## Tamarindus indica

## **Indigenous**

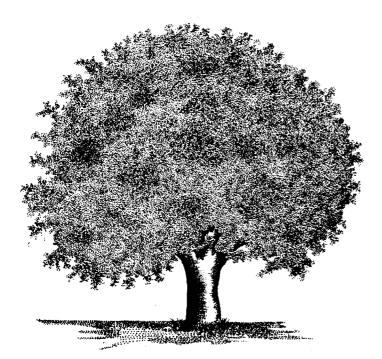
STANDARD/TRADE NAME: Tamarind, Mkwadju.

Common names: Bajun: Ukwaju; Boni: Mukai; Boran: Roqa, Groha; Digo: Mkwadzu; Embu: Muthithi; English: Tamarind; Giriama: Mkwaju, Kwaju (fruit); Kamba: Kithumula, Kikwasu (south-eastern Makueni), Nthumula (fruit), Nzumula (fruit), Ngwasu (fruit); Kipsigis: Lemecwhet, Lamaiyat; Luhya (Bukusu): Kumukhuwa; Luo: Ochwaa, Chwaa; Maasai: Oloisijoi; Malakote: Morhoqa; Marakwet: Aron, Oron; Mbeere: Muthithi; Meru: Muthithi; Nandi: Limaiyua, Lamayuet; Orma: Roqa; Pokomo: Mkwayu; Pokot: Oron, Arol (plant); Sabaot: Lemaiyua; Samburu: Rogei; Sanya: Roka; Somali: Hamaar, Hamar, Raqee (Tana River), Roge, Roqhe; Swahili: Mkwaju, Msisi, Ukwaju (fruit); Taita: Mkwachu; Taveta: Mase, Muzumura; Teso: Epeduru; Tharaka: Muthithi; Tugen: Aryek (fruit), Arwe (plant); Turkana: Epeduru.

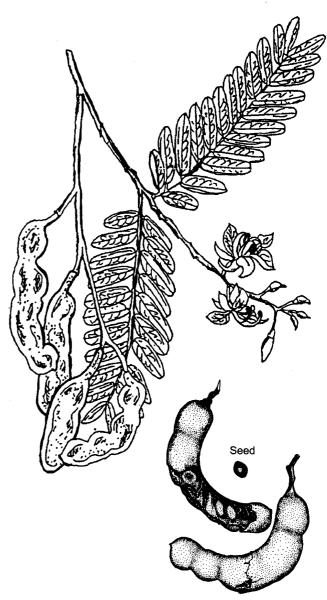
DESCRIPTION: A large tree to 30 m, with an extensive dense crown. The short bole can be 1 m in diameter. Evergreen or deciduous in dry areas. BARK: Rough, grey-brown, flaking. LEAVES: Compound, on hairy stalks to 15 cm, 10–18 pairs of leaflets, dull green, to 3 cm, oblong, round at the tip and base, veins raised. FLOWERS: Small, in few-flowered heads, buds red, petals gold with red veins. FRUITS: Pale brown, sausage-like hairy pods, cracking when mature to show sticky brown pulp around 1–10 dark brown angular seeds.

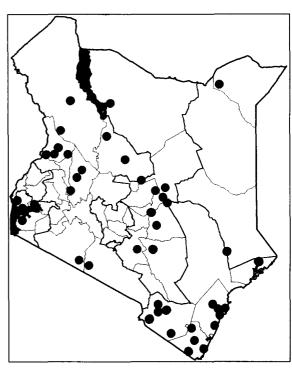
EcoLogy: Indigenous to tropical Africa; widely used in the Sahel, India, South East Asia, the Caribbean and Central America. A very adaptable species, drought hardy, preferring semi-arid areas and wooded grasslands, tolerating salty, coastal winds, even monsoon climates, 0–1,500 m. Grows in most soils, but prefers well-drained deep alluvial soil; often riverine in very dry areas. Agroclimatic Zones III–V. Flowers in April–May and in September–November and fruits in July–August and January–February in Bungoma.

Uses: Firewood, charcoal, timber, furniture, poles, posts, utensils (pestles and mortars, carts), boat building, food (edible fruit pulp, pulp also used for souring porridge,



## Fabaceae (Caesalpiniaceae)





## Tamarindus indica (cont)

drink, fried seeds, seasoning, flavouring), medicine (leaves, twigs, bark, roots), fodder, bee forage, shade, ornamental, mulch, nitrogen-fixing, tannin, dye, veterinary medicine.

**PROPAGATION:** Good mother trees should be chosen for vegetative propagation. Seedlings, wildings, direct sowing at site, grafting and budding for best varieties.

SEED: About 1,400 seeds per kg.

**treatment:** Germination rate about 90%. Nick or soak seed in cold water for 12 hours.

**storage:** Seed can be stored for long periods but is susceptible to attack by weevils. About 350–1,000 seeds per kg.

Management: Slow growing but long lived; pollarding, coppicing, pruning.

**REMARKS:** The fruit has many uses and is important for nutrition in many parts of the world, not least in India. Local trade in the fruit is common. Budded and grafted on a large scale in the Philippines.

FURTHER READING: http://www.worldagroforestrycentre.org/Sites/
TreeDBS/AFT/AFT.htm; Albrecht, 1993; Backes and Ahenda, 1998; Beentje, 1994; Bein et al., 1996; Bekele-Tesemma et al., 1993; Blundell, 1987; Dharani, 2002; Fichtl and Adi, 1994; ITDG and IIRR, 1996; Jensen, 1999; Katende et al., 1995, 1999; Kokwaro, 1993; Lötschert and Beese, 1983; Maundu et al., 1999; Mbuya et al., 1994; National Academy of Sciences, 1979; Noad and Birnie, 1989; Palgrave and Palgrave, 2002; Ruffo et al., 2002; Storrs, 1979; Verheij and Coronel, 1991; on Maydell, 1990