

Devil's rope pear

Cylindropuntia imbricata



Devil's rope pear is a very thorny cactus, commonly called 'rope pear' because of its rope-like appearance. Dense infestations can impede access and reduce stock-carrying capacity. It can become a dominant species and displace native vegetation and pasture species. It can also reduce land use and pastures. The spines can cause injury to stock, humans and native animals, reducing or preventing grazing activities and productivity. Devil's rope pear are sometimes grown as ornamentals, despite their sharp thorns and tendency to spread.

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

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



**Queensland
Government**

Legal requirements

Devil's rope pear 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). 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 in its area. This plan may include actions to be taken on devil's rope pear. Some of these actions may be required under local laws. Contact your local government for more information.

Description

Devil's rope pear is a generally upright or sometimes bushy cactus, up to 3 m high. The stems are divided into hairless, dull green, cylindrical pads that vary up to 37 cm in length and are 3.5–5 cm thick. The pads have a series of short, raised ridges that give them a twined, rope-like appearance. The areoles are found on these ridges and produce 3–11 pale yellow or white spines, with the longest being 2.5 cm long. Papery sheaths cover these spines.

The flowers are purple or reddish-purple to pink, up to 6 cm long and 3–9 cm wide and are found at the end of stem segments. Fruit are barrel-shaped, green, but turn yellowish as they mature. These fruit are 25–70 mm long and 20–40 mm wide, spineless, egg-shaped berries with deeply depressed tops. They are covered in small bumps and have 18–30 tiny raised structures (i.e. areoles). The seeds are 2.5–4 mm long and are yellow to light brown in colour.

Life cycle

Devil's rope pear reproduces by seed and vegetatively via stem segments. Vegetative reproduction has been reported to be the most prevalent type of spread. Flowering occurs mostly during late spring and summer.

Methods of spread

Devil's rope pear can spread by segments breaking off and attaching to animals, footwear, vehicles and machinery. The fruit and stem segments break off easily from the parent plant. They are mainly spread by floodwaters, and in some cases by being rolled along bare ground by strong winds.

Fruit are eaten by birds and other animals, and the seeds then spread in their droppings.

Habitat and distribution

Native to southern USA and northern Mexico, devil's rope pear has a scattered distribution throughout the eastern parts of Australia. It is most common in the inland and sub-coastal regions of southern Queensland and New South Wales. Also recorded from north-western Victoria, south-eastern South Australia and the Northern Territory.

It is mainly found in hot, semi-arid environments but also occurs in drier sub-tropical and warmer temperate regions.

Devil's rope pear can also be found along roadsides, disturbed sites, pastures, open woodlands, rangelands and grasslands.

Control

Managing devil's rope pear

The GBO requires a person to take reasonable and practical measures to minimise the biosecurity risks posed by devil's rope pear. This fact sheet provides information and some options for controlling devil's rope pear.

The best control for devil's rope pear incorporates integrated management strategies, including herbicides, mechanical, physical and biological control methods.

Physical control

Dig out plants completely and burn. Ensure that all tubers that can grow are removed and destroyed. Ploughing is not considered an effective means of control unless followed by annual cropping.

For advice on disposal options, contact your local government.

Mechanical and fire control

Mechanical control using machinery is difficult because stem segments can easily re-establish. A hot fire is an effective control method for dense infestations. Before burning, consult Biosecurity Queensland to see if this practice is suitable for your pasture and land management practices. A forestry mulcher has recently been trialed and works well as a control method but can be expensive.

Biological control

A cochineal (*Dactylopius tomentosus*) (imbricata biotype) is proving an effective biological control agent for devil's rope pear. However, a new biotype (*cylindropuntia* sp.), has just been approved for release. Both biotypes can achieve an acceptable level of control. 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. They rely 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 involves the manual transfer of cochineal-infested segments onto plants that do not contain cochineal insects.

To assist in the distribution and spread of cochineal, physically move infected stem segments and place on isolated plants (>50 m away). Collect infected stem segments from existing devil's rope 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

Four permits allow the use of several herbicides and application methods to control rope pear cacti as invasive plants in various situations.

See Table 1 for treatment options allowed by the permits.

Prior to using the herbicides listed under the permits (PER90719, PER92459, PER92465 and PER92475), you must read or have read to you and understand the conditions of the permits. To obtain a copy of these permits visit apvma.gov.au.

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

For more information contact your local government or visit biosecurity.qld.gov.au.

Table 1. Herbicides for the control of devil's rope pear

Situation	Herbicide	Rate	Registration details	Comments
Agricultural non-crop areas, commercial and industrial areas, fence lines, forestry, pastures and rights-of-way	Triclopyr 240 g/L + Picloram 120 g/L (e.g. Access)	1 L/60 L diesel	APVMA permit PER92465 (expires 30/11/2024)	Foliar spray Apply as a thorough foliar spray to all stems
Agricultural non-crop areas, commercial and industrial areas, forests, pastures and rights-of-way	Triclopyr 600 g/L (e.g. Garlon)	3 L / 100 L water		
Native pastures, agricultural non-crop areas, rights-of-way, commercial and industrial areas	Metsulfuron-methyl 600 g/kg (e.g. Metsun 600 Herbicide)	20 g / 100 L water		
Non-crop areas, roadsides, fence lines and storage areas	MSMA 800 g/L (e.g. AC Militate Herbicide)	2.5 L / 100 L water	APVMA permit PER90719 (expires 31/12/2028)	
Pastures, non-crop areas, commercial and industrial areas, domestic and public service areas and rights-of-way	Aminopyralid 8 g/L + picloram 100 g/L + triclopyr 300 g/L (e.g. Grazon Extra)	500 mL / 100 L water		
Agricultural non-crop areas, commercial and industrial areas, forests, pastures and rights-of-way	Triclopyr 200 g/L + Picloram 100 g/L + Aminopyralid 25 g/L (e.g. Tordon RegrowthMaster Herbicide)	2.5 L / 100 L water		
Pastures, roadsides, rights-of-way, bushland/native forests, agricultural non-crops areas, commercial and industrial areas, domestic and public service areas, vacant lots, wastelands	Triclopyr 200 g/L + Picloram 100 g/L + Aminopyralid 25 g/L (e.g. Tordon Regrowth Master)	Undiluted	APVMA permit PER92459 (expires 31/08/2025)	Stem injection Apply 2 mL solution per 10 cm cut
	Glyphosate 360 g/L (e.g. Roundup)	Undiluted to 1:1 in water		
	Amitrole 250 g/L + Ammonium thiocyanate 220 g/L (e.g. Amitrole T)	Undiluted		Stem injection 1 mL injected into cuts at 3 cm spacing
Non-crop areas, including native vegetation, conservation areas, gullies, reserves and parks	Aminopyralid 4.47 g/L + picloram 44.7 g/L (e.g. Vigilant II)	Undiluted	APVMA permit PER92475 (expires 30/11/2024)	Cut stump Apply 3 mm gel layer over each cut stem

Note: Refer to the permits for more herbicide options. 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.

