

## **Weeds Act 1959**

### **Guidance on control of injurious weeds**

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MAFF advice on control of injurious weeds specified in the Weeds Act 1959

Injurious weeds can be controlled using a number of chemical and cultural means. Care should be taken to choose the most appropriate method for each site circumstance. This applies particularly to sites of special conservation interest where control of the injurious weeds may risk damaging rare or valuable flora and fauna. In these situations expert advice should be sought before any action is taken.

**Injurious Weed Control using Herbicides**

N.B. This document is kept under review to check the continuing validity of the herbicide recommendations, and revisions are issued as necessary.

The application of herbicides is subject to regulations which must be observed when using products. These are summarised in the Code of Practice for the Safe Use of Pesticides on Farms and Holdings (available from MAFF Publications, quoting reference PB3528).

Instructions for use including operator and environmental protection, the crops or plants on which the product may be used, maximum dose, harvest interval and other details are shown on the product label. Each time a product is used you must **READ THE LABEL AND FOLLOW THE INSTRUCTIONS**. Some products are only available to operators who hold a certificate of competence as recognised by the Ministry of Agriculture, Fisheries and Food.

**Non Selective Herbicide Treatment**

Control of injurious weeds can be undertaken using a non-specific herbicide such as glyphosate either as an overall spray or using a height selective applicator or spot treatment.

**Selective Herbicide Treatment**

Injurious weeds can be controlled using selective herbicides. Although most products are generally used as an overall spray, some can also be applied through a selective height applicator or as a spot treatment to improve their selectivity.

The following shows the most favoured active ingredients for the control of each injurious weed specified under the Weeds Act 1959. These active ingredients may be available alone or in mixtures with other chemicals and qualified advice should be obtained to determine the most appropriate product especially when mixed populations of weeds occur.

N.B. Herbicides (marked \*) are referred to by active ingredient not product name

**SPEAR THISTLE (Cirsium vulgare)**

Spear thistle occurs widely on lowland and upland grassland and waste places. The weed competes effectively with crops for water, light and nutrients. It is biennial and only spreads by seed. Mature plants are normally 30-50 cm tall, with flowers from July through to late autumn. Large numbers of seeds are produced which can be blown by wind across farm and field boundaries.

**CONTROL** The plants can be cut each year before mid-July to prevent shedding of viable seed. It is also possible to remove them by digging. Long-term control is possible from herbicide treatment; spear thistle is susceptible to clopyralid\* and moderately susceptible to MCPA\* herbicides. Where clover is an important constituent of the sward, a mixture of MCPA\* and MCPB\* herbicides is more appropriate.

**CREEPING OR FIELD THISTLE (Cirsium arvense)**

Creeping thistle can quickly dominate vegetation in grassland or waste ground. The weed forms dense patches which suppress crop plants.

Mature plants extend 30-100cm in height, with flowers from July into late autumn each year. The plants produce only a few viable seeds which can be blown by wind. However, invasion is more often by spread of the plants' underground root systems.

**CONTROL** Cultivation is not an effective means of control as the number of root pieces which can throw up new shoots is increased. Control on arable land therefore is usually by use of a range of herbicides depending on the field crop grown.

On grassland, cutting at flower stem extension but before opening of the flower buds will prevent seed spread for a particular season. Repeated cutting at the same growth stage over several years may "wear down" an infestation.

MCPA\* herbicide applied during the early bud stage will kill the aerial parts of the plant, but repeat treatments the following year may be necessary for complete control. One application of the herbicide clopyralid\* is normally sufficient to achieve an acceptable level of control.

#### **BROAD-LEAVED DOCK (*Rumex obtusifolius*) AND CURLED DOCK (*Rumex crispus*)**

Broad-leaved dock thrives in high nitrogen environments, open swards and where there is heavy treading by stock. Curled dock occurs more commonly on arable and waste land.

Both species produce many seeds which can remain viable in soil for decades. Buds on pieces of tap-root broken by soil disturbance or treading will produce new plants. The two species are similar in appearance but leaf shape differs, as reflected in their names. Hybrids are common between the species and this can hinder identification. Flowering for both species is from late June until early autumn with inflorescences reaching over 100 cm in height.

#### **CONTROL**

##### **Broad-leaved Dock**

Seedlings: MCPB\* for grass clover reseed  
Mecoprop\* or MCPA\* for grass reseed without clover  
Established: Asulam\* for grassland with clover  
Fluroxypyr\*, 2,4-D\*, triclopyr\*, or thifensulfuron for grassland without clover

##### **Curled Dock**

Seedlings: MCPB\* for grass clover reseed  
Mecopro  
Established: Asulam\* for grassland with clover  
Fluroxypyr\*, 2,4-D, MCPA\*, mecoprop\* or triclopyr\* for grassland without clover  
p\* or MCPA\* for grass reseed without clover

#### **COMMON RAGWORT (*Senecio jacobaea*)**

This is the only ragwort species specified in the Weeds Act 1959; other species of *Senecio* are not so widespread as common ragwort. Flowering is from late June onwards to early autumn when the characteristic yellow inflorescences usually extend between 30-100 cms in height.

The weed occurs in neglected grass fields, on uncropped ground and sand dunes. It prefers light soils of low fertility, particularly in over or under- grazed pasture. Common ragwort is biennial when undisturbed but can develop perennial characteristics following cutting or treading.

**POISONOUS TO LIVESTOCK** Cattle and horses are particularly susceptible to poisoning by common ragwort but sheep are also susceptible. Palatability of the weed increases when plants are conserved in hay

or silage or treated with herbicide. An added problem is that livestock cannot easily reject fragments of ragwort in conserved herbage and its poisonous alkaloids are unaffected by the conservation process.

**CONTROL** Although short-term action can be undertaken to clear existing plants, reinfestation will be rapid unless overall husbandry is improved, particularly for uncropped ground and grassland.

**Cutting:** Cutting and stem removal at the early flowering stage reduces seed production but does not destroy the plant. Cut plants left lying in the field are a serious risk to grazing animals and may still set seed. These should be removed and burned within the Code of Practice for the Protection of Air (available from MAFF Publications, quoting reference PB0618).

**Pulling (and digging):** Pulling or digging can also prevent seed spread but may not give long-term control. Plants should be removed and burned within the Code of Practice for the Protection of Air (see above).

**Herbicides:** No single herbicide treatment will completely eliminate a ragwort infestation due to successive germinations of the weed. Treatment with selective herbicides can be made to the plant rosettes usually late spring and in the autumn before frost damages the foliage. The most effective material for overall spraying is 2,4-D\* but this will damage clover and a number of other plant species.

**WHICHEVER METHOD OF CONTROL IS SELECTED, REMEMBER NOT TO TURN GRAZING ANIMALS INTO THE FIELD UNTIL ANY TREATED RAGWORT PLANTS HAVE DIED AND DISINTEGRATED. DO NOT ALLOW RAGWORT TO BE HARVESTED IN HAY OR SILAGE FOR LIVESTOCK FEED.**