



Senegalia mellifera

Family name: Leguminosae

Common name: Leguminosae

Local name: (كتر) Kitr



Wild and cultivated



Role in Biodiversity

Senegalia mellifera is a nitrogen fixing plant. In addition to providing food, shelter and shade for animals and insects, it is considered as a valuable honeybee plant. In dry areas where *Senegalia mellifera* form dense impenetrable thickets, it may outcompete grasses and become dominant.



Environment and Growing

Senegalia mellifera has a preference for deep sandy or gravelly soils, and well-drained loamy soil. It is also tolerant to the black cotton soils (vertisols). It grows well in adequate sunlight and consistent moisture without waterlogging.

Growth requirements:

- Annual rainfall range 400-800 mm.
- Mean annual temperature range 15-30°C.
- Mean maximum temperature of hottest month range 25-40°C.



Reproduction and Communication

Senegalia mellifera is a bisexual plant reproduced mainly by seeds. Flowers are very attractive with a strong scent specially at night. It is an excellent source of food for bees and is recommended for honey production in dry tropical areas.



Life span

The typical lifespan of black thorn ranges from 20 to 30 years. Under optimal conditions, some specimens can live even longer.



Size

Senegalia mellifera grows up to 4 meters in height with multiple stems, and sometime reaches 6 to 9 meters high.



Parts



Stems are low branching with pairs of black hooked thorns every 5 to 15 mm.

[Edit / Translate](#)

Roots are in form of a system that explores large volumes of soils, allowing survival in dry areas.



Leaves are bipinnate with only 1-2 pairs of pinnae each bearing 1-2 pairs of ovate or obovate leaflets.



Flowers are fragrant, sweetly scented, 3-5 cm long and creamy white in colour, borne in dense hanging spikes.



Fruits are straw coloured flat pods, 3-8 cm long x 1.5-2.5 cm wide, that contain usually three seeds. Fallen pods may still have attached seeds.



Seeds are up to 10 x 8mm and 2 to 3 per pod.

INTRODUCTION

Shrub

Senegalia mellifera, blackthorn, is a drought resistant shrub, commonly found on semi-arid grasslands throughout the savannah in western, eastern and southern Africa. The plant has a number of local uses, but is valued mainly for its gum. It is characterized by spherical crown, black bark which becomes ash-grey to light brown on the branches, and small, short, sharply hooked spines.

In Sudan, *Senegalia mellifera* is found in the semi-desert plant belt on sandy lands and covers the southern parts of the River Nile and Northern States, the northwestern part of Khartoum State, North Kordofan and Darfur. It is also found in a belt on clay lands in the regions of Kassala and Gedaref to Al-Jazirah. The belt extends to the Upper Nile region and meets Khor Abu Habal in Kordofan. This plant has many uses in Sudan, the most important of which are construction, firewood and charcoal. Its flowers, which appear during or before autumn, are also famous for their quality in producing honey. It is also an important medicinal plant.

LIVELIHOODS / CULTURE

Cultivation

In Sudan, *Senegalia mellifera* is naturally growing tree. After heavy rainfall, seeds that still attached to fallen pods can germinating in great profusion. Seed germinate in 2-14 days

It is widely planted on the sides of roads and as fences for large farms, especially those owned by individuals. There is no special traditional practice of growing this plant in Sudan. For fences the seeds are usually sown at distances of less than a meter to ensure that the branches are intertwined.

Senegalia mellifera could also be vegetatively propagated by coppicing.

Cultural Value

- Different parts of the *Senegalia mellifera* tree, such as leaves, twigs, pods, shoots, and flowers, are eaten by domestic animals especially camels and goats.
- Gum collected from injured stems is edible and used also as glue.
- The wood is taken for building huts and the branches for fencing and making axe and pick handles.
- Baskets made of the roots and barks fibres serve for collecting gum arabic.

Medicine and Health

- The decoction of its stem barks of *Senegalia mellifera* is used against diarrhea and eye problems in livestock. It is also used to treat stomachache, malaria, coughs.
- Bark ash poultice is used to treat Syphilis by people in the Mellit area
- Plant extracts are also reported to be used to treat chronic joint pain

Cultural Expressions

Villages named after it include:

Al Kitair, Kitair Al Awamra

THREATS

In addition to climate change, *Senegalia mellifera* regionally faces overgrazing and clearance for agricultural expansion, especially in Gazeira and Kordofan States.

[Image\(s\) source :](#)[Link\(s\)](#)[Compiled By:](#)