### Ricinus communis

#### **Common name:**

Caster oil plant,

## **Palatability to Livestock:**

High at all stages.

## **Toxicity to Goats:**

Low risk.

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

Potentially toxic to sheep, cattle, horses, pigs, poultry, and humans.

## **Poisonous Principle:**

- . Phytotoxins.
- . Ricin and ricinine in seeds.

#### Effects:

Signs and symptoms;

- . Inhibits protein synthesis  $\rightarrow$  cell necrosis.
- . Loss of appetite,
- . Abdominal discomfort, diarrhoea,
- . Dullness, weakness,
- . Rapid, loud heart beat,
- . Trembling and Incoordination.

# Health and Production Problems;

Death can occur, but slow recovery is more likely. A purgative. Allergic skin reactions.

### Treatment;

- . Be aware of potential health problems.
- . Flowers and seeds are toxic.

# **Integrated Control Strategy:**

- . Use goats.
- . Dig out, slash.
- . Glyphosate on cut stumps.
- . 2,4-D on young plants.
- . Declared a "Noxious" weed in Queensland.

### **Comments:**

- . Garden plant gone feral.
- . A large perennial shrub, up to 2.5m high.
- . Branches are thick, hollow, dull pale green.

- . Leaves alternate, very large, serrated, lobed, widely spaced on the branches, stalk attached off-centre is dark reddish brown to glossy green when mature, has a bad smell when crushed.
- . Ricin a blood coagulant, takes some time to show symptoms, vomiting, diarrhoea, cold sweats, burning sensation in mouth, thirst.
- . In severe cases, skin turns blue, and heart malfunctions, convulsions, death, respiratory failure and cardiac arrest.
- . Flowers in erect spikes in forks of upper branches, female red upper, male yellow below, these flowers are also toxic.
- . Fruits, a spiny, 3-lobed capsule, explode when ripe. Shiny mottled seeds are toxic, 2-8 can kill a human.
- . Caster oil, a laxative, is extracted from the seeds.
- . Native to Asia and Africa, found in all states in disturbed areas, creek beds, etc.
- . Horses are most susceptible, cattle and sheep less so. Animals may develop an immunity.



Picture: *Ricinus communis*Helen Simmonds. Calga NSW.

# Further Reading:

- . Blood. Environmental Weeds for SE Australia. CRC Weeds Management Systems. 2003.
- . Cherry. Fact Sheet. Central Northern CC. 1997
- . Everist. Poisonous Plants of Australia. 1981
- Huggins and Lucy. Weeds of Southern Qld 1997
  Kohnke. Feeding and Nutrition of Horses. 1998
- . McBarron. Poisonous Plants, Handbook.1983.
- . McKenzie R Veterinary Clinical Toxicology 2000
- . Shepherd. Pretty but Poisonous. 2004.
- . Simmonds, Holst and Bourke. Palatability and Potential Toxicity of Australian Weeds to Goats. 2000
- . Wilson. Some Plants are Poisonous. 1987.

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