

PLANT PEST CONTROL

LAND PLANT PESTS

Nodding Thistle: *Carduus nutans*

Why are we worried?

Nodding thistle is a large, invasive, biennial thistle which can significantly reduce stock carrying capacities. It can form dense clumps which smother the underlying pasture and make stock movement difficult. Plants form ideal hides for rabbits and hares and for further weed infestations.

What does it look like?

- The plant is most easily identified at the flowering stage when it has drooping purple flower heads which nod in the wind.
- The flowering stems are up to 1.5m tall, stout and bear spiny wings to just below the flower heads.
- It can either be annual or biennial with profusely branched, thick, stems and light green leaves extending along the stems as wings with irregularly toothed, spiny lobes.
- A plant can produce up to 20,000 seeds of which at least a third will be viable. Seeds are heavy and fall close to the parent plant.



- Seeds can be spread by stock, birds and machinery.

Where is it found?

Nodding thistle is capable of colonising any area in Hawke's Bay. It is particularly dense in areas with open pastures and disturbed soils. Most areas will contain seeds from previous infestations, which may germinate at any time.

What's the best way to control the plant?

The most effective control measure is pasture management. A tight sward prevents thistles germinating while an open pasture is an ideal environment for germination.



Individual plants or small clumps can be grubbed but large infestations are generally sprayed.

Plants are best sprayed in the late autumn early winter when the plants are seedlings. Plants at about the six-leaf seedling stage are ideal. Spraying at this time of the year also has only a minimal effect on pasture clovers.

Common types of application at the seedling stage are MCPA and MCPB. As plants grow they require higher rates of chemical to be controlled. Spray rates for mature plants will cause severe pasture damage, especially clovers. It is best to seek advice from your chemical representative or Biosecurity Plant Pest Officer before spraying.

Mature plants can be controlled by mowing but for this to be successful, plants need to be flowering. Mowing before flowering will cause multi-crown plants which will continue to grow, but if cut during flowering, but before seed set plants will die. Multi-crown plants are even more difficult to kill.

What biological controls can be used?

Three biological control agents have been released in Hawke's Bay. The Nodding Thistle Receptacle Weevil, released in 1978, is now widespread throughout the region and is effective in reducing viable seed numbers.

The Nodding Thistle Gall Fly, released in 1991 and the Crown Weevil, released in 1988 are still becoming established. Collectively these agents are having an effect on reducing plant numbers but it will be some years before the impact is obvious.

Domesticated goats are effective.

For further information

If you think you may have this plant pest on your property, please contact the Biosecurity Plant Pest Officers at Hawke's Bay Regional Council for advice and we will work with you to eradicate it.

Wairoa	06 838 8527
Napier	06 835 9200
Waipukurau	06 858 8636
TOLL FREE	0800 108 838

www.hbrc.govt.nz

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