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 steps to minimise the 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 certain species. 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 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 steps to minimise the 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 Queensland.

**Herbicide control**

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

<table>
<thead>
<tr>
<th>Situation</th>
<th>Herbicide</th>
<th>Rate</th>
<th>Registration details</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-agricultural areas, domestic and public service areas, commercial and industrial areas, bushland/ native forests, roadsides, rights of way, vacant lots, wastelands, wetlands, dunal</td>
<td>Triclopyr 200 g/L + Picloram 100 g/L + Aminopyralid 25 g/L (Tordon regrowthmaster)</td>
<td>500 mL/100 L water</td>
<td>APVMA permit PER11463 Permit expires 30/06/2023</td>
<td>Foliar spray</td>
</tr>
<tr>
<td></td>
<td>Aminopyralid 4.47 g/L + picloram 44.7 g/L (Vigilant)</td>
<td>Neat</td>
<td></td>
<td>Cut stump 3–5 mm thick layer over cut surface</td>
</tr>
<tr>
<td></td>
<td>Triclopyr 200 g/L + Picloram 100 g/L + Aminopyralid 25 g/L (Tordon regrowthmaster)</td>
<td>2500 mL/10L water</td>
<td></td>
<td>Stem injection Apply 2 mL solution per 10 cm cut</td>
</tr>
<tr>
<td></td>
<td>Glyphosate 360 g/L (roundup)</td>
<td>Neat</td>
<td></td>
<td>Stem injection Apply 2 mL of solution immediately per 10 cm cut</td>
</tr>
<tr>
<td></td>
<td>Triclopyr 240 g/L + Picloram 120 g/L (Access)</td>
<td>1670 mL/100 L distillate</td>
<td></td>
<td>Basal bark or cut stump</td>
</tr>
</tbody>
</table>

**Further information**

Further information is available from your local government office, or by contacting Biosecurity Queensland on 13 25 23 or visit biosecurity.qld.gov.au.

There are no herbicide products specifically registered for the control of willows cactus in Queensland. However, a permit held by the Department of Agriculture and Fisheries allows people generally to use some herbicide products to control willows cactus as an environmental weed in various situations.

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

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.

- Read the label carefully before use. 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.

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