Dalbergia melanoxylon Fabaceae (Papilionaceae)

Indigenous

STANDARD/TRADE NAME: African blackwood, Mpingo.

COMMON NAMES: **Boni:** Samachi; **Digo:** Mpingo; **Duruma:** Maringo; **English:** African blackwood, African ebony; **Giriama:** Muhingo; **Kamba:** Muvingo; **Meru:** Mwengo; **Swahili:** Mpingo; **Taita:** Myingo.

DESCRIPTION: A much-branched, **spiny, often multi-stemmed shrub or well-branched tree to 7 m.** Trunk diameter seldom exceeding 30 cm, often twisted. **Grey-white** often spine-tipped branchlets bear the leaves, which cluster at the nodes. BARK: Light grey and smooth when young, rougher and flaking with age. LEAVES: Compound, on stalks to 20 cm, **leaflets 9–13,** each usually **1–2 cm but up to 6 cm at the coast, tip rounded or notched.** FLOWERS: Small, white, sweet scented in branched sprays to 12 cm long, appearing with young leaves. Corolla to 6 mm long. FRUIT: Bunches of grey papery pods, **thin and flat to 7 cm, pointed both ends,** 1–2 seeds inside.

ECOLOGY: A small tree of semi-arid Africa and India. Widely spread from northern Ethiopia, south to Angola and the northern part of South Africa and west to Senegal. The tree prefers areas with a high water table. In Kenya, common in Meru National Park and in Kitui District. Also occurs in Kilifi, Machakos and Taita Taveta Districts, in Tsavo East National Park and around Makueni. Often found in deciduous woodland or bushland, wooded grassland, in rocky sites or on black-cotton soils, 0–1,350 m. Agroclimatic Zones II–VI. Produces seed at the coast in September–December.

USES: Firewood, charcoal, timber (construction), furniture, poles, carving, walking sticks, musical instruments, medicine (bark, roots, leaves), fodder, bee forage, mulch, nitrogen-fixing.

PROPAGATION: Seedlings, wildings, cuttings. Produces root suckers.

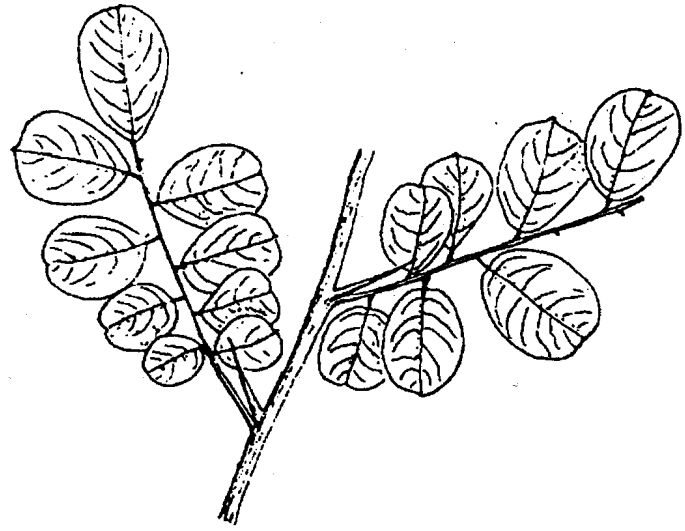
SEED: Pods left on the tree are soon attacked by insects, so collection of ripe grey pods should be done quickly. With pods, 6,000–16,000 seeds per kg; about 42,000 per kg clean seed extracted from pods. Good germination rates: 50–60% in 8–20 days. Water sparingly so seed does not rot.

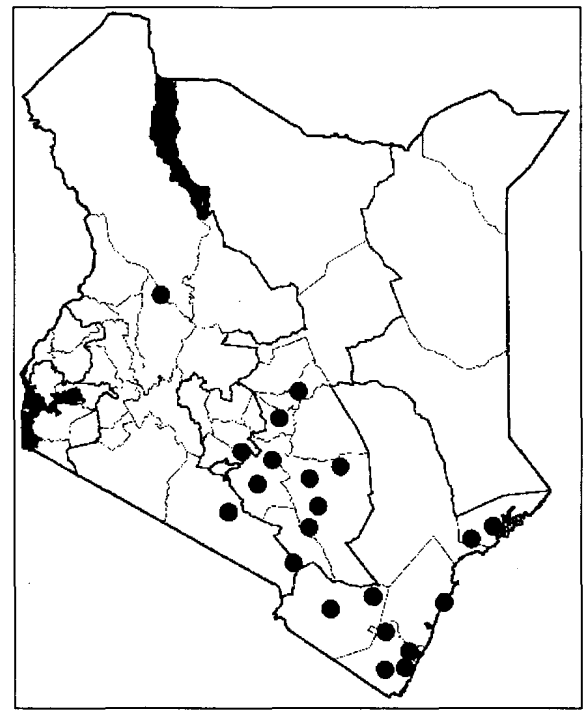
treatment: Break pods into short pieces, each with one seed, soak in cold water for 6 hours and then sow. Complete extraction of seed from the pod is difficult, but if done, there is no need for soaking.

storage: Seed can be stored for long periods if kept free from insects.

MANAGEMENT: Slow growing. Side-prune to get a clear bole. Coppices.

REMARKS: This tree provides one of the most valuable timbers known. It has hard, durable, termite-resistant, purple-black heartwood enclosed in a thin pale yellow



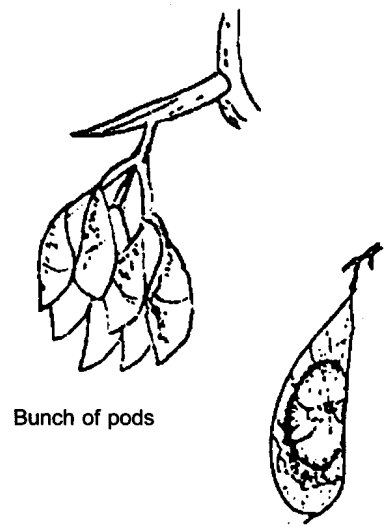


Dalbergia melanoxylon (cont)

outer layer of sapwood. The wood is dense and polishes well. It is most coveted by wood carvers who combine these two layers to produce high-quality carvings of various patterns. This is the wood that mainly supported the carving industry in Kenya from the early 1920s. By the 1980s, however, most of the larger trees in harvesting areas had been exterminated, leaving the industry to be supported by other species. The heartwood is used for musical instruments, combs, etc. Farmers should be encouraged to grow and manage these trees on their farms.

There are at least 8 *Dalbergia* species in Kenya (and about 100 worldwide). Many of them are shrubs, occasionally growing to tree size, while a few are lianas. The most widespread of these is *D. lactea* (**Kamba:** Mumbumbwa; **Kikuyu:** Mwaritha; **Maasai:** Oldisigon; **Meru:** Murumbega; **Nandi:** Bembet; **Pokomo:** Muchoyoko; **Taita:** Kinyondo), a shrub or liana which is usually found in the more humid parts of Kenya from the Taita Hills through central parts to western Kenya. The bark is used as a source of string.

FURTHER READING: http://www.worldagroforestrycentre.org/Sites/TreeDBS/AFT/AFT.htm; Albrecht, 1993; Beentje, 1994; Bein et al., 1996; Bekele-Tesemma et al. 1993; Dharani, 2002; Katende et al., 1995; Kokwaro, 1993; Mbuya et al., 1994; National Academy of Sciences, 1979; Noad and Birnie, 1989; Palgrave and Palgrave, 2002; Storrs, 1979; von Maydell, 1990.



Bunch of pods

Single pod