

LOCAL NAMES

English (carrot tree, cabbage tree); Luganda (kinulangombe, kimulyangimbe); Tigrigna (ander guhila); Tswana (morobolo)

BOTANIC DESCRIPTION

Steganotaenia araliacea is a small savannah tree 2-7 m tall. Bark yellow-green or grey, rather waxy and peeling off in papery strips or rectangles.

Leaves pinnate, crowded towards branch ends, aromatic; leaflets 2-3 pairs on a leaf stalk about 10 cm long with an expanded base around the stem, ovate, to 5 cm, sometimes stalked, margin toothed.

Flowers small, green-white, in rounded compound clusters at twig ends. 3-7 long stalks arise together, each further bears a crown of small heads (umbels) about 8 cm across. Stamens longer than petals in male flowers.

Fruit cream-brown, dehiscent, flat and heart shaped to 12 mm, winged each side with 3 ribs.

The generic name is likely based on Greek 'stegnas' meaning covered and the Latin 'taenia' meaning band.

BIOLOGY

S. araliacea is hermaphroditic.

ECOLOGY

S. araliacea occurs over a wide range of altitude, but is abundant in low-altitude woodland or on rocky outcrops.

BIOPHYSICAL LIMITS

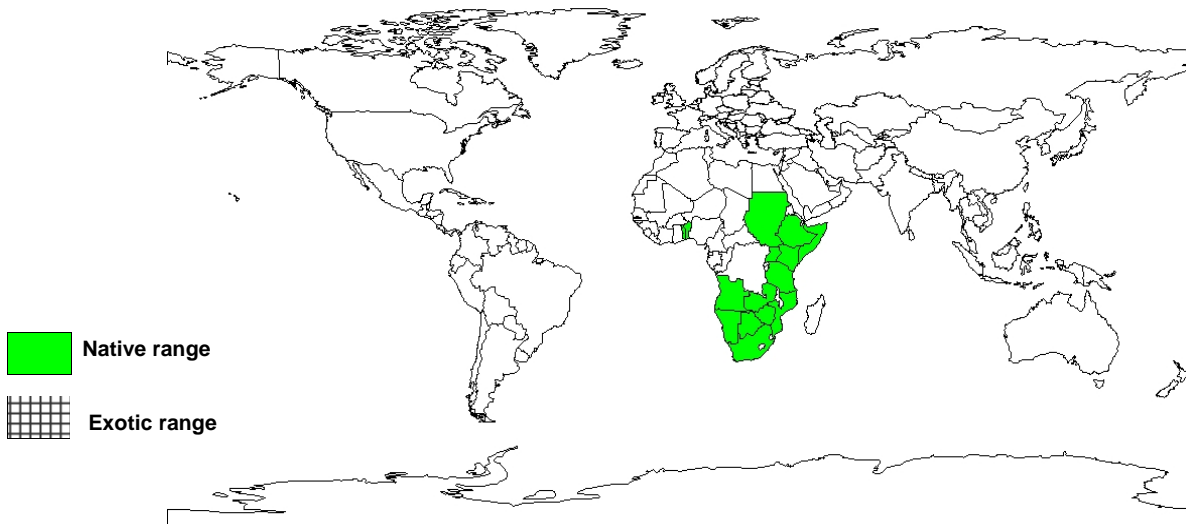
Altitude: up to 2 000 m

Soil type: Prefers rocky soils.

DOCUMENTED SPECIES DISTRIBUTION

Native: Angola, Benin, Botswana, Democratic Republic of Congo, Ethiopia, Kenya, Mozambique, Namibia, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe

Exotic:



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

PRODUCTS

Fuel: Tree parts are used as fuelwood.

Timber: The wood is white and soft, used in making farm tool handles and implements.

Essential oil: The major hydrodistilled essential oils from the highly aromatic leaves are limonene + beta-phellandrene, alpha-pinene, sabinene, beta-caryophyllene and cryptone.

Poison: Six dibenzocyclo-octadiene lignans from *S. araliacea* stem bark displayed cytotoxic (antimitotic) activity in a manner similar to colchicine on 11 human tumour cell lines. The lignans steganangin (the most abundant analogue), steganacin and steganolide A were most abundant.

Medicine: The roots are used in treating snake bites and the tree trunk reported to have snake deterring activity, leaves are rubbed on wounds as general disinfectant. Roots and bark used to cure sore throat. Bark is chewed for fever. Twigs are used in dental care as toothbrushes and bark used in preparing a medication for a heart complication. The bark decoction, prepared by boiling the bark for one hour, is added to milk and administered orally to adults as a remedy for stomachache/dysentry. The roots are used in treating painful chest conditions. Plant material also used as medicine for gas in stomach. Saponins isolated from the leaves of *S. araliacea* have shown antileukaemic activity.

SERVICES

Erosion control: *S. araliacea* is important in soil conservation.

Soil improver: Leaf litter enriches surrounding soil.

Ornamental: This lovely tree often flowers and fruits when leafless. It makes a good garden plant because of its adaptability.

Intercropping: *S. araliacea* has a light shade and is found intercropped with banana, cacao, coffee. In Uganda the tree is commonly left standing in fields for its medicinal value.

GERMPLASM MANAGEMENT

Seeds difficult to collect because of their small size.

FURTHER READING

Baba-Moussa F, Koumaglo K, Ayedoun A, Akpagana K, Moudachirou M, Bouchet P. 1997. Antifungal activity of essential oils extracted in the African states of Togo and Benin. *Cryptogamie, Mycologie*. 18(2): 165-168.

Kinghorn AD et al. 1995. Novel strategies for plant-derived anticancer agents. Proceedings of the third drug discovery and development symposium, 22-24 July 1993, San Diego, California, USA. *International Journal of Pharmacognosy*. 33: SUPPL, 48-58.

Lavaud C et al. 1992. Saponins from *Steganotaenia araliaceae*. *Phytochemistry*. 31(9): 3177-3181.

Owuor BO. 1999. An Ethnobotanical and Phytochemical study of the Herbal Remedies of Migori District, Kenya. Msc. Thesis, University of Nairobi, Kenya.

Palmer E, Pitman N. 1972. *Trees of Southern Africa Vol. 2*. A.A. Balkema Cape Town.

Wickramaratne DBM et al. 1993. Novel antimitotic dibenzocyclo-octadiene lignan constituents of the stem bark of *Steganotaenia araliacea*. *Journal of Natural Products*. 56(12): 2083-2090.

SUGGESTED CITATION

Orwa C, Mutua A, Kindt R, Jamnadass R, Simons A. 2009. *Agroforestry Database: a tree reference and selection guide version 4.0* (<http://www.worldagroforestry.org/af/treedb/>)