

Table 1. Herbicides for the control of camphor laurel

Situation	Herbicide	Rate	Comments
Agricultural non-crop areas, commercial and industrial areas, forests, pastures and rights-of-way	Triclopyr 300 g/L + Picloram 100 g/L (e.g. Conqueror)	350–500 mL/100 L water	High-volume spray for trees up to 3 m tall; higher rate for trees > 2 m high
		500 mL/10 L water	High concentration/low volume application (gas gun or sprinkler sprayer) Trees less than 1.5 m high which are able to be sprayed from all sides Use high volume application on larger bushes
	Triclopyr 300 g/L + Picloram 100 g/L + Aminopyralid 8 g/L (e.g. Grazon Extra)	350–500 mL/100 L water	High concentration/low volume application (gas gun or splatter gun) Trees less than 1.5 m high
		500 mL/10 L water	High concentration/low volume application (gas gun or splatter gun) Trees less than 1.5 m high Use high vlume application on larger bushes
	Triclopyr 600 g/L (e.g. Garlon 600)	170 mL/100 L water	High-volume foliar spray for trees up to 3 m high
	Triclopyr 600 g/L (e.g. Garlon 600)	1 L in 60 L diesel	Basal bark trees to 10 cm diameter or cut stump trees to basal bark size or greater
	Triclopyr 200 g/L + Picloram 100 g/L (e.g. Slasher)	Mix 1 part herbicide with 4 parts water	Stem injection application (consult label)
Pasture, non-crop, forestry, right-of-way and aquatic areas	Triclopyr 200 g/L + Picloram 100 g/L + Aminopyralid 25 g/L (e.g. Tordon RegrowthMaster)	Mix 1 part herbicide with 4 parts water	Stem injection application (consult label)
	Glyphosate 360 g/L (e.g. Roundup Biactive)	2 mL of 1:1 mix with water	Stem injection for trees up to 25 cm in diameter
		2 mL undiluted	Stem injection for trees 25–60 cm in diameter

Various glyphosate formulations are available but not all are registered for this use. Consult labels for rates. For aquatic or riparian areas only use glyphosate formulations registered for use in those situations.

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

This fact sheet is developed with funding support from the Land Protection Fund.

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.



Restricted invasive plant

Camphor laurel

Cinnamomum camphora



Camphor laurel was introduced into Australia from Asia in 1822. It has been planted as a garden ornamental throughout Queensland.

Camphor laurel is an attractive shade tree, but can be very destructive as it aggressively replaces native vegetation. The long-term consequences of its spread may result in the loss of native wildlife and agricultural productivity over large areas of South East Queensland.

Camphor laurel invades pastures and disturbed riparian systems. It tends to germinate under fences and power lines (wherever birds rest and deposit the seed). As a result, it can push fences over and disrupt power facilities. It is a troublesome weed on dairy farms throughout south-east Queensland and northern New South Wales.

Along the waterways of south-east Queensland, camphor laurels are replacing the native blue gums thereby threatening koala populations.

Older camphor laurel trees develop a massive root system that can block drains and crack concrete structures. The average suburban backyard is far too small to accommodate a mature camphor laurel without problems. Removal of a mature tree can cost hundreds of dollars.

Legal requirements

Camphor laurel is a restricted invasive plant under the *Biosecurity Act 2014*. It must not be given away, sold, or released into the environment without a permit. The Act requires everyone to take all reasonable and practical steps to minimise the risks associated with invasive plants and animals 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 and animals in its 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

Camphor laurel is a large evergreen tree, growing up to 20 m tall. The leaves have a glossy, waxy appearance and smell of camphor when crushed. In spring it produces lush, bright-green foliage and masses of small white flowers. The spherical fruits are green (changing to black when ripe) and 10 mm in diameter.

Life cycle

Trees flowers in spring and produces over 100,000 seeds a year. The seeds can stay viable up to three years and germination occurs form 4–20 weeks.

Methods of spread

Spread by people as an ornamental tree. Berries spread by water and birds.

