

## Baobabs

Baobabs occur naturally in areas with 200 – 800 mm rainfall pa. The density of freshly cut baobab wood is 850kg/m<sup>3</sup> and dried it is 210kg/m<sup>3</sup>. It is therefore one of the most important rules not too over water. Baobabs store water in their massive trunks and will rot, should it get too much. In 2002, the Limpopo Province got a much higher rainfall than normal and in 2003, the scientists all reported that the baobabs were collapsing due to excess water. An interesting fact is that from Reunion, it is reported that if left, these trees will regenerate after 5 – 10 years, even if burnt. Lots of water will not make it grow bigger quicker, in other words. My personal experience with seeds from Zimbabwe, is that it is able to tolerate more water, than the seeds from Madagascar. It has either acclimatized or is used to more water, being from the Kariba Valley.

There are two schools of thought on winter for baobabs.

One school dry-root their trees in winter to force dormancy on trees. Dormancy is very important because the tree needs a resting period. The thought is that a longer resting period will encourage more vigorous growth. This is my second year of dry rooting and I will report back after this years growth. Take them out end of May and repot beginning of August, after cutting the tap root.

Other growers take their trees in (or at least out of the rain) during winter months, getting no water whatsoever. Period of dormancy is the same as above.

## Growth and Development

A 1 – 5 year old baobab is classified as a seedling. (Plant raised from seed and not cutting) Growth rate is fast (500 – 800mm) per year for the first five years. Sapling (Young tree) is 6 – 80 years old. Adult trees vary from 80 – 2000 years +.

The seedlings and saplings lack the characteristically swollen trunk and palmately digitate leaves of adults.

As the tree thickens and grows with increasing moisture content, three stages of growth can be recognized.

Stage 1 - Stem has steep steady taper with little branching until more or less adult height is reached.

Stage 2 - Main trunk is of more or less uniform diameter throughout, except for a constriction below the branches, becoming bottleshaped. Branches remain erect.

Stage 3 - Widespread branching crown is produced. Trunk increases in diameter and can become hollow. Root system becomes extensive and loses taproot.

At about 30 – 40 years, trunk thickens rapidly attaining 4 – 5 m in diameter after 100 years.

## General Information

Baobabs flower and fruit at about 8 – 10 years in West Africa, but Messina trees at 16 – 17 years. The lifespan of the flowers are 24 hours and flowers are pollinated by bats, bushbabies, bees and moths. Seeds are dispersed by animals and germination is easy. I have had seed germinate after 3 days.

Baobabs do not suffer from diseases and pests and the main enemy is water – TOO MUCH OF IT. Baobabs seem to be able to regenerate new bark. Stripping of bark will not kill a tree. The bark is highly resistant to trauma, especially fire and will regenerate if left for 5 – 10 years.

Seeds stay viable for up to 10 years.

There are 8 species of baobab, 1 occur in Africa and Madagascar, 6 in Madagascar and 1 in Australia.

*A. digitata* - Very large trunk up to 15m in diameter. White flower and 10 – 25m high.



Seedling



Young tree

*A. Grandidieri* – Very large cylindrical trunk with reddish gray bark and looks like an upside down parsnip. Flat top crown, white flowers.



Seedling



Trees on Madagascar

*A. madagascariensis* – Trunk has little swelling, cylindrical from base to branches. 10 – 30m high. Red flowers. Grows near sea, close to the high water mark.

