



PLANT FACT SHEET

Adansonia digitata L.

GENUS *Adansonia* FAMILY Malvaceae

COMMON NAMES Boabab, Cream of tartar tree

EDIBLE PARTS AND USES

Edible parts: Roots, Leaves, Fruit, Seeds, Bark, Sprouts, Flowers, Vegetable

The young leaves are eaten as a cooked vegetable. The dried leaves are also used to thicken soups.

The fruit pulp is eaten raw. It is also used for a drink. The flowers are eaten raw or cooked.

The seeds can be eaten fresh or dried and ground into flour then added to soups. They yield a cooking oil.

The young tender roots are eaten. The fattened root tubers are cooked and eaten.

The bark is eaten and the dried leaves are used as flavouring.

The shoots of germinating seeds are eaten.

DESCRIPTION

A large tree. It grows up to 25 m tall. It loses its leaves during the year. The branches are thick, angular and spread out wide. The trunk is short and stout and can be 10-14 m around. Often the trunk has deep grooves or is fluted. The bark is smooth and grey but can be rough and wrinkled. The leaves spread out like fingers on a hand. There are 5-9 leaflets. Often the leaves are crowded near the ends of branches. The flowers are large and 12-15 cm across. The petals are white and the stamens are purple. The fruit hangs singly on a long stalk. The fruit has a woody shell. This can be 20-30 cm long and 10 cm across. On the outside of the fruit are green to brown hairs. Inside the fruit are hard brown seeds. They are about 15 mm long. The seeds are in a yellow white floury pulp. The pulp is edible. The thick roots end in fattened tubers.

HABITAT

It is a tropical plant. It grows in the lowlands. It grows in the hot dry regions of tropical Africa. It grows in the Sahel. It survives well in dry climates. It grows where rainfall is 100-1,000 mm a year. It can tolerate fire. It grows where the annual temperatures are between 20°C and 30°C. In most places it grows below 900 m altitude but occasionally grows to 1500 m altitude. It requires good drainage. It can grow in arid places. It grows in Miombo woodland in Africa. It suits hardiness zones 11-12. In Brisbane Botanical Gardens.

PRODUCTION

Cultivation

Trees are grown from seed. The seed remain viable for several years but before planting the seeds must be treated to break the hard seed coat. This can be done by soaking the seeds in hot water for several minutes or by cutting the seed coat. Seeds that float in water should not be used. Seeds can be planted in nurseries in

plastic bags then transplanted after 6 months.

Plants can also be grown by cuttings.

Harvesting and Seed Production

Trees grow quickly reaching 2 m in 2 years. Trees produce fruit after 2 to 15 years. The plant is pollinated by bats, insects and winds. Trees can last 600 or more years. Fruit can be stored for about a year.

NOTES

There are 8 *Adansonia* species. The fruit pulp has a high Vitamin C content. Also put in the family Bombacaceae. In the subfamily Bombacoideae. Chemical composition - leaves (sun-dried): rich in calcium, containing 3.6% calcium oxide, potassium tartarate, common salt and tannin. Acid composition of seed oils (Nigerian sample): Oil = 15%. Fatty acid composition - 14:0 = trace. 18:0 = 5%. 18:1 = 33%. 18:2 = 29%. Cyclopropenoid acids (as sterculic [HBr-acetic acid in benzene]) = 7%. Chemical composition (after Abdelmuti): Protein (crude) = 3.1% (dry). Fat = 0.5% (dry). Fibre (crude) = 9.2% (dry). Ash (insoluble) = 5.8% (dry). Carbohydrate (soluble): Starch = 15.3% (dry). Sucrose = 19.3% (dry). D-glucose = 0.6% (dry). D-fructose = 5.6% (dry). Amino acids (g [16g N]-1): Aspartic acid = 9.8g. Threonine = 5.2g. Serine = 5.9g. Glutamic acid = 10.1g. Proline = 7.5g. Glycine = 5.5g. Alanine = 5.2g. Valine = 5.2g. Cysteine = 1.3g. Methionine = 1.3g. Isoleucine = 4.2g. Leucine = 6.8g. Tyrosine = 3.3g. Phenylalanine = 4.2g. Lysine = 4.6g. Histidine = 1.6g. Arginine = 4.6g. Minerals: Sulphur = 0.13% (dry). Potassium = 0.06% (dry). Magnesium = 0.14% (dry). Calcium = 0.36% (dry). Na = 0.01% (dry). K = 2.57% (dry). Zinc = 13mg/kg -1 (dry). Iron = 17 mg/kg-1 (dry). Manganese = 8 mg/kg-1 (dry). Copper = 8 mg/kg-1 (dry). Aluminium = 10 mg/kg-1 (dry).

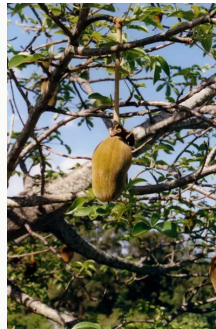
PICTURES



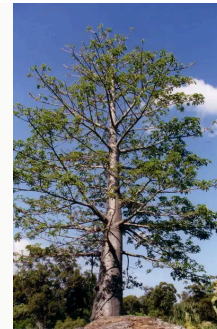
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