

Dobera glabra

Forssk.

Salvadoraceae

LOCAL NAMES

Arabic (zobra,mikah); Somali (garas); Swahili (mkupa); Tigrigna (gharsai,geresa)

BOTANIC DESCRIPTION

Dobera glabra is an evergreen shrub or tree up to 8-10 m high. The smooth, green, greyish-brown to dark grey bark is fissured in rectangular patches; bark on younger wood is grey.

Leaves opposite, olive-green, leathery, slightly fleshy and smooth.

Flowers white, bisexual, in axillary and terminal panicles.

Fruit greenish turning purple when mature, rough on the outside, shaped like a small egg, about 2 cm long and 1 cm wide, pointed at the end, with a white seed coated with a slimy red skin.

The specific name, 'glabra', is Latin for 'smooth', 'without hairs', or 'bald'.

BIOLOGY

In the northern coast of Kenya, trees flower in March and April, followed by the seeding period in July and August. The diaspores of *D.glabra* are ingested and dispersed by hornbills. They are greenish at maturity and have a very thin seed coat which apparently is not damaged by ingestion.



Dobera glabra (Patrick Maundu)



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ECOLOGY

The species occurs in thorn bushes or scrubs of *Acacia*, *Balanites* and *Commiphora*, on rocky hillsides and saline riverbeds. It mainly occupies the arid and semi-arid regions of Africa. In Kenya, *D. glabra* is found mainly in the northern coast and provinces. Trees are able to withstand short-term waterlogging.

BIOPHYSICAL LIMITS

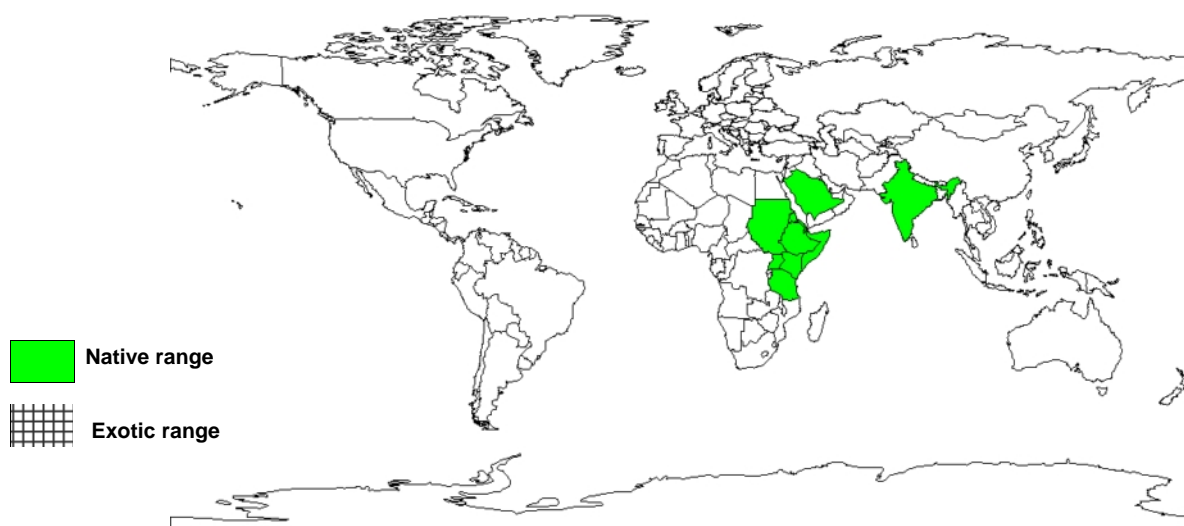
Altitude: 0-1 500 m, Mean annual rainfall: 100-600 mm

Soil type: *D. glabra* grows on sandy, alluvial, black cotton or calcareous loam soils.

DOCUMENTED SPECIES DISTRIBUTION

Native: Djibouti, Eritrea, Ethiopia, India, Kenya, Saudi Arabia, Somalia, Sudan, Tanzania, Uganda

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: Fruits and seeds are edible; seeds need to be boiled for a long time before they can be eaten.

Fodder: Leaves are very palatable and browsed by all livestock.

Fuel: *D. glabra* is planted for firewood.

Timber: The fairly soft wood is used for carving such as for pestles, mortars, spoons, storage containers and other domestic items. It is also used for making bed-frames and stools.

SERVICES

Shade or shelter: *D. glabra* is often planted in villages as a shade tree.

Ornamental: The attractive trees are planted in amenity areas.

TREE MANAGEMENT

A single tree may produce as much as 50 kg of seeds/year. Spacing should be at least 10 m apart. Once trees are properly established, they can tolerate repeated lopping or browsing. The species may be endangered, so planting of trees should be encouraged.

GERMPLASM MANAGEMENT

Seed storage behaviour is recalcitrant, with seeds being sensitive to desiccation and viability declining rapidly in open storage. However, seeds can be stored for a few days in well-ventilated containers with moist sawdust. On average, there are about 1300 seeds/kg.

FURTHER READNG

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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>)