

Gmelina arborea

Verbenaceae

South Asia

COMMON NAMES: **English:** Gmelina, Melina.

DESCRIPTION: A deciduous tree that may reach 18 m, but is usually smaller; the crown fairly open. **BARK:** **Pale cream** when young, **grey–yellow–brown** with age, corky and rough. **LEAVES:** Large, **heart-shaped, to 20 cm, tip pointed**, shiny above, pale and hairy below, on a stalk to 12 cm. **FLOWERS:** In clusters to 30 cm long, orange-yellow, each flower bell shaped. Abundant nectar attracts bees. **FRUIT:** **Orange-yellow, egg shaped to 2.5 cm**, containing a stone with 1–4 seeds inside. The fruity smell attracts bats.

ECOLOGY: Found in moist forests of south Asia to China. Now a useful tree planted worldwide, 0–1,200 m, but relatively new to Kenya. In Kenya it is basically a coastal tree, although it may grow in other lowland areas. It does best in fertile, well-drained loams. Agroclimatic Zones II–III.

USES: Firewood, charcoal, timber, furniture, tool handles, poles, veneer, plywood, fodder (leaves, fruit), bee forage, shade, ornamental, windbreak.

PROPAGATION: Seedlings, direct sowing at site, cuttings.

SEED: About 1,400 seeds per kg. Germination rate 40–80% in 20–50 days under good conditions.

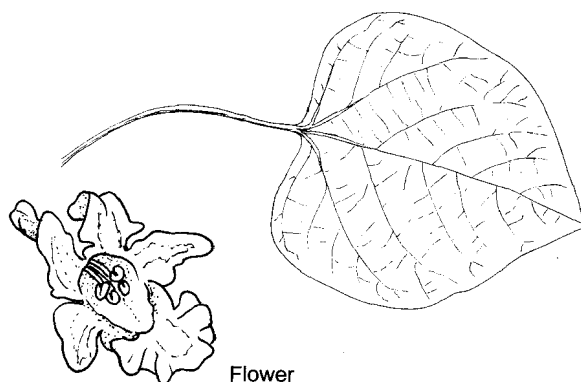
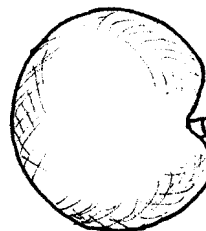
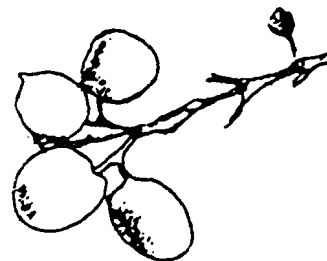
treatment: Soak seed in cold water for 24–48 hours.

storage: Seed can be stored for a year without loss of viability.

MANAGEMENT: Fast growing, pruning, lopping, coppicing. Coppices well when young but less well when stumps are old. Protect young trees from livestock. Young trees do not compete well with weeds. Established trees compete with crops and suppress undergrowth and thus should not be grown near cultivated land.

REMARKS: The greyish white soft wood is light and strong. The leaves are palatable to livestock and the fruits are also eaten.

FURTHER READING: <http://www.worldagroforestrycentre.org/Sites/TreeDBS/AFT/AFT.htm>; Albrecht, 1993; Bekele-Tesemma et al., 1993; Jensen, 1999; Katende et al., 1995; National Academy of Mbuya et al., 1994; National Academy of Sciences, 1979; Storrs, 1979.



Flower

