

Prosopis chilensis

Fabaceae (Mimosaceae)

Chile, Argentina

STANDARD/TRADE NAMES: Chilean mesquite, Mathenge (Kenya).

COMMON NAMES: **Turkana:** Eterai; **Somali:** Mathenge.

DESCRIPTION: A usually thorny tree or shrub 8–15 m with light to dense foliage. **BARK:** Grey, cracked. **LEAVES:** Alternate, compound. **Leaflets well spaced, oblong, tip pointed, narrow, 1.5 cm long, no terminal leaflet.**

FLOWERS: In greenish yellow spikes turning yellow-brown. **FRUIT:** **Pods, about 10 cm long, yellow when ripe, becoming black, borne in large numbers, each with up to 25 seeds within a slightly sweet pulp.**

ECOLOGY: Cultivated all over the tropics. It is drought-resistant and grows on light sandy soils. Tolerates some waterlogging but is sensitive to weed competition while young. Tolerant of extreme temperatures, severe drought and overgrazing. Introduced in Kenya, e.g. in Baringo, Wajir, Magadi, Mandera and Turkana, 0–1,500 m. Listed internationally as an invasive species; invasiveness has been recorded from South Africa and Namibia to Australia. Seeds may remain dormant in the soil for up to 10 years, but germination is enhanced by passage through the digestive tract of herbivores. This species resprouts vigorously after cutting from dormant buds underground, so when attempting to clear it the roots must be grubbed out and the operation repeated in successive years.

Prosopis species, generally referred to as mesquites, have demonstrated their invasiveness in Kenya too, especially in irrigation schemes in hot areas. Agroclimatic Zones IV–VII. Mature fruit in Garissa and Tana River in December and January.

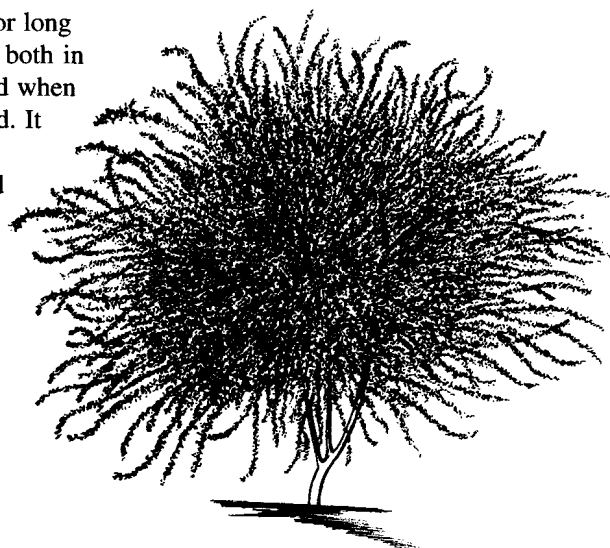
USES: Firewood, charcoal, timber, poles, posts, edible fruit and leaves, fodder (pods), bee forage, shade, soil conservation, gum, tannin, live fence.

PROPAGATION: Seedlings, direct sowing at site.

SEED: Seeds can be extracted by exposing pods to termites or soaking in water. Germination rate may be 45–80% within 10–30 days.

treatment: Immerse in boiling water, remove from fire and allow to soak for a minute. Alternatively, soak in cold water for 24 hours or nick seed.

storage: Seed can be stored for long periods, both in pods and when extracted. It is not attacked by insects.



MANAGEMENT: Fairly fast growing even in dry conditions; coppicing, pruning. Leaves and pods can be lopped for goats.

REMARKS: This species has a shapely tree form (unlike *P. juliflora*). Some thornless forms may occur. Since the tree can become a weed in wetter areas, planting in cultivated areas, e.g. irrigation schemes, should be avoided. Pods contain much sugar and are excellent animal feed, sometimes ground to a powder concentrate. The tree has a shallow adventitious rooting system, and a very deep taproot. There are about 44 mesquites, most of which are found in the warmer parts of the Americas and a few in Asia and Africa. A number of them are terrible weeds.

FURTHER READING: <http://www.worldagroforestrycentre.org/Sites/TreeDBS/AFT/AFT.htm>; Albrecht, 1993; Bein et al., 1996; Maundu et al., 1999; Mbuya et al., 1994; National Academy of Sciences, 1979, 1980; Palgrave and Palgrave, 2002.

