

Broad-leaved pepper tree

Schinus terebinthifolius



The broad-leaved pepper tree is invading coastal dune areas, wetlands and along stream banks. It hosts mango black spot disease and harbours witches broom diseases that can affect citrus. The tree is choking out native plants and is becoming a serious problem. Broad-leaved pepper tree is a garden escapee and native to Brazil.

The broad-leaved pepper tree can also affect human and animal health as it contains toxic resins. Contact with the sap can cause persistent swelling, rashes, welts, running sores, a swollen face, colic and haemorrhages in the eyes. The pollen can cause respiratory difficulty.

Legal requirements

Broad-leaved pepper tree is 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).

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 broad-leaved pepper tree. Some of these actions may be required under local laws. Contact your local government for more information.

Description

Broad-leaved pepper trees can grow into a large spreading tree, up to 10 m high, sometimes up to 16 m high and 10 m wide. The leaves consist of 5–9 dark green leaflets. At the ends of the branches are small whitish flowers, followed by bunches of glossy, round red fruits 6 mm across. There are male and female trees, with only female bearing fruit.

Life cycle

Broad-leaved pepper tree has two obvious physiologically different growth phases; a reproductive growth phase in winter, with the main flowering period during autumn with a secondary smaller peak in spring and a vegetative growth phase during summer. However, flowering may occur throughout the year. Fruiting and seed dispersal occurs predominantly over winter. Seedlings have a high survival rate. Plants reproduce from three years of age and overseas they have been recorded to live for about 35 years.

Methods of spread

Human movement through introduction of broad-leaved pepper tree as an ornamental shrub was responsible for initial spread of the invasive plant.

Broad-leaved pepper tree is primarily spread through seed dispersal by birds and mammals. The tree produces bright red berries that are attractive to frugivores or animals that eat fruit. Silver eyes, figbirds, currawongs and others are thought to disperse the seed.

Broad-leaved pepper tree can also reproduce from root suckers.

Habitat and distribution

Native to Brazil, Argentina and Paraguay. It was originally introduced and promoted as an ornamental shrub. It is now a serious threat to ecosystems, particularly in coastal regions, riparian zones and wetlands.

Broad-leaved pepper tree rapidly colonises disturbed bushland and dominates understorey vegetation. It out-competes and replaces native grasses, ground covers and shrubs, and is shade tolerant. It spreads rapidly on waterlogged or poorly drained soils, but will grow on drier land in higher rainfall areas.

Broad-leaved pepper tree has been found growing in a range of habitats from mangrove forests to coastal sand dunes. Thickets of broad-leaved pepper tree also form around water holes, shading out pasture.

Control

Managing broad-leaved pepper tree

The GBO requires a person to take reasonable and practical measures to biosecurity the risks posed by broad-leaved pepper tree. This fact sheet provides information and some options for controlling broad-leaved pepper trees.

Removal should be done in winter. Revegetation of the cleared area should be pre-planned to ensure that other invasive plants do not gain a foothold in the disturbed area and should include mulching to keep invasive plants down.

Physical control

Hand-pull or chip out young plants.

If the tree is chopped down, be prepared for it to regrow and for the roots to sucker, for up to six months. Treat these as they occur. Try cutting two inches below the soil, chip away all the bark and nail a tin plate down over the stump. Sometimes the plant won't start to regrow until 18 months after initial chopping.

Broad-leaved pepper tree can be put through a wood chipper to make mulch.

Take care to ensure your own and others safety when trimming or lopping broad-leaved pepper tree near power lines. For electrical safety information visit worksafe.qld.gov.au/electricalsafety.

Herbicide control

There are several herbicides specifically registered for the control of broad-leaved pepper tree. Two permits also allow the use of herbicides to control broad-leaved pepper tree as an invasive plant in various situations.

See Table 1 for the treatment options.

Prior to using the herbicides, you must read or have read to you and understand the conditions of the herbicide labels and permits. To obtain a copy of the permits, visit apvma.gov.au.

