

# Moreton Bay Chestnut

## *Castanospermum australe*



Australia - New South Wales, Queensland; southwestern Pacific - New Caledonia, Vanuatu

*Castanospermum australe* is a tall, evergreen tree with a very dense crown of abundant, dark-green, glossy foliage. It grows up to 40 metres tall with a bole up to 120cm in diameter.

The seeds are a traditional staple food of the Australian Aborigines, and are also harvested from the wild by other people. The tree is most attractive at flowering time with sprays of orange-red flowers and also when bearing its large pendant, cylindrical, bean-like fruits. It is therefore often planted as an ornamental in warm temperate to tropical areas.

The immature seed is poisonous, though mature seeds are harmless.

Another report says that the raw seed is poisonous and needs treatment to render it edible. The seed needs to be cut in slices and washed for several days prior to consumption, otherwise it can cause severe gastrointestinal disturbance.

## Edible Uses

Seed - cooked. The fresh raw seed contains high levels of saponins and can be harmful. The cooked seed tastes like a sweet chestnut. It probably requires considerable leeching before it is safe to eat

The Australian aborigines finely sliced the seeds and soaked them in running water for 10 days before roasting them and grinding them into a powder. This powder could be stored for later use. The seeds are about 3 - 4.5cm wide and are carried in pods 10 - 25cm long and containing 3 - 5 seeds



## Medicinal

The seed yields compounds called castanospermine that are under investigation as HIV inhibitors and might be useful in the treatment of AIDS. Parts of the tree contain chemicals which, after careful extraction, have been shown to have anti-cancer, anti-inflammatory, and anti-HIV properties.

The seedpods are astringent.

Used to treat post-prandial hyperglycaemia in diabetic patients.

## Agroforestry Uses:

The extensive root system is used to protect riverbanks and catchment areas in Australia



## Other Uses

The seeds have a high saponin content

Although the report does not elaborate, the saponins could probably be used as a soap substitute

The seeds contain toxic saponins which are reportedly toxic to a serious pest of stored grain

The heartwood is dark-brown to almost black; the sapwood varies from white to yellow. The grain is straight, though sometimes interlocked, the texture is slightly greasy. The wood is hard, heavy, durable, resists decay. It polishes well and has a high resistance to the passage of electric current. It is used in construction, cabinet making, carving etc

One of the most valuable woods in Australia, the sliced veneers can be good substitute for teak

The wood has a density of 700 kg /cu m. The wood can be used as a fuel