Rainbow&Brown

TOLL-FREE CALL
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WEED FILE:
WOOLLY MULLEIN

Verbascum thapsus

DESCRIPTION

Woolly mullein is also known as Great or Common mullein, and is native to Europe, northern Africa and western Asia. It has been introduced to North America, Australia and New Zealand and has of course become a troublesome weed in those countries as a result.

It's a biennial or an annual plant, and can grow to 2 metres in height, although in NZ the height is usually up to about 60cm. Initially it appears as a broad rosette of thick woolly leaves (hence the name woolly mullein), followed by the emergence of an erect flowering stem that also supports further leaves.

The leaves are silver-grey in colour, quite thick and in the shape of a slightly pointed oval. They are up to 20cm long and 10cm across. The rosette leaves have very short stalks, while the progressively smaller leaves on the erect flowering stem have no leaf stalks at all. The 'woolly' surface has the appearance of a thick woollen blanket, or of coarse felt.

The main (flowering) stem is thick, rigid and unbranched, forming a single tall spear.

Flowers are also stalkless and appear on the upper part of the erect stem. The flower is yellow, with five petals, and is up to 3cm in diameter. Flowering in NZ is from July to April.

The seeds are distributed from egg shaped capsules within the woolly sepals forming part of the flower. The seeds are abundant and have a long life in the soil. However, the plant is a poor competitor, and the seeds only germinate successfully in any real numbers if located in an area of dry and open ground.

HABITAT

Woolly mullein is found throughout both main islands of New Zealand, in particular in the drier areas. The plant's preferred habitat is roadsides and waste areas, railway track routes, dry and stony stream beds, stony and arid ground generally, lower tussock land and weak pastures.

MANUAL REMOVAL

It is fairly easy to remove by hand individual or sparsely-distributed woolly mullein plants, and this should preferably be done before viable seeds have formed. The removed plants should be taken from the site and disposed of in a manner that takes into account the preference of woolly mullein for open and waste areas. So don't throw removed plants into a waste area; you'll only transfer the problem to a new and 'better' location, and thus make it worse in the process.

HERBICIDE CONTROL

Woolly mullein can be sprayed successfully whenever it is growing actively. However, the thick woolly coating on the leaves can be very difficult for the spray solution to penetrate, and is no doubt the reason why some people have experienced good results and others poor results, when using the same herbicide; the use of a wetter/penetrant is critical, and the spray coverage must be thorough or the plant can survive.

There are several choices for control:

- ***Glyphosate*** at 100ml/10L water using the 360g/L product, plus 10ml ***SuperWetter*** organosilicone penetrant. User experience is variable with this herbicide, probably due mainly to the penetrant issue. Glyphosate works at its best only during the flat rosette stage, because it is easier to get the spray nozzle right into the centre of the crown. Once the central stalk has appeared it is more difficult to achieve adequate coverage without also getting too much overspray and thus causing collateral glyphosate damage to other plants.
- ***MCPA*** at 50ml/10L water, plus 10ml ***SuperWetter*** organosilicone penetrant. Treatment during the early rosette stage is preferable.
- ***GrassMate*** at 60ml/10L water, plus 10ml ***SuperWetter*** organosilicone penetrant. This is the best option, because it is very effective against woolly mullein at all growth stages, and there will be no damage to grasses from overspray when treating the slender central stalk. However, this is also the most expensive option per litre of spray. It is very likely that woolly mullein seeds present at spraying will be rendered non-viable by the actives in GrassMate. Note also that GrassMate will suppress clover, although in the usual habitat of woolly mullein there is not likely to be any clover present.

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