LOCAL NAMES
Swahili (mkarambaki,mkaa)

BOTANIC DESCRIPTION
Warburgia stuhlmannii is a small evergreen tree 12-24 m high, with a bole to 8 m, girth 1.5 m. Bark yellow to grey-black, splitting into irregular flakes. Slash blood-red turning brown.

Leaves very glossy above, elliptic, base cuneate, apex acute (and often somewhat asymmetrical), 3-9.5 by 1.5-3.5 cm; petiole 3-5 mm.

Flowers green, or yellow-green, subtended by 3 bracts, 5-6 mm long.

Fruit a berry, green, with a waxy bloom, globose, 12-15 mm across, containing 2 or more seed with an oily endosperm.

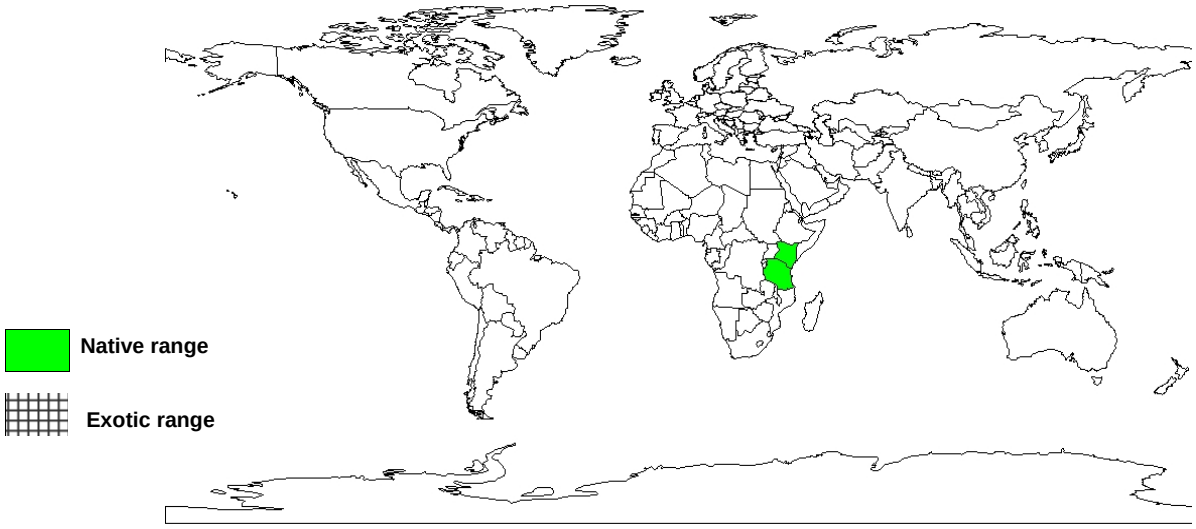
The genus is named after Dr Otto Warburg (1859-1938), born in Hamburg, lecturer in botany at the University of Berlin and author of numerous botanical papers.

ECOLOGY
This rare tree is found in coastal forest and wooded grassland.

BIOPHYSICAL LIMITS
Altitude: 0-400 m

DOCUMENTED SPECIES DISTRIBUTION

Native: Kenya, Tanzania
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
Food: Bark, leaves and fruit are hot to the taste. The bark is traditionally used as a spice.

Timber: Sapwood white, very wide. Heartwood yellowish-green, darkening to olive green, lustrous, oily, hard and heavy, with fine texture and straight grain, handsomely figured with broad dark bands. The wood contains an aromatic oil with a sweet scent of sandalwood and lemon. Saws easily and machines to an excellent finish. Difficult to nail and liable to split. Used for cabinet making, turnery and furniture.

Lipids: Oil has been extracted from the wood for use in perfumes.

Medicine: Bark used in a remedy for toothache and rheumatism. Pulverized bark mixed with honey is used as a cough medicine. Exudate from the bark is mixed with egg, boiled and drunk for constipation.

PESTS AND DISEASES
Wood rots quickly and does not resist termites.

FURTHER READNG

Beentje HJ. 1994. Kenya trees, shrubs and lianas. National Museums of Kenya.

Bryce JM. 1967. The commercial timbers of Tanzania. Moshi (Tanzania): Tanzania Forest Division, Utilisation Section.

Chabra SC, et. al. 1987. Plants used in traditional medicine in Eastern Tanzania. I: Pteridophytes and Angiosperms (Acanthaceae to Canellaceae). Journal of Ethnobotany. 21:253-277.

Dale IR, Greenway PJ. 1961. Kenya trees and shrubs. Buchanan's Kenya Estates Ltd.

SUGGESTED CITATION

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