## Prosopis juliflora

## Central America, Mexico

STANDARD/TRADE NAMES: Mesquite, Algaroba, Mathenge (Kenya). COMMON NAMES: Turkana: Eterai; Somali: Mathenge.

DESCRIPTION: Often a spreading shrub, but can become a shapely tree to 6 m or more, though usually 3–5 m. The bole short, young branches smooth green. BARK: Thick, rough green-grey, scaly with age. Some with pairs of thorns to 5 cm. LEAVES: Bipinnate with 2–3 pairs of pinnae, stalks to 6 cm, leaflets oblong narrow, 1.5 cm long, no terminal leaflet. FLOWERS: Gold-yellow, densely crowded in spikes, 5–10 cm, fragrant. FRUIT: Yellow pod, 10–20 cm (more brittle than *P. chilensis*), sweeter, darker; 10–20 hard seeds inside, difficult to extract.

Ecology: A thorny shrub or tree cultivated all over the tropics, it grows well in arid regions, producing deep roots and tolerating sandy, rocky or poor and saline soils, 0–1,500 m. Agroclimatic Zones II–VII (riverine).

Uses: Firewood, charcoal, timber, poles, posts, carvings, edible fruit, medicine, fodder (leaves and pods), bee forage, shade, nitrogen-fixing, soil conservation, sanddune stabilization, windbreak, live fence.

**PROPAGATION:** Seedlings, direct sowing at site. Produces root suckers.

**SEED:** 8,000–15,000 seeds per kg; germination 40–80%. Seeds can be extracted by exposing pods to termites. **treatment:** Not necessary.

**storage:** Seed stores well, both in pods and when extracted. They are not attacked by insects.

Management: Fairly fast growing; lopping, pollarding and coppicing. Leaves and pods can be lopped for goats.

**REMARKS:** This tree becomes a weed in hot areas, especially in irrigation schemes, where planting it should be avoided. It sets seed after 3–4 years. This *Prosopis* has a great many variants and is closely related to *P. chilensis*, causing some confusion in identification. But this species is more shrubby than *P. chilensis* and the leaflets are more closely packed; it also spreads faster, blocking rivers and roads, and competes more aggressively with crops.

These 2 species are now widely planted in Kenya, especially in dry areas such as Turkana District. Mesquite was

## Fabaceae (Mimosaceae)

introduced to North Eastern Province in the 1970s and is now naturalized. It has become an aggressive weed in most urban and peri-urban areas of northern Kenya and along the main rivers such as the Tana. Its thorns cause frequent tyre punctures in donkey carts and are reported to cause infections if they pierce the skin. Local herdsmen have attributed some deaths in livestock to prolonged consumption of mesquite. It is also reported that around water ponds the plant discolours water and affects the taste. As a result, people in those areas now have a negative attitude towards this plant.

FURTHER READING: http://www.worldagroforestrycentre.org/Sites/TreeDBS/AFT/AFT.htm; Albrecht, 1993; Bekele-Tesemma et al., 1993; Dharani, 2002; Katende et al., 1995; Maundu et al., 1999; Mbuya et al., 1994; National Academy of Sciences, 1979, 1980; von Maydell, 1990.

