

Honey locust

Ornamental varieties

Gleditsia triacanthos var. *inermis*



Honey locust is a highly invasive, exotic tree. Due to the potential impacts of infestations in agricultural and natural environments, all varieties of *Gleditsia triacanthos* have been declared Class 1 weeds in Queensland and have been targeted for eradication.

While honey locust is commonly known for its large crucifix-shaped thorns, a range of mostly thornless ornamental varieties has been developed.

Common commercial names include: Christie, Elegantissima, Emerald cascade, Halka, Imperial, Impercole, Inermis, Limegold, Majestic, Mirando, Moraine,

Rubylace, Shademaster, Skycole, Skyline, Spectrum, Summerlace, Sunburst, Suncole, Skyline and Trueshade.

These varieties are still found in many urban gardens. It is illegal to keep, sell or supply honey locust or their reproductive materials in Queensland, but honey locust cultivars are often purchased from interstate nurseries and brought into Queensland without knowledge of their pest status.

Cultivated honey locust varieties are recognised for their beauty and have in the past been used as shade and feature trees. Nevertheless, they pose the same economic



Queensland Government

and environmental threats as their thorny counterparts, with the potential to form dense groves, taking over pasture land and out-competing native species.

Declaration details

Honey locust is a declared Class 1 pest plant under the Queensland *Land Protection (Pest and Stock Route Management) Act 2002*.

All landholders are required by law to keep their land free of Class 1 pests. It is a serious offence to introduce, keep or sell Class 1 pests without a permit.

Description and general information

Size

The honey locust is a deciduous, leguminous tree. Some reach 20–30 m in height, although cultivars vary in size, form and leaf colour (see Table 1).

Appearance

Despite often being referred to as thornless, ornamental honey locust often throw thorny progeny and begin to produce barbed thorns up to 15 cm long as they age. In addition, many plants are produced by grafting cuttings of so called thornless cultivars onto the root stock of wild varieties. When the roots are damaged or the tree is cut down, these grafted plants produce thorny suckers.

From spring to autumn the honey locust bears prolific fern-like, bipinnately arranged leaves. These leaves are 10–25 cm long with about 12 opposite paired leaflets per leaf (each leaflet is 1.5–2.5 cm long). In autumn the leaves turn a golden yellow colour and are lost in preparation for the winter months.

The honey locust produces hanging clusters of insignificant greenish-yellow flowers between October and November, and some cultivars produce 20–30 cm long brown pods that remain on the tree throughout winter.

Life cycle

The seeds have hard, impenetrable coats and can remain viable for 20 years or more. This makes eradication very difficult and allows groves of honey locust trees to re-establish many years after the parent trees have gone.

The problem

Weeds like honey locust put considerable pressure on farming ventures and threaten natural environmental systems.

Ornamental honey locust trees have in the past been deliberately promoted and planted in Queensland. They are still available through interstate nurseries and by online order, although it is illegal to knowingly supply them to a Queensland gardener.

Environmental

Honey locust is an invasive tree capable of out-competing and replacing native vegetation. It can create dense monocultures and therefore restricts habitat for native fauna. The sharp barbs of thorny varieties can seriously injure wildlife. Introduced pest animals such as foxes, cats and rabbits find refuge in the dense thickets, causing secondary pest problems.

Agricultural

Honey locust trees spread rapidly from seed. If not controlled, they can destroy pastures by smothering the more desirable grass species. The plant can form dense thickets, particularly along waterways, preventing stock access to water.

Safety

The long, strong spines of some varieties can inflict serious injuries and lead to infection in humans, pets, livestock and native animals. They can also cause damage to vehicles and equipment and remain a safety hazard even once the plant has died.

Table 1 Common cultivated honey locust varieties found in Australia

Common name	Description
Elegantissima	Very compact, almost shrub-like; grows 3.5–4.5 m. Attractive fine fern-like foliage.
Emerald Cascade	Weeping form. Rich, dark green foliage turns bright yellow in autumn.
Halka; Christie	High, rather narrow crown; horizontal branching structure. Fine foliage, turns yellow in autumn.
Imperial; Impcole	Round spreading form with widely spreading branching habit; grows 9 m tall x 9 m wide.
Mirando	Dwarfed cultivar with spreading, twisted branches.
Moraine	Tall tree with rounded crown and broadly spreading lower branches. Dense, deep green ferny foliage, turns yellow in autumn.
Rubylace	Medium sized tree grows to 8 m. Distinctive red-tipped foliage in spring turning a bronze-red through summer and deepening in colour in autumn.
Shademaster	Upright tree with ascending branches and a rounded crown; grows to 9 m. Dark green foliage that persists late in autumn before turning golden; usually podless although can begin producing pods after 15 years.

