

Commiphora africana

(A. Rich.) Engl.

Burseraceae

LOCAL NAMES

Afrikaans (harige kanniedood); Amharic (anqa); Arabic (angka,gafal); English (African myrrh,corkwood,poin-grub commiphora); French (myrrhe africaine); Somali (dabba'un'un,hammes-sagara); Swahili (mponda,mkororo,mbambara,mturituri,mtwitwi); Tigrigna (anqwa,anqua)

BOTANIC DESCRIPTION

Commiphora africana is a small tree, sometimes reaching 10 m but usually not more than 5 m high. It can be recognized unmistakably from a distance by its outline--a spherical top and a short trunk with low branches. Crown is rounded, with the branches ascending and then curving downwards. Many of the branchlets end in spines. The bark is grey-green, sometimes shiny, peeling in membranous scales; slash red, pleasantly scented, exuding a clear gum. Has a creeping root system that spreads several metres around the tree.

Leaves trifoliate, leaflets cuneate at the base and with irregular and bluntly toothed margins, waxy grey-green above with a sparse covering of hairs, lighter in colour and more densely hairy below, up to 4 x 2.5 cm, the middle leaflet larger than laterals.

Flowers in axillary clusters of 4-10; petals 4, red, not fused, but forming a tube about 6 mm long.

Fruits reddish, 6-8 mm across but sometimes larger, almost stalkless, made up of a tough outer layer, which splits when ripe to reveal a hard, furrowed stone embedded in a red, resinous flesh.

The generic name '*Commiphora*' is based on the Greek words 'kommi' (gum) and 'phero' (to bear). The specific name simply means African.

BIOLOGY

The tree is deciduous, coming into leaf at or before the beginning of the wet season, and losing its leaves at the beginning of the dry season. In exceptional years when the rainfall is sparse and interrupted, 2 crops of leaves may be produced. Flowers are produced in the 1st half of the dry season and are followed by the leaves and fruits. Flowering and fruiting are irregular and do not occur every year. The seeds are hard and are probably dispersed by animals and birds.



Fruit and leaves (Bart Wursten)

ECOLOGY

A widespread species, although its range and ecology is somewhat obscured by taxonomic confusion. It is common in Acacia-Commiphora bushland and is normally found in dry savannahs and in the Sahel.

BIOPHYSICAL LIMITS

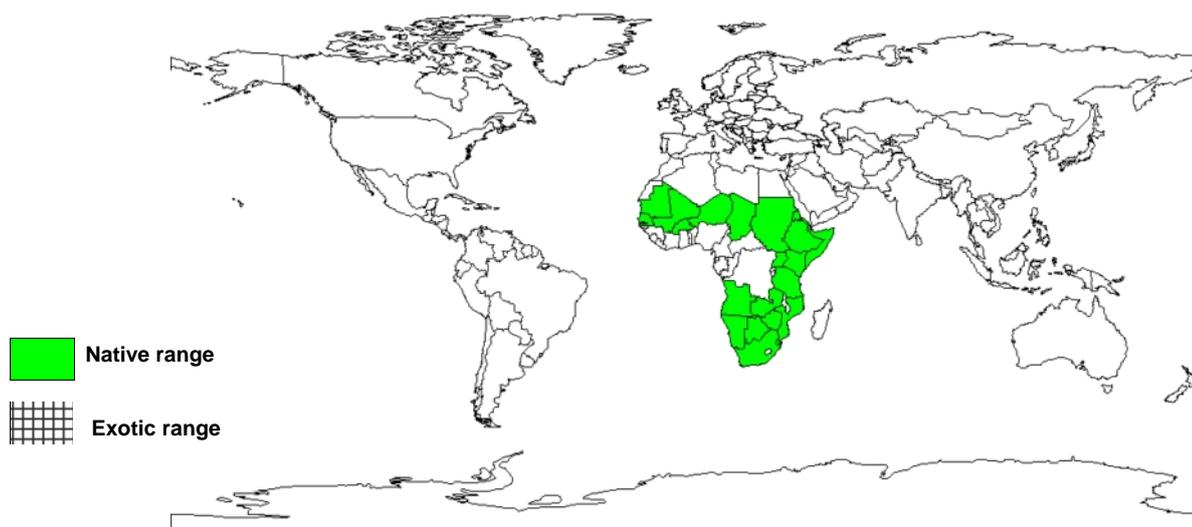
Altitude: 300-1 900 m, Mean annual rainfall: 150-900 mm

Soil type: Occurs in a wide range of soil types but appears to grow best mainly on red clay, sandy clay and rocky ground in the Sahel. It also grows on rocky escarpments.

DOCUMENTED SPECIES DISTRIBUTION

Native: Angola, Botswana, Burkina Faso, Chad, Eritrea, Ethiopia, Kenya, Mali, Mauritania, Mozambique, Namibia, Niger, Senegal, Somalia, South Africa, Sudan, Swaziland, 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.

PRODUCTS

Food: Roots of young plants are juicy with a mildly sweet taste and can be chewed. The gum is also eaten; the bark is brewed to make a red tea.

Fodder: The leaves are browsed by livestock, especially camels and goats, at the end of the dry season when the tree comes into leaf. *C. africana* is of outstanding importance for many nomadic herdsman in the northern parts of the Sahel.

Timber: Wood is used for house building, headrests, stools, milk containers and wooden spoons. Stems are utilized as toothbrushes.

Medicine: Fruits are chewed or pounded and used against toothache and diseases of the gum.

Gum or resin: Gum extracted from the stem is used in making arrows.

SERVICES

Boundary or barrier or support: *C. africana* is particularly suitable for planting for live fences and hedges.

GERMPLASM MANAGEMENT

Seed storage behaviour appears to be orthodox. Seeds should be stored dry.

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SUGGESTED CITATION

Orwa C, A Mutua, Kindt R, Jamnadass R, S Anthony. 2009 Agroforestry Database: a tree reference and selection guide version 4.0 (<http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp>)