

***Cordia sinensis* (C. gharaf, C. rothii)****Boraginaceae****Indigenous**

**COMMON NAMES:** **Boran:** Harores, Mader, Mader boor, Mader qoowe; **Chonyi:** Mkayukayu; **Gabra:** Madeer; **Giriama:** Mderia, Mkayukayu; **Ilchamus:** Salapani, Lgweita; **Kamba:** Kithea, Muthei munini, Kithia; **Kipsigis:** Nokirwet; **Maasai:** Oldorko; **Malakote:** Mutalya chana (Riverine, Tana River), Mutaale; **Marakwet:** Adomoyon; **Orma:** Mader; **Pokomo:** Muhale, Mhali; **Pokot:** Adomeyon, Adome (fruit); **Rendille:** Gaer, Koh, Madeer, Gayer; **Samburu:** Ilgoita, Ikweite, Dorgo, Lmanturre, Lgueita, Lgweita orok, Silapani; **Sanya:** Hoorocha; **Somali:** Mareer, Marer; **Swahili:** Mkamasi, Mnya mate; **Tugen:** Adumewa, Edoma (leaves), Adomewa; **Turkana:** Edome; **Wardei:** Marer.

**DESCRIPTION:** A tangled deciduous shrub or small multi-branched tree, 3–12 m, often with drooping branches. **BARK:** Young bark smooth grey-white, later yellow-brown to black, roughly grooved. **LEAVES:** **Grey-green, narrowly oblong** to 9 cm long, feel rough to touch, with hairs both sides, tip rounded or notched, on a **stalk about 1 cm**. Leaves more or less opposite. **FLOWERS:** Tubular and small, fragrant, in cream terminal clusters, on branched hairy stalks. **FRUIT:** Egg-shaped, to 2 cm, clearly tipped, held in a calyx cup, **orange-red like egg yolk** with very **sticky edible pulp**. The calyx has a toothed edge and covers 1/3 of the fruit.

**ECOLOGY:** Grows from West Africa east to the Middle East, India and Sri Lanka and south to South Africa. Wide-spread in the drier parts of Kenya but absent in Western and Nyanza Provinces. Found in dry sites, usually with *Salvadora persica* in open bushland, usually 0–1,400 m. Mainly alluvial, sandy, red loam and rocky soils. Agroclimatic Zones III (coast)–VII. Flowers in April–May (Turkana); fruits in March (Kilifi), May–June (Kajiado, Kitui), August–September (Garissa, Samburu, Turkana, Kajiado).

**USES:** Firewood, timber (construction), furniture (traditional stools), poles, tool handles (for hoes), utensils (spoons, stirrers, fish traps), walking sticks, arrows, edible fruit, drink, edible gum, medicine (roots, bark), fodder (leaves), bee forage, fibre, fruit used as glue, ceremonial, veterinary medicine, fire making, smoking containers.

**PROPAGATION:** Seedlings, wildings.

**SEED:** 14,000–18,000 seeds per kg. The fruits should be de-pulped immediately after collection by rubbing over a wire mesh under running water. Adding sand may facilitate the process. Pulp and stones can then be separated by floating in water. Each fruit contains up to 4 tiny seeds (multi-germ). Germination up to 60% after 30 days.

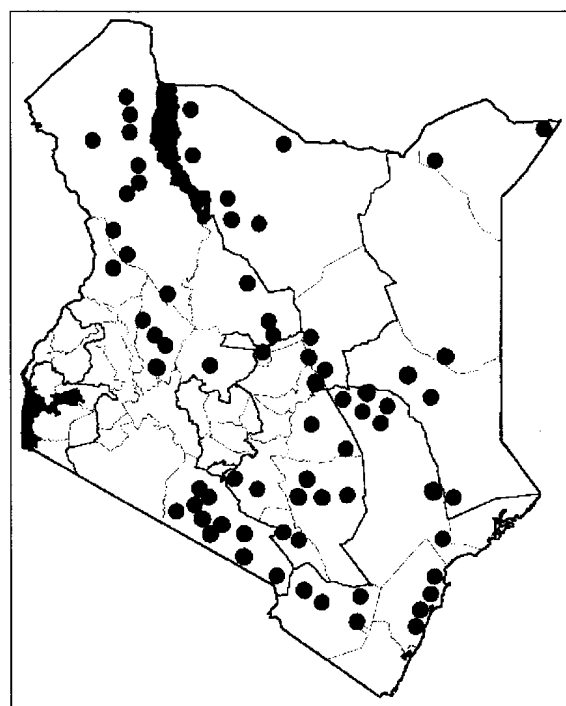
**treatment:** Not necessary for fresh seed. For stored seed pour warm water (40°C) on the seeds and soak until the water is cool.

**storage:** De-pulped fruit can be stored for a few months.

**MANAGEMENT:** Fairly fast growing, lopping, pollarding, coppicing. Several seedlings may germinate from each stone. Can be pricked out.

**REMARKS:** A very useful tree in dry areas. Flexible branches are dry, light and do not snap; used for supports on camel pack-saddles. Ripe fruits eaten raw. The sweet mucilagi-

nous pulp may be eaten, while the fruit cover and seeds are discarded. Alternatively, fruits are gathered, pounded to a sticky mass, sun-dried and stored in a wooden container (*eburr*: Turkana). The fruit pulp is sometimes used for brewing a local beer. Fresh juice may also be drunk (Turkana). A clear gum produced by the tree is



***Cordia sinensis* (cont)**

edible. Stems are widely used as poles in hut construction (Turkana, Pokot, Boran, Somali, Gabra). The Turkana use this plant to erect bird-scaring platforms in their sorghum fields. In many cases these may root, hence becoming a nearby source of food. Fodder for goats, camels, sheep and cattle. Fruits sold in Lodwar (Turkana). Poles for construction sold (Pokot, Turkana). *C. sinensis* is a very variable species. In northern Kenya and at the coast it tends to have longer, smooth leaves. In the Tharaka, Kitui, Mbeere, Machakos and Kajiado areas, the leaves tend to be more coarse, shorter and with an irregular margin.

**FURTHER READING:** Albrecht, 1993; Beentje, 1994; ITDG and IIRR, 1996; Katende et al., 1995, 1999; Kokwaro, 1993; Maundu et al., 1999; Mbuya et al., 1994; Palgrave and Palgrave, 2002; Ruffo et al., 2002.

