





ADANSONIA DIGITATA



Jharkhand Biodiversity Board

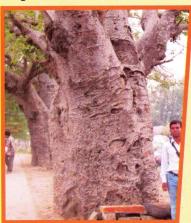
India – UNDP Biological Diversity Project Van Bhawan, Doranda, Ranchi – 834002

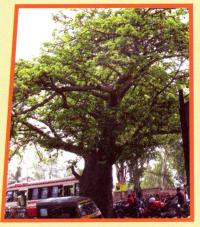
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"Kalpataru" (Botanical name - Adansonia digitata, English name - Baobab) is a deciduous tree of African savanna origin. The name "Kalpataru" signifies its importance in Indian context as it denotes the attachment of natives to this tree species having the glory to be treated as the mythological tree which fulfills all the wishes if anyone begs something under the crown of this auspicious tree. Moreover the mythology tells that Kalpataru is found in heaven so the availability of this tree at any place is a matter of devotion and dignity for the local people. "Gorakh-imli" is another common name for this tree as the taste of its fruit reminds the taste of Imli (Tamarind).

General Information

Adansonia digitata belongs to the family Bombacaceae. The other important and famous members of this family are Bombax ceiba (Hindi name – Semal) and Ceiba pentandra (Hindi name- Vilayati semal), both are important fibre yielding species. Adansonia digitata is a long living tree and some of the trees are reported to have an age of 1000 years. It is a large tree, characterized by the unusual swollen, relatively short bottle shaped trunk, the trunk runs upto 15 metre in height and about 10 metre in diameter at chest height.





The rounded crown of the tree possesses thick branches with pubescent branchlets bearing 5-7 foliate leaves which remain crowded at the apex of the branchlets.

The tree flowers around mid may, the flowers being large and showy, cream coloured and bear oblong or oblong-ovoid fruits which remain attached to the tree till the next flowering season.





The seed possesses a very hard coat so the natural germination percentage is very low. Natural reproduction occurs in such cases where the fruit pulp is eaten by the wild animals so that the seed gets the chance to break its dormancy after being passed through their digestive tract. However chemical treatment has also been reported to break the dormancy of seeds. Grafting techniques has also been reported. The advantage is that the plant from grafted technique flowers much earlier than the seed borne plant.





Economic importance

Adansonia digitata is a multipurpose tree. Wood yields paper pulp. The bark fibre is also used to prepare fibre products. The pulp of fruit possesses medicinal properties as it has been reported to cure bronchial asthma and allergic dermatitis. The fruit pulp is also edible and rich in vitamin C and minerals like Calcium, Phosphorous and Potassium. The leaves are rich in protein content

and can be rated "good" in terms of WHO standards as they possesses a satisfactory level of 5 amino acids out of 8 essential amino acids. Realizing its importance as a multipurpose tree specie, the forestry wing of food and agriculture organization of the UN (FAO) has issued information (FAO, 1988). The international centre for research in agroforestry (ICRAF) is also promoting this specie as a multipurpose tree.

Geographical distribution

This tree is a native of African Savanna. However the specie has been reported from Asia, America and Australia, mainly because of its introduction by humans, showing its adaptability to a wide range of climatic and geographical conditions.

In Ranchi

In Ranchi, this tree has three famous representative, all of them are growing at Doranda locality near Doranda College. The age of these trees are approximately over 100 years. One more tree was there but unfortunately it was uprooted because of the soil degradation beneath its trunk. The incident caused great concern about the safety and conservation of these trees resulting in the involvement of research institutions and forest department of Ranchi to propagate it. Nowadays the tree specie has also been growing in some centers of forest department like Nakshatra van and Sidho-Kanhu Park and in the premises of Government research institutes like HARP and NBPGR. This shows that there is a possibility to propagate this specie in and around Ranchi. Besides this, there is an urgent need to protect the old trees standing near Doranda College as these trees are situated along a very busy town road. Injuries to its trunk and branches have been reported several times in the local media. The rare status of this tree and its existence in Ranchi is making this city a noteworthy and providing a rare position in the vegetational scenario of our country.

Source of Information

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