Table 1 Common cultivated honey locust varieties found in Australia continued

Common name	Description
Skyline; Skycole	Very symmetrical, erect, broadly pyramidal crown; spreading to upright branching habit; grows to 9 m. Foliage dark green and turning to amber in autumn.
Sunburst; Suncole	Broad oval crown with very irregular growth habit; grows 7–9 m. Bright yellow new foliage maturing to a fresh lime-green; clusters of yellow-green fragrant flowers.
Trueshade	Broadly oval/domed crown with branch angles close to 45 degrees and widely spreading lower branches.



Skyline cultivar's autumn colouration (photograph courtesy of Horticultural Photography™)



Honey locust flower



Seed pods, 20–30 cm



Emerald cascade cultivar (photograph courtesy of Horticultural Photography™)

Control

A variety of mechanical and chemical means of control are available (refer to the 'Honey locust' fact sheet, PP47, for further information).

However, the removal of large ornamental honey locust trees from residential areas is best done using the cut stump method (see Table 2). This allows the tree to be completely removed.

It is vital the cut surface is treated with herbicide as honey locust trees readily regrow. If the tree being removed is a grafted variety, the new shoots will most likely be thorny.

Where possible, remove honey locust trees when they are not in seed. If seed pods are present, make sure they are carefully collected before the tree is mulched or moved off site. Contact a Local Government Weeds Officer or Biosecurity Officer to have the seeds disposed of correctly.

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 2 Example herbicides registered or permitted for the control of honey locust

Situation	Herbicide active ingredient	Rate	Comments	
Agricultural non-crop areas, rights of way, commercial and industrial areas, forests and pastures	Fluroxypyr 200 g/L ¹ (e.g. Starane 200 ®)	1.5 L/100 L diesel	Basal bark for plants up to 10 cm basal diameter. Treat circumference of stem to a height of 45 cm from the ground. Wet bark to point of run-off.	
		3 L/100 L diesel	Basal bark for plants 10–20 cm basal diameter. Treat as described above.	
		5 L/100 L diesel	Basal bark for plants greater than 20 cm basal diameter. Treat as described above. Old rough bark will require more spray than smooth young bark.	
		5 L/100 L diesel	Cut stump application – use this rate for all plant sizes. Cut plant <15 cm above ground and apply chemical to cut surface and sides of stump immediately (<15 seconds).	
		0.5 L/100 L water	High volume spraying. Apply to obtain full coverage of the leaves and stems of plants to 2 m high. Wet plant the point of run-off.	
		75 mL/15 L water	Knapsack spraying. Treat as described for high volume spraying technique.	
Minor use permit (PER11463) ³ Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas	Triclopyr 240 g/L + picloram 120 g/L (e.g. Access ®)	1 L/60 L diesel	Basal bark for 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.	
		Glyphosate 360 g/L (e.g. Round-up ®)	1 L/2 L water	Drill, frill, axe or stem injection. These application methods require that the chemical reaches the sapwood within 10–15 seconds of the cut or drill hole being made.
		Glyphosate 360 g/L (e.g. Round-up ®)	1 L/12 L water	Cut stump application (as described above); or paint basal green bark and/or crown.
	Triclopyr 200 g/L + picloram 100 g/L (e.g. Tordon Double Strength ®)	500 mL/100 L water	Spot spray where residual weed control is required away from waterways.	

Notes

1. Do not graze treated pasture for seven days after application.
2. Honey locust trees can be successfully controlled when basal barking with fluroxypyr in both actively growing and dormant stages.
3. PER11463 is in force to 30 June 2014. It is a requirement of PER11463 that anyone using products under the permit comply with the details and conditions stated in the permit. A person must read the details and conditions of permit. PER11463 can be accessed at <http://permits.apvma.gov.au/PER11463.PDF>

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.

Cover photographs courtesy of www.nzplantpics.com (left image) Horticultural Photography™ (right image)