



The sausage tree, *Kigelia africana*.

A truly, multi-purpose African species

The sausage tree is medicinal and produces strong water-resistant wood for a variety of uses

BY FRANCIS GACHATHI AND ALICE NABATANZI

K*igelia africana* (synonym *K. aethiopum*), commonly known as the sausage tree, is a semi-deciduous tree with a rounded crown, growing to a height of 18m on riverbanks. However, in open woodlands, it grows much shorter, with a spreading low crown.

The species is recognised easily due to its spectacular, large sausage-shaped fruits hanging from its branches. The bark is grey-brown in colour, smooth at first, but rough and flaking in patches on older trees. The leaves are compound, in groups of three at the ends of the branches, usually with 5 to 11 very rough leaflets. The dark maroon flowers with yellow veins hang on long stalks. They are shaped like an upturned trumpet and have an unpleasant smell, most notable at night. Bats and hawk-moths pollinate the flowers.

The unusual grey, sausage-shaped fruits – which give the tree its common name – hang from rope-like long stalks. They can reach over a metre in length and weigh as much as 10kg. The fruit pulp within the thin skin is firm and very fibrous,

containing numerous hard seeds, released only when the fruit rots on the ground, the hanging stalks often remaining prominent on the tree.

The sausage tree is truly African. The generic name *Kigelia* comes from the Mozambican Bantu name for the sausage tree, “kigeli-keia” and *africana* means from Africa. The genus *Kigelia* has one species and occurs throughout tropical Africa from Eritrea to Chad; south to South Africa, and west to Senegal and Namibia. It is classified under the flowering plants family *Bignoniaceae*, which include trees with showy flowers such as the Nandi flame (*Spathodea campanulata*), the jacaranda (*Jacaranda mimosifolia*) and the Nile tulip tree or siala (*Markhamia lutea*).

In Kenya, the sausage tree is known by over 20 local names, an indication of the tree's importance and value to communities throughout its geographic range. It occurs from the coast to the highlands in open woodland and riverine vegetation, up to 1,850 metres above sea level (masl).

Recorded local names for the tree include mobwoka (Giriama); muatine (Kamba); muratina

(Kikuyu); ratuinet (Kipsigis); kumufungu (Bukusu); rotio (Marakwet); murantina (Meru); ratinuet (Nandi); bogh (Orma); mbwoka (Pokomo); rotin (Pokot); muun (Rendille); imombi (Samburu); bukuraal (Somali); mwengea (Swahili); mwaisina (Taita); mukisha (Taveta); muthigu (Tharaka) and edot (Turkana).

Traditional and modern uses

The sausage tree is sacred to many communities in Africa and has a wide variety of uses in traditional African and Western medicine. The Luo and Luhya bury a fruit to represent the body of a person believed to be dead. Among some communities, it is believed that hanging the fruit of *Kigelia* around dwellings will ward off evil spirits, violent storms, whirlwind and lightning. For these reasons, the species is often protected on farmlands when other trees are cut down.

Traditionally in Africa, the plant is used to treat the effects of childbirth, relieves an inflamed spleen and has anti-inflammatory properties.

Children with measles are bathed with beer made from the fruit extract. The fruits have

antibacterial properties and are used to treat ulcers, sores, snakebite, acne, boils, syphilis, fungal infections and rheumatism. People drink a decoction from the root to treat gastro-intestinal problems, while the leaf extract treats wounds.

Ash from roasted leaves is mixed with honey for treating high blood pressure. A decoction made from the tree's bark is taken for relief from headaches, rheumatism and for treating epilepsy and sexually transmitted diseases. A decoction from the leaves is used to treat malaria.

The tree's fresh fruit is poisonous to humans and should not be eaten. However, other mammals including baboons, bush pigs, giraffes, elephants, hippos and porcupines eat it. Still, mature baked fruits are split into half longitudinally, the soft inner tissue and seeds cleaned out in hot water and used to ferment and flavour traditional beer.

Lactating women in various parts of sub-Saharan Africa eat the leaves, as this is believed to enhance the volume and quality of breast milk.

In the cosmetic industry, extracts from the fruit are used in making a skin anti-ageing ointment. In addition, the anti-microbial properties of the fruit make it suitable for treatment of eczema and psoriasis. The boiled fruits produce a red dye, the roots a yellow dye while the tannin-rich fruit pulp yields a black dye.

Marketing potential

Today, *Kigelia* is among African trees with great marketing potential. The pale brown or yellowish wood from the tree is exceptionally strong and water-resistant, very useful for making dugout canoes, oars and watering troughs. It is also used for making beehives, boxes, drums, stools, yokes, tool handles, mortars and various utensils and tools.

The wood is also carved into mousetraps and toys while weapons like bows are made from branches. The wood also makes good fuel.

Because of its decorative flowers and amazing fruits, *Kigelia* is widely planted as an ornamental tree in urban areas in warm, tropical regions. Planting sites should however be selected carefully, as the falling fruit can cause serious injury to people, and considerable damage to vehicles parked under the tree. It is suitable for planting along riverbanks.

Considering the many medicinal purposes for which it is used, there is enormous scope for future research of *Kigelia africana*, and further pharmacological investigation is warranted.

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Fruits of the sausage tree.



A beehive made out of a hollowed trunk of the sausage tree.



Flowers of the sausage tree.

(All photos - Francis Gachathi)