

Sausage Tree

Description

The sausage tree, *Kigelia africana* (or *Kigelia pinnata*), belongs to the family Bignoniaceae. It is widespread across Africa and is found in wet savannah and riverine areas, where it occurs in abundance. Growing 23 metres high or more, it is semi-deciduous with grey-brown smooth bark. The tree draws its name from its unique sausage-shaped fruit, suspended from long stalks, sometimes over a metre in length and weighing as much as 10kg. The hard, grey fruit has a thin skin covering a firm, fibrous fruit pulp containing numerous small, unwinged seeds. Its velvety, bat-pollinated maroon coloured flowers reach up to 90cm in length.



Traditional uses

Kigelia has a long history of use by rural African communities, particularly for its medicinal properties. Most commonly, traditional healers have used the sausage tree to treat a wide range of skin ailments, from fungal infections, boils, psoriasis and eczema, through to the more serious diseases, such as leprosy, syphilis and skin cancer. It also has internal applications, including the treatment of dysentery, ringworm, tapeworm, post-partum haemorrhaging, malaria, diabetes, pneumonia and toothache. The Tonga women of the Zambezi valley regularly apply cosmetic preparations of *kigelia* fruit to their faces to ensure a blemish-free complexion. The fruit is a common ingredient in traditional beer, and is said to hasten the fermentation process. *Kigelia* leaves are an important livestock fodder, and the fruits are much prized by monkeys and elephants. Perhaps not surprisingly, given its suggestive shape, the fruit has also found traditional use as an aphrodisiac.

Known properties

A significant body of scientific literature and patents confirm the validity of many of the traditional uses of *kigelia* and suggest a number of new applications. It has also found a market in Europe and the Far East as the active ingredient in skin tightening and breast firming formulations. *Kigelia*'s known chemical constituents include:

- Napthaquinones (including kigelinone)
- Fatty acids (including vernolic)
- Courmarins (including kigelin)
- Iridoids
- Caffeic acid
- Norviburtinal
- Sterols (including sitosterol and stigmasterol)
- Flavonoids (including luteolin and 6 hydroxyluteiolin)

The steroids are known to help a range of skin conditions, notably eczema, and the flavonoids have clear hygroscopic and fungicidal properties. New research by PhytoTrade Africa has supported anti-oxidant and anti-inflammatory properties.

Selected references

- Akunyili, D. and Houghton, P. (1993) Meroterpenoids and naphthaquinones from *Kigelia pinnata*. *Phytochemistry*, **32** (4): 1015-1018.
- Bandyopadhyay, N. et al (1999) Chemotaxonomical study of some selected species of Bignoniaceae with reference to phenolic compounds. *Journal of Hill Research*, **12** (1): 5-10.
- Binutu, O. et al (1996) Antibacterial and antifungal compounds from *Kigelia pinnata*. *Planta Medica*, **62**: 352-353.
- Grace, O. et al (2002) Antibacterial activity and isolation of active compounds from fruit of the traditional African medicinal tree *Kigelia africana*. *South African Journal of Botany*, **68** (2): 220-222.
- Houghton, P. et al (1994) Activity of extracts of *Kigelia pinnata* against melanoma and renal carcinoma cell lines. *Planta Medica*, **60** (5): 430-433.
- Khan, M. and Mlungwana, S., (1999) Short Report: ν -Sitosterol, a cytotoxic sterol from *Markhamia zanzibarica* and *Kigelia africana*. *Fitoterapia*, **70**: 96-97.
- Maisiri, M. and Gundidza, M., (1999) *The effects of crude extracts of Kigelia africana and Aloe excelsa on deep wound healing*. University of Zimbabwe, Harare. www.uz.ac.zw/medicine/pharmacy/pubs. 23/05/02.
- Moideen, S. et al (1999) Activity of extracts and naphthoquinones from *Kigelia pinnata* against *Trypanosoma brucei brucei* and *Trypanosoma brucei rhodesiense*. *Planta Medica*, **65**: 536-540.
- Weenen, H. et al (1990) Anti-malarial activity of Tanzanian medicinal plants. *Planta Medica*, **56**: 368-370.
- For more information, contact info@phytotradeafrica.com
- © 2000 - 2009 PhytoTrade Africa. All