

Honey locust

Gleditsia triacanthos including cultivars and varieties



Honey locust is a large, rapidly growing tree. In the past it has been deliberately promoted and planted in Australia as a fodder tree and garden ornamental.

Honey locust is an invasive tree capable of outcompeting and replacing native vegetation. It can often create dense monocultures, thereby providing restricted habitats for native fauna.

The plant's long, spines can inflict serious injuries and infections to humans, livestock and wildlife.

They can also cause damage to tractor, quad bike and other vehicle tyres, restricting vehicle movement near infestations. Even when the plant has died, its spines can continue to inflict injury.

Honey locust can also provide a haven for introduced pest animals such as foxes, cats and rabbits.



Queensland
Government

Legal requirements

Honey locust (*Gleditsia* spp. including cultivars and varieties) are a category 3 restricted invasive plant under the *Biosecurity Act 2014*. It must not be given away, sold, or released into the environment. The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with invasive plants under their control. This is called a general biosecurity obligation (GBO). This fact sheet gives examples of how you can meet your GBO.

At a local level, each local government must have a biosecurity plan that covers invasive plants in its area. This plan may include actions to be taken on honey locust. Some of these actions may be required under local laws. Contact your local government for more information.

Gleditsia species other than *Gleditsia triacanthos* are a prohibited invasive plants under the *Biosecurity Act 2014*. The Act requires that all sightings of honey locust other than *Gleditsia triacanthos* be reported to Biosecurity Queensland within 24 hours. By law, everyone has a GBO to take all reasonable and practical measures to minimise the biosecurity risk of honey locust spreading until they receive advice from an authorised officer.

Description

Honey locust is a deciduous, leguminous tree growing up to 20 m high. From spring to autumn, it bears prolific green leaves (10 cm long), with about 12 opposite paired leaflets per leaf. In October–November it bears creamy, yellow hanging flower stalks (10 cm long) that develop into 20–30 cm long brown pods. Some varieties have separate male and female plants, while other varieties are bisexual. The plant seeds prolifically every 1–2 years and the pods are relished by stock.

The trunk and limbs of ‘wild’ trees bear very large crucifix-like spines that can grow to more than 50 mm. In the past, nurseries have sold grafted ornamental thornless varieties of honey locust. There are many ornamental varieties of honey locust, including Ruby Lace, Sunburst, Moraine, Shademaster and Inermis. These so-called thornless varieties produce thorns at a later date or throw thorny progeny. This means that these varieties are subject to the same controls as the wild type. All varieties must be managed and cannot be sold anywhere in Queensland.

Life cycle

Flowering starts at tree age of 3–5 years and occurs in October–November. The tree seeds prolifically every 1–2 years, with the largest seed set every second year. The seeds can remain viable for at least 20 years.

Methods of spread

Seed is spread by grazing stock eating pods and passing seed in dung. Honey locust is also spread by floodwaters transporting floating pods and by people planting it as an ornamental or for fodder.

Habitat and distribution

Honey locust was originally introduced from North America and planted in Queensland in 1907 as a fodder and ornamental tree. It was first reported as a pest in 1955 at Cressbrook Creek (Esk Shire). Honey locust exists naturally across the United States from Mexico in the south to Ontario, Canada in the north.

Honey locust can grow in most soil types but prefers alluvial flood plains along river systems. Impenetrable thickets of this thorny weed have smothered large areas of highly productive alluvial grazing land near Toogoolawah.

Honey locust is an extremely drought tolerant, adaptable species and is presently free of insects and disease that may impact on its growth. Its potential for spread over large areas is enormous.

Heavy infestations occurred on the Darling Downs in the Clifton/Allora area and at Toogoolawah. Scattered infestations and individual ornamental plants are found around Monto, on the eastern Darling Downs from Toowoomba to New South Wales, and in the Arcadia, Stanley, Bremer and Logan valleys.

Control

Managing honey locust

The GBO requires a person to take reasonable and practical steps to minimise the risks posed by honey locust. This fact sheet provides information and some options for controlling honey locust.

Although honey locust is a useful fodder tree when young, older trees can reproduce at an uncontrollable rate. If left uncontrolled, a population explosion may occur, threatening sustainable pasture production and the environment. This has been evident in established infestations near Esk and Warwick. Quick management of isolated trees can prevent this situation occurring elsewhere.

The best approach is usually to combine different control methods. These may include chemical and mechanical control methods combined with land management practices. The control methods chosen should suit the specific weed and your particular situation.

Take care to ensure your own and others safety when trimming or lopping bamboo near power lines.

For electrical safety information visit worksafe.qld.gov.au/electricalsafety.

Grazing

Continual grazing suppresses seedlings but can also assist in spreading seeds into new areas. Grazing can be a useful follow-up control method after herbicide treatment to control seedlings and regrowth, providing the plants do not bear seed pods.

For the control of dense infestations on grazing land, burning followed by spot spraying is an economical control method.

Mechanical control

Bulldozing

This method breaks plants at or above ground level. Once broken, honey locust will vigorously produce regrowth from broken bases and roots. Follow-up with some other form of control such as cultivation or herbicide is necessary.

Cultivation

On arable land, dozing followed by deep ploughing can control dense infestations, but only if followed by regular cropping and/or spot spraying of regrowth. If cultivation is abandoned, reseeding from nearby trees can be a problem.

Herbicide control

Table 1 details the herbicides registered for honey locust control. Before using any herbicide always read the label carefully. All herbicides must be applied strictly in accordance with the directions on the label.

Table 1. Herbicides for the control of honey locust

Situation	Herbicide	Rate	Comments ²
Agricultural non-crop areas, commercial and industrial areas, forests (including softwood plantations), rights-of-way and pastures	Fluroxypyr 333 g/L ¹ (e.g. Starane Advanced [®])	900 mL/100 L diesel or Biosafe	Basal bark application for plants up to 10 cm basal diameter. Treat circumference of stem up to 45 cm high from the ground.
		1.8 L/100 L diesel or Biosafe	Basal bark application for plants 10–20 cm basal diameter. Treat circumference of stem up to 45 cm high from the ground.
		3 L/100 L diesel or Biosafe	Basal bark application for plants greater than 20 cm basal diameter. Treat circumference of stem to a height of 45 cm from the ground. Use cut stump application at this rate for plants of any size.
		300 mL/100 L water	High-volume application using hand gun. Apply to seedlings and young plants up to 2 m high.
Agricultural non-crop areas, commercial and industrial areas, fence lines, forestry, pastures and rights-of-way	Triclopyr 240 g/L + Picloram 120 g/L (e.g. Access [®])	1 L/60 L diesel	Basal bark stems up to 5 cm thick. Cut stump treatment for larger plants. Cut plant as close to ground as possible and apply herbicide mixture immediately (within 15 seconds) after cut is made.

The listed herbicide formulations are examples only. Other formulations of some herbicides may be available, but some may not be registered for honey locust. Check the label for the correct rate and comments. Do not use products unless they include honey locust on the label.

¹ Do not graze treated pastures for seven days after application.

² Honey locust trees can be successfully controlled when basal barking in both actively growing and dormant stages.

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

Once a honey locust tree has been killed by herbicides, it is quickly invaded by borers. By the time the tree falls, the borers have reduced it to a shell and it will shatter. The thorns do not break down as quickly and remain a danger to humans and other animals walking through the area where the trees were. As safety is a concern, removal of the dead trees will help to eliminate these problems.

More information

For more information contact your local government or visit biosecurity.qld.gov.au.



Fact sheets are available from biosecurity.qld.gov.au. The control methods recommended 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, the department does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.

