

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 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

Broad-leaved pepper trees can grow into a large spreading tree, up to 10 m high and broad. 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-leaf 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 3 years of age and overseas they have been recorded to live for about 35 years.

Method of spread

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

Broad-leaf 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.

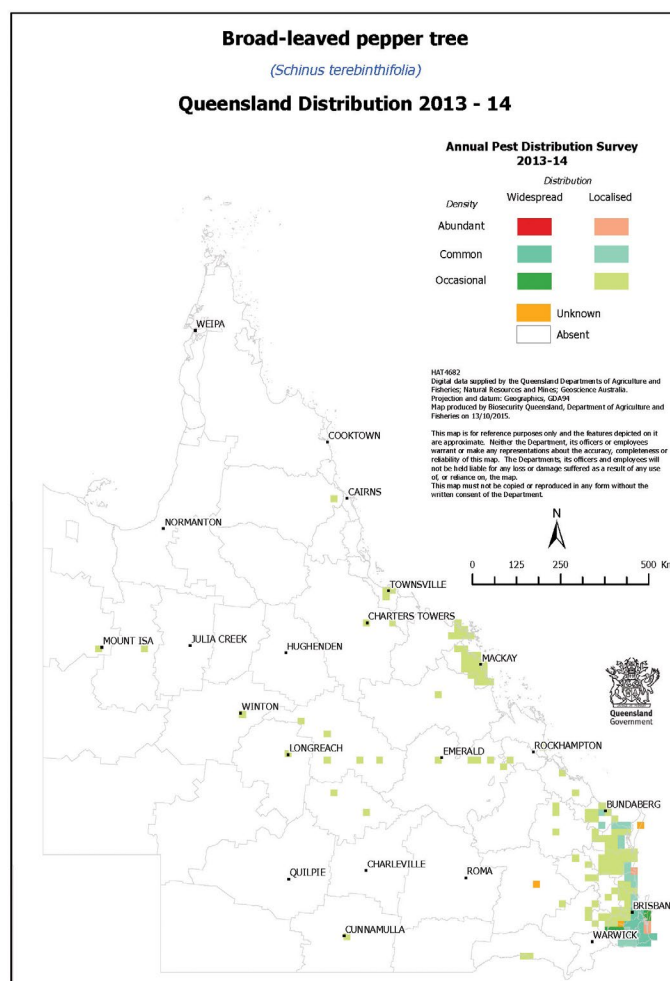
Board-leaf pepper tree can also reproduce from root suckers.

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 Australians ecosystems, particularly in coastal regions, riparian zones and wetlands.

Broad-leaf pepper tree is an invasive weed overseas, in Hawaii and Florida. It is also recorded as a weed in other mainland USA states, Bahamas, South Africa, New South Wales and Queensland. It dominates many areas of native vegetation in Florida, the Bahamas and all the islands of Hawaii.

Map 1. Distribution of broad-leaved pepper tree in Queensland



Broad-leaf 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-leaf pepper tree has been found growing in a range of habitats from mangrove forests to coastal sand dunes. Thickets of broad-leaf 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 steps to minimise the risks posed by broadleaved pepper tree. This fact sheet provides information and some options for controlling broad-leaved pepper trees.

Birds are attracted to the tree's bright red berries and are responsible for the main method of seed spread.

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

Herbicide control

An off-label use permit allows the use of various herbicides for the control of environmental weeds in non-agricultural areas, bushland and forests.

See Table 1 for treatment options allowed by the permit.

Prior to using the herbicides listed under PER11463 you must read or have read to you and understand the conditions of the permit. To obtain a copy of this permit visit www.apvma.gov.au

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.

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

Situation	Herbicide	Rate	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. FMC Fluroxypyr 200 Herbicide)	35 mL per 1 L diesel or kerosene	Basal bark application Spray or paint the herbicide on the full circumference of each stem. Cut stump Paint within 15 seconds of cutting APVMA permit PER11463 Permit expires 30/06/2018
	Glyphosate 360 g/L (e.g. Roundup)	1 L per 12 L water	Cut stump Paint within 15 seconds of cutting APVMA permit PER11463 Permit expires 30/06/2018
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.
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)	21 mL/1 L diesel	Basal bark application. 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 200 g/L (e.g. FMC 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.

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



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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.