Queensland, Steve Fitzgerald, Wikimedia Commons CC BY-SA 4.0





#### Toona ciliata Australian Red Cedar

Above: Capsules and seeds, Photo: Peter Woodard, Public domain.

Below left: Leaf arrangement. Photo: Forest and Kim Starr, Maui, Hawaii, CC BY 3.0 US

Below right: Bark of mature tree, Macksville NSW. Photo: Connormill72, CC BY-SA 4.0.

All photos: Wikimedia Commons





#### Toona ciliata: In GBG, as it was in December 2014.

This species has many common names. The name Indian Mahogany is sometimes used for its red timber, although Mahogany is timber from Swietenia species in the same family, Meliaceae.

The name Australia
Red Cedar is used for
this Toona's valued
timber. It is neither a
Cedar now even a
Conifer.

The Western Red Cedar is a conifer from North America, but it is also not a Cedar, but a Cypress.

The name Cedar is also given to other species in the family Meliaceae (Pink and White Cedars) and to Falcataria in the Peacock flower group of the bean family Fabacese.



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