

Blue Heliotrope

Blue heliotrope (*Heliotropium amplexicaule*) is an extremely drought-hardy weed with the ability to persist and spread easily. This major agricultural nuisance occupies over 110,000 hectares in New South Wales.

WHAT IS BLUE HELIOTROPE?

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

This increases its ability to persist and spread, and has made it a major agricultural weed in NSW. Blue heliotrope competes with desirable pasture plants and causes toxicity to stock. It is widespread and adaptable to a wide range of soil and climate types. It occupies more than 110,000 hectares in NSW.

TOXICITY

Blue heliotrope contains pyrrolizidine alkaloids (PAs). These PAs are also found in common Heliotrope (*Heliotropium europaeum*). The amount of PAs in blue heliotrope is much higher than in common heliotrope.

Heliotrope is not very palatable to livestock and consequently tends to be avoided; however, some individuals continue to eat it indiscriminately. Heliotrope will be eaten if no other feed is available.

Continual ingestion by livestock of large amounts of heliotrope plants (either fresh or dried), or their seeds as contaminants in stock feed, can cause liver damage and reduced productivity and even death.

HOW TO IDENTIFY

Blue heliotrope is a hairy, summer-growing, prostrate perennial herb, 15–30cm high and 30–200cm in diameter.

Blue heliotrope belongs to the Boraginaceae family, which includes forget-me-nots (*Myosotis* spp), comfrey (*Symphytum officinale*), paterson's curse (*Echium plantagineum*) and yellow burrweed (*Amsinckia* spp).

Leaves are:

- Alternate;
- Dull green;
- Soft and tapered at both ends.



Stems:

- It has many hairy, branched stems radiating from a woody rootstock, and is highly aromatic.



Roots:

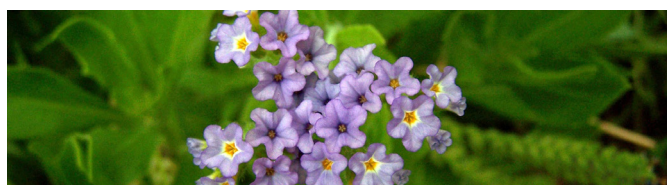
- Strong, slender taproot that can be very woody.
- It generally extends to over 1m but has been observed at up to 2m throughout the soil profile.
- Are a complex system of lateral roots occurring at several depths.

HOW DOES IT SPREAD?

Blue heliotrope is adapted to a wide range of habitats and can reproduce from both seed and root fragments. Blue heliotrope spreads aggressively, as it produces many sticky seeds that adhere to animals and machinery. Seed can pass unharmed through the digestive tracts of most animals. Blue heliotrope can also regenerate from root fragments. It is most commonly spread by road graders, farm machinery, livestock, humans and the movement of water along watercourses.

Flowering is largely dependent on rainfall, but usually starts in November and continues through summer until March. In frost-free areas, the plant is capable of growing and flowering at any time of the year after rain. Established plants produce a flush of new growth in spring and autumn, flowering profusely at these times. In warmer areas, plants may flower and set seed as early as July. The fruit develops into two nutlets, each containing two seeds.

The plant is frost-susceptible, dying off in winter and regenerating from the vigorous root system in the following spring.



CONTROL AND MANAGEMENT

Pasture management

Having an active summer growing pasture which can out-compete blue heliotrope will provide long term control.



Chemical control

Herbicides play an important role in controlling blue heliotrope as they aid the destruction of the root system which generally extends over 1 metre. Chemical treatments are most effective when the plant is actively growing and has commenced flowering (late February–March).



Grazing management

Sheep can be grazed on paddocks infested with blue heliotrope, however not for extended periods of time. They should also be held in a quarantine paddock when rotated, due to seeds remaining unharmed when passed through animals. Merinos have the greatest tolerance to blue heliotrope, with adult wethers recommended for use. Horses, pigs and cattle should never be used in a grazing management plan for Blue Heliotrope.



YOUR RESPONSIBILITY

Landowners under the Biosecurity Act 2015 have a General Biosecurity Duty (GBD) where they are expected to, within reason, know about any weeds which may impact their land.

Regional Recommended Measure – ASSET PROTECTION

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should mitigate the spread of the plant from their land. A person should not buy, sell, move, carry or release the plant into the environment. Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value.



GET THE FREE WEEDS APP

NSW Department of Primary Industries have developed an app that provides key information to help users reduce the impact of over 320 weeds in NSW, called NSW WeedWise.

Users can search or browse weed names (common or scientific), recognise a weed by its physical description and image gallery, and find out about its impacts, where it occurs, how it spreads and its preferred habitat.

NSW WeedWise is a free smartphone app available through app stores.



FOR MORE INFORMATION

Visit Council's website www.midwestern.nsw.gov.au, or the Department of Primary Industries website www.dpi.nsw.gov.au and search 'weeds'. Council's Weeds Team are available to assist on 6378 2939 or at weeds.admin@midwestern.nsw.gov.au.

DISCLAIMER

The information contained in this fact sheet is general in nature and should not be relied upon as the complete source of information to be considered. This document is not intended as a substitute for consulting relevant legislation or for obtaining appropriate professional advice relevant to your particular circumstances.

Reference: NSW DPI