

Hunter Region Priority Weed

# Blue heliotrope

Drought tolerant pasture invader



Management guide



In NSW, weeds are regulated by the *NSW Biosecurity Act, 2015*. All land managers have a **General Biosecurity Duty** to contain the spread of weeds.

**“General Biosecurity Duty means that any person dealing with plant matter must take measures to prevent, minimise or eliminate the biosecurity risk (as far as is reasonably practicable).”**

The Regional priority for Blue heliotrope is as a species of concern.

For further information contact your local Biosecurity (Weeds) Officer via [Hunter Regional Weeds](#) or visit [NSW WeedWise](#).

## Impacts

Blue heliotrope is a major agricultural weed in NSW. A summer-growing perennial herb, it is extremely drought-hardy.

- Adaptable to a wide range of soil and climate types.
- Outcompetes pasture and native grassland.
- Cultivation can increase an infestation.
- Causes toxicity to stock. Although very unpalatable to livestock, some individuals continue to eat it indiscriminately.
- Heliotrope will be eaten if no other feed is available.
- Spreads aggressively by sticky seeds, root fragments.
- Spread by machinery, animals, humans, and water.
- Seeds and dry plant matter can contaminate stock feed.
- Continual ingestion by livestock of large amounts of heliotrope plants can cause liver damage and reduced productivity.
- Horses are the most susceptible, followed by pigs, cattle, sheep and goats.
- All affected livestock species may become jaundiced and experience varying degrees of photosensitisation.
- Livestock may show signs of depression.
- Often found along roadsides, in waterways, on non-arable country, in degraded pastures and on fallowed cultivation.
- Overgrazing can allow establishment of the weed.

## Management

- Eradication of Blue heliotrope is difficult. The effective control of this weed will usually involve a combination of options.
- Managing grazing pressure is critical to the control. Maintain a vigorous summer-growing perennial pasture.
- Reduce weed density using systemic herbicides before sowing a competitive perennial pasture. Obtain advice on pasture management from your local agronomist.
- Sheep and goats can be used to manage heliotrope, provided a different group of animals is used each year.
- Horses, pigs and cattle should never be used in grazing management of blue heliotrope.
- Cultivation gives short-term control but also has the potential to spread the problem. Best carried out after application of a systemic herbicide. Follow-up seedling control is essential.
- Systemic herbicides help to destroy their root system.
- A biological control agent, the Blue heliotrope leaf-beetle was released in 2001. At high densities, leaf-beetles can completely defoliate blue heliotrope, with both the larvae and adults feeding on the leaves. It is a difficult agent to establish requiring multiple, short interval releases.

# Identification



Blue heliotrope individual plant. *Photo: JJ Dellow*



Blue heliotrope leaf-beetle larvae (above) and adult (below) feed on all parts of the plant. *Photos: above J Kidston and below A Johnson*



Blue heliotrope flowers grow in dense clusters along one side of a coiled stalk, often referred to as a fiddle neck.

*Photo: Auld & Medd*



The fruit develops into two nutlets, each containing two seeds. Seed can pass unharmed through the digestive tracts of most animals. *Photo: P Sykes*



Blue heliotrope forms dense infestations on lighter soils. *Photos: P Sykes*

# Management Calendar

The calendar below outlines the management approach for a typical year.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Growth stage	May become stressed in intense hot and dry		Growth stage, flowering		Tops die off with frosts in cold areas. May continue to grow and flower in July in warmer areas.				Growth stage, flowering			
Action	Can be sprayed with herbicide if not stressed		Best time for herbicide control with active growth		Over-sow with winter crops or winter-active pasture				Best time for herbicide control with active growth			

Recommended control options may vary according to your area. There are experienced professional Biosecurity (Weeds) Officers based in each Local Government Area who have local knowledge and can provide expert advice for your weed management situation. Contact your expert Biosecurity (Weeds) Officer at your local Council or at **Hunter Regional Weeds**.

Herbicide control options for all areas in NSW, including current herbicide registrations, are available for for Blue heliotrope at **NSW WeedWise**.

*Remember that all herbicide must be used and handled in accordance with the label or permit.*

<https://weeds.dpi.nsw.gov.au/Weeds/BlueHeliotrope>



Get the WeedWise app

## Further information

For further information on how to meet your General Biosecurity Duty on your property, your best source is the expert Weeds Officer at your local Council or via Hunter Regional Weeds.

**Contact Hunter Regional Weeds**

[www.hunterregionalweeds.net.au](http://www.hunterregionalweeds.net.au)

**Hunter Local Land Services**

[www.lls.nsw.gov.au/regions/hunter](http://www.lls.nsw.gov.au/regions/hunter)

**NSW Weed Wise**

[www.weeds.dpi.nsw.gov.au](http://www.weeds.dpi.nsw.gov.au)

