RED BEAN or **MIVA MAHOGANY**

Dysoxylum mollissimum* subsp. *molle

Dysoxylum is a flowering plant genus of trees and shrubs, constituting part of the mahogany family (*Meliaceae*). *Dysoxylum* derives from the Greek word '*Dys*' meaning "bad" referring to "ill-smelling" and '*Xylon*' meaning "wood".

Red Bean and Australian Rosewood are members of this genus. There are approximately eighty species in this genus, growing widely across the western Pacific Ocean, Australia and south & south-eastern Asia; centered on the tropics between the Pacific and Indian Oceans.

They grow naturally in New Guinea, eastern and northern Australia, New Caledonia, Fiji, South East Asia, southern China, the Indian subcontinent, the Philippines, Taiwan, and in the western Pacific Ocean their most easterly occurrences, in the Caroline Islands, New Zealand and Niue.

Red Bean occurs in tropical, sub-tropical and littoral rainforests in eastern Australia, It also occurs in South East Asia and the south-western Pacific Islands. In Australia it is distributed from the Bellinger River in New South Wales in the south, to the wet tropics of north-eastern Queensland. The specific epithet *mollissimum* is from the Latin, meaning "very soft", describing the soft hairy leaflets.

Health warning

Congestion of lungs, eye inflammation, irritation of mucous membranes, headache, nose bleed, loss of appetite.

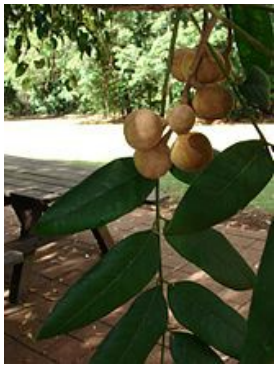
Two furniture makers that I know of attribute their throat cancer to Red Bean dust.

Do not inhale the dust and wear lung protection with active air purification.

Description

It is a large and impressive tree, up to 35 metres tall and a trunk diameter of 120 cm. It is usually buttressed or flanged at the base. The trunk is scaly and rough, grey or brown in colour. Freshly cut bark has an onion type scent. Many of the species of *Dysoxylum* smell of onions and should not be confused with Onionwood, *Syzygium alliiligneum.*

Leaflets are usually opposite on the stem, without serrations, and distinctly asymmetrical at the leaf base. Leaflets are 6 to 15 cm long and 2 to 5 cm wide, and are mid green above, paler below, and sometimes softly hairy under the leaf. *True leaves* are 30 to 60 cm long, pinnate. Leaf stem swollen where joining the larger branch. Leaf venation is evident above and below, but raised and more noticeable below. Net veins easily seen. Veins creamy green, contrasting with the darker leaf colour.



Freshly broken twigs emit an odour of onion, shallot or turnip White flowers form on panicles from January to July. The fruit is a fawnish brown capsule, around 2 cm in diameter. There is one reddish brown seed in each of the one to five cells. The fruit ripens between November and March. The fruit is bird attracting.

Timber properties

The tree produces a well regarded mahogany timber, suited to cabinet work, carving and boat building.

The heartwood is red-brown in colour. Sapwood is creamy-pink and can be easily distinguished from heartwood

Grain. Medium to coarse grained, uniform in texture; grain often interlocked. The soft tissue (parenchyma) gives a slight figure to the tangential surface.

Density. 625-640 kg/m^3 at 12% moisture content;

Shrinkage to 12% MC. 4.3% (tangential); 2.7% (radial).

Unit shrinkage. 0.39% (tangential); 0.31% (radial).

Durability above and in-ground. Class 3 - life expectancy 7 to 15 years.

Lyctine susceptibility. Untreated sapwood is susceptible to lyctid borer attack.

Termite resistance. Not resistant.

Seasoning. Can be satisfactorily dried using conventional air and kiln seasoning methods.

Machining. Machines and turns well.

Fixing. No difficulty has been experienced with the use of standard fittings and fastenings.

Gluing. Can be satisfactorily bonded using standard procedures.

Finishing. Will readily accept paint, stain and polish.