

WEED FILE: HEMLOCK

REVISED: APRIL 2017



Conium maculatum

DESCRIPTION

Hemlock is a poisonous biennial weed found throughout New Zealand.

Hemlock initially appears as a broad rosette, and then will grow an upright stem system up to 2 or 3 metres in height in its second year. The plant has distinctly fern-like leaves that are dark on the upper surface, and grey-green underneath. The leaves can reach 40cm in length in a mature plant. When the plant is smaller it can easily be mistaken for fennel or wild carrot.

The stems are hollow, many-branched, with a smooth surface and are blue-green or purplish in colour. In spring and summer hemlock produces clumps of small white flowers at the ends of the upright stems. After flowering is finished the plant dies.

Hemlock has a strong and foul smell when crushed.

HABITAT

Hemlock prefers damp waste areas, orchards, roadsides, ditches and stream banks, and generally appears in isolated clumps. However it can become a serious pasture invader at times, especially in newly established pastures.

POISON

All parts of the hemlock plant are highly poisonous. Generally livestock will recognise hemlock as poisonous and avoid it, but in hard or intensive grazing conditions stock have been known to eat it. The plant also becomes more palatable (although no less poisonous) to stock as it dies, and this needs to be borne in mind when reintroducing stock after spraying: the hemlock plant is not safe until fully dead and desiccated, when it is of no further interest to the grazing animals.

NOTIFICATION & CONTROL

In many regions of New Zealand hemlock is a declared noxious weed and is subject to notification and/or plant management strategies that require its compulsory eradication by the landowner.



HERBICIDE CONTROL

Hemlock is susceptible to quite a few herbicides, although it is known to be resistant to amitrole-based sprays.

As with most weeds, the best time to control it with herbicides is during periods of active growth, when the chemical is most efficiently translocated through the plant.

Spot Treatment

This is the most efficient form of control for the isolated patches or clumps in which hemlock most commonly appears.

- **Glyphosate** at 100ml/10L water, plus 10ml **SuperWetter** or **SprayWetter** penetrant.
- **MSF600** at 2g/10L water, plus 10ml **SuperWetter** or **SprayWetter** penetrant.
- **GrassMate** at 60ml/10L water, plus 10ml **SuperWetter** or **SprayWetter** penetrant (note this is the only grass-friendly spot spray option)
- **Buckshot** granular herbicide at 2g applied to the centre of crushed rosettes, or sprinkled within the drip line of larger plants.

Spraying New Pasture

For effective control of seedling and small rosette hemlock only. Apply only after clover has reached two trifoliate leaf stage.

- **2,4-D Granules** at 2-3kg in 100-300L water per hectare.
- **Decision** at 50g in 100-300L water per hectare.

Boom Spraying Larger Plants

This can be done if spot treatment or weed wiping are not practical options.

- **GrassMate** at 2L/Ha plus 100ml of **SuperWetter** penetrant per 100L water.

Weed Wiping

Weed wiping is very cost-effective if valuable pasture has been invaded by hemlock to a degree that makes spot spraying impractical, and the hemlock has reached a suitable height above the level of the pasture.

- **Glyphosate** at 200ml/L of water, plus 2ml of either **SprayWetter** or **SuperWetter**.
- **MSF600** at 2g/L of water, plus 2ml of either **SprayWetter** or **SuperWetter**.