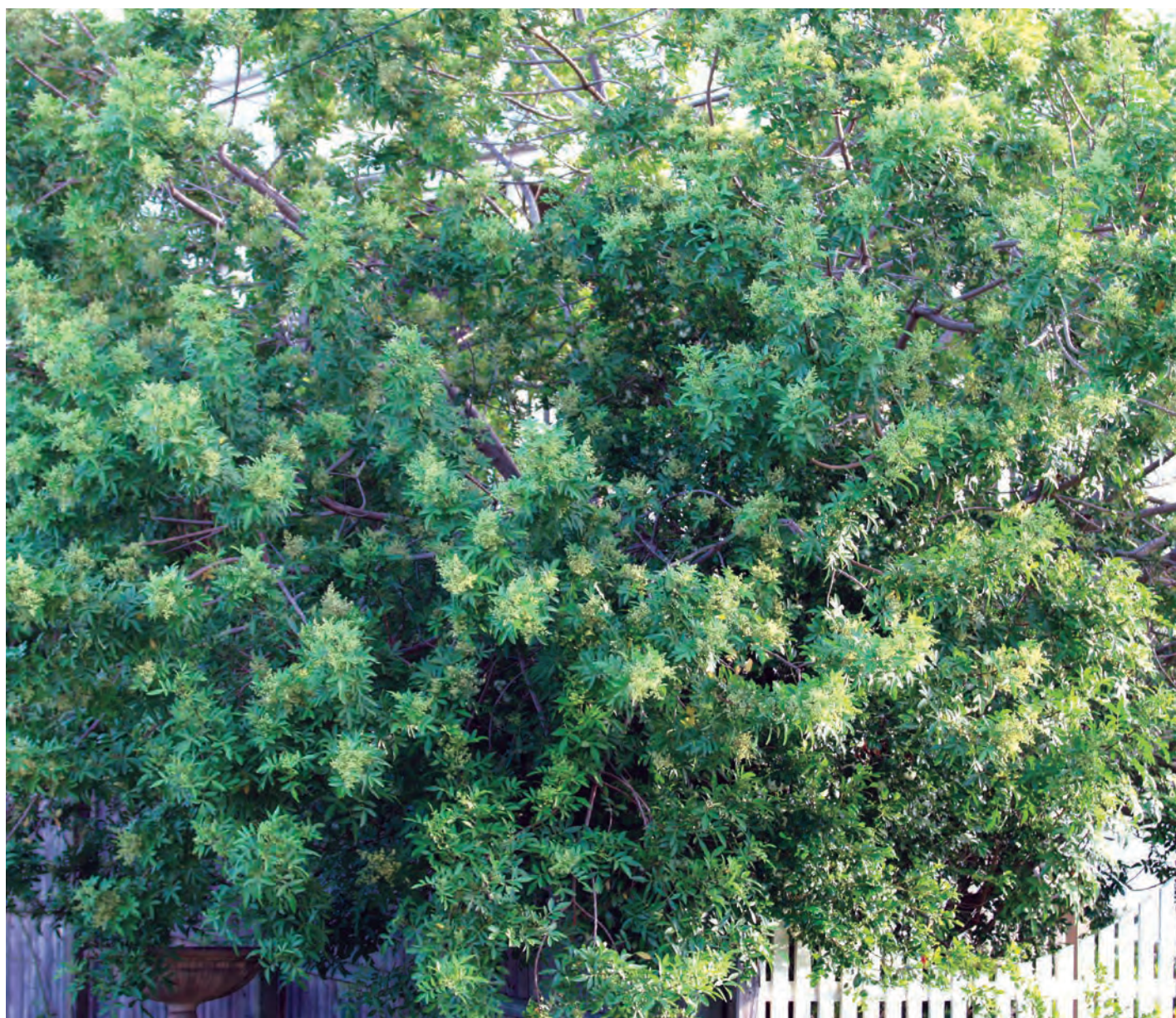
More information

More information is available from your local government or visit biosecurity.qld.gov.au.

Table 1. Herbicides for the control of broad-leaved pepper tree

Situation	Herbicide	Rate	Registration details	Comments
Non-agricultural areas, domestic and public service areas, commercial and industrial areas, bushland/ native forests, roadsides, rights of way, vacant lots, wastelands, wetlands, dunal and coastal areas	Fluroxypyr 200 g/L (e.g. Wynca Fluroxypyr 200 Herbicide)	35 mL per 1 L diesel or kerosene	APVMA permit PER11463 (expires 30/04/2027)	Basal bark Spray or paint the herbicide on the full circumference of each stem
	Glyphosate 360 g/L (e.g. Roundup)	1 L per 12 L water		Cut stump Paint within 15 seconds of cutting
Forestry, pasture, commercial and industrial areas, rights of way, around agricultural buildings and public service areas	Aminopyralid 93.7 g/kg + metsulfuron-methyl 75 g/kg (e.g. Di-Bak AM Herbicide)	1 capsule every 10 cm of circumference	Registered	Stem injection Consult label for directions for use and critical comments
Agricultural non-crop areas, commercial and industrial areas, forests (including softwood plantations), pastures and rights-of-way	Fluroxypyr 333 g/L (e.g. Starane Advanced)	300 mL/100 L water		Foliar spray Winter application, mature leaves, fruiting
		21 mL/1 L diesel or Biosafe Biodegradable Herbicide Carrier		Basal bark Spray or paint the herbicide on the full circumference of each stem
Agricultural non-crop areas and rights of way, commercial and industrial areas, forests and pastures	Fluroxypyr 400 g/L (e.g. CropSure Fluroxypyr 400 Herbicide)	250 mL per 100 L water		
	Fluroxypyr 200 g/L (e.g. Wynca Fluroxypyr 200 Herbicide)	500 mL per 100 L water		Foliar spray Winter application or while the tree is in fruit, providing that no replanting of desirable broad-leaf plants is intended for six months
Natural ecosystems (non-agricultural)	Glyphosate 360 g/L (e.g. Weedmaster Duo)	1:50 (glyphosate:water)	APVMA permit PER12363 for use by officers/ contractors of government agencies, QPWS, or NRM groups	Aerial spot spray Using helicopter or unmanned aircraft vehicles.

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



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.

