

LOCAL NAMES

English (milletia)

BOTANIC DESCRIPTION

Millettia dura is a small tree up to 13 m tall, DBH 35 cm. Young stems brownish pubescent.

Leaflets 15-19, oblong, 8-9 cm long x 2-3 cm wide glabrous, except on the margins and midribs; leaf base asymmetric, tip acuminate. Leaf stipules strap shaped, 8 mm long, leaf rachis pubescent, up to 20 cm long; petiole 3-5 cm long; petiolules 3-4 mm long. Leaf stalk base has a pulvinus.

Flowers in pendulous, brown pseudoracemes, up to 15 cm long, peduncle 5 cm, floral bracts oval 1-2 mm long, pedicels up to 13 mm. Calyx brown pubescent; tube 6 mm. Corolla mauve; standard white, silky outside, 25 mm long. Ovary 18 mm long, pubescent 8-11 ovulate.

Pod flat, dehiscent, 14-20 cm long, up to 21 mm wide, glabrescent.

Seeds ellipsoid, oblique, funicle dilated proximally.

M. dura is easily confused with *M. ferruginea*. The generic name is after C. Millet, c.1830, an officer of the East Indian company. The specific epithet 'dura' reflects the locality from where the first botanical collection was made: the Dura River in Kibale forest Uganda.

BIOLOGY

M. dura is a hermaphroditic tree often fruiting when leafless.



Millettia dura tree on ICRAF campus, Nairobi (AFT team)



Millettia dura pods (AFT team)

ECOLOGY

M. dura is naturally found in upland evergreen forest margins and remnants.

BIOPHYSICAL LIMITS

Altitude: 1 200-1 650 m

Mean annual rainfall: 1 100-2 000 mm

Soil type: Adapts to a variety of soils.

DOCUMENTED SPECIES DISTRIBUTION

Native: Democratic Republic of Congo, Ethiopia, Kenya, Rwanda, Tanzania, Uganda

Exotic:



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

PRODUCTS

Fodder: The leaves can be fed to livestock.

Fuel: The tree is an important source of firewood and charcoal.

Timber: The wood is tough and resistant to termites. Used for poles and tool handles.

Poison: Parts of the plant are reportedly poisonous.

SERVICES

Erosion control: An important tree for soil conservation and improvement.

Shade or shelter: *M. dura* is an important shade tree in East Africa.

Reclamation: This species is fast growing and drought resistant once established a good candidate for afforestation endeavours.

Soil improver: The leaves are good mulch material and manure.

Ornamental: A beautiful tree suitable for avenue planting and gardens, spectacular in bloom.

Boundary or barrier or support: The termite resistant poles are good for fencing.

Intercropping: *M. dura* is intercropped with tea for shade and soil improvement.

TREE MANAGEMENT

M. dura is a fairly fast growing tree. Can be managed by lopping, coppicing and pollarding.

GERMPLASM MANAGEMENT

There are 6 000-10 000 seeds per kilogram. Germination is very good – up to 80% in 20 days. Soaking in cold water for 6 hours and seed coat nipping improves germination. Seed storage behaviour is orthodox but should be kept dry and insect free. Ash may be added to reduce insect damage.

FURTHER READING

Gillet JB et al. 1971. Leguminosae (Part 4), Sub-family Papilionoideae (Part 2). In: Flora of Tropical East Africa. Crown Agents, London, UK.

Katende AB et al. 1995. Useful trees and shrubs for Uganda. Identification, Propagation and Management for Agricultural and Pastoral Communities. Regional Soil Conservation Unit (RSCU), Swedish International Development Authority (SIDA).

SUGGESTED CITATION

Orwa C, Mutua A , Kindt R , Jambadass R, Simons A. 2009. Agroforestry Database:a tree reference and selection guide version 4.0 (<http://www.worldagroforestry.org/af/treedb/>)