

Riverina pear

Opuntia elata



Riverina pear is an upright, drought tolerant shrub that rapidly invades pastures and natural areas and overwhelms native vegetation. Dense infestations can also impede access and reduce stock-carrying capacity.

It can also reduce land use and pastures. The spines can cause injury to livestock, humans and native animals, reducing or preventing grazing activities and productivity.

Possession, propagation and distribution of riverina pear as an ornamental plant are not considered reasonable and practical measures to prevent or minimize the biosecurity risks posed by riverina pear.

In Queensland it is illegal to sell riverina pear on Gumtree, eBay, Facebook, at markets, nurseries or any marketplace.



Legal requirements

Riverina pear is a restricted category 3 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 certain species. Some of these actions may be required under local laws. Contact your local government for more information.

Description

Riverina pear is a multi-branched shrub with erect branches up to 2 m high. Spines absent or 1–3 short spines, whitish yellow present at some areoles.

Flowers are orange, 3–4 cm wide. Stem segments are glossy green, sometimes with a purple tinge (especially around the areoles and margins). Often more than 2 cm thick, 5–25 cm long. Fruit are club shaped, up to 6 cm long, purplish red.

Life cycle

This invasive cactus reproduces by seed and vegetatively via stem segments. The seeds have hard seed coats that allow them to survive heat and a lack of water. Flowering occurs mostly during spring and summer.

Methods of spread

Riverina pear can spread by segments breaking off and attaching to animals, footwear, vehicles and machinery. The stem segments break off easily from the parent plant. These pads can survive long periods of drought before weather conditions allow them to set roots.

It can also spread by floodwaters, and in some cases by being rolled along bare ground by strong winds. Birds and other animals readily eat the many seeded fruits and deposit seeds in their droppings.

Habitat and distribution

Native to south America, riverina pear is considered invasive in Australia and Europe. Infestations have been detected in southern inland Queensland at Warwick, Mitchell, Morven and Mungallala.

Preferred habitat is hot, semi-arid environments but also occurs in drier sub-tropical and warmer temperate regions.

Control

Managing riverina pear

The GBO requires a person to take reasonable and practical measures to minimise the biosecurity risks posed by riverina pear. Infestations can be controlled with

biological, mechanical and herbicide controls and pasture management.

Physical control

Dig out plants completely and deep bury. Ploughing is not considered an effective means of control unless followed by annual cropping.

Mechanical control

Mechanical control using machinery is difficult because pads can easily re-establish.

Biological control

Two biological control agents are known to be effective against riverina pear: *Dactylopius ceylonicus* (also a successful biological control agent of drooping tree pear and *Cactoblastic cactorum* (prickly pear moth).

Once established on individual plants, the adults provide a continuous supply of new insects to attack new growth and surrounding plants. Cochineal insects are wind-borne and spread to new plants and relies on individuals landing on suitable plants. However, control and spread can be enhanced if the cochineal is manually transferred to new plants.

How to distribute cochineal

Spreading cochineal insects simply involves the manual transfer of cochineal-infested segments into plants that do not contain cochineal insects

To assist in the distribution and spread of cochineal, physically move infected stem segments and place in isolated plants (>50 m away). Collect infected stem segments from existing riverina pear plants using tongs and a knife. To transport stem segments, use plastic tubs with lids. Don't leave cochineal in direct sunlight or hot vehicles.

Herbicide control

Herbicide options available for the control of riverina pear in Queensland are shown in Table 1.

Landholders and contractors should check if the property is in a hazardous area as defined in the *Agricultural Chemicals Distribution Control Act 1966* prior to spraying.

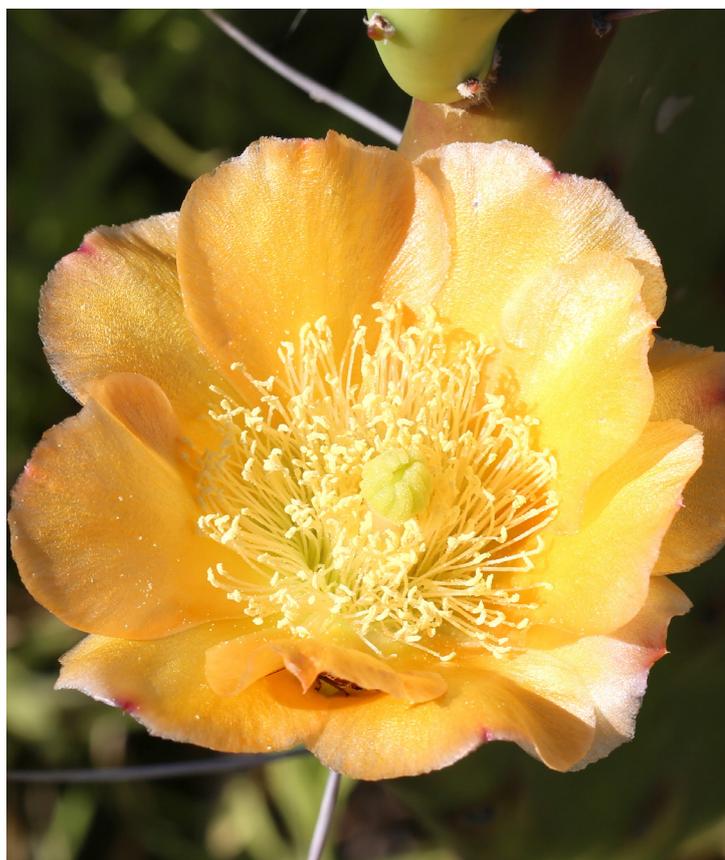
More information

Contact your local government for more information or visit biosecurity.qld.gov.au.

Table 1. Herbicides for the control of riverina pear

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	Aminopyralid 4.47 g/L + picloram 4.47 g/L	Neat	Cut stump 3–5 mm thick layer over cut surface Permit number PER11463
	Aminopyralid 8 g/L + picloram 100 g/L + triclopyr 300 g/L	500 mL/100 L of water	Foliar spray Permit number PER11463
	Aminopyralid 25 g/L + picloram 100 g/L + triclopyr 200 g/L	500 mL/100 L of water	Foliar spray Permit number PER11463
	Aminopyralid 25 g/L + picloram 100 g/L + triclopyr 200 g/L	2500 mL/10 L water	Stem injection Apply 2 mL of solution per 10 cm cut Permit number PER11463
	Glyphosate 360 g/L	Neat	Stem injection Apply 2 mL immediately per 10 cm cut Permit number PER11463
	Metsulfuron-methyl 600 g/kg	2 g/10 L water + Pulse®	Stem injection Apply 1 mL per cut spaced 10 cm apart Permit number PER11463
	Picloram 120 g/L + triclopyr 240 g/L	1670 mL/100 L of diesel distillate	Basal bark or cut stump Permit number PER11463
	Picloram 120 g/L + triclopyr 240 g/L	1670 mL/100 L of diesel distillate	Thin-line Apply to the lower part of the stem from ground level up to 5 cm high. Refer to product label for further information Permit number PER11463

Read the label carefully before use and 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 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.