

Leaflet No. 26

Tree Seed Information Leaflet



Maesopsis eminii



Kenya Forestry Research Institute

June 2009

Species: *Maesopsis eminii* Engl.

Family: Rhamnaceae

Common name: Musizi or Mutere

Local name: Mutere (Luhya)

Description: *Maesopsis eminii* is large semi-deciduous tree (dropping leaves on some seasons). It grows to a height of 27m and has a straight bole. Bark is silvery, grey-brown to almost white and furrowed on old trees. Leaves are dark green and toothed along the edge. Flowers are small and greenish. Fruits are egg shaped, fleshy, yellow and turn purple when ripe.

Distribution: Naturally the species occur in rain forest. In Kenya natural populations are found in Kakamega forest and Taita Hills. It is widely planted in wetter highlands between 800 and 1650m above sea level.

Flowering and fruit development: Flowering occurs during the rain season, usually in December/January. Pollination is by insects and fruit matures in about 6 months after pollination. Fruits ripen between July and September.

Seed collection method: The mature purple fruits are collected from the ground following natural seed fall or by climbing the tree and shaking the branches to release the ripe fruits.

Seed extraction, cleaning and drying: Fruits are sun dried and then put in a concrete mixer with ballast at a ratio 1:2 (fruit to ballast). The mixture is then tumbled for 1 to 2 hours to erode the pulp from the fruits. Seeds are separated from the ballast by hand sorting and sun dried to the required moisture content of less than 10%. Alternatively, seeds can be extracted by soaking fruit in water for 24 hours and then rubbing against a screen/wire mesh and washing away the pulp in running water. Seeds are then sun dried to the required moisture content of less than < 10% for storage or distribution.

Number of seeds per kg: There are 500 to 900 seeds per kilogram depending on provenance and weather conditions during the seeding season.

Seed storage: Seed can be stored in airtight containers (glass or plastic jars, or aluminium packets) in a cool dry place for 1-2 years without significant loss of viability.

Seed sowing and germination: Seeds germinate within 20 to 30 days after sowing. Pretreatment is not necessary. The average germination rate of mature and healthy seeds is 40-60%. The expected number of seedlings per kg of seed is about 350.

To sow, seeds are spread thinly and evenly on a seedbed containing sand or a mixture of sand and soil and then covered with a thin layer of soil/sand. Watering is done regularly (morning and evening) until they germinate. The young seedlings are transplanted (pricked out) when they are large enough to handle (2-3 leaves). Transplanting can be to polythene tubes or other pot containing soil. Seedlings are planted out after 4-6 months when they are about 30cm tall.

Uses: *Maesopsis eminii* is used for production of timber, veneer and plywood.



For more information contact

The Director
Kenya Forestry Research Institute
P.O.Box 20412 - 00200
Nairobi, Kenya

Tel: +254-724-259781/2,
+254-722-157414
+254-20-2010651/2

E-mail: director@kefri.org
Website: www.kefri.org