



**TOLL-FREE CALL
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WEED FILE:

NODDING THISTLE

REVISED: JUNE 2014



Nodding thistle – *Carduus nutans*

DESCRIPTION

Nodding Thistle is a large, invasive thistle that can quickly achieve a dense cover that smothers the pasture beneath. It can reach about 1.5 metres tall, and usually grows in thick patches. It has a distinctive purple, drooping ('nodding') flower head that's easy to identify, but before reaching that stage it might be confused with Scotch and Plumeless Thistles. The leaves of a Nodding Thistle are green and have shiny metallic-looking upper surfaces, usually with whitish edges. The flower stems have narrow, spiny wings growing to just below the flower head. Rosette leaves are long and narrow, and deeply cut with spiny edges.

Nodding Thistle can be either biennial or annual. One plant can produce 10,000 viable seeds that are easily spread by farm machinery, stock and birds. Seeds germinate mainly in autumn, but can germinate outside that period. Autumn-germinated plants will flower and seed the following summer. Later germinations remain as rosettes for the first year and complete their lifecycle by flowering in their second summer.

Caution: *If you slash Nodding Thistle plants it will make the pasture appear tidy, but it will also prevent them from flowering on schedule, so they will simply remain present in your pasture as perennials until they are able to flower when you're not looking. So eventually you'll still have to eradicate them.*

PASTURE MANAGEMENT

The best control measure is pasture management, because a tight pasture sward will minimise thistle germination and throttle growth of any thistle seedlings. However, thistles will usually find some opportunity to establish themselves, and one plant quickly becomes a clump, which soon becomes an infestation.

GRUBBING-OUT

Individual plants and isolated clumps can be grubbed out successfully before seeding. Take at least 5cm of the taproot to avoid regrowth.

MOWING

Mowing (topping) mature plants can be a useful control, but timing is critical. For best results, mow *after* flowering, but *before* seed has set. Plants mowed before flowering will become hard-to-kill multicrown thistles. Plants mowed after seed set will of course multiply via the mass of released seed.

HERBICIDE CONTROL

Large infestations of Nodding Thistle are best sprayed. The optimum times for spraying are late autumn/early winter or in spring, when the plants are seedlings and more susceptible. If there's good pasture cover present, graze it well a week before spraying to maximise results and minimise pasture damage.

Boom Spraying

- **2,4-D Granules** at 2kg/Ha (seedlings) or 2.5-3kg/Ha (rosettes). Spray before flower stalk develops.
- **MCPA** at 3L/ha on seedlings, 4L/ha on small rosettes with crowns to 4cm diameter. This herbicide will damage clover if present.
- **MCPB+MCPA** at 4L/ha on seedlings to six leaf. Reasonable control at later stages. This type of herbicide avoids clover damage.
- **Cobber** used alone at 1L/ha until early flowering. **Cobber** is also an excellent addition at 100-200ml/Ha to both MCPA and 2,4-D Granules where larger, multicrown or otherwise hard-to-kill thistles are present.

Spot Spraying

- **GrassMate** at 6m/L applied anytime to whole plant. Grass friendly, but will suppress clover.
- **Cobber** at 25ml/10L (knapsack) or 100ml/100L (handgun). Effective anytime against larger plants.

Spot Treatment

- **Buckshot** granules applied dry at 2g to the crushed centre of each plant. Best applied to smaller plants, but effective against larger plants as well. An excellent option for killing thistles that have survived or been missed in earlier treatments.

Weed Wiper

- **MSF600** applied at 2g/L of water. For faster visible results add **Glyphosate** at 250ml/L water. Graze to reduce pasture height prior to treatment, so that the wiper can be set as low as possible. Make multiple passes over thick patches. Where a weed wiper can be used, this method is cheap, very effective against even mature & multicrown thistles, and of course is totally pasture-friendly.



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