



[northwestweeds.com.au](http://northwestweeds.com.au)



## Paterson's Curse

by Les Tanner, North West Weeds, Bingara NSW



Paterson's curse (*Echium plantagineum*) - also known as Salvation Jane - is widespread throughout many parts of New South Wales. It's a handy resource for bees, but a curse to most grazing animals.

### IDENTIFICATION

Paterson's curse is easily distinguishable by its attractive, purple flowers. The plant produces thousands of seeds, often transported to new areas in hay and other forms of fodder. Wherever we see horses in a paddock, for example, we usually see Paterson's curse that has arrived there via hay.



### EFFECT ON ANIMALS

Paterson's curse contains a number of alkaloids, at least one of which acts on the livers of animals causing loss of condition and eventual death in some cases.



Pigs and horses are most affected by continued exposure to Paterson's curse. Their stomachs cannot fully process the plant material, resulting in chronic liver damage. Sheep, goats and cattle are affected but to a lesser extent.

Paterson's curse also causes hay fever and skin irritation for some humans.

**MORE INFORMATION:** Includes "Noxious Plants of Australia", by Parsons and Cuthbertson

[Inkata Press].



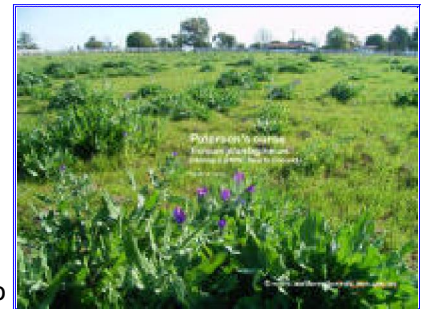
[NSW DPI weeds website](http://NSW DPI weeds website) - detailed information on the plant and its management



### CONTROL METHODS

**Non-Chemical Options:** Competitive pastures and/or good grazing management are important in helping to control this problem plant. Manual removal of new plants is an option for small infestations.

**Biological control** is showing some promise as a means of controlling serious, established infestations in some parts of NSW. The CSIRO and NSW DPI have been involved in a major biological program to control Paterson's curse. Seven (7) different types of insects have been approved for release in Australia. The most promising insects so far include *Mogulones larvatas* and *Mogulones geographicus*. These insects have been released in many areas of NSW, at sites subsequently monitored by NSW DPI staff and local council weeds officers.



Results in northern NSW have been patchy, compared to the southern (and cooler) areas of the state where the program has had some noticeable successes - in fact, some news reports have quoted bee farmers as going crook because there has not been enough Paterson's curse available for their bees...



More information on the biocontrol program can be found on the NSW DPI weeds website,

**Chemical Options:** Overleaf:

**Chemical Options:**

According to NSW DPI's excellent booklet "*Noxious and Environmental Weed Control Handbook (Fourth Edition)*", treatments for *Echium* species (Paterson's curse and Viper's Bugloss) include:

Chemical	Rate: Spot/Boom	Comments
Triclopyr 300 g/L + picloram 100 g/L + aminopyralid 8 g/L eg Grazon Extra®	250 mL in 100 L of water	Spot spray from rosette to flowering plants.
Glyphosate 360 g/L Various trade names	500-700 ml in 100 L of water 2.0-3.0 L/ha	Spot spray. Actively growing plants. Boom application.
2,4-D amine 625 g/L Various trade names	170-220 ml in 150 L of water 1.7-2.2 L/ha	Spot spray - young rosettes. Boom application.
2,4-D 300 g/L + picloram 75 g/L eg Tordon 75-D®	150 mL in 100 L of water	Spot spray. Rosettes to pre-flowering.
Metsulfuron methyl 600 g/kg Various trade names	5 g in 100 L of water 10-15 g/ha	Apply to rosettes after full leaf expansion but before head emergence. Do not spray after emergence of first flowers, as seed set has occurred.
MCPA 500 g/L Various trade names	1-1.5 L/ha	Apply at early rosette stage.
Dicamba 500 g/L Various trade names.	280 ml per 100 L of water 4.0 L/ha	Spot spray . Boom spray. Apply prior to flowering. Add wetter.
Metsulfuron 300 g/L + aminopyralid 375 g/kg Stinger®	10g per 100 L water	Hand gun application

**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 a herbicide in any way contrary to the label recommendations.

**DISCLAIMER:** The information contained in this web site 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 North West Weeds or the user's independent adviser.

Les Tanner 15/07/15