

RAGWORT

Senecio jacobaea

Introduction

Ragwort is a serious pasture weed that can spread rapidly and invade clean areas, leading to reduced pasture production and ongoing maintenance. The toxic substances contained in ragwort also cause liver damage in grazing animals.

Cattle dislike ragwort and will avoid any pasture where it is present. This leads to reduced pasture utilisation, as well as the suppression of pasture growth under ragwort plants. Sheep eat ragwort without ill-effect unless continually exposed to the plant over a number of seasons.



Ragwort infestation - early summer

Pest Status

*IN AREAS OF THE BAY OF PLENTY WHERE RAGWORT IS A **TOTAL CONTROL PLANT PEST** (REFER TO THE ENVIRONMENT B·O·P REGIONAL PLANT PEST MANAGEMENT STRATEGY) LAND OCCUPIERS ARE REQUIRED TO CONTROL ALL INFESTATIONS OF THIS PLANT. WHERE RAGWORT IS A **BOUNDARY CONTROL PLANT PEST** LAND OCCUPIERS ARE REQUIRED TO CONTROL ALL INFESTATIONS OF THIS PLANT GROWING WITHIN 50 METRES OF A NEIGHBOURING PROPERTY WHICH IS CLEAR OR BEING CLEARED OF RAGWORT.*

Origin

Originating from Europe, ragwort has spread to become a prominent pasture weed in many temperate parts of the world. It was introduced to New Zealand around 1870 and is now commonly found along road sides and riverbeds, in open forests, and throughout swamps and pastures.

Description

Ragwort is an erect biennial or perennial herb reproducing from crowns, roots and seeds. Stems are reddish/purple at the base and rise up to 60cm, branching out at the top. Bright yellow flowers form large heads at the end of each branch. The leaves are deeply divided and wrinkled, dark green on top and have a paler green, downy lining. By early winter young ragwort plants develop into a rosette standing 2 to 5 cm high and up to 15 cm in diameter. Ragwort plants are easily identified at this stage, and by late winter develop into what is called the 'cabbage rosette' stage.



Ragwort plant - early winter

Invasion

Seeds provide the main method of ragwort invasion with one plant producing up to 250,000 seeds. They are carried by wind, water, animals (both domestic and wild), vehicles, clothing and via hay or chaff. Cutting, grazing and ineffective chemical control can all stimulate regeneration from the crown, converting biennial plants to perennials. Dispersal can also occur from roots and pieces of crown being cut by cultivation equipment.

Control

While a number of control options exist, it is important that landholders experiment with a combination of suggested controls to suit their needs. The following control methods provide a range of options currently utilised on many New Zealand properties.

Grazing Management – maintaining a vigorous, dense pasture helps reduce the incidence of ragwort invasion. Ragwort can be controlled by sheep grazing at three stock units per hectare. Mob stocking of sheep four times between spring and autumn can also achieve good control.

Chemical control – suitable herbicides can be applied using traditional boom spray equipment, knapsack sprayers, carpet rollers, and weed wipers. Granulated formulations can also be used for spot treatment of isolated plants.

Overall boom spraying of pasture is normally carried out in autumn and winter. After boom spraying, an ongoing spot spraying programme must be maintained. Spot spraying with suitable herbicides can be carried out successfully up until flowering. Plants near flowering can be difficult to kill and plants should be sprayed *before* seeds begin to appear.

Be aware of horticultural activity in the local district and apply herbicide sprays with caution. Operators are liable for damage arising from spray drift.

- Seedlings and small rosettes (mid winter)
2,4-D:
Boomspray: 1–3 litres/ha in 300 litres of water

Pasture Kleen™
Boomspray: 2.5-4.0 litres/ha in 300 litres of water
- Larger plants (to early flowering)
Tordon® Gold:
Knapsack: 125ml per 10 litres water
Gunspray: 400-600ml per 100 litres of water
Weedwiper/roller: 50 ml per litre of water

Escort™:
Gunspray: 5 g per 100 litres of water
Weedwiper/roller: 1 g per litre of water

Tordon® 2G:
Granules: 2 g on crushed centre of plant

CAUTION: When using any herbicide READ THE LABEL thoroughly and follow all instructions and safety requirements.

Grubbing – grubbing or pulling ragwort is best done at the full to late flowering stage when the roots are much less likely to regrow. If grubbing is done in the rosette to early flowering stage, root fragments left in the soil are likely to grow again. The flower heads of pulled plants should be burned.

Mowing – this option is not recommended. While the paddocks may look tidier, mowing encourages the development of multiple crowned perennial ragwort plants.

Biological Control

Three insects have been introduced to New Zealand for use as biological control agents: a seed fly, a moth and a flea beetle.

The ragwort flea beetle is proving to be effective in controlling ragwort in parts of the Bay of Plenty. Releases of the ragwort flea beetle and the cinnabar moth caterpillar are made annually.

For information regarding where these insects have established, or the releasing of ragwort flea beetles or cinnabar moth caterpillars on your property, contact Environment B·O·P.

Further Information

For further information contact a local Environment B·O·P plant pest officer on freephone 0800 ENVBOP (368 267)

Environment B·O·P offices located at:

6 Rata Street **Mt Maunganui**
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5 Quay Street **Whakatane**
25 Church Street **Opotiki**

Email: **info@envbop.govt.nz**

Information in this fact sheet regarding herbicides does not necessarily appear on the labels of the products concerned. Environment B·O·P does not accept liability for any damages that may arise from use of herbicides at non-standard rates. Mention of product trade names implies neither endorsement of those products nor criticism of similar products not mentioned.

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