

Sandalwood

Santalum spicatum

There are twenty-five species of Santalum in the world. Of these five are endemic to Australia, and one species Indian Sandalwood (S. Album) is native to Australia as well as to Southern India.

Derivation of names

Santalum - Greek *santalon* from Sanskrit 'chandana', meaning fragrant and referring to the wood and extracted oils.

spicatum - from Latin *spica* - meaning a spike, referring to the flowers.

Other Names

Fragrant Sandalwood, Australian Sandalwood, Western Australian Sandalwood.

Related Australian Species

Sweet Quandong, Native Peach (*S. acuminatum*)

Northern Sandalwood, Plum Bush (*S. lanceolatum*)

Bitter Quandong (*S. murrayanum*)

Sandalwood (*S. Obtusifolium*)

Indian Sandalwood (*S. Album*)

As well, there are two other trees called False Sandalwood, probably because of the aroma of the wood.

False Sandalwood, Budda, Sandalwood Box (*Eremophila mitchellii*)

False Sandalwood, Sugarwood, Sugartree (*Myoporum platycarpum*)

The Tree

This beautiful timber comes from a small innocuous tree or shrub generally only growing to 4 metres tall. Because of its restricted habitat, it is one of Australia's precious trees that very few of us have seen growing, either in its natural habitat or even in gardens. Occasionally (maybe rarely) it grows to 8 metres with a butt of up to 300mm. It has a spreading habit with an irregular branched crown producing somewhat sparse grey foliage. The leaves are grey-green, lanceolate with blunt tips growing up to 70 mm long. The bark is grey, rough and furrowed on the lower sections, but smooth and bluish grey on the smaller branches. The inflorescence consists of clusters of small red and green, scented flowers. The fruit is similar to that of the Quandong, but considerably larger. It has a brownish red skin (exocarp) and grows up to 30 mm dia. The exocarp or the fruity leathery skin, unlike quandong is not



palatable, but the kernel is edible and when roasted is quite delicious. Recently on a field trip with the International Wood Collectors Society, we visited a small plantation of Sandalwood and Quandong with Neville Bonney as our guide. Neville presented us with a taste of a delicious sweet made from Quandong 'jelly', roasted and crushed Sandalwood kernels and chocolate. What a treat!



Sandalwood and Quandong, like most of the Santalums are Parasitic, relying on their roots tapping into other plants for moisture and nutrients which they use to photosynthesise into plant sugars. The natural host plants vary from saltbushes to several species of Acacia, Eucalyptus, Dodonaea, Allocasuarina etc. Commercially they are propagated on grasses, but need to find more robust hosts as they mature. In the plantation mentioned above, Quandongs and Sandalwoods were planted in rows with several potential hosts but in particular Sheoaks. The most robust trees grew with the most robust host plants.

Habitat

Fragrant Sandalwood is limited to South Australia (The Far West, Eyre Peninsula and the Northern Flinders Ranges) and southern Western Australia (Goldfields to Shark Bay). It is typically a small tree of the arid lands. The most common host in WA is probably Raspberry Jam Tree (*Acacia acuminata*) and in SA, Mulga (*Acacia aneura*).

Timber

I have been fortunate enough to obtain a small amount of Sandalwood. It is an absolute joy to turn. Huon Pine is always quoted as a beautiful aromatic timber which is a delight to work, but believe me our SA Sandalwood is in another class. It is a very slow growing tree and the wood is quite dense and close grained and turns beautifully. It is not a commercial timber



and I have not found detail about its air-dried weight, but think it might be similar to Huon Pine – about 500 Kg per cubic metre. The sapwood is pale creamish brown and the heartwood is dark brown. The fine growth rings are very narrow and close because of its slow growth. When being worked the fragrant odours are released. Although it is an outstanding turning and carving timber, it is because of the fragrance that it has a real commercial value. In a powdered form it is used to make Joss sticks. It has been exported to Asia for its fragrance. The natural oils are extracted and are used for perfumes and soaps. All woody parts of the tree, including its roots have been exported from Western Australia since 1845, and in South Australia it was a major export from 1926 to 1940. All woody parts emit the fragrance – even dry branches give off its fragrance when cracked. There are now several places, including the Eyre Peninsula, where plantations are being trialled. It is second only to the famous Indian Sandalwood for aroma and rich oils. The most obscene use that I have read about describes its value as an excellent fuel, used to fire brick kilns – what a waste!

Now, I need to get back to my shed to have another smell.

Ron Allen