

Acacia seyal Del.
Leguminosae (Fabaceae)



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■ Morphological Description

Tree, 3-12 m tall, crown flat topped; white to greenish yellow or orange red; sparsely branched, the branches horizontal or ascending; young branchlets with sparse hairs or almost glabrous, with numerous reddish sessile glands; epidermid of twigs becoming reddish and shed annually; leaves often with a large gland on petiole and between the top 1-2 pairs of pinnae; stipules spinescent, up to 8 cm long, ant-galls present or absent; pinnae - usually 3-7 pairs; leaflets in 11-20 pairs, 3-8 cm long, 0.75-1 mm wide, sparingly ciliate or glabrous; lateral veins invisible beneath; flowers bright yellow, in axillary, pedunculate heads 10-13 mm across, borne on terminal or short lateral shoots of the current season; involucrel in lower half of peduncle 2-4 mm long; apex of bracteoles rounded or elliptic, sometimes pointed, from near the base to about half-way up the peduncle, rarely higher; calyx 2-2.5 mm long, puberulous in upper part; corolla 3.5-4 mm long, glabrous outside; pods 7-20 cm long, 0.5-0.9 cm broad, dehiscent, falcate, constricted between seeds, glabrous except for sessile glands, 6-9-seeded; seeds elliptic, 7-9 mm long, 4.5-5 mm wide, compressed, minutely wrinkled, olive-brown to olive; areole 5-6 mm long, 2.5-3.5 mm wide.

■ Geographical Distribution

Local: Nile Valley, Oases, Sinai and Western Desert.

Regional: Eastern Africa and Egypt.

Global: Native to the Sahelian Zone from Senegal to Sudan, it also occurs in Egypt and eastern and

Acacia seyal Delile, Descr.

Egypte, Hist. Nat. 286, t. 52, f. 2 (1814).

Names

Arabic: Sayaal سيال , Talh طلع

English: Talh gum, Thirsty thorn, Shittah tree

French: Mimosa epineux seyal

southern Africa, from Somalia to Mozambique and Namibia.

■ Ecology

The trees thrives in *Sclerocarya caffra* woodlands, wooded grasslands and especially on seasonally flooded black-cotton soils along water courses. It requires a heavy clay-alluvium, but grows well on stony ground at the base of hills. Grows at 20-2,100 m altitude. A gregarious savanna tree, ranging from Subtropical Desert to Dry through Tropical Desert to very Dry Forest Life Zones, shittim wood is reported to tolerate annual precipitation of 8.7-22.8 dm (mean of 7 cases = 15.0 dm), annual mean temperature of 18.7-27.8 °C (mean of 7 cases = 24°C) and pH of 5.0-8.0 (mean of 5 cases = 6.9).

■ Part(s) Used

The bark, wood and leaves.

■ Collection

In all stages

■ Preparations

Decoction and powder

■ Use

Oral.

■ Constituents

The plant contains gum of the arabic type which is made up mainly of arabin, calcium, magnesium and potassium salts of arabic acid, oxidase enzyme and tannin.

■ Pharmacological Action and Toxicity

Alcoholic extract of the plant showed inhibition of

TNV which is dose dependent (antiviral activity).

■ Pharmacopoeia

Not available

■ Phytopharmaceutical Products

Not available

■ Traditional Medicine and Indigenous Knowledge

History: According to some Biblical scholars, the Shittah tree is mentioned in the Bible only once, but its wood is referred to many times as shittium, which is the plural of shittah in Hebrew. Some even speculate that it was only natural that Moses should turn to shittium when he came to build the Ark of the Covenant and the Tabernacle and needed beams and timber. No one can really be sure which species of Acacia was meant. Ancient Egyptians made coffins, some still intact, from the wood. Nigerians used sapling stems or roots for spear shafts.

■ Traditional Medicinal Uses

- Astringent for colds, diarrhoea, haemorrhage and ophthalmia
- Bronchitis and rheumatism
- Dysentery and leprosy
- Emollient
- Fumigant for rheumatic pains
- Intestinal ailments
- Stimulant

Other uses of the plant: The gum is edible, along with the leaves and the young pods. Stems and roots are used for spear shafts. The leaves are used for forage and the wood for fuel.

■ References

General References

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