

Leucaena leucocephala

Fabaceae

Central America

Am: *Lukina*

Eng: *Leucaena, Pink leucaena, Lead tree*

Or: *Lukina*

Tg: *Lukina*

Ecology

Widely introduced in the tropics over the past 100 years, reaching Africa in 1950. It grows best in humid Bereha and Moist and Wet Kolla agroclimatic zones in full sunlight on well-drained neutral or calcareous soils, 0-1,600 m. It does not tolerate acidic soils or very dry places. It is recognized as an invasive species and has been invasive in the coastal areas of East Africa. It is replacing indigenous forests in the Hawaiian Islands. A psyllid insect pest, *Heteropsylla cubana*, causes defoliation. The insect spread by chance from Central America to Hawaii in 1984, and has more recently spread through Asia and into East Africa.

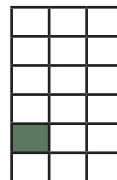
Uses

Firewood, charcoal, timber (from giant types), poles, fodder (leaves, shoots), bee forage, ornamental, green manure, nitrogen fixation, soil conservation, soil improvement, live fence.

Description

An evergreen shrub or tree 5–20 m, depending on the variety, medium leafy canopy, develops a deep tap-root even as a seedling. **LEAVES:** Compound alternate with many leaflets, each thin and pointed to 1.5 cm. Leaves and leaflets fold up with heat, cold or lack of water. There is a

conspicuous round mark on the leaf stalk just before the leaflets. **FLOWERS:** White, round heads about 2 cm across on a long stalk from the leaf axil. **FRUIT:** Numerous bunches of thin, dry pods 10–15 cm, persisting on the tree, releasing 12–25 hard, shiny brown seeds.



Propagation

Seedlings, direct sowing at site.

Seed

The species is a prolific seeder. Germination rate 50–85%. 13,000–34,000 seed per kg, most often around 20,000.

Treatment: Soak in hot water for two minutes.

Storage: Seed can be stored for long periods if kept dry and insect free.

Management

Very fast growing. Lopping. It coppices well.

Remarks

The many varieties have been classified into three types; the giant types preferred. The tree is a potential weed due to prolific seed production and aggressive root system, especially in hot, humid conditions. Mimosine in the leaves can cause hair loss and stomach problems in livestock. Total feed should not contain more than 20% of *Leucaena*. Root nodules are very active in fixing nitrogen under suitable conditions. In Kenya, the psyllid defoliates the leucaena, resulting in severely reduced production of fodder as well as wood, but without killing the leucaena.



Photo: Patrick Maundu

