Combretum molle

R. Br. ex G. Don

Combretaceae

LOCAL NAMES
Afrikaans (basterrooibos); Amharic (agalo,avalo); Bemba (mulama,kaunda,montamfumu); Bislama (abelwa); English (velvet leaf willow,velvet leaf combretum,velvet bush willow); Lozi (mufula); Luganda (ndagi); Lunda (chihuma); Ndebele (umbondo); Nyanja (kakunguni,mulama,mkute,kalama); Shona (mupembere); Somali (rokess,abol); Swahili (msana,mlama); Tigrigna (haziba,abelwa,weiba,anfarfaro,sesewe); Zulu (umBondwe,umBondwe-omhlophe)

BOTANIC DESCRIPTION
Combretum molle is a shrub or small, graceful, deciduous tree 3-13 m high; trunk crooked or leaning, occasionally swollen at the base, up to 30 cm in diameter. Bark grey and smooth when young, grey-brown to almost black, rough and flaking when older, twigs often with reddish hairs. Branching heavy and drooping, giving a rounded or flat-rounded, sometimes oval, crown. It may be evergreen or deciduous and yields a gum.

Leaves opposite, simple, leathery, 5-17 cm long, 2.5-9 cm wide, narrowly elliptic, broadly ovate-elliptic to almost circular, with dense, grey, velvety hairs on both sides, especially below; some forms almost without hairs; margins untoothed; apex tapering, often with a short point or sometimes notched; base round, heart-shaped or slightly narrowed; divided by midrib into 2 unequal parts; margin entire; petiole thickset, 2-3 mm long; net-veining conspicuous, especially on the under surface.

Individual flowers small, on bare branches; pale cream or greenish-yellow, sometimes with a reddish tinge; heavily scented, borne singly in the axils of the leaves; in dense, axillary, often branched spikes, 4-9 cm long. The short-stalked flowers are borne on a central stalk 3-7 cm long. Bracts present.

Fruits 1.4-2 (max. 2.5) x 1.5-2 cm; yellowish-green flushed with red, drying to golden reddish-brown; borne abundantly, some old fruits remaining on the tree into the next flowering season; 4-winged, the wings pale yellow-brown, rounded, with shallow notches at top and bottom.

Combretum was the name given by Pliny to a particular climbing plant, the identity of which has been lost in time. The specific name is the Latin word ‘mollis’, meaning ‘soft’, presumably because of the softness of the leaves.

BIOLOGY
Flowers appear before the leaves and are attractive to insects, which probably pollinate them. Flowering in southern Africa occurs from September to November; in Zambia, between July and October; fruit ripens between June and September.

Leaf (Botha R.)

Densely foliaged tree (Botha R.)

Detail of the inflorescence and flowers. (Botha AD)

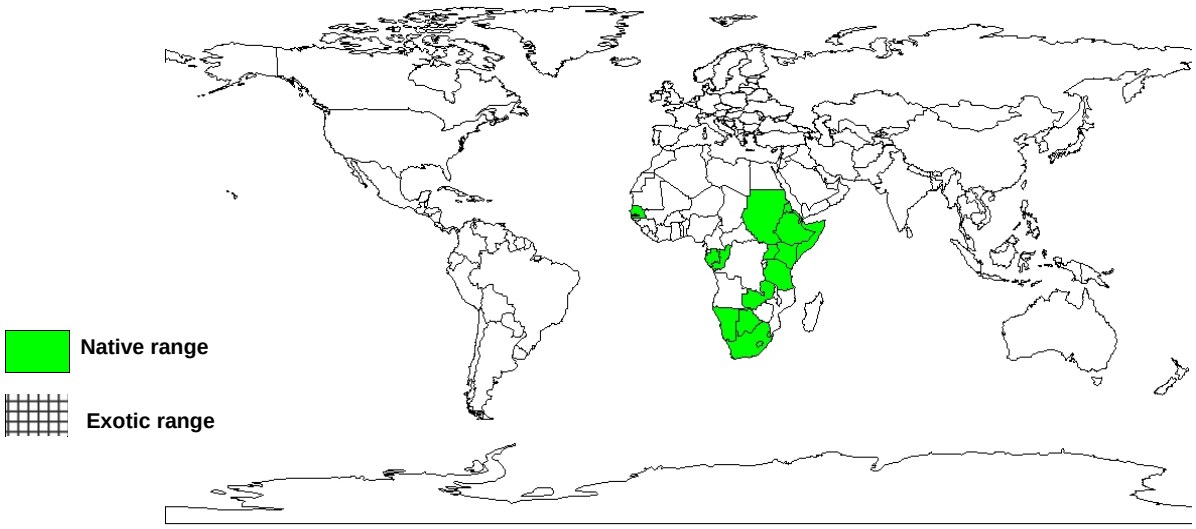
ECOLOGY
C. molle is widely distributed in southern Africa from Kosi Bay in the extreme north east to Namibia in the west, and from the Orange Free State in the south, northwards through the Transvaal to tropical Africa. It is a tree of the bush and savannah regions of Africa generally, often occurring on ant-hills, in semi-evergreen thickets and frequently associated with quartzite formations. It is a common tree in Pretoria and Johannesburg, for it grows freely on the slopes of Magaliersberg and on those of the western Waterberg and Soutpansberg. C. molle is found throughout Zambia with the exception of Kalabo, Senanga, Sesheke and most of Mongu Districts. It has a wide range, from Senegal to Sudan, down across the whole of central and eastern Africa.

BIOPHYSICAL LIMITS
Altitude: 0-2 300 m, Mean annual rainfall: 900-1 200 mm

DOCUMENTED SPECIES DISTRIBUTION

Native: Botswana, Central African Republic, Congo, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Gabon, Kenya, Lesotho, Namibia, Senegal, Somalia, South Africa, Sudan, Swaziland, Tanzania, Uganda, 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
Fodder: The leaves are browsed by cattle.

Apiculture: Flowers attract bees and make good forage for honey production.

Fuel: Wood burns slowly, giving intense heat, and is suitable for firewood and production of high quality charcoal.

Timber: Combretum wood is yellow, hard, coarse, brittle when dry and rots easily. It is said to be reasonably termite resistant and is suitable for implement handles, poles, stools, construction and fence posts.

Tannin or dyestuff: A red dye can be obtained from the leaves and yellow dye from the roots.

Medicine: Boiled root decoction is used to induce abortion and treat constipation, leprosy, headaches, stomach pains, fever, dysentery, general pains, swellings and as an anthelmintic for hookworm. The root and leaf together are believed to be an antidote for snake bite; leaves are chewed or pounded, soaked in water and the juice drunk for chest complaints and as an anthelmintic, or they are used as an inhalant in hot steam bath. An infusion of the inner bark is taken orally or as an enema to relieve various stomach ailments. The bark exudes a gum that can be used to treat wounds, or crushed dried or fresh leaves can be used for the same purpose.

SERVICES
Soil improver: Leaf fall is a source of mulch and green manure for the soil.

TREE MANAGEMENT
Trees are fast growing; lopping and coppicing are suitable practices.

GERMPLASM MANAGEMENT
Seed storage behaviour is orthodox; seeds can be stored for long periods under favourable conditions. There are about 10 000-15 000 seeds/kg.

FURTHER READNG

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SUGGESTED CITATION

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