Silverleaf nightshade (Solanum elaeagnifolium)

Fact sheet

What do they look like?

Silverleaf nightshade is a deep rooted summer growing perennial plant from the tomato family, Solanaceae. It grows to 800mm high. Its leaves are silver-green and have approximately 4mm long yellow prickles on the undersides and on the stems. Flowers are 35mm in diameter, with five fused purple petals and prominent yellow stamens. Fruit is round and berry-like, changing from green stripes to motley yellow and orange when mature. Fruit contain up to 150 seeds. The root system can penetrate to a depth of 2 metres.

It flowers from November to February and mainly grows in spring and summer. Plants die back before winter but the dead stems with berries usually remain standing for a few months.





Why should silverleaf nightshade be controlled?

Silverleaf nightshade is very difficult to kill. Plants can be spread by seed or root pieces. It is best to try and treat isolated plants and small patches as they appear. Extended and integrated control measures are vital to manage this weed.

Silverleaf nightshade is toxic to animals, can reduce the yield of wheat crops by 50% and competes with winter and perennial grass pastures by taking water and nutrients during the preceding summer.



What are my responsibilities?

Silverleaf nightshade is declared under the Landscape South Australia Act 2019 on the Eyre Peninsula. This means it is illegal to transport or sell this plant and all property owners have a responsibility to control silverleaf nightshade on their property. Residents who rent their properties also have obligations to control any weeds present. This also includes anyone who is leasing property unless other arrangements have been made.



What are the best ways to control silverleaf nightshade?

Good hygiene strategies are critical in helping to limit the amount of spread on your property or to another property. A long term strategy, using an integrated approach with a range of chemical and non-chemical methods, needs to be developed based on site-specific requirements.

The control strategy must aim to prevent berry-set at the early flowering stage as viable seeds can be found in young, green berries as small as 7mm in diameter.

Chemical control

Timing of herbicide treatment is important. Seedlings are the most susceptible stage of plant growth to chemical control. Herbicide absorption and translocation to roots is lowest during the middle of summer when the plant is in the reproductive phase, with the greatest amount of herbicide translocation occurring in spring and autumn. Chemicals registered to use on silverleaf nightshade include 2,4-D + picloram, fluroxypyr and glyphosate. Check the <u>weed control handbook for declared plants</u> <u>in South Australia</u> on the PIRSA website for specific rates.

Additional strategies include the use of competitive crops and pastures to suppress the plants in spring and summer, grazing by sheep and goats in particular (avoiding the risk of seed dispersal through faeces by not grazing when seeds are present or by quarantining animals for 14 days after removal); slashing during flowering and before seed set; avoiding fragmentation of roots with cultivation; thoroughly cleaning equipment prior to moving from an infected area; and establishing tree belts using allelopathic Eucalypt species in the vicinity of infestations.

Do you have silverleaf nightshade?

If you think you have silverleaf nightshade on your property, the Eyre Peninsula Landscape Board can provide advice on control and management.

More information

Email: ep.landscapeboard@sa.gov.au Phone: 08 8688 3200

www.landscape.sa.gov.au/ep