

Leucaena leucocephala (L. glauca)

Mimosoideae

Central America

- Common names: Bond: mbegu; Swah: mlusina.
- Ecology: Originally from the drier western side of Central America. now perhaps the most widespread exotic in the tropics Naturalized in the Philippines, Indonesia, Hawaii and in Kenya along the coast. In Tanzania it was introduced on an experimental basis in Morogoro (Sokoine University of Agriculture) where it proved a success as an agroforestry species. Now it is used in several areas in the country. Leucaena grows best at 0-1,600 m altitude in full sunlight and in well-drained neutral or calcareous soils. It does not tolerate acidic soils. Needs at least 600 mm rainfall. It develops a deep taproot even as a seedling.
- Uses: Firewood, charcoal, fodder (leaves, shoots), bee forage, mulch, green manure, soil conservation, nitrogen fixation, soil improvement, shade, ornamental, live fence.
- Description: An evergreen shrub or tree 5-20 m depending on the variety, medium leafy canopy. 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. FLOWERS: white, round heads about 2 cm across on a long stalk. 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, root suckers.
- Seed info.: No. of seeds per kg: 13,000-34,000. The species is a prolific seeder. Germination rate: 50-85% within 8 days.
- treatment: soak in hot water for 2 minutes or nick the seed coat with a knife to improve germination.
- storage: properly dried seeds can be stored for several years.
- Management: Very fast growing; pollarding, lopping, coppicing.
- Remarks: If not properly managed in areas of high rainfall it becomes a weed due to its prolific seed production. Livestock feed should not contain more than 20% of Leucaena as the mimosine in the leaves can cause hair loss and stomach problems. Root nodules are very active in fixing nitrogen under suitable conditions. The Leucaena psyllid, *Heteropsylla cubana*, has recently appeared as a serious pest of *Leucaena leucocephala* in East Africa. Varieties which are resistant to the pest are being developed. *L. diversifolia* has also shown some resistance to the psyllid.

