

There's a lot more to Australia's red cedar than timber

April 20 2021, by Gregory Moore



Credit: Peter Woodard/Wikimedia

Native deciduous trees are rare in Australia, which means many of the red, yellow and brown leaves we associate with autumn come from introduced species, such as maples, oaks and elms.

One [native tree](#), however, stands out for its leaves with soft autumnal hues that drop in March and April: Australia's red cedar. Don't be fooled by its common name—red cedar is not a cedar at all, but naturally grows

in rainforests throughout Southeast Asia and Australia.

You may be more familiar with its timber, which I've been acquainted with all of my life. My grandmothers had cedar chests of drawers they had inherited from their mothers or grandmothers, and I had assumed they were made from one of the Northern hemisphere cedar species. The wood still smelled of cedar after all this time in family homes—a scent I associate with grandparents and country homes.

By the time I was given one of these chests to restore, I knew much more about the tree and valued the chest of drawers all the more. So, with autumn putting a spotlight on Australian red cedars, let's look at this species in more detail.

Majestic giants of the rainforest

I first encountered red cedar [trees](#) in the sub-tropical rainforests of Queensland and New South Wales in the 1980s. Then, its scientific name was called *Cedrela toona* and later *Toona australis*. Now, it's recognized as *Toona ciliata*.

The various names reflect a taxonomic history in which the Australian species was once regarded as being separate from its Asian relatives, but all are now considered one.

The trees are awe-inspiring. Under the right conditions, it can [grow to 60 meters tall](#) (occasionally more) with a trunk diameter of up to 7m.

After losing its foliage in autumn, the new foliage in spring often has an attractive reddish tinge. In late spring it has small (5 millimetres) white or pale pink flowers, but they usually go unnoticed in the rainforest because of their height or the density of other tree canopies growing beneath.



Credit: AI-generated image ([disclaimer](#))

Older red cedars have wonderful buttresses at the base of their trunk, a characteristic shared by many tall tropical trees. These buttresses have long been considered an advantage for species that can emerge above the canopy of a rainforest where winds are much stronger, with the buttresses and expanded root systems providing greater strength and resistance to the wind.

These buttresses also greatly increase the surface area of the base of the trees exposed to air, which facilitates the uptake of extra oxygen as the activity of micro-organisms in the soil can leave it oxygen-depleted.

Logged to near extinction

With a wide distribution throughout Asia and Australia, its uses [in ancient times](#) were many and varied. In [traditional medicine](#), bark was used or digestive remedies as well as wound dressing and its resin was used for treating skin conditions.

Dyes, oils and tannins used for preparing leather could also be extracted by boiling various plant parts. Today the wood is used for culturing shiitake mushrooms, which are much in demand in restaurants.

But the recent history of red cedar is a typically sad colonial tale. The species belongs to the same family as mahogany (Meliaceae) and, not surprisingly, [was exploited](#) for its timber from the early days of colonization.

The timber is durable, lightweight and suitable for naval use and so was very heavily logged, right along the east coast of Australia [from the early 1800s](#) until the early 20th century.

The rich deep red color of its timber and the fact it was soft and easily worked meant it was used for furniture, ornate carvings in public buildings, town halls and parliaments, such as the State Library in Melbourne. It was also used for implements and handles, and for sailing and racing boats.

You've probably had a close encounter with [the lovely red banisters](#) on some of these old buildings that were made of red cedar, often darkened under the patina of so many hands.



Tiny white flowers are hard to see from the ground in a rainforest. Credit: Forest and Kim Starr/Wikimedia, [CC BY-SA](#)

The once common and widespread species was logged almost to extinction along the east coast by the mid-1900s, and to the point of practical commercial extinction with little timber available to industry by the 1960s.

So valued was the timber that in the late 1970s, a plan was hatched to remove red cedar from Queensland National Park rainforests using helicopters. Luckily, the idea did not fly and so some great trees persist. The species has a conservation status of concern, but is not considered to

be endangered at present.

A terrible pest

The fact they are deciduous [makes them potentially](#) very interesting and useful for horticultural use, but that potential remains largely unrealised. And given the value and quality of its timber, you may be wondering why it's not being grown in plantations across the continent.

The reason is a native moth called the [cedar tip moth](#) (*Hypsipyla robusta*), which lays its eggs on the main growing shoot of the tree. When the eggs hatch the larvae bore down the shoot, which not only results in shoot dieback but also causes the trees to develop multiple stems and branches which reduce its timber value.

Despite this, they are still planted as a quick-growing ornamental tree for their shade in other parts of the world, such as Hawaii and Zimbabwe.

The moths are attracted to the scent of the tree, so they're very difficult to control. The moth does not attack the tree in South America, for instance, because the moth has not established there, so there are large plantations of red cedar [in Brazil](#).

It's an interesting reminder: often it's the little things in ecology that can affect success, or failure. When we humans meddle without knowledge, things don't necessarily go to plan, usually to our cost.

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