

Sclerocarya birrea* (S. caffra)*Anacardiaceae****Indigenous**

COMMON NAMES: **Boran:** Didissa; **Chonyi:** Fula (fruit), Mfula; **Digo:** Mng'ongo; **English:** Marula; **Giriama:** Mfula, Mufula, Fula (fruit); **Ilchamus:** Lmang'wa; **Kamba:** Mauw'a (fruit), Maua (fruit), Muuw'a; **Luo:** Ong'ong'o, Ng'ongo, Mang'u; **Maasai:** Olmang'uai, Ilmanguai (plant); **Marakwet:** Arol, Oroluo; **Meru:** Mura; **Pokot:** Orolwo; **Sabaot:** Kotelalam, Katetalam; **Swahili:** Mng'ongo, Mongo, Mungango, Morula; **Teso:** Ekajikai; **Tugen:** Tololokwo; **Turkana:** Ekajiket.

DESCRIPTION: A deciduous tree 10–18 m with a thick bole and large branches to a light, rounded crown. **BARK:** Grey, then black and thick with irregular cracks and raised scales; inner bark pink-red. **LEAVES:** Compound, crowded at tips of branches, 3–18 pairs of leaflets, each stalked, oval to 10 cm, tip pointed or blunt. **FLOWERS:** Male and female flowers on the same or different trees; pale green male flowers in spikes, hanging down and often with insects; female flowers solitary, green-pink. **FRUIT:** Rounded and fleshy to 3.5 cm across, skin cream, spotted, peeling away from the sweet flesh, which tastes a bit like mango. Each fruit contains a hard edible stone that has 2–3 large seeds inside, oily and edible.

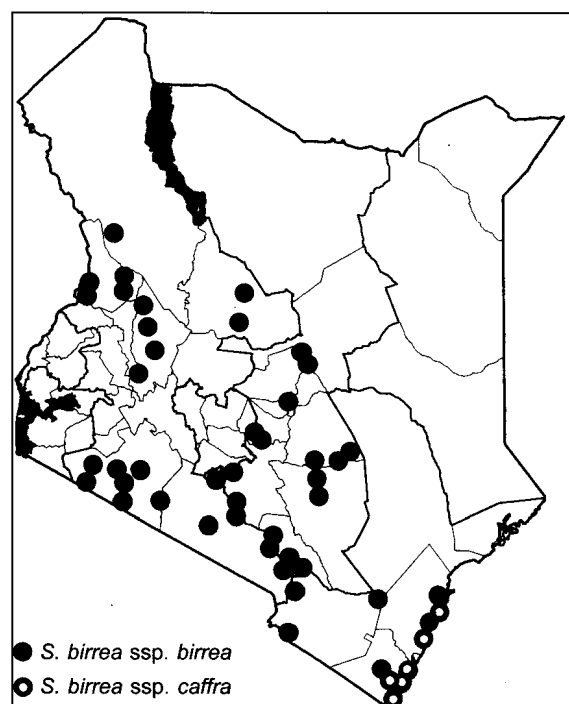
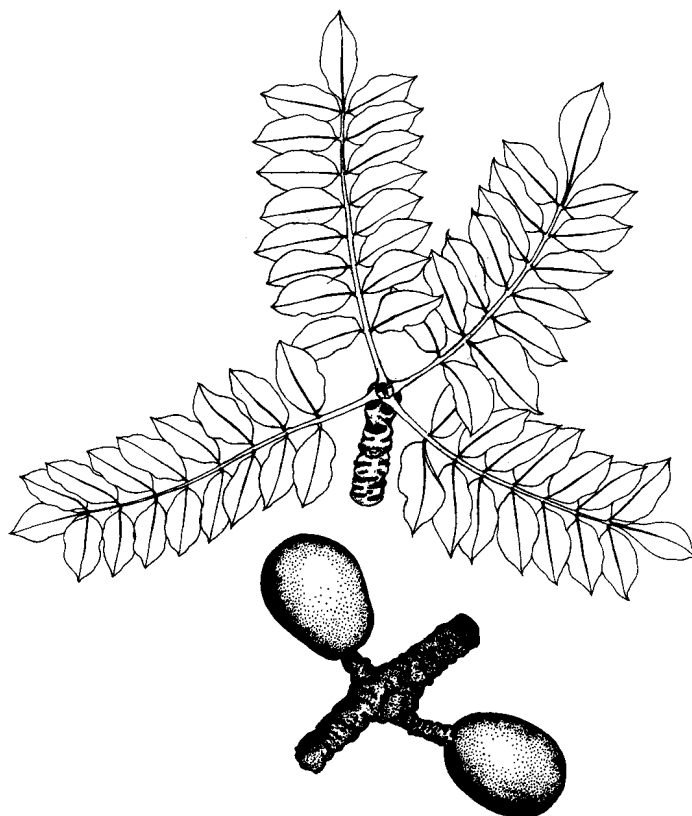
ECOLOGY: An African fruit tree occurring at medium to low altitudes from West Africa to Ethiopia and south to Natal scattered in mixed deciduous woodland and wooded grassland. Subsp. *birrea* is found from Senegal to Ethiopia and widespread in Kenya, e.g. in Lambwe Valley, Moyale, in West Pokot and Baringo, in wooded grasslands and on rocky hillsides; 500–1,600 m. Commonest on sandy loam soils as well as dry rocky riverbeds. Subsp. *caffra* is found in coastal and adjoining areas; 0–1,200 m. Open bushland, especially on sandy loam soils and rocky hillsides. Subsp. *caffra* is known to be highly salt tolerant. In Israel it grows well under irrigation with salty water. Agroclimatic Zones III (in warm humid areas)–V.

