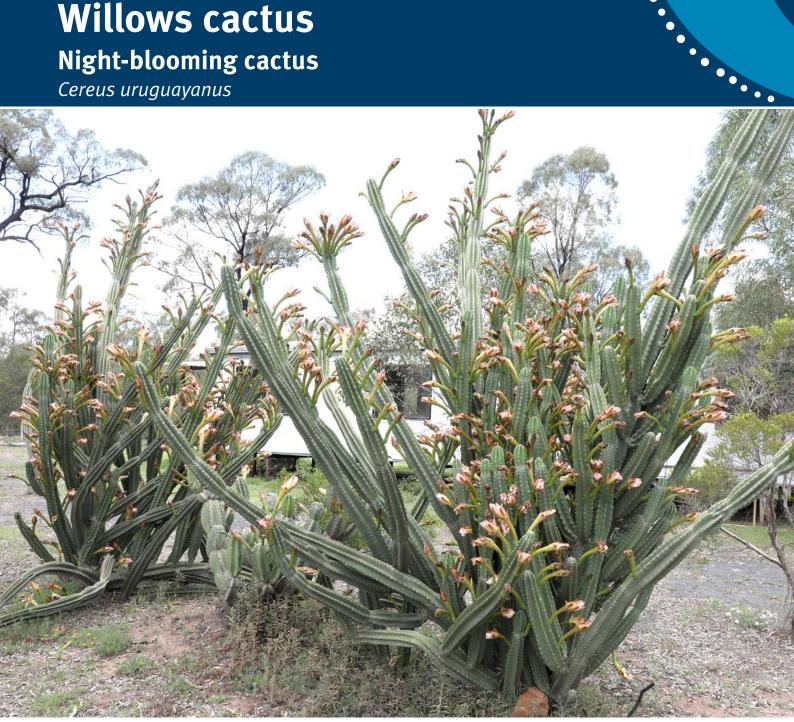
# Willows cactus **Night-blooming cactus**

Cereus uruguayanus



Willows cactus can form dense infestations that compete with native vegetation, limiting growth of small shrubs and groundcover species. Willows cactus can also reduce pastures and land availability for grazing animals.

Willows cactus is a common ornamental plant in Queensland gardens because of its interesting shape, large white flowers and edible fruits.

# **Legal requirements**

Willows cactus is not a prohibited or restricted invasive plant under the Biosecurity Act 2014. However, by law, everyone has a general biosecurity obligation (GBO) to take reasonable and practical measures to minimise the biosecurity risks associated with invasive plants under their control.



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 willows cactus. Some of these actions may be required under local laws. Contact your local government for more information.

## **Description**

Willows cactus is a perennial succulent tree that can grow up to 8 m high with multiple vertical stems and branches.

The stems are succulent, green and spiny, and they are covered with a bluish, waxy layer. The branches and stem usually have six conspicuous lateral ribs on which arrangements of 6–8 spines protrude. These spines are approximately 10-20 mm long.

The white flowers are approximately 150 mm long and are funnel shaped. These flowers occur along on the stems of the plant. The flowers mostly open at night and close again in early morning.

Willows cactus produces large red fruit that contain hundreds of seeds. The fruit are very attractive to birds and spread easily.

Monstrosity or fascination of the stem of certain Cereus plants occurs occasionally in infestations in Queensland. This form of Cereus is not a different species but occurs when the apical meristem divides in an abnormal manner, leading to a different appearance.

### Methods of spread

Willows cactus is spread by birds and animals that eat the ripe fruit and disperse the seeds in their droppings.

Stem fragments can also be a source of spread if garden plants are incorrectly dumped or floods move segments to new locations.

## Life cycle

Willows cactus reproduces mostly by seed. It can also reproduce vegetatively given the right conditions.

The flowers are pollinated by bees and night flying insects. Pollinated flowers produce a large apple sized red fruit that contain white flesh and hundreds of black seeds about the size of a pin head.

#### **Habitat and distribution**

Willows cactus is a native of southern Brazil, Uruguay, and northeastern Argentina. Large infestations of willows cactus occur in southern inland Queensland near Miles, Glenmorgan, Tara and Inglewood. A large infestation also occurs in the central highlands west of Emerald. Smaller infestations are common across southern and central Queensland because of birds spreading seed from garden ornamental plants into nearby bushland or agricultural land.

Currently in Queensland, willows cactus does not seem to preference any soil type, with infestations occurring on a wide variety of soils.

It has subsequently naturalised in many locations across Queensland.

#### **Control**

The GBO requires a person to take reasonable and practical measures to minimise the biosecurity risks posed by willows cactus. This fact sheet provides information and some options for controlling willows cactus.

The best control for willows cactus incorporates integrated management strategies, including herbicides, mechanical, physical and biological methods.

#### **Physical control**

Dig out plants completely and burn or deep bury. Ensure that all tubers that can grow are removed and destroyed.

#### Mechanical and fire control

Mechanical control using machinery can quickly reduce the size of the infestation. Although willows cactus can regrow from stem segments, this is a slow process and so opportunity exists to push up the cactus and burn at a later stage. More research is needed to ascertain the effectiveness of fire on seedling and young plants in pasture situations. Before burning, consult Biosecurity Queensland to see if this practice is suitable for your pasture and land management practices.

#### **Biological control**

An introduced mealy bug (Hypogeococcus festerianus) insect has become established in Queensland. The insect is now present in willows cactus infestations near Cecil Plains, Miles and Tara in southern inland Oueensland.

#### Herbicide control

Treatment with herbicides can be effective, because the plants are relatively easy to find.

There are no herbicide products specifically registered for the control of willows cactus in Queensland. However, a permit allows people generally to use some herbicide products to control willows cactus as an invasive plant in various situations.

See Table 1 for the treatment options in situations allowed by the permits.

Prior to using the herbicides listed under this permit (PER11463) you must read or have read to you and understand the conditions of the permit. To obtain a copy of this permit 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

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

Table 1. Herbicides for the control of willows cactus

Situation	Herbicide	Rate	Registration details	Comments
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 per 100 L water	APVMA permit PER90719 (expires 31/12/2028)	Foliar spray
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 (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 Biactive)	Undiluted to 1 L per 1 L water		Stem injection Apply 2 mL of solution per 10 cm cut
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 3–5 mm thick layer over cut surface
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)	1670 mL per 100 L Diesel		Cut stump
		10 L per 100 L diesel		Basal bark using thinline technique Apply to the lower part of the stem from the ground level up to 5 cm high

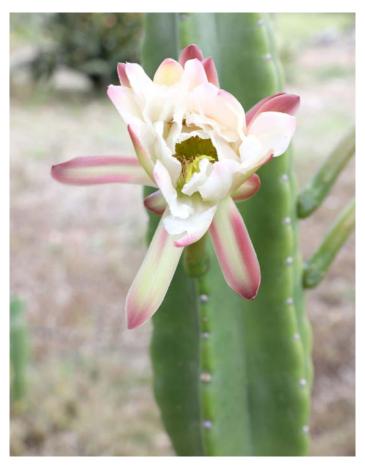
Note: Refer to the permits for more herbicide options. Read the label carefully before use and always use the herbicide in accordance with the directions on the label.



Bird eating willow cactus fruit



Biological control damage from mealy bug insect









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.