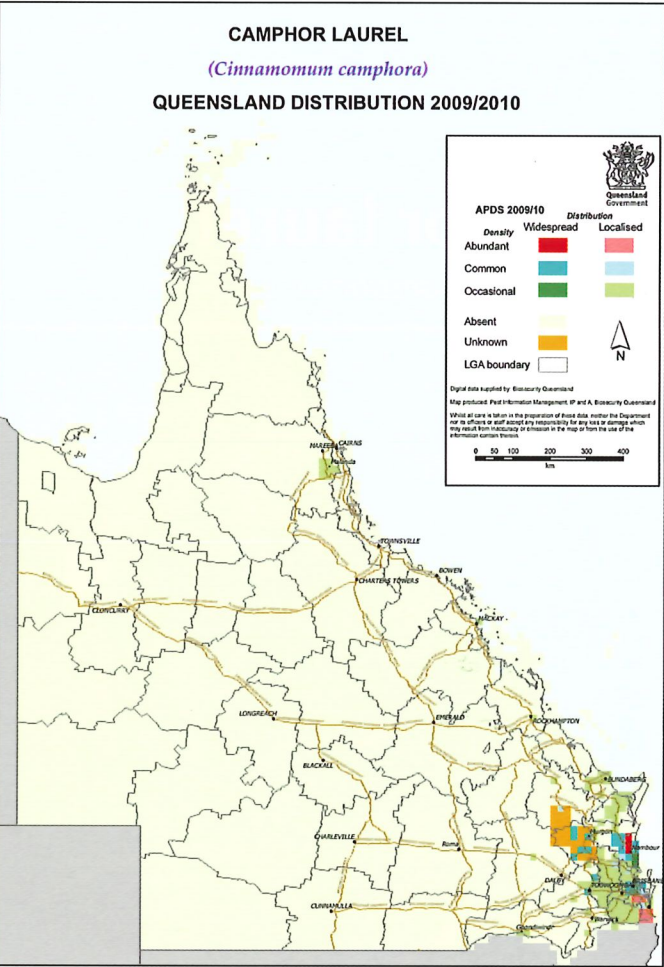
Habitat and distribution

Camphor laurel is native to Taiwan, Japan and some parts of China. Since it was introduced, it has been planted all along eastern Australia from the Atherton Tablelands to Victoria. It is particularly common along watercourses and in soil types that once supported rainforest.

In south-east Queensland, it has the potential to develop dense infestations similar to older infestations that exist in northern New South Wales.

A large camphor laurel tree may produce over 100 000 seeds every year. The seeds are readily spread by fruit eating birds.

Map 1. Distribution of camphor laurel in Queensland



Control

Managing camphor laurel

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

Mechanical control

Removal of newly established or isolated seedlings by hand pulling or grubbing is effective.

Bulldozing is only suitable for young trees that can be removed, roots and all. Failure to remove roots of mature trees will result in regrowth.

Fire kills plant tops but produces regrowth from the base.

Herbicide control

Selection of a suitable control method depends on the size of the target tree and its situation. A standing tree that has been treated may be a serious hazard to human safety or other structures when it falls. Removal of the bulk of the tree before treating the stump is preferred in such situations.

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

Foliar spray

Foliar sprays can be used for young trees up to 3 m tall.

Basal bark spray

For trees up to 6 m, carefully spray around the base of each stem or trunk to a height of 40 cm above the ground. Make sure every part of the trunk is sprayed, as if one side is missed the tree will keep growing.

Cut stump

For small trees, cut each stem off as close to the ground as possible and **immediately** (within 15 seconds) apply the herbicide mixture liberally to the cut surface.

Stem injection

For trees taller than 6 m, stem injection using a modified axe is the most practical method—leave no more than 2 cm between cuts.



Axe cuts for stem injection of herbicides should be made at regular intervals all around the stem (or stems). Care should be taken to ensure the axe leaves a ‘pocket’ in the stem, into which the chemical is immediately injected. Cuts should penetrate the sapwood (just under the bark), but not the hard central wood. Cuts made too shallow into the bark or too deep into the stem will result in regrowth. The practice of drilling holes in the stem prior to herbicide application is not recommended.

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.

