DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Prickly pear *Opuntia spp.*



Prickly pear is declared a Class A (to be eradicated) and Class C (not to be introduced) weed in the Northern Territory and is a Weed of National Significance in Australia.

Prickly pear is a declared weed, south of 18°5 latitude, in accordance with the Weeds Management Act.

The problem

Opuntioid cacti are a group of plants that belong to a sub-family of Cactaceae. Opuntioid cacti vary significantly in their form and habit, ranging from low growing shrubs under 50 cm to erect trees up to 8 m tall. Invasive species in these genera are Weeds of National Significance. These invasive cacti impact on Australia's environmental, agricultural and aesthetic values. The spines are capable of causing serious injury to humans, stock and native animals. Large stands of cacti can harbour feral animals, limiting access for stock mustering and recreational activities. Spines can contaminate wool and hides, and infestations can reduce or prevent grazing activities, reducing productivity.

Habitat and distribution

Opuntioid cacti are native to the Americas, from Canada to southern South America. Opuntioid cacti grow throughout a wide climatic range, from arid to warm temperate tropical areas. Species are found throughout all Australian states and territories, and are very adaptable, growing in a range of soil types and areas that receive above 150 mm of rainfall annually. They have become weedy where they were introduced as food, fodder, ornamentals and for the former cochineal industry. Cacti flourish around old homesteads, dumps and minesites.

Preventing spread of Prickly pear

Opuntioid cacti can spread easily from the movement of seeds, fruit and segments via birds, animals, water, vehicles, equipment and people. Good hygiene is essential when working in infested areas, including staying on designated tracks to prevent further spread. All segments and fruits should be removed from an area as they are capable of regrowing, even under very harsh conditions.

Chemical control

The Australian Pesticides and Veterinary Medicines Authority (APVMA) regulate the use of chemicals in Australia. In some instances off-label permits are issued by the APVMA. For more details on herbicide registration and permits go to www.apvma.gov.au or contact the Weed Management Branch.

Non chemical control

Grazing on opuntioid in most instances is prevented due to the sharp spines, though stock and other animals sometimes feed on less spiny species in times of drought.

Mechanical or physical removal of opuntioid cacti can be undertaken, however extreme care must be taken due to their spiny nature. Some species can pose a significant risk of injury when handled.

Physical removal can be difficult as any segments detached in the process can regrow to form new plants. Material must be disposed of appropriately via deep burial.

* Hot fires can kill plants, although regrowth can occur. Burning can also assist in providing access to sites allowing other control activities to be undertaken. Removing the bulk of the plant through burning can also reduce the amount of herbicide required for follow up control.

Biological control agents have been used successfully on opuntioid cacti - Cactoblastis cactorum, a stem-boring moth, and several Dactylopius species, cochineal scale insects. Cactoblastis has been extremely successful in controlling common prickly pear (O. stricta), although it is less effective in cooler, wetter areas or very dry locations.

There are several Dactylopius species (cochineal) present in Australia. The species look similar but differ in their host ranges so it is important to use the correct cochineal. For example, the cochineal that is effective on tiger pear will not work on common prickly pear. Heavy rain and cold weather can inhibit the effectiveness of cochineal; however successful control is possible for tiger pear, common prickly pear and velvety tree pear. Cactoblastis and cochineal can be easily spread by re-distributing the agents either as eggs or by placing infected segments on unaffected plants. Researchers are investigating other biocontrol options.

Disclaimer

In the Northern Territory, a registered product must only be used in situations consistent to those appearing on the label, unless authorised under a permit; and a person:

- must not have in their possession or use a chemical product unless the product is registered in Australia (exemptions apply)
- may use a registered product at a concentration, rate or frequency lower than that specified on the label unless this is specifically prohibited on the label. This does not apply to herbicide use occurring under an APVMA permit
- may use a registered product to control a pest not specified on the label provided the pest is in a situation that is on the label and use on that pest is not specifically prohibited on the label
- may also use a registered product using a method not specified on the label unless this is specifically prohibited on the label.

Users of agricultural (or veterinary) chemical products must always read the label and any permit, before using the product and strictly comply with the directions on the label and any conditions of any permit. Users are not absolved from compliance with the directions on the label or conditions of the permit by reason of any statement made in or omission from this publication.

* Any management incorporating burning must be in accordance with the *Bushfires Act* and *Fire and Emergency Act*. Please contact your local fire station for permits to burn.

Further information

Weed Management Officers from the Weed Management Branch can provide advice on all aspects of weed management including control techniques, biological control, legislative responsibilities, policy advice, monitoring and reporting and regional planning.

For further information on weed management planning, integrated control, herbicide application techniques and monitoring please refer to the <u>NT Weed Management Handbook.</u>

