

# *Ceiba pentandra*

Bombacaceae

Indigenous, Tropical America and West Africa

**Am:** *Yetit zaf*  
**Eng:** *Kapok tree*  
**Sm:** *Dum-dum*

## Ecology

A distinctive tree widely grown in the tropics. It does best at low altitudes in well-drained soils. In Ethiopia, it is planted from Dry Moist Bereha to Dry and Moist Kolla agroclimatic zones. Semi-naturalized, especially in Harerge, Tigray, Arsi, Wolega, and Ilubabor. It is also native to Ilubabor where it grows in lowland evergreen forest. The tree is believed to be Latin American and indigenous in West Africa too, 500–1,600 m.

## Uses

Fodder (leaves and shoots), bee forage, ornamental, fibres (mattresses and insulation).

## Description

A tall deciduous tree to 30 m with conspicuous, horizontal layered branches, the trunk covered with sharp conical spines when young, heavily buttressed with age, very shallow rooted. BARK: Young branches green, old bark grey, smooth. LEAVES: Compound, 5–11 leaflets, shortly stalked, radiating from a main stalk to 20 cm, each drooping, long and narrow, 8–16 cm. FLOWERS: Open at sunset, small, 1–3 together, the smell unpleasant; 5-part calyx, 5 petals joined at the base, to 3 cm long, dirty white, densely silky hairy outside, 5 stamens. FRUIT: Large woody capsules to 30 cm, conspicuous hanging on the bare

tree, contain round black seeds with long silky white fibres—called kapok—around them.



## Propagation

Seedlings, cuttings.

## Seed

Seedlings. Sow seeds in pots or directly at site, or establish from cuttings. Pluck pods by hand when ripe but before they split open. After fibre is removed from the pod, the seeds can be separated from the fibre by beating it with a stick. Soak seed in cold water for 24 hours before sowing. Germination rate is 50–85%. Seeds are dispersed by wind.

**Treatment:** Soak seed in cold water for 24 hours.

**Storage:** Seed are oily but can be stored up to a year in normal conditions. However, viability is gradually lost, so best to use fresh seed.

## Management

Coppicing, lopping and pollarding.

## Remarks

The wood is so soft it has few uses. Kapok fibre burns easily but is water-repellent and lighter than cotton. The unripe fruit and seed oil are edible and an important crop in parts of the world, such as Java, Thailand, Malaysia and Sri Lanka. Press cake from seed residue contains 26 % protein. Tree produces a high yield after 8–10 years with abundant rain in the growing season and a dry period for flowering and fruiting. Shallow-rooted and easily damaged by high winds. In West Africa, seeds are powdered and added to soup. Flowers open in the evening and are usually pollinated by bats.

