

# Acacia mellifera (Vahl) Benth.

#### Leguminosae

# Synonyms

- A. senegal (L.) Willd. subsp. mellifera (Vahl) Roberty
- Mimosa mellifera Vahl.

#### Common names

Kitr (the Sudan).

#### Description

Tall rounded shrub or small tree with ball-shaped crown, reaching occasionally 9 m in height in the southern limit of its distribution. Branches covered with very sharp recurved thorns. The smooth grey bark with white lenticels on the young branches and shoots, can be differentiated from its resembling relatives *A. laeta, A. senegal, A. gourmaensis* and *A. dudgeoni* by its leaves which have only 1-2 pairs of pinnae with 1-2 pairs of leaflets, obliquely ovate or obovate, i.e. quite asymmetrical ; also by the fact that it simultaneously develops leaves and flowers in the early rainy season. Young leaves may, however, appear well before the onset of the rains; it then constitutes a most appreciated browse, especially to goats and camels. Prickles are recurved and set in axillary pairs. The fragrant flowers are white to cream-colored, 3.5 cm long, and gathered in short, dense, hanging spikes. Pods are flat, oblong, 3-8 x 1.5-2.5 cm, hemmed, with slightly constricted margins between the seeds, papery, reticulate with a blunt top, generally containing 3 seeds.

#### Habitat

*A. mellifera* is a gregarious species. It often constitutes almost pure, dense, impenetrable, even-aged thickets.

#### Water

It occurs in the rainfall belts between 400 and 800 mm MAR., but down to the 100 mm isohyet in the Rep. of Sudan along the drainage networks (e.g. Wadi al Milk, in Kordofan).

### Soil

Usually found on clay soils, but can grow on most soils.

#### Distribution

Widespread in Africa, occurring in Egypt, the Sudan, Somalia, Ethiopia, Angola, Kenya, Uganda and Tanzania. Sahel east of the Niger river to the southern Arabian Peninsula, Eastern and Southern Africa. In Kenya, it occurs at altitudes between 1000 and 1400 m.

#### Crop management

Ivens (1970) showed that A. mellifera is easily killed by stumping and cutting, and repeated burning exerts a good deal of control.

#### **Products & uses**

Goats are very fond of the leaves, which are either browsed from the standing shrubs or are picked up when they fall to the ground (normally during the dry season). The young leaves, which usually appear in February (middle of the dry season), are very much liked by goats, and where it is dominant, *A. mellifera* contributes very considerably to their diet. The tree is too spiny for cattle and the fallen leaves too small.

Browse, dry leaves and pods are collected on the ground by cattle and sheep who, unlike camels and goats, cannot directly browse them, fuel-wood, building material for "zeribas", hut building, live hedges, bark from stems and roots produce fibers for plaiting, bag making and wickerwork, in human medicine leaf decoctions are used to cure genitourinary disorders.

#### Author: Le Houérou

#### **Nutritional Quality and Animal Production**

Young leaves contain up to 42 percent protein (Dougall and Bogdan, 1958).

# Links for the genus:

- The WattleWeb: Acacias from A-Z
- Seed treatment and inoculation: Instructions for acacias and other NFT (Nitrogen Fixing Trees)
- Sustainable livestock production: Indigenous knowledge in utilization of local trees and shrubs in central Tanzania
- Indigenous multipurpose trees of Tanzania: Uses and economic benefits for people

# References

Dalziel 1955 ; Dale & Greenway 1961 ; Giffard 1966 ; El Amin 1973 ; Geerling 1982/88 ; Von Maydell 1983/86 ; Baumer 1983 ; Wickens et al. 1995.