

Bellyache bush

Jatropha gossypifolia



It is generally acknowledged that the shallow root system and canopy cover of bellyache bush precludes growth of other plants, often outcompeting native vegetation and reducing pasture growth. Dense infestations may occur on river flats and other areas of good loamy soil. It has taken over extensive sections of river frontage in several locations, reducing biodiversity and increasing mustering costs.

The fruits of the plant are poisonous to humans and animals. The toxic substance is a toxalbumin which, when eaten, leads to symptoms of gastroenteritis and the eventual death of some animals. There have been many stock deaths reported due to bellyache bush poisoning, mainly in times of severe drought.



Declaration details

Bellyache bush is a Class 2 declared pest plant under the *Land Protection (Pest and Stock Route Management) Act 2002*. Declaration requires landholders to control declared pests on the land and waters under their control. A local government may serve a notice upon a landholder requiring control of declared pests.

It is an offence to introduce, keep or supply Class 2 pests without a permit issued by Biosecurity Queensland. Penalties of up to \$40 000 apply.

Description and general information

Bellyache bush is often confused with castor oil plant (*Ricinus communis*). Both plants are frequently found in the same area.

Bellyache bush is a squat, thick-stemmed shrub 2.5–4 m tall developing from a short, single-stemmed plant with three or four young leaves sprouting from the top. Young leaves are deeply divided into three rounded lobes, and are purple coloured and sticky. Older leaves are bright green, about 10 cm in diameter, and may have up to five lobes, the edges covered in coarse, dark brown hairs.

The flowers are small, red with yellow centres, and found in small clusters throughout the upper part of the plant. Seed pods are smooth and oval, about the size of a cherry and 12 mm across; they contain three to four seeds about 8 mm long.

Castor oil plant is similar but usually taller than bellyache bush. The leaves are larger and clearly different, with more lobes (seven to nine) which are much more pointed. Flowers and fruit are on an obvious spike near the top of the plant. Fruit are covered with soft spines and are 2.5 cm across, much larger than those on bellyache bush.

Habitat and distribution

A native of tropical America, bellyache bush is sometimes grown as a garden plant. It has escaped and become naturalised in various areas of north Queensland and has been declared a noxious weed by many local governments. A number of smaller infestations occur throughout the remainder of Queensland. It is usually common along riverbanks and roadsides.





Control

Fire

High kill rates using fire have been observed in the field, but only when there is a sufficient fuel load to carry a fire through a bellyache bush infestation.

Mechanical control

As bellyache bush is shallow rooted, grubbing the plant by hand is effective. Repeated slashing of infested areas will help reduce density.

Herbicide control

The herbicides currently registered for bellyache bush are listed in Table 1. Testing by staff at the Tropical Weeds Research Centre has shown several others to be effective against this plant; they have been submitted for registration.

Further information

Further information is available from your local government office, or by contacting Biosecurity Queensland (call 13 25 23 or visit our website at www.biosecurity.qld.gov.au).

Table 1 Herbicides registered for the control of bellyache bush

Situation	Herbicide active ingredient	Rate	Comments
Agricultural land – non-crop ¹	fluroxypyr as mhe (200 g/L)	0.5 L/100 L	Thoroughly wet plants and apply when actively growing
	fluroxypyr as mhe (333 g/L)	0.33 L/100 L	
	fluroxypyr as mhe (400 g/L)	0.25 L/100 L	
Forests – softwood production ¹	fluroxypyr as mhe (333 g/L)	0.6–1.8 L/ha (pre/post plant) or 0.3 L/100 L	Thoroughly wet plants and apply when actively growing
Forests – timber production ¹	fluroxypyr as mhe (200 g/L)	0.5 L/100 L	Thoroughly wet plants and apply when actively growing
	fluroxypyr as mhe (333 g/L)	0.33 L/100 L	
	fluroxypyr as mhe (400 g/L)	0.25 L/100 L	
Land – commercial/ industrial/public	fluroxypyr as mhe (200 g/L)	0.5 L/100 L	Thoroughly wet plants and apply when actively growing
	fluroxypyr as mhe (333 g/L)	0.33 L/100 L	
	fluroxypyr as mhe (400 g/L)	0.25 L/100 L	
	metsulfuron-methyl (600 g/kg)	10 g/100 L + penetrant (see label)	Thoroughly wet plants and apply when actively growing
	triclopyr as butotyl (75 g/L) + metsulfuron-methyl (28 g/L)	0.25 L/100 L	

Table 1 Continued

Situation	Herbicide active ingredient	Rate	Comments
Land – rights of way ¹	fluroxypyr as mhe (200 g/L)	0.5 L/100 L	Thoroughly wet plants and apply when actively growing
	fluroxypyr as mhe (333 g/L)	0.33 L/100 L	
	fluroxypyr as mhe (400 g/L)	0.25 L/100 L	
	metsulfuron-methyl (600 g/kg)	10 g/100 L + penetrant (see label)	Thoroughly wet plants and apply when actively growing
	triclopyr as butotyl (75 g/L) + metsulfuron-methyl (28 g/L)	0.25 L/100 L	
Pastures ¹	fluroxypyr as mhe (200 g/L)	0.5 L/100 L	Thoroughly wet plants and apply when actively growing
	fluroxypyr as mhe (333 g/L)	0.33 L/100 L	
	fluroxypyr as mhe (400 g/L)	0.25 L/100 L	
	metsulfuron-methyl (600 g/kg)	10 g/100 L + penetrant (see label)	Thoroughly wet plants and apply when actively growing
Pastures – native	metsulfuron-methyl (600 g/kg)	10 g/100 L + penetrant (see label)	Thoroughly wet plants and apply when actively growing
	triclopyr as butotyl (75 g/L) + metsulfuron-methyl (28 g/L)	0.25 L/100 L	

Notes:

¹ Products containing fluroxypyr have a 7-day withholding period in agricultural situations before grazing or cutting for stockfeed.

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

Fact sheets are available from Department of Employment, Economic Development and Innovation (DEEDI) 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, DEEDI does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.