

***Psidium guajava***

Myrtaceae

**South and Central America**

**COMMON NAMES:** English: Guava; Kamba: Kivela; Kikuyu: Mubera; Luhya: Lipera; Luo: Maperu; Somali: Zeitun; Swahili: Mpera.

**DESCRIPTION:** A small evergreen tree to 8 m, branching irregularly. **BARK:** Smooth, pale brown, later peeling and flaking; **young shoots 4-sided.** **LEAVES:** Large, **dull and oval to 15 cm long**, side veins prominently hairy below, in opposite pairs. **FLOWERS:** White, about 2.5 cm across, 1–3 together beside leaves, many stamens. **FRUIT:** Rounded to 6 cm long, **tipped by remains of the calyx; pink, white or yellow**, depending on the variety. The **sweet flesh** surrounds many hard angular seeds. Seedless varieties exist.

**ECOLOGY:** A small tree or shrub now widely cultivated in the tropics for its fruit, naturalized in Kenya. The trees grow easily in most light soils. Popular in many areas, including dry ones. Bats, birds, including chickens, cattle, pigs and humans distribute the seed. It is internationally recognized as a serious invader. Recorded as invasive in Hawaii, the Galapagos Islands, South Africa, Zimbabwe and New Zealand. As it regenerates readily from the underground parts by suckering, it is extremely difficult to kill. In Kenya, it has spread extensively in the western parts of the country, particularly humid parts of Western and Nyanza Provinces. However, it does not seem to establish in and colonize natural ecosystems successfully but is a vigorous colonizer of disturbed ground, roadsides, etc. Agroclimatic Zones I–V. Mature fruit May–June in Machakos, July in Nairobi.

**USES:** Firewood, tool handles, edible fruit (rich in vitamin C), jam, jelly, drink (juice, tea from bark, roots used in soup), medicine, fodder (leaves for goats and camels), bee forage, ornamental, shade, soil conservation, dye (root bark), live fence, toothbrushes.

**PROPAGATION:** Seedlings, wildings, direct sowing at site, root suckers, root cuttings, air layering, grafting. Guava grown for processing may be propagated by seed; about 70% of seedlings retain the general characteristics of the

mother tree. Guava grown for fresh fruit should be clonally propagated. Air layering is possible, but for larger numbers shield or patch budding or grafting onto seedling rootstocks is recommended.

**SEED:** Produces many seeds. Propagation by seed is very easy.

**treatment:** Not necessary.

**storage:** Seed can be stored for long periods.

**MANAGEMENT:** Fast growing; pruning, coppicing. Lower branches need constant pruning.

**REMARKS:** Trees begin to bear fruit after 2 years and continue fruiting up to 30 years. Improved varieties (fruit size and quality) exist. The wood is termite resistant. Quite competitive and branches and roots need pruning if grown with crops. The genus *Psidium*, with about 100 members, is tropical American. Several other species with smaller fruit are also cultivated in Kenya.

**FURTHER READING:** <http://www.worldagroforestrycentre.org/Sites/TreeDBS/AFT/AFT.htm>; Bein et al., 1996; Bekele-Tesemma et al., 1993; Dharani, 2002; Fichtl and Adi, 1994; Jensen, 1999; Katende et al., 1995; Lötschert and Beese, 1983; Mbuya et al., 1994; National Academy of Sciences, 1983; Noad and Birnie, 1989; Verheij and Coronel, 1991.

