



Sandalwood

Sandalwood has a fascinating history, full of religious symbolisms and it is used as a vital ingredient in many fine fragrances but in modern history it appears more full of challenges than mystique with many questioning the sustainability of supply.

We often hear of projects to ratify the sustainability issues emanating from different corners of the world but what information can we rely on and what does it mean for pricing, quality and that all important sustainability question?

This section represents a very basic overview of the market today, quantifying historical developments relative to the supply and demand issues being seen now in the F&F sector.

India

Indian Sandalwood (*Santalum album*) was once the industry standard but over the years stocks diminished as people took from the land with no long-term re-planting projects in mind. Over recent years the government has stepped in to take a more active role and banned all harvesting of sandalwood trees until the tree is thirty years old.

Plantations across the Indian's south and Sri Lanka have assumed a new era of sustainability but conflicts between government departments have led to more questions than answers as the laws in each state differ and the controls surrounding export licenses contradict other departmental laws.

Certainly as a fine fragrance ingredient this quality is the most sought after but buyers frequently have to find both natural and synthetic replacements to ensure their factories do not run dry.

Indian Sandalwood (*Santalum album*)

Sustainable (5★ very sustainable) ★★

Price / Value (5★ good value) ★★

Good time to buy (5★ buy now) ★★

Australia

Apparently now Australia produces both Australian Sandalwood and Indian Sandalwood. How and why we can explain.....

Australian (*Santalum spicatum*): this desert type of tree is native to Australia and found predominantly in the middle and southern parts of Western Australia. A West Australian Government Act of 1929 regulated the amount of sandalwood that could be 'pulled or removed from Crown land', other than that of plantations. A government department, the Department of Protection and Wildlife (DPAW) was established to enforce the Act and the Forest Products Commission (FPC) was commissioned to conduct the harvesting with a company WestCorp managing the processing.

Since the late 1990s many long-term plantations have been established covering around 15,000 hectares. Plantings are set to continue at 1-2,000 hectares per annum. These will be harvested when the trees reach an optimum maturity but not before they are 15-20 years old (some will be this age very soon).

There is also private wood available from private land, which can be unregulated and subject to illegal harvesting. This proportionally is a small amount of wood.

There is only one major oil producer who has access to most of the wood from the Crown land, along with the second largest plantations causing a monopoly situation. Other smaller producers are trying to access the wood but have difficulties to make their presence felt in what seems a closed supply chain.

However it is hoped that these dynamics will soon change as other growers and entrepreneurs have stepped up efforts to source wood and establish new distillation units.

Australian Sandalwood (*Santalum spicatum*)

Sustainable (5★ very sustainable) ★★★★★

Price / Value (5★ good value) ★★★

Good time to buy (5★ buy now) ★★

Australian (*Santalum album*) is also grown in Australia, in plantations only found in the Tropical North as this is not a native species. Just like the growing conditions in its native India, *Santalum album* needs a different environment to survive, which can only be found in particular regions of Australia.

Plantations started in the late 1990s and there is now around 8,000 hectares of this species growing. There are two large investment groups responsible for these plantations assuming around 95% of the market share between them.

The cost of land and weed management in these areas is expensive and it is not yet fully known what will be the quality of oil from these plantations. Certainly the early plantations suffered as the conditions and the host trees were not ideal but with the main oil coming from the heartwood in the butts and roots of the tree and taking at least 20 years to mature, it could still be a few years before we see the impact of this new supply source.

At the moment, there is only one company processing this wood distilling the oil so supplies are limited and prices expensive relative to those expected in the past for this species from its native India.

Australian Sandalwood (*Santalum album*)

Sustainable (5★ very sustainable) ★★★

Price / Value (5★ good value) ★

Good time to buy (5★ buy now) ★

Pacific Islands

A number of Pacific Islands are known for producing sandalwood, such as Fiji, Vanuatu, New Caledonia and Hawaii to name but a few. If you trawl the internet, you will find many stories of 'village projects' or 'aboriginal partnerships' and many make for a good read. The idea of giving local villages and their people work in return for local wood sounds good but there are very few stories that have a happy ending. In fact, along the way many investors get burnt and in the end the project collapses.

The species in these regions also differ from the Australian and Indian types mentioned already. This species is commonly known as *Santalum austrocaledonica*. It is closer in its analytical properties to the Indian type and even has closer odour characteristics and can often represent good value for money when it is available. The availability is one that appears to be a never ending question. As mentioned, these projects come and go and primitive distillation techniques can also mean a lack of consistency with quality. These projects also yield small volumes relative to that India once produced or Australia does now, so for many applications they are not viable. However, they do give a twist to any ingredient story when used in therapeutic, healthcare or other niche products but take care when deciding to write them in to your next fine fragrance formulation.

Pacific Sandalwood (*Santalum austrocaledonica*)

Sustainable (5★ very sustainable) ★

Price / Value (5★ good value) ★★

Good time to buy (5★ buy now) ★★