

Averrhoa bilimbi

Oxalidaceae

South East Asia

COMMON NAMES: Digo: M'birimbi; Giriama: Mbirimbi; **English:** Bilimbi, Cucumber tree; **Sanya:** Mbirimbi; **Swahili:** Mbirimbi.

DESCRIPTION: A small tree with few, upright branches, 6–9 m high. **LEAVES:** Compound, usually with 7–19 pairs of 5–12 cm ovate leaflets and a single terminal leaflet. **FLOWERS:** Emerging in leaf axils or on branches and trunk (cauliflorous), with 10–22 mm red-purple free petals. **FRUIT:** A yellowish green berry, slightly lobed and up to 10 cm long and 5 cm wide, translucent when ripe. The soft juicy flesh is edible but acid; contains a few flattened seeds.

ECOLOGY: Probably a native of the Malaya Peninsula but now cultivated all over the wetter tropics. Prefers seasonal humid climates with a drier season but not actual drought and acidic soils. Flooding and salinity are not tolerated. In Kenya, it is planted at the coast where it tolerates rocky soils derived from coral. Grows also around Lake Victoria in Uganda. Agroclimatic Zones I–III.

USES: Edible fruit (pickles, curry, chutney, preserves in syrup), flavouring.

PROPAGATION: Seedlings. Air layering (marcotting). Grafting.

SEED: Extracted by crushing the fruit and hand picking the seed.

treatment: Not necessary.

storage: Sow as quickly as possible.

MANAGEMENT: Fast growing. Thinning of excess fruit in the early stages. Plant trees 4–6 m apart.

REMARKS: Fruit is too acidic to be eaten raw but it may be pickled in the same manner as cucumber, which it resembles in appearance; may also be preserved in syrup or used as a relish with meat or fish. Fruit is also used for jams and jellies. A good appetizer and good for flavouring other food. *A. carambola* (**English:** Carambola, Star fruit), the only other member in the genus, is a similar tree, to 6 m, also cultivated at the Kenya coast. The fruit has similar uses. Distinguished from *A. bilimbi* by having smaller leaves, fewer leaflets and whitish or pink flowers. The carambola fruit is oval or elliptic in outline, ripening through translucent yellow (when flavour is acid) to a

golden orange colour (when sweet and delicious), about 10 cm long and 3-, 4- or 5-ribbed longitudinally, so that a cross-section is star-shaped. The pulp is astringent when green but pleasantly acid or even sweet when ripe. Both species of *Averrhoa* are widely cultivated in the tropics, but carambola extends to frost-free subtropical areas too. They are long-lived trees, bearing flowers and fruits through much of the year. Budding of carambola has been successful, but budwood should be beyond the tender stage although not so old that it is brittle.

FURTHER READING: <http://www.worldagroforestrycentre.org/Sites/TreeDBS/AFT/AFT.htm> (*A. carambola*); Jensen, 1999; Lötschert and Beese, 1983; Verheij and Coronel, 1993.

