Inverell Shire Council

NOXIOUS WEED CONTROL UNIT

Please address all correspondence to the General Manager, Inverell Shire Council, 144 Otho Street, Inverell, NSW 2360 – Telephone 02 6728 8288 Fax 02 6728 8277 Email council@inverell.nsw.gov.au website www.inverell.nsw.gov.au

Velvety Tree Pear

Velvety tree pear *(Opuntia tomentosa),* also known as velvet tree pear, is a native of Central Mexico. The story behind its introduction into Australia is not known, but it would be safe to assume it was brought into Australia as a garden plant. It is now locally established over thousands of hectares of inland Queensland and northern New South Wales.

THE PROBLEM

The plentiful seeds of velvety tree pear are spread long distances by birds. Plants grow into large trees up to 5m high, and groups of plants become so thick they impede stock movement and reduce grass cover. And, the highly visible plants would not necessarily reflect favourably on property management or value.

On the credit side, however, velvety tree pear has some value as supplementary fodder during dry times (the plant has fewer and less problematic thorns than the smaller, common prickly pear). The presence of scattered velvety tree pear also provides constant host material for the sustenance of cactoblastis and cochineal biological control agents.

IDENTIFICATION

The most dominant identifying feature of velvety tree pear is the actual size/height of the plant. It grows way beyond the normal, common prickly pear. Young leaves are shiny but take on a distinct "velvety" appearance as they mature. Flowers are a bright orange colour. Large plants produce masses of fruit every year.

LEGAL STATUS:

Velvety tree pear is a declared CC4(C) NOXIOUS WEED within the Shire of Inverell:

CC4(C) MANAGEMENT PLAN – LEGAL REQUIREMENTS within the Shire of Inverell

The growth and spread of the plant must be controlled by conducting an on-going and effective treatment program to reduce plant numbers and to minimise the plant's negative impact on the land. Any biological control or other control program directed by the local control authority must be implemented. All reasonable measures are to be taken to ensure vehicles, machinery and livestock moved off the property are free of the plant. Plant must not be sold, propagated or knowingly distributed.

CONTINUED OVERLEAF:

MORE INFORMATION? PLEASE CONTACT YOUR LOCAL WEEDS OFFICER:

Les Tanner 02 6728 8284 - mobile 0427 241 806	Phil Sutton 02 6728 8244 - 0418 446 068
OR check out Council's website on www.inverell.nsw.gov.au, Environmental Services section	

VELVETY TREE PEAR (Cont.)

CHEMICAL TREATMENT of velvety tree pear is effective, because the plants are easy to find. Unfortunately the work can be costly because of the volume of herbicide needed to cover the plants. According to NSW DPI's excellent booklet "*Noxious and Environmental Weed Control Handbook 3rd Edition"* and other sources, herbicide treatments include:

Chemical	Rate	Comments
Triclopyr eg Garlon 600®	High volume 3L in 100L water + 0.5% (500 mL) uptake spray oil. Knapsack application 50mL in 10L of water plus 50mL uptake spray oil **OR** 1L in 75L **diesel**	Apply to actively growing plants - see permit PER10544 for more details
Triclopyr + Picloram eg Grazon DS®/Extra®	High volume 500 ml in 100 L water + 5% Uptake spray oil OR knapsack application 50mL in 10L of water plus 50mL Uptake spray oil (Essential to use spray oil or similar to "stick" the spray to the leaves)	Apply to actively growing plants - see permit PER10544 for more details [Very slow acting, esp. on larger plants. Can take >12 months, but during this time cochineal insects if any remain active and assist with seedling control]
Triclopyr + Picloram eg Access®	1.0 L in 60 L diesel	Folia application, thoroughly wet plants
Amitrole + Ammonium thiocyanate Nufarm Amitrole T®	Apply a mix of 1 part Amitrole T in 25 parts water liberally to small plants and regrowth	Tall plants may be lopped before spraying. Apply the spray liberally over the entire plant and on adjacent soil. Registered Qld only.

BIOLOGICAL CONTROL using cochineal (*Dactylopious opuntiae*) insects can be effective, especially over the long term because, unlike herbicides, the process ensures insects remain to tackle new plants. **There are a few hints to follow:**

- Cochineal insects are not very mobile and initially need to be manually transferred into uninfected plants. Unless blown by the wind, the tiny 1mm insects only travel 3-4 metres. Thick ground cover hinders them, and cracked ground (eg black soil) is fatal because they drop into the cracks! They travel best on hard, reasonably bare ground.
- The insects work better if they are given shelter from the elements. After the insects are established on the plant itself, the biocontrol program can be further assisted by cutting some of the main plants down (about 300mm above ground level). Ideally, try to land these plants on rocks/logs to minimise their contact with the soil and their ability to take root. Stacking scattered leaves back on the main plant also helps. Often, just pushing the plants over (**as in the photo, right**) can be enough. Note the white patches on the leaves denoting numerous cochineal insect colonies.

- Cutting tree pear down does 3 things: (1) it severs the plant's food supply, (2) it reduces the plants resistance to the effects of the tiny cochineal insects, and (3) provides a sheltered environment (the underside of the leaves) for cochineal insects to flourish in. While ever insects are present on the main plants, their offspring continue to locate and destroy new seedling growth.
- The ongoing presence of velvety tree pear provides host material for cochineal (the same species also attacks common pest pear) and for desperate cactoblastis moths unable to locate common pear on which to lay their eggs. Incidentally, cactoblastis can be useful during some seasons for devouring young seedlings. They sometimes also attack new (soft) leaves on young plants, thus allowing completion of their breeding cycles. Generally, however, cactoblastis have zero impact on mature plants because the "wood" is too hard for them to chew through.

IMPORTANT: USE OF PESTICIDES – ALWAYS READ THE LABEL

Pesticides must only be used for the purpose for which they are registered and must not be used in any other situation or in any manner contrary to the directions on the label. Never use herbicide in any way contrary to the label recommendations.

DISCLAIMER: Information contained herein is based on knowledge and understanding at the time of writing. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Inverell Shire Council or the user's independent adviser.

LRT 31/05/2010

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