Uses: Firewood, charcoal, timber (general purpose),

furniture (stools), poles, beehives, carvings, utensils (pestles, grain mortars, bowls), edible fruit, drink, fat (seed), medicine (bark, roots, leaves), fodder (leaves, seeds), bee forage, shade, mulch, fibre (bark), dye (bark).

PROPAGATION: Seedlings, cuttings, truncheons (large woody cuttings), grafting; produces root suckers.

SEED: Mature fruits fall while still green and ripen to a yellow colour on the ground. About 400–450 stones per kg, each with 2–3 seeds. Germination is 40% after 6 weeks.



Sclerocarya birrea (cont)

treatment: Germination is hastened if flesh is removed, seed cleaned and soaked for 24 hours in cold water before sowing.

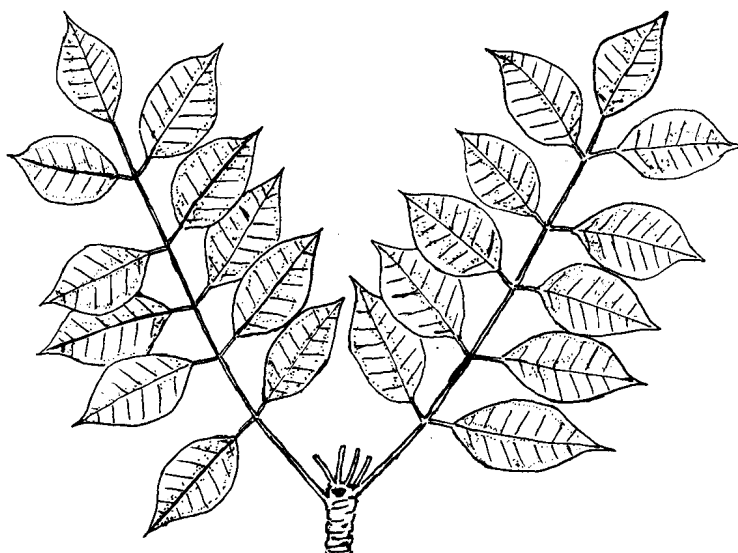
storage: Viability is lost within a month at room temperature. Stores well in airtight containers at cooler temperatures.

MANAGEMENT: Young trees coppice easily; can be grafted for best varieties.

REMARKS: The leaves of the 2 subspecies differ. Subsp. *caffra* has leaflets usually longer than 3 cm and with a pointed tip, while subsp. *birrea* has leaflets usually less than 3 cm long and that are blunt or sharp at the tip.

Young trees are susceptible to fire damage. The fruit is rich in vitamin C, is well liked by children and also eaten by a variety of game (including elephants), and also by goats. The firewood takes time to dry. Archaeological evidence indicates that the fruit of *S. birrea* subsp. *caffra* was known and consumed by humans in Africa more than 10,000 years ago.

FURTHER READING: <http://www.worldagroforestrycentre.org/Sites/TreeDBS/AFT/AFT.htm>; Beentje, 1994; Bein et al., 1996; Katende et al., 1995, 1999; Kokwaro, 1993; Maundu et al., 1999; Mbuya et al., 1994; Palgrave and Palgrave, 2002; Ruffo et al., 2002; Storrs, 1979; van Wyk, 1993; von Maydell, 1990.



S. birrea ssp. *caffra*