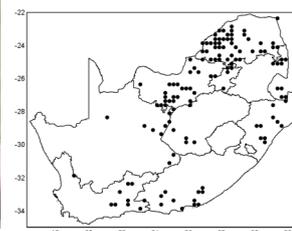


ARC-PPRI FACT SHEETS ON INVASIVE ALIEN PLANTS AND THEIR CONTROL IN SOUTH AFRICA

www.arc.agric.za



AUSTRALIAN PEST PEAR is a many-branched, succulent shrub which can reach 2 metres high. The leaf pads (cladodes) are blue-green, flattish, and longer than they are broad (i). The cladodes may or may not contain spines. If spined, these are up to 40 mm long and occur in groups of one or two. Attractive, yellow flowers (ii) are borne in summer, and are followed by red, succulent, sour-tasting berries, which turn purple (iii) when ripe. The cactus was imported into South Africa as an ornamental, and originates from North America and the West Indies. The common name, Australian pest pear, arises from the fact that it invaded Australia where it became one of the world's worst weeds. Australian pest pear is a category 1 declared weed in South Africa and must be controlled, or eradicated where possible.



THE PROBLEM

Although Australian pest pear is not very widespread, its distribution is expanding. Unfortunately, one of the worst infestations is in the Kruger National Park. As with most cacti, the plant can spread vegetatively when cladodes come into contact with the soil, and the seeds are dispersed by a variety of mammals and birds that eat the fruit. In agriculture, spined cladodes may adhere to the fur of livestock, resulting in skin irritations.

THE SOLUTION

Mechanical control is only effective and possible in small infestations. While chemical control is fairly effective against Australian pest pear, it is costly, labour intensive, and requires regular follow-up treatment. Follow-up treatment has to be well-timed to ensure that the plants have not begun flowering and fruiting, since seed dispersal by animals spreads the infestation. As with most invasive alien plants, biological control is the only cost-effective, sustainable solution. Two biocontrol agents that succeeded in controlling the plant in Australia were introduced into South Africa. One is the cactus moth, *Cactoblastis cactorum*, which was introduced in the 1930s, and the other is the cochineal insect, *Dactylopius opuntiae* (iv) introduced only in 1997. The cochineal insect belongs to the same species as the one that controls prickly pear, although it is a different biotype known as the 'stricta' biotype, which is particularly damaging to Australian pest pear. The cactus moth is heavily preyed on by a variety of predators at all stages of its life cycle—especially in the Kruger National Park, where baboons have developed a taste for the larvae and excavate them from the cladodes. The cochineal is very effective in controlling the plant but, unfortunately, the insects may be washed off the plants during heavy rain which, in turn, encourages plant growth. The action of these two agents continues to suppress Australian pest pear infestations, and the plant is considered to be under substantial control. Thanks to a fairly intensive, combined chemical and biological control programme, the infestation in the Kruger National Park has been reduced by about 90%.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



Compiled by: Lin Besaans (2012) © ARC
Plant Protection Research Institute
infoweeds@arc.agric.za