

LOCAL NAMES

English (dombeya)

BOTANIC DESCRIPTION

Dombeya torrida is a deciduous shrub or much-branched forest tree 12-15 m tall, sometimes up to 25 m high with a shady umbrella crown and a trunk diameter of about 50 cm; bark grey and smooth, only lightly grooved with age, clear lenticels, inner bark thick, orange-brown, very fibrous.

Leaves broadly ovate, base cordate, apex acuminate, and margin serrate to entire, 4-25 by 3-15 cm, densely pubescent, tip pointed; young stems and leaf stalks often red.

Flowers often abundant, pale pink or white, in showy clusters on branched hairy stalks to 30 cm; petals 11-21 mm long, remain around the fruit, turning yellow-brown as they dry.

Fruit oval 5-celled capsule to 1 cm, densely hairy, with about 10 small brown seeds inside.

BIOLOGY

Dombeya seeds are not easy to obtain.

ECOLOGY

D. torrida often grows along forest edges in Afromontane forest. It also persists in forest patches and gallery forests and occurs as a single tree in mountain grassland and farmland. It is a common understorey tree in semi-humid highland woodlands and forests, often associated with *Juniperus*, *Arudinaria*, *Hagenia*, *Celtis*, *Cassipourea*, *Cornus*, *Podocarpus* and *Olea capensi*. It is also riverine.

BIOPHYSICAL LIMITS

Altitude: 1600-3400 m

Temperature: 14-24°C

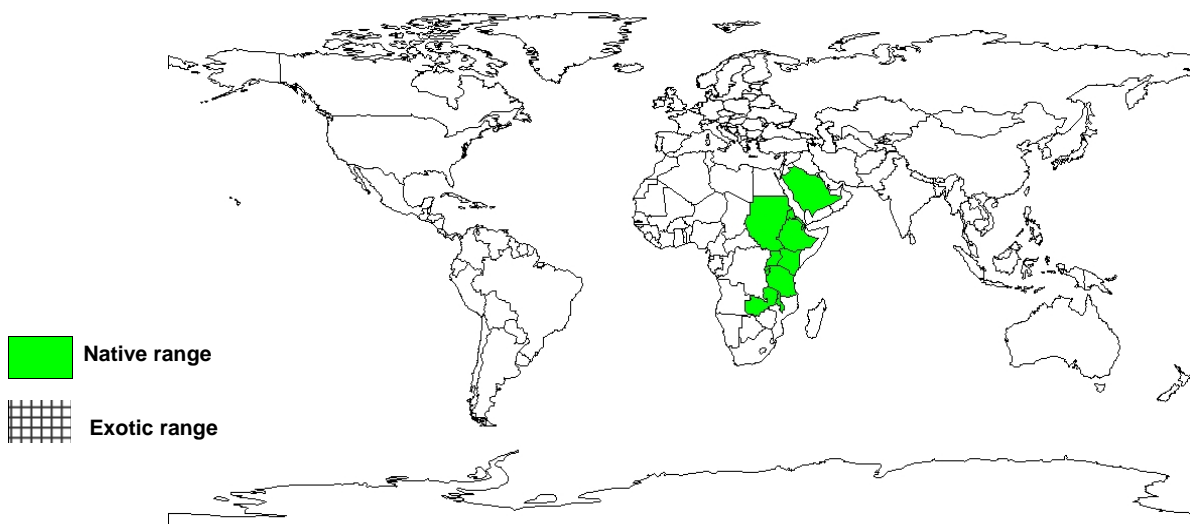
Rainfall: 1000-2000 mm

Soil type: Prefers well drained soils exhibiting humic friable clays, dark red sub-soils and deep loams.

DOCUMENTED SPECIES DISTRIBUTION

Native: Burundi, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Kenya, Malawi, Rwanda, Saudi Arabia, Sudan, Tanzania, Uganda, Yemen, Republic of, Zambia

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

Timber: The wood is soft but tough and heavy, easy to work and suitable for turnery and house construction, but it is not durable in the ground. It is used for poles and making tool handles.

Apiculture: Dombeya is recommended for planting to increase honey production. It is considered one of the best nectar-producing trees so a good place to put bee-hives. Bees collect pollen and nectar throughout the day from its flowers.

Fodder: Leaves are browsed by cattle.

Medicine: Root bark is used for wound dressing.

Fibre: The bark fibre is used for making cloth and string or rope.

Fuel: Dombeya is a good source of firewood and charcoal.

SERVICES

Soil improver: Fallen leaves produce rich mulch for soil improvement. High quality forest soil for use in the nursery is collected under dombeya trees.

Erosion control: In Rwanda the tree is used for soil conservation.

TREE MANAGEMENT

Dombeya is fairly fast growing and may need pruning, coppicing, lopping or pollarding.

GERMPLASM MANAGEMENT

The seeds storage behaviour is orthodox, with viability maintained for several years in hermetic air-dry storage at 3°C. Seed treatment is not necessary. There are about 235,000 seeds per kg.

PESTS AND DISEASES

No serious pests or diseases have been recorded.

FURTHER READING

Amanuel G (ed.). 1994. Indigenous trees and shrubs of Eritrea. Department of Forestry, Wildlife and Environment, Ministry of Agriculture, Asmara, Eritrea.

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

Bekele-Tesemma A, Birnie A, Tengnas B. 1993. Useful trees and shrubs for Ethiopia. Regional Soil Conservation Unit (RSCU), Swedish International Development Authority (SIDA).

Fichtl R & Adi A. 1994. Honeybee Flora of Ethiopia. Margraf Verlag, Weikersheim, Germany.

Hedberg I and Edwards S (eds.). 1989. Flora of Ethiopia Volume 3: Pittosporaceae to Araliaceae. The National Herbarium, Biology Department, Addis Ababa University and The Department of Systematic Botany, Uppsala University, Sweden.

Hong TD, Linington S, Ellis RH. 1996. Seed storage behaviour: a compendium. Handbooks for Genebanks: No. 4. IPGRI.

<http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?424436>

<http://www.beesfordevelopment.org/info/info/flora/dombeya-torrida.shtml>

Maundu P & Tengnäs T (eds). 2005. Useful trees and shrubs for Kenya. Technical handbook No. 35. World Agroforestry Centre-East and Central Africa Regional Programme (ICRAF-ECA), Nairobi, Kenya.

Maydell von HJ. 1990. Trees and shrubs of the Sahel. Margraf Verlag, Weikersheim, Germany.

Rocheleau D, Weber F & Field-Juma A. 1988. Agroforestry in dryland Africa. ICRAF, Nairobi, Kenya.

Seyani JH. 1991. Dombeya in Africa: Opera Botanica Belgica 2. National Botanic Garden of Belgium, Meise, Belgium.

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/>)