### Loganiaceae

#### LOCAL NAMES

Afrikaans (geelklapper); Bemba (musayi,kasongole); English (corky bark,corky-bark monkey orange,wild orange,bush orange,monkey orange); Lunda (mukolo); Nyanja

(mteme,temya,mzimbili,mzai,kabeza,maye); Swahili (mtonga,mperamwitu); Tongan (muono,muteme,muwi)

#### **BOTANIC DESCRIPTION**

Strychnos cocculoides is a shrub or small tree, 2-8 m high, with a compact, rounded crown; bark thick, creamy brown, deeply corky and ridged longitudinally; young branchlets reddish or blackish-purple, densely spreading-pubescent or rarely glabrous, usually longitudinally fissured; spines stout, sharp, curved downwards, axillary and paired.

Leaves dark green, opposite, coriaceous, oblong-elliptic to broadly ovate, usually broadest below the middle, 1.8-8 x 1.4-6 cm, pubescent on both sides, rounded subcordate or rarely cuneate at the base, 3-7 nerved at or just above the base and matt or shiny above; venation compressed above, prominent and conspicuous beneath; petiole 2-6 mm long.

Flowers small, greenish-white, borne in dense terminal cymes, up to 3.5 cm in length.

Fruits globose, 1.6-7 cm in diameter with a smooth, woody shell that is dark green with paler mottlings when young, turning yellow after ripening; seeds with a hard coat, numerous, compressed, up to 2 cm in diameter and embedded in a fleshy pulp that when ripe is juicy and yellow.

'Strychnos', meaning 'deadly', is an ancient Greek name given to a certain poisonous member of the Solanaceae family. Linnaeus, who founded the genus Strychnos on the Indian species S. nux-vomica, which yields strychnine, possibly associated the deadly qualities of both groups when he named the genus. The specific name is based on the Greek names 'kokkos' (berry), and 'oikes' (resembling).

# **BIOLOGY**

S. cocculoides flowers during the rainy season, and the fruit ripens in the dry season. It takes 8-9 months from flower fertilization to fruit ripening.



Strychnos cocculoides (Paul Latham)



Strychnos cocculoides (Anthony Njenga)

#### **ECOLOGY**

S. cocculoides grows naturally in woodlands, mixed forests, deciduous woodlands and lowlands.

#### **BIOPHYSICAL LIMITS**

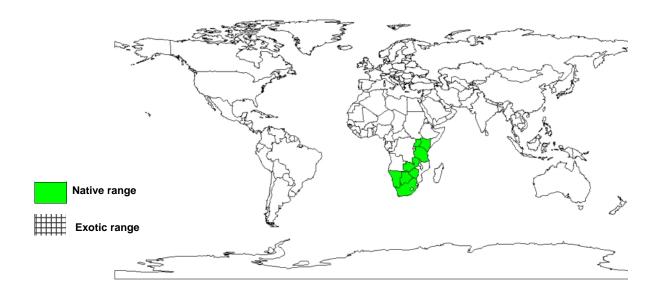
Altitude: 400-2000 m, Mean annual temperature: 14-25 deg. C, Mean annual rainfall: 600-1200 mm

Soil type: Prefers sites with deep sandy soil on rocky slopes, and grows on acidic dark-grey clays and red or yellow-red loams.

#### DOCUMENTED SPECIES DISTRIBUTION

Native: Botswana, Kenya, Namibia, South Africa, Tanzania, 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.

# Strychnos cocculoides

## Baker

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#### **PRODUCTS**

Food: Ripe fruit is eaten fresh or is used to prepare a sweet-sour non-alcoholic drink.

Timber: The soft, white, pliable, tough wood is used for tool handles and building materials.

Poison: Seeds are reported to contain toxic substances. The fruit is used to make a dye that provides protection from insects to colour trays and containers.

Medicine: S. cocculoides root is chewed to treat eczema; a root decoction is drunk as a cure for gonorrhoea, and pounded leaves are used to treat sores. The fruit is used in making eardrops, and a fruit preparation is mixed with honey or sugar to treat coughs. Roots, leaves and bark are used in treating disorders of the male organs.

#### SERVICES

Boundary or barrier or support: S. cocculoides is planted along boundaries and near home compounds.

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# TREE MANAGEMENT

The species is semi-cultivated; raised in the nursery and planted on a cleared site. Saplings need to be protected from fire; weeds, especially climbers, need to be cleared until the trees are established. The tree coppices well.

# **GERMPLASM MANAGEMENT**

Seed storage behaviour is orthodox; seeds are short lived - at most 2 months at room temperature. There are about 1800 seeds/kg.

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