

Invasive plants and animals

Green cestrum

Cestrum parqui



Green cestrum is an escaped garden plant, which has become a weed of roadsides, creeks and neglected sites in central and south-east Queensland. The roots, stems and leaves are toxic to many domestic animals.

Generally dispersed by birds, seeds are also spread by water movement. Plants can also regrow from cut root pieces. Seedlings will not readily establish under conditions of vigorous competition with other plants.

Description

Green cestrum is also known as green poison berry or Chilean cestrum. It is an erect, perennial shrub to 3 m high, with one or more stems emerging from each crown. The young stems are whitish; older stems are darker, striated at the base and mottled above. The leaves are alternate, up to 12 cm long and 2.5 cm wide, and have an unpleasant odour when crushed.

The greenish-yellow flowers are in clusters at the ends of branches. The flower tubes are up to 2.5 cm long with five small terminal lobes. They have an unpleasant odour by day, but are fragrant at night.

The fruit is a purplish-black, oval berry about 1 cm long. The dark purple pulp contains one or two seeds of 3 to 4 mm length which have an irregular shape with sharp angles.

Problem

The plant grows vigorously if neglected. On alluvial flats it has been known to outcompete most other vegetation.

Green cestrum needs careful control because its extensive, shallow rooty system can produce many new plants from suckers, particularly after root disturbance or injury.

Green cestrum is toxic to animals including cattle, sheep, horses, pigs and poultry. Its effect on native fauna is unknown. Two alkaloids, parquine and solasonine, have been isolated from green cestrum and it is thought that these substances could be responsible for its toxic effects. Symptoms in cattle include fever, loss of appetite, increased thirst and eventually, general paralysis. Poultry develop acute kidney and liver damage. Post-mortem examination of poisoned animals usually reveals extensive internal haemorrhaging. Time of death varies from mere hours to 3 days after consumption of the plant, and depends on the animal, time of year and amount of green cestrum eaten.

Life cycle

Seeds germinate in autumn. Plants flower after two years and produce flowers for several months through summer and autumn. The plants are long-lived, producing new growth in spring. Seeds remain dormant in the soil for many years.

Habitat and distribution

A native of Chile and Peru, green cestrum was introduced as a garden ornamental. Green cestrum is a common weed on vacant allotments, roadsides and creek banks about towns in south-eastern Queensland and some towns in Central Queensland. It is common in Brisbane and Ipswich. It prefers higher rainfall areas and is quite tolerant of frost.

Green cestrum is mainly spread by birds eating the fruit and excreting viable seeds. It can also regenerate from root pieces to produce new infestations, particularly when cultivation or roadside grading

disturbs or relocates roots. Flood waters also aid dispersal of the weed.

Declaration

Green cestrum is not declared under the *Land Protection (Pest and Stock Route Management) Act 2002*, however, plants that are not declared under state legislation may have control requirements imposed by local governments.

Prevention

Newly established plants should be destroyed before they flower and produce berries. Birds eat the berries, dispersing the seed to new areas. Do not plant green cestrum in gardens, as this acts as a potential point of dispersion.

Roadside infestations should be controlled before road grading is carried out. The same recommendation applies in cultivation areas; control the cestrum first. Land which is overgrazed, and therefore has limited plant competition, should be regularly checked for new infestations.

Control

The impacts of weeds can threaten the sustainability of agriculture and other land uses. Weeds can also significantly affect native plants and animals.

The best approach is dependent on the individual situation, and may include a combination of changes in land management with herbicide, biological and mechanical control methods. The final combination chosen needs to take into account the size of the weed infestation, the availability of control methods and the life cycle of the plant.

Management strategies

Green cestrum seedlings can be suppressed by vigorous competition from other plants. Control adult plants, then plant a vigorous pasture species or local native species which will compete with seedlings. This method is not always practical on riverbanks and gravel beds.

Mechanical control

Green cestrum can be killed by digging out the plants completely. Care must be taken to remove all the yellow roots, otherwise regrowth will occur. It is preferable to burn the roots.

Herbicide control

Before using any herbicide always read the label carefully. All herbicides must be applied strictly in accordance with the directions on the label.

Landholders and contractors are reminded to check if the property is situated in a hazardous area as defined in the *Agricultural Chemicals Distribution Control Act 1966*.

Caution: Remove livestock from the sprayed area until the leaves drop. Treated plants can be more attractive to livestock.

Table 1 details the herbicides registered for control of green cestrum in Queensland.

Further information

Further information is available from the vegetation management/weed control/environmental staff at your local government.



TABLE 1 – HERBICIDES REGISTERED FOR THE CONTROL OF GREEN CESTRUM

Situation	Herbicides	Rate	Preference	Comments
non-crop, pastures rights-of-way, forests, industrial areas	picloram+triclopyr (Grazon DS ^R)	0.5 L/100 L	2	Apply late spring to early autumn. Thorough coverage of leaf and stem
non-crop, pastures rights-of-way	trichlopyr (Garlon 600 ^R)	0.17 L/100 L	4	Thoroughly spray foliage when growth is active
non-crop, rights-of-way, industrial areas	amitrole (Amitrole T ^R)	1.1 L/100 L	3	Spray weeds just prior to flowering. Repeat if necessary
non-crop, pastures, industrial areas rights-of-way	2,4-D + picloram (Tordon 75-D ^R)	0.65 L/100 L	1	Spot spray
non-crop, forests, industrial areas, pastures, rights-of-way	Picloram + triclopyr Access ^R	1 L/60 L diesel	1	Basal bark or cut stump

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