

## *Leucaena leucocephala*

### **Common name:**

Leucaena,

### **Palatability to Livestock:**

Moderate.

### **Toxicity to Goats:**

Moderate.

### **Toxicity to Other Species:**

Cattle, sheep, horses.

### **Poisonous Principle:**

Mimosine, a goitrogenic compound.

### **Effects:**

*Signs and symptoms;*

- . Excitability,
- . Lack of weight gain, stomatitis,
- . Goitre,
- . Incoordination,
- . Hair or fleece loss,
- . Cataracts.

### *Health and Production Problems;*

- . Shedding of fleece.
- . Weight loss.

### *Treatment;*

- . Remove animals before troubles occur.
- . Provide varied diet.
- . Drench ruminants with mimosine-degrading bacterium to degrade toxins, which will spread to all animals in the herd..

### **Integrated Control Strategy:**

- . A good fodder plant provided animals do not overeat.
- . See local Council for any restrictions.

### **Comments:**

- . An imported species being developed as a high protein browse plant in Australia.
- . Some varieties have caused fleece loss in sheep due to the high mimosine content.

- . The “Hawaiian” variety is the common type naturalized in northern Australia.
- . A large shrub which will form thickets and become invasive if not controlled.
- . Leaves are fern like, bright to dull green, alternate and compound.
- . Flowers are creamy pom-poms on stalks, usually near the ends of the branches.
- . Pods are dark brown and flat, with seed corrugations.
- . Ideal for tropical forage production, but can spread naturally and is becoming an invasive weed in coastal, riverine and agricultural land.
- . Withstands Dry Seasons, but grows poorly on acid soils, and is very susceptible to frost.
- . Native to Central America, but becoming naturalized all over the world.
- . Excellent source of high quality protein, but if eaten in excess over a period of weeks, will cause toxic effects with hyperexcitability as a first symptom.
- . Horses are particularly vulnerable to toxic effects from overeating.



Picture: *Leucaena leucocephala* issg.org.

### **Further Reading:**

- . Dowling and McKenzie. Poisonous Plants. 1993. DPI QLD.
- . Everist. Poisonous Plants in Australia. 1983. Jackson and Jacobs.
- . Australian Agricultural Botany. 1985.
- . McKenzie. Veterinary Clinical Toxicology. 2000.