

Castor oil plant

Ricinus communis



Castor oil plant spreads over sandy soil areas, creek banks and gullies. This can lead to a significant loss of prime grazing land.

The seeds of castor oil contain ricin, a poison that is extremely toxic to livestock and humans. Leaves have a lesser amount of toxin. Symptoms of poisoning in animals usually do not appear for a few hours or several days.

Seeds cause gastrointestinal disorders and leaves tend to cause neuromuscular disorders. Poisoning in livestock is rarely reported though, as castor oil plant is seldom grazed by stock when other pasture plants are available.

Also, small amounts of the plant will induce an immunity to poisoning.

Legal requirements

Castor oil is not a prohibited or restricted invasive plant under the *Biosecurity Act 2014*. However, by law, everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.



Local governments must have a biosecurity plan that covers invasive plants and animals in their area. This plan may include actions to be taken on certain species. Some of these actions may be required under local laws. Contact your local government for more information.

Description

Castor oil plant is a tall, branching perennial shrub that grows to 3 m high and occasionally higher. It has stout, hollow branches that are a dull pale green or red. Older branches and trunks turn greyish.

Large leaves (10–60 cm across) are widely spaced on the branches and grow on long, stout, hollow stalks attached off-centre to the bottom of the leaf. Each leaf is divided into 7–9 pointed triangular segments with toothed edges and conspicuous veins. Leaves are glossy, dark reddish-green when young and glossy green when mature.

The flowers are crowded in stout, erect spikes in the forks of the upper branches. Female flowers are in the upper part of the spikes and male flowers at the base.

Female flowers develop into fruit about 2.5 cm across that are covered with soft green or red spines. The fruit have three segments, each segment containing one large, mottled, smooth seed. When ripe, the fruit explode violently and throw the seeds a distance of several metres.

The name castor oil plant is sometimes mis-applied to bellyache bush (*Jatropha gossypifolia*). Bellyache bush can be found in similar habitats but is usually smaller than castor oil plant; has leaves with only three smooth, rounded

lobes; and has small, smooth fruits found in clusters in the upper parts of the plant.

Habitat and distribution

Castor oil plant is native to Africa and Asia, and is now naturalised throughout Australia. It is often abundant along watercourses and floodplains, disturbed or waste land, and roadsides. It may be common locally after heavy rains or floods.

Control

Individual plants or small infestations may be removed by cultivation or hand-pulling. Broadscale infestations may require spraying with herbicides to control the plant.

Herbicides registered for the control of castor oil plant are provided in Table 1. Note that a number of 2,4-D formulations are available, but some do not include registration for castor bean plant. Check label carefully for correct rates.

In addition Fluroxypyr has been found to be very effective and some formulations are permitted in certain situations under PER11463.

Further information

Further information is available from your local government office, or by contacting Biosecurity Queensland on 13 25 23 or visit www.biosecurity.qld.gov.au.

Table 1. Herbicides for the control of castor oil plant

Situation	Herbicide	Rate	Registration details	Comments
Pastures, rights-of-way and industrial	2,4-D amine 625 g/L (e.g. Ken-Amine 625)	3.4 L/ha Check label for other formulations		Foliar (overall spray) Add wetting agent Spray plant to point of run-off
Agricultural non-crop areas, commercial and industrial areas, forests, pastures and rights-of-way	Garlon 600/Triclopyr	1.7 L per 100 L diesel		Basal spray around entire base of plant to a height of 40 cm when plant is actively growing Cut stump at any time of year, but treat stump immediately after cutting
Non-agricultural areas, domestic and public service areas, commercial and industrial areas, bushland/native forests, roadsides, rights of way, vacant lots, wastelands, dunal and coastal areas	Fluroxypyr 200 g/L (e.g. Fluroxypyr 200)	50 mL/10 L water	APVMA permit PER11463 Permit expires 30/06/2023	Foliar spray (backpack) Read permit and label carefully
	Fluroxypyr 333 g/L (e.g. Starane Advanced)	30 mL/10 L water		

Read the label carefully before use. Always use the herbicide in accordance with the directions on the label.

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Fact sheets are available from Department of Agriculture and Fisheries (DAF) service centres and our Customer Service Centre (telephone 13 25 23). Check our website at www.biosecurity.qld.gov.au to ensure you have the latest version of this fact sheet. The control methods referred to in this fact sheet should be used in accordance with the restrictions (federal and state legislation, and local government laws) directly or indirectly related to each control method. These restrictions may prevent the use of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, DAF does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.

