

WEED FILE:

BLACK NIGHTSHADE

REVISED: FEBRUARY 2015



Black Nightshade – *Solanum nigrum*

DESCRIPTION

Note: Black nightshade is often mistakenly called deadly nightshade. It's not deadly nightshade ... see 'Toxicity' below.

Black nightshade is a summer annual and can be a short-lived perennial. It can be variable in size and form, but most often grows as a tall, upright plant reaching about 70cm in height. Large plants will typically become extensively branched and can carry a lot of foliage and consequently compete successfully with crop and pasture species for sunlight. The plants normally die off with the late autumn frosts.

The leaves are dark green, sometimes with purple edges, oval shaped and pointed at the tips, and are up to 12cm long by 7cm wide. The stems are often distinctly purple, especially late in the season.

Mature plants support distinctive bunches of berries 7-10mm in diameter, initially green in colour and turning to black when ripe. When green the berries are a serious problem in pea crops because they can easily be harvested with the peas and are hard to distinguish visually.

Flowers appear between October and May, and are generally white, occasionally pale mauve, 10-12mm in diameter, with five pointed petals and a central yellow column.

Distribution

Black Nightshade is common throughout most of NZ, although less so in the southern half of the South Island. It appears most often in arable land, waste areas, disturbed pastures and gardens. The ripe berries are eaten by birds and it is by this means (bird droppings) that the plant is most readily spread.

Toxicity

Black nightshade is not particularly poisonous, although the unripe green berries may be mildly toxic to children, and there are observations of calves being 'drunk' from eating black nightshade that has become more palatable as it dies off after spraying.

Its undeserved reputation for toxicity is largely due to its being regularly mistaken for deadly nightshade. Deadly nightshade is actually very rare in NZ, and exists only in very limited numbers in locations close to Christchurch. Deadly nightshade (also called belladonna) is indeed highly toxic: Emperor Augustus was poisoned by his missus with belladonna, and Macbeth used it to poison various Englishmen.

Small-flowered nightshade

There is one other species, *small-flowered nightshade*, that is visually very similar to black nightshade and occurs in similar situations although it is not so widely distributed. However as its characteristics and control measures are virtually identical, the two can for practical purposes be considered the same.

CULTIVATION CONTROL

Black nightshade is controlled by cultivation where that is an option. However it does commonly appear in new pasture and crops, when other control measures must be used.

HERBICIDE CONTROL

Black nightshade is readily controlled by many herbicides, so the most suitable product to use is generally determined by the situation and the need to avoid or minimise damage to pasture and crops. However, there is evidence of black nightshade resistance to some chemicals, particularly chlorsulfuron and the triazine family of herbicides.

Waste Areas

- **Glyphosate** is very effective used at 1L/100L in situations where collateral damage to grass is not a concern.

New Pasture

- **MCPB** or products combining **MCPB** plus **MCPA**, applied by boom spray at 4L-6L per hectare, are effective against black nightshade at the seedling stage, and will not damage the new grasses or clover. These products will also provide reasonable suppression of plants past the seedling stage.

Established Pasture

- **Decision** at 50g/Ha (clover-friendly).
- **GrassMate** at 60ml per 10 litres of water, applied to actively growing plants by spot spraying, will provide control but will temporarily remove clover from the sward.

Clover, lucerne, chicory, maize

- **Decision** at 50g/Ha, applied before 4th leaf stage. For larger black nightshade, increase rate to 65g/ha. For best results add a crop oil at 500ml/100L water.

