

# LEUCAENA

Lead Tree, Wild Tamarind, Jumbie Bean, Red Leucaena

*Leucaena diversifolia*, *L. leucocephala*, *L. pallida* X *L. leucocephala*

Leguminosae

## ECHO® PLANT INFORMATION SHEET

### Description

Leucaena is a multipurpose tree species that can withstand almost any type or frequency of pruning or coppicing. It is native to Mexico and Central America, and now abundant in the Philippines, West Africa, Nepal, Australia and Hawaii. Spanish sailing vessels reportedly introduced Leucaena to Asia four centuries ago. A total of thirteen species of Leucaena, mostly shrub species, are distributed within the New World tropics and subtropics.

### Uses

Its green pods and high-protein leaves are a source of livestock fodder. Dried leaves also are processed as pellets for livestock and poultry. In its native regions the foliage also is eaten by humans in salads and soups or cooked as a vegetable. Leucaena is used as a shade tree in cacao, tea, coffee and teak plantations. It also is planted as a windbreak or as hedges and living fences. Because of its nitrogen-fixing capability, Leucaena lends itself well to reforestation projects designed for soil nutrient improvement. Leucaena also has been used successfully in projects designed to retard soil erosion losses or to rejuvenate soil water-holding capacity. Leucaena's rapid growth capability and its relatively dense wood make it a good choice for paper pulp and fuelwood uses.

### Common Names

- Tagalog
  - Bayani
  - Ipil Ipil
- Indonesian
  - Lamtoro

### Cultivation

- Elevation: 200-2500 m (650-8200 ft)
- Rainfall: 600-2800 mm (24-110 in)
- Temperature: 20° C (68° F) somewhat frost tolerant
- Soil: any Seeds fresh from the pods may be planted without pre-treatment.

In the tropics, *Leucaena diversifolia* grows in areas from 200-2500m altitude. It is found in cool and seasonally wet locations with an average annual rainfall of 600-2800mm and a mean maximum temperature in the hottest month of 18-30°C. It does not withstand drought well. It has a high light requirement and tolerates only partial shade.

Stored seeds need to be nicked with a knife to break the seed coat or given a hot water treatment to break seed dormancy. Add boiling water for 3-5 minutes and then allow the seeds to stand for 24 hours in cool water. Inoculation with rhizobia is recommended on many soils where Leucaena has never been grown before, although the rhizobia are almost universal in tropical soils. Inoculate the seeds by mixing the seeds in a plastic bag with a small amount of a sticker substance (60 mL/¼ cup sugar dissolved in 120 mL/½ cup water) to make the inoculum adhere to the seed. Add commercially prepared Leucaena inoculum powder to the treatment bag, inflate the bag, and gently mix the contents. Spread treated seeds on a clean surface to air-dry. Plant immediately after treatment, or store treated seeds under refrigeration until planting. Unused amounts of sticker substance or inoculum powder may be stored under refrigeration.

### Harvesting and Seed Production

Leucaena seeds itself readily, and it may become a weed in environments favorable to its growth. Seed weevils may eat seeds in the pods.

### Pests and Diseases

Extensive Leucaena stands have been decimated by an insect pest called "*Leucaena psyllid*" or "jumping plant louse." In psyllid-infested regions, use the K-636 psyllid-resistant Leucaena strain or other psyllid-resistant strains. Seed weevils may eat seeds in the pods.

### Cooking and Nutrition

Unripe green seeds sometimes are eaten raw or added to salsa. Ripe seeds may be used as a coffee substitute or parched like popcorn. Leucaena plant parts contain the amino acid, mimosine, that causes animal hair loss, goiter, and reduced reproduction if Leucaena plant parts are a significant component of the diet. Non-ruminant animals are particularly susceptible to the above-mentioned effects. Leucaena plant parts should not be fed to horses or sheep. Cattle and goats usually tolerate up to a 50% Leucaena diet. Pigs may be fed up to a 10% Leucaena diet, poultry only to 5%.

### References

Heuzé V., Tran G., 2015. *Leucaena* (*Leucaena leucocephala*). Feedipedia, a programme by INRA, CIRAD, AFZ and FAO. <https://www.feedipedia.org/node/282> Last updated on September 9, 2015, 10:46

[http://keys.lucidcentral.org/keys/v3/eafrinet/weeds/key/weeds/Media/Html/Leucaena\\_leucocephala\\_\(Leucaena\).htm](http://keys.lucidcentral.org/keys/v3/eafrinet/weeds/key/weeds/Media/Html/Leucaena_leucocephala_(Leucaena).htm)

<https://pfaf.org/User/Plant.aspx?LatinName=Leucaena+leucocephala>

[http://www.tropicalforages.info/key/forages/Media/Html/entities/leucaena\\_diversifolia.htm](http://www.tropicalforages.info/key/forages/Media/Html/entities/leucaena_diversifolia.htm)