The Northern Tablelands Regional Strategic Weed Management Plan 2017 - 2022





Weed Control Management Plan: Silverleaf Nightshade

Botanical Name: Solanum elaeagnifolium Common Names: Silverleaf Nightshade

Northern Tablelands Regional Priority Weeds Objective – <u>ASSET PROTECTION</u> (Whole of Region) This weed is widely distributed in some areas of the region. Their spread must be minimised to protect priority sites.

General Biosecurity Duty

All plants are regulated with a **general biosecurity duty** to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.

Regional Recommended Measure:

Outcomes to demonstrate compliance with GBD

- Land managers should prevent spread from their land, where feasible.
- Land managers should mitigate the risk of new weeds being introduced to their land.
- The plant should not be bought, sold, grown, carried or released into the environment.
- Mandatory Measure (Division 8, Clause 33 Biosecurity Regulation 2017) A person must not import into the State or sell.

New England Weeds Authority Local Control Requirements

Owners/occupiers of land are required to actively control Silver Leaf Nightshade, and as a minimum, to continuously inhibit the plants ability to spread, and its numbers and distribution must be reduced.



The serious reduction of crop and pasture production makes Silverleaf Nightshade one of the worst weeds in NSW. It is readily spread by seed and root segments and once established, is very difficult to control. The spread of Silverleaf Nightshade is influenced by land use and rainfall patterns. It will grow on most soil types. Silverleaf Nightshade will grow from seed and root segments in summer rainfall areas. In southern NSW, with less reliable summer rainfall, vegetative propagation is more common. Land use, for example cultivation or livestock movement will determine spread. Seed is spread by birds, water, and livestock, particularly sheep. Most viable seed passes through the animal's digestive system in two weeks, making this a mandatory 'clean out' period before stock can be moved to clean areas. Cultivation breaks the roots into many small segments and can spread them over the paddock. Root segments can travel larger distances in soil on attached to machinery. New plants can regenerate from pieces as small as 1 cm. Research shows that root segments if kept moist can remain viable in soil for up to 15 months.

Photo: NSW DPI

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.

Linkage to Plans/Strategies

- Northern Tablelands Regional Strategic Weed Management Plan 2017-2022
- NSW Biosecurity Strategy 2013-2021
- NSW Biosecurity Act 2015

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• Pesticides Act 1999 and Pesticide Regulation 2017

Download the weedwise app for detailed information on priority weeds in our area.

For Further Information: New England Weeds Authority 129 Rusden St Armidale NSW 2350 PH: (02) 6770 3602 www.newa.com.au or NSW DPI Weedwise: http://weeds.dpi.nsw.gov.au/ or Northern Tablelands Local Land Services: https://northerntablelands.lls.nsw.gov.au/biosecurity

References

• NSW DPI Website /Weedwise/ Noxious and Environmental Weed Control Handbook 6th Edition.

Disclaimer:

This document has been prepared by the Northern Tablelands 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.

Registered herbicide application rates for: Silverleaf Nightshade

Botanical Name: Solanum elaeagnifolium Common Names: Silverleaf Nightshade

Silverleaf Nightshade colonies are not easily controlled as the extensive interconnecting root systems are difficult to totally control. Silverleaf Nightshade has a tremendous capacity to regenerate from root fragments. Continual vigilance is required when managing Silverleaf Nightshade. Colonies can re-establish even though they may have been controlled for several seasons.

Silver Leaf Nightshade Control Calendar

JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	ОСТ	NOV	DEC
HERBICIDE								HERBICIDE			
OPTIMAL								OPTIMAL			

Registered Herbicide Application Rates:

2,4-D 300 g/L + Picloram 75 g/L (Tordon® 75-D)

Rate: 650 mL in 100 L of water Comments: Spot spray. Spray to wet thoroughly. Extend treated areas beyond the last plant for 1 m. Withholding period: 1-8 weeks (see label).

Fluroxypyr 333 g/L (Starane[™] Advanced)

Rate: 300 mL in 100L of water Comments: Delay applications till majority of shoots have emerged. Follow-up treatment will be required Withholding period: 7 days. Herbicide group: I, Disruptors of plant cell growth (synthetic auxins) Resistance risk: Moderate

Critical Comments:

- Consult your weeds officer for application tips
- > Always read and follow the Label instructions and MSDS of respective herbicides.

NOTE:

- (a) 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.
- (b) All chemical control programs must be carried out in accordance with the Pesticides Act 1999 and Pesticide Regulation 2017.
- (c) All Chemical application programs used must be undertaken by or be designed and supervised by an appropriately Certified and Accredited Chemical user.
- (d) 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.