

**North West Regional Best Practice Guide for**: **Silverleaf Nightshade**

**Botanical Name:** *Solanum elaeagnifolium*

**Common Names:** Silverleaf nightshade

**North West Regional Priority Weeds Objective** - Asset Protection

These weeds are widely distributed in the region. Their spread should be minimised to protect priority assets.

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**Photo: NSW DPI**

**Silverleaf nightshade :** is a serious problem in cultivation paddocks. Once established, it is almost impossible to eradicate. The roots penetrate to a depth of more than 2m making chemical control unreliable. All parts of the plant, particularly the green or ripe fruit, can be toxic to animals. Symptoms include bloating, trembling, loose faeces, nasal discharge, salivation and breathing difficulties. Cattle are moresusceptible than sheep.

**General Biosecurity Duty – *Biosecurity Act 2015***
*A* ***general biosecurity duty*** *applies to all dealings (as defined) with this species. Any person who deals with this species who knows (or ought to know) of any biosecurity risk posed by the plant, a carrier or a dealing , has a duty to ensure the biosecurity risk is prevented, eliminated or minimised, so far as is reasonably practicable.*

**Regional Recommended Measure**:

**Outcomes to demonstrate compliance with GBD**

* Land managers should mitigate the risk of new weeds being introduced to their land.
* Land managers should prevent seed and propagules spreading from their land
* Land managers reduce the impacts of the plant on priority assets.

**Mandatory Measure** (Division 8, Clause 33 Biosecurity Regulation 2017)-

 A person must not import into the State or sell.

**Liverpool Plains Shire Local Control Requirements**

1. Reduce the size and density of infested area by physical,and or chemical control methods, and
2. Eliminate or minimise the risk of spread onto neighbouring lands.

##### Penalty for not complying with the general biosecurity duty or a direction issued under the *Biosecurity Act 2015*

The maximum penalty is:

* in the case of an individual—$220,000 and, in the case of a continuing offence, a further penalty of $55,000 for each day the offence continues, or
* in the case of a corporation—$440,000 and, in the case of a continuing offence, a further penalty of $110,000 for each day the offence continues.

The maximum penalty for an offence that is committed negligently is:

* in the case of an individual—$1,100,000 and, in the case of a continuing offence, a further penalty of $137,500 for each day the offence continues, or
* in the case of a corporation—$2,200,000 and, in the case of a continuing offence, a further penalty of $275,000 for each day the offence continues.

**Silverleaf nightshade Control Calendar**

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| **MAY** | **JUNE** | **JULY** | **AUG** | **SEPT** | **OCT** | **NOV** | **DEC** | **JAN** | **FEB** | **MARCH** | **APRIL** |

**GROWTH CYCLES**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DORMANT** |  | **GERMINATION** |  | **GERMINATION** |
| **STEM EMERGENCE** |
| **FLOWERING**  |

**INTERGRATED CONTROL TECHNIQUES AND ALTERNATIVES**

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| **HERBICIDE OPTIMUM** |
| **GRAZING** |
| **SUMMER CROPPING** |

**Control Methods/Techniques:** Combinations of the following methods are effective.

**Manual/Mechanical:** Cultivation is not useful tool to use against Silverleaf nightshade and is more likely to drag root particles to clean areas.

**Chemicals:** There are a number of Registered Herbicides for use on Silverleaf nightshade for foliar and spot spraying and boom spraying methods.

**Cultural/Biological:** Currently, there are no successful biological control agents for use on Silverleaf nightshade.

**Registered Herbicide Application Rates:**

Please refer to theNSW DPI Website NSW WeedWise.<https://weeds.dpi.nsw.gov.au> for current up to date permits and Registered Chemicals.

Or to NSW Weed Control Handbook 2018 7th Edition for Chemical Options.

**Critical Comments:**

* Apply when bushes have good leaf growth and cover with no leaf fall.
* Consult your LCA Biosecurity Officer- Weeds for application tips
* Always read and follow the Label instructions and MSDS of respective herbicides.

**NOTE:**

1. All Control Techniques involving herbicide use, must comply with the directions on the herbicide label or the conditions set out in a current permit to use a nominated herbicide.
2. All chemical control programs must be carried out in accordance with the *Pesticides Act 1999* and Pesticide Regulation 2017.
3. All Chemical application programs used must be undertaken by or be designed and supervised by an appropriately Certified and Accredited Chemical user.
4. Growth patterns and the changes to optimum treatment times will vary with seasonal conditions due to air temperature changes that may coincide with soil and moisture availability.

**Disclaimer:**

This document has been prepared by the North West Regional Weed Committee and Local Government Control Authorities in good faith and on the basis of best available information. Users of this document must obtain their own specific advice and conduct their own investigations and assessments of their individual circumstances.

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| **Linkage to Plans/Strategies*** North West Regional Strategic Weed management Plan 2017-2022
* NSW Biosecurity Strategy 2013-2021
* NSW Biosecurity Act 2015
* *Pesticides Act 1999* and Pesticide Regulation 2017

**References*** *NSW DPI Website /Weedwise/ Noxious and Environmental Weed Control Handbook 7th Edition.*
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