

Indigenous

**Trade names:** **English:** African copaiba balsam

**Common names:** **English:** bitok **Lugbara:** bitok, bitoke, bito **Madi:** masa.

**Ecology:** One of 8 *Daniellia* species in tropical Africa mostly occurring north of the equator from Senegal in the west to Uganda and the Sudan in the east. It grows in wooded grassland and savannah often with *Butryospermum paradoxum*. A common tree in Moyo District (West Nile). Villages there have few trees and only pockets of forest remain in protected areas.

**Uses:** Timber (dugout canoes), mulch, bee forage, ornamental (avenue tree), windbreak, gum (resin).

**Description:** A deciduous tree 25-45 m with a **thick trunk to 2 m** around, often **clear to 10 m** before branching to a dense **spreading crown, triangular and flat-topped**. **BARK:** pale grey, scaly, **a sticky gum-resin** exuding when cut. **LEAVES:** pinnate, on a stalk 20-50 cm, usually 6-8 pairs oval stalked leaflets, increasing in size up to 10 cm long, base rounded and unequal sided, tip pointed. If the leaf is held up to the light gland dots can be seen all over the surface. **FLOWERS:** **white, in large fragrant heads to 25 cm long, large petal-like bracts overlap the buds** but drop off before the flower opens; 4 green-white sepals enclose the flower which has **1 small petal, about 1 cm long**, and 4 other tiny petals. **FRUIT:** smooth **flat pods, pale yellow, pointed and curved, 6-9 cm, tiny, split suddenly** to expose a **single dark brown seed**, about 2 cm long. The open pod with the seed attached by a **thread-like funicle** remains on the tree for some time before falling.

**Propagation:** Seedlings (sow seed in pots), direct sowing on site. Seedlings quickly develop deep roots and frequent root pruning is thus essential for successful planting. Direct sowing at site is the recommended method.

**Seed:** The seed are thrown a long distance when the pods split open and they must be collected from the ground since trees are very tall. Thus collecting seed is difficult,

**treatment:** soak in cold water overnight before sowing,

**storage:** seed is liable to insect attack. Add ash to reduce insect damage.

**Management:** Slow growing.

**Remarks:** Farmers should be encouraged to grow this tree as it has a potential for improving poor savannahs. The heartwood is red-brown, weak and perishable but easily worked. The resin is used as a gum locally.

