






Castor oil plant

Ricinus communis

| HABIT | STEMS & BRANCHES | LEAVES | FLOWERS | FRUIT & SEED |
|--|---|---|---|---|
|  |  |  |  |  |
| A tall, branching shrub reaching 2 - 3m in height, but can grow taller in favourable conditions. | Stems are hollow, with leaves arranged alternately along branches. | Leaves are alternate and glossy, maturing from dark reddish-brown to green, with a distinctive unpleasant odour. Leaves are divided into 7-9 toothed lobes with a central vein. | Flowers are crowded in spikes in the forks of upper branches, females at the top of the spikes, males at the bottom. Neither type has petals. | Egg-shaped, 3-lobed fruits, about 2.5cm long, covered in red or green soft spines. Each lobe contains one seed. Fruits explode when mature, throwing seeds several metres. Seeds are toxic to animals and humans. |

Castor oil plant is declared a Class B (growth and spread to be controlled) and Class C (not to be introduced) weed in the Northern Territory.

Castor oil plant is a declared weed in accordance with the *Weeds Management Act*.

The problem

Castor oil plant can invade pastures, but is rarely grazed by stock. The seeds contain the extremely poisonous substance ricin, which is toxic to horses, cattle, sheep, pigs and poultry. The seeds are also toxic to humans, the consumption of two to eight seeds can lead to death.

Habitat and distribution

Castor oil plant is native to Asia and Africa. It is now found in all Australian mainland states, generally along creek lines and in disturbed areas. Dense colonies may develop, particularly following heavy rains or flooding. In the NT castor oil plant has mainly been confined to the arid centre and the Victoria River District.

Preventing spread of Castor oil plant

Spread prevention is the most successful and cost effective way of managing weeds. Castor oil plant seeds can be spread by flooding, in mud adhering to vehicles or machinery and in garden waste and soil. It is often abundant along watercourses and floodplains. To stop seeds spreading, small selected parts of the infestation, located upstream must be treated first. Large infestations need to be controlled by a coordinated approach which includes the development of buffer zones.

Castor oil plant control

Caution should be taken when attempting any control and removal of this weed. Wear protective clothing, gloves and eye protection before starting control work.

Chemical control

| Chemical and concentration | Rate | Situation, method and comments |
|--|--|---|
| 2, 4-D amine 625 g/L Various trade names | 320 ml / 100 L | Seedling (individuals and infestation) + Adult infestation Foliar spray - apply when actively growing |
| Triclopyr 600 g/L Various trade names | 1 L / 60 L (diesel) 1 L / 60 L (diesel) | Adult (individuals or infestation) Basal bark < 5 cm stem diameter Cut stump > 5 cm stem diameter |

Optimum treatment times – Darker colours represent preferred months for foliar treatment.

| Jan | Feb | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-----|-----|-------|-------|-----|------|------|-----|------|-----|-----|-----|
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Non-chemical control

For small infestations of small plants, hand remove entire plant including the root system.

Follow up

It is vital that follow up works are carried out to control seedling recruitment and regrowth after a site has been treated. Treatment areas must be revisited no less than four weeks after spraying, but prior to seed-set. Seeds in the soil can remain viable for at least four years, and up to seven years under dry conditions, so follow-up control to kill any regrowth or new germinants should be done for at least four years after treatment. Areas should be checked for two years after eradication. If left uncontrolled, seedlings and regrowth may develop into a bigger problem than the initial infestation.

Disclaimer

In the Northern Territory, a registered product must only be used in situations consistent to those appearing on the label, unless authorised under a permit; and a person:

- must not have in their possession or use a chemical product unless the product is registered in Australia (exemptions apply)
- may use a registered product at a concentration, rate or frequency lower than that specified on the label unless this is specifically prohibited on the label. This does not apply to herbicide use occurring under an Australian Pesticides and Veterinary Medicines Authority (APVMA) permit
- may use a registered product to control a pest not specified on the label provided the pest is in a situation that is on the label and use on that pest is not specifically prohibited on the label
- may also use a registered product using a method not specified on the label unless this is specifically prohibited on the label.

Users of agricultural (or veterinary) chemical products must always read the label and any permit, before using the product and strictly comply with the directions on the label and any conditions of any permit. Users are not absolved from compliance with the directions on the label or conditions of the permit by reason of any statement made in or omission from this publication.

Further information

Weed Management Officers from the Weed Management Branch can provide advice on all aspects of weed management including control techniques, biological control, legislative responsibilities, policy advice, monitoring and reporting and regional planning.

For further information on weed management planning, integrated control, herbicide application techniques and monitoring please refer to the [NT Weed Management Handbook](#).