



# A Preliminary Survey, Census and Age of *Adansonia digitata* L. (Bombacaceae) From Nanded District Marathwada Region of Maharashtra State India.

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## ABSTRACT

*Adansonia digitata* L. (Bombacaceae) often known as African baobab is a widespread tree in Southern Arabian and African continent which came to India probably from more than 3000 - 4000 years ago. In India this tree already faces crisis for its survival and in Red Data Book it is listed as an endangered species. There is lack of awareness in the local people to conserve and protect this endangered species. This tree is one of the best examples of conservation practice done by the nature itself. The present work is a preliminary survey, census and age of this rare, endemic and endangered species from Nanded District of Marathwada region of Maharashtra State India.

**Key Words:** *Adansonia digitata* L. Preliminary report, Census, Age.

## Introduction:

*Adansonia digitata* L. is a native tree of Southern Arabian and African continent belongs to the family Bombacaceae (Wickens 1982). Naturally this tree occurs most of the countries in the World. In the World this tree has several local names as: African Baobab tree, Baobab tree, Kalpvriksha, Wishing tree, Haven tree, Monkey bread tree (the dry soft fruit is food for monkeys) or Dead-rat tree (appearance of the fruits), Upside – down tree (branches looked like roots), Cream of tartar tree (acidic taste of the fruits). It has numerous medicinal uses, each body part of the tree is very useful so this tree is also called as “**Chemist Tree or The small pharmacy Tree**” (Etkin & Ross 1982). In the World all locations of this tree are found in arid and semi-arid region (Salim et. al. 2012). In the tropical ecosystem harbor *Adansonia digitata* L. occupy the 7 -10% of the Earth’s land surface which encompass 96% of the World’s tree species (Poorter et. al. 2015).

Baobab is a multi – purpose use tree, it provides food, clothing and medicine as well as raw material for many things. fruit pulp, seeds, leaves, flowers, roots and bark are edible. The fruit pulp have rich in vitamin – C. It also have Antimicrobial, Anti-malarial, Diarrhooa, Anaemia, Asthma, Anti-viral, Anti-oxidant and Anti – inflammatory properties etc. The Phytochemical investigations revealed the presence of flavonoids, phytosterols, Amino acids, fatty acids, Vitamins and Minerals. (Obizoba and Amaechi 1993) (Yazzie et. al. 1994).

In the World all the locations of this tree were found in the arid or semi –arid region. Baobab is a tropical indigenous tree to Africa (**Baum 1995**). This tree is mostly found in agroforestry systems across Africa (**Assogbadjo et. al. 2020**). It is a huge tree grows upto more than 25 meters in height and can be tolerant to high temperatures and long spans of drought. The trunk of this species is irregular, bottle – shaped, spongy and soft and contributes to store water storing capacity (**Sidibe and Williams 2002**). A large baobab can store as much as 02 lakh liters of water (**Chapotin et. al. 2006**). This tree can reach ages over 1000 years to 2500 plus years, being a longest - lived deciduous tree in the World (**Patrut et. al. 2018**).

The root, stem bark, leaves, flowers, fruit pulp and seeds of baobab are edible. Leaves are used in the preparation of soup, seeds are rosted and eaten as snacks Baobab has been used extensively in traditional medicines. (**De. Caluwe et. al. 2010**). For its medicinal and nutritional value it is a majestic tree in Africa. The tree parts are used to treat various ailments such as malaria, diarrhea and other microbial infections. (**Kamatou et. al. 2011**)

### Material and Methods:

In Marathwada region of Maharashtra state *Adansonia digitata* L. is a rare, endemic and endangered tree. By its huge appearance this tree can be very easily identified. By visiting various places in the Nanded district of Marathwada rgon of Maharashtra State India by observations and survey the census of this tree has been done. The girth of stem was measured in meters or feet's and approximately the age of this tree was predicted by its girth. The results are summarized in the Table No. - 1 and Table No. - 2.

**Table No. - 1**

**List of *Adansonia digitata* L. ( Bombacaceae) Trees in Nanded District of Marathwada Region of Maharashtra State India.**

Sr. No.	Place in Nanded District	Number of Plants Reported
1.	Kandhar Taluka.	02
2.	Degloor Taluka.	01
	Total Trees	03

**Table No. - 2**

**Probable Age of *Adansonia digitata* L. ( Bombacaceae) Trees in Nanded District of Marathwada Region of Maharashtra State India**

Sr. No.	Place in Nanded District	Girth in Meters	Approximate Age
1.	Kandhar Taluka.	40 M	400 - 500
2.	Kandhar Taluka.	60 M	600 -700
3.	Degloor Taluka.	30 M	300 -400

### Results and Discussion:

The Table No. -1 shows the number of *Adansonia digitata* L. ( Bombacaceae) tree from different talukas of Nanded district of Marathwada Region of Maharashtra State India. There are 03 trees were found in the district. In Table No. -2 the measurement of girth of stem of trees along with the probable age is depicted. The trees having a girth of 25 meters or 80 feet is approximately 3000 years old. The measurement of girth shows that these plants must be at least 300 years old, but however it can be confirmed by carbon dating techniques.

In the present survey counted number of trees of *Adansonia digitata* L. (Bombacaceae) from Nanded District of Marathwada Region of Maharashtra State is 03 but, this survey is not complete. The survey reports of this tree *Adansonia digitata* L. (Bombacaceae) from different parts of India is one of the excellent examples of conservation practice done by the Nature itself.. Moreover, in-situ and ex-situ conservation strategies are necessary for the propagation of this tree. The study also forecasted to observe the possible

species distribution across the Maharashtra state under current and future climatic conditions. However for sustainable development and conservation (Assogba et.al. 2022) of biodiversity Baobab is also needs to be protected and conserve.

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