

Gmelina arborea

Verbenaceae

Far East, South Asia

Nyanja: Malaina**Senga:** Melaina

Ecology: A tree of moist forests but now planted world wide in the tropics, 0–1,200 m. It grows throughout Zambia where it is popular as an avenue tree; also in plantations as a firebreak. In Eastern Province, it is a common shade tree in villages and around institutions. It grows best on deep well-drained soils but will also grow on most soil types and is moderately drought-resistant once established.

Uses: Firewood, charcoal, **timber** (furniture, tools), poles, **fodder** (leaves, fruit), bee forage, shade, ornamental, **windbreak**.

Description: A deciduous tree which may reach 18 m, but usually smaller; the crown fairly open. **BARK:** pale cream when young, grey-yellow-brown with age; corky and rough. **LEAVES:** large and heart-shaped to 20 cm, tip pointed, shiny above, pale and hairy below, the stalk up to 12 cm. **FLOWERS:** in clusters to 30 cm long, orange-yellow, each flower bell shaped. Abundant nectar attracts bees, August–October. **FRUIT:** orange-yellow, egg shaped to 2.5 cm, containing a stone with 1–4 seeds inside, October–December.

Propagation: Seedlings, wildings, direct seeding, cuttings.

Seed: Germination 40–80% in 20–30 days. No. of seeds per kg: $\pm 2,500$ seeds when dry.

treatment: Soak in cold water for 48 hours.

storage: Seed can be stored for a year before it starts to lose viability.

Management: Pruning, lopping, coppicing. Protect young trees from goats by smearing goat dung around the stem. Weed young trees as they do not compete well.

Remarks: Established trees compete with crops for water and nutrients. The fruit contains a chemical which inhibits crop growth, so avoid planting these trees next to crops. The trees are resistant to termites and are fast growing. The timber is soft and has been used for matchsticks. In Eastern Province the timber is used to make simple furniture, boxes, etc.

