

## VARIEGATED THISTLE CONTROL



Illustration courtesy of  
Tasmanian Department  
of Agriculture

Variegated thistle (*Silybum marianum*) is a strong competitor with pastures in the higher rainfall areas. The weed is readily killed in the seeding and rosette stage, but becomes harder to kill as plants mature.

Although variegated thistle will germinate over several months, most plants emerge soon after the break of season. In most cases it pays to treat infestations as soon as possible; while the plants are still young and susceptible to 2,4-D. This also allows other pasture plants to germinate, take over bare patches and to compete better with later-emerging variegated thistle plants. It is, however, necessary to return to the infestation in later winter to mop up those thistle plants which have escaped the previous treatment.

Variegated thistle reproduces only from seed, which can remain viable in the soil for up to nine years. Chemical control will remove only the current year's infestation. Therefore for long-term control, pasture improvement is required.

The pasture must be able to compete with variegated thistle for light, nutrients and moisture.

Prompt action is essential to stop variegated thistle spreading into new areas.

**Spray-Graze:** The advantage of this control method is that the level of 2,4-D applied will cause less damage to the clover or other pasture species than the higher rates required for a kill using herbicide alone. The thistle plants are not killed either, but absorb the 2,4-D, causing them to grow upright and accumulate sugars. This makes them more palatable to stock. If weeds are not heavily grazed after spraying, most of them recover and grow normally. Spray-graze has been successful using cattle, but the results are better with sheep if they are available.

### Control

**Biological control** Investigations are in progress in the eastern states

**Mechanical control** Where large infestations have not been sprayed, slashing at the flowering stage will prevent viable seeds forming.

### Chemical control

2,4-D amine  
(500 g/litre)

**KNAPSACK:** 4 ml per litre of water.  
If the plants are more mature increase the concentration to 8 ml per litre of water.

**BOOMSPRAY:** 2.1 litres/ha, up to 5 litres/ha when plants are running up to flower

Will damage any clovers which are present in the pasture. Split application of 1.5 litres/ha in early winter followed by a similar application in spring is often more effective.

2,4-D amine  
(500 g/litre)

**SPRAYGRAZE:**  
1.5 litres of per hectare

Spray the pasture six weeks after the opening rains. Seven days later graze with sheep at about four or five times the normal stocking rate for about six weeks or until the pasture shows signs of overgrazing. Clovers should recover from this treatment.

2,4-D ester  
(800 g/litre)

**KNAPSACK:** 2.5 ml per litre of water. If the plants are more mature increase the concentration to 5 ml per litre of water.

**BOOMSPRAY:** 1.5 litres/ha, up to 3 litres/ha when plants are running up to flower

Will damage any clovers which are present in the pasture. Split application of 1.5 litres/ha in early winter followed by a similar application in spring is often more effective.

### Further Information

For advice on variegated thistle control, contact your nearest Agriculture Protection Board district officer.