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KILLING WEEDS IN PASTURES WITH 2, 4-D

Because 2,4-D is sold in different strengths, you should follow directions for mixing given by the manufacturer. If you use it properly, you can control weeds in pasture. It does not harm most kinds of grasses commonly found in Virginia pastures.

2,4-D kills slowly. Sometimes two to three weeks may pass after application before the weeds actually die. 2,4-D not only kills the leaves and tops of most weeds but it also kills their roots.

Methods of application of 2,4-D vary. On level to moderately rolling land, a motor-powered sprayer is best. For a uniform coverage of the entire area, mount spray nozzles on a stationary boom. In many fields or pastures, however, the weeds are in clumps and may be spot treated.

On very rough land or where small scattered clumps of weeds are to be killed, you can get good results from a 2,4-D dust. A small crank-type duster will hold enough dust for about an acre. Even where boom sprayers can be used, a duster will be found useful in killing the scattered weeds that may not be killed by spraying and to stop new weeds from spreading.

Control of weeds is only one step in making good pasture. If weed-killing is the only step taken, your money will be wasted in many instances. If extensive bare areas are left after the weeds are killed, seed them with a good pasture mixture. For best results, always follow weed-killing with an application of fertilizer.

Plants sprayed with 2,4-D do not injure animals that eat them.

Precautions

Avoid getting 2,4-D on plants which you do not want to kill. Watch out for drifting spray or dust, so that it does not get on flowers, vegetables, shrubs and trees that may be harmed.

Be sure to clean the 2,4-D out of the sprayer thoroughly before using it for other kinds of sprays. If the same sprayer must be used for 2,4-D and for other sprays, clean 2,4-D out with household ammonia, 1 part to 100 parts of water ($\frac{1}{4}$ pint to about 3 gallons). Let it stand in the sprayer (also in hose and nozzle) for 36 to 48 hours; then rinse thoroughly. A much safer practice would be to use a special sprayer for 2,4-D treatment.

Preparations of 2,4-D are non-inflammable, non-explosive, non-corrosive, and non-irritating to the skin.

Effect on Weeds

Some weeds are more resistant than others to 2,4-D. One application, applied at the right time, is enough to kill some weeds. Others may require two or more applications. Remember, too, that the seeds of some weeds remain alive in the soil for several years—hence, it may take more than one season to clean them all out, particularly perennials.

These weeds are not killed by 2,4-D:

Barnyard grass	Ground cherry
Beggar weed	Johnson grass
Bermuda grass	Milkweeds
Black nightshade	Mullein
Bracken	Oxeye daisy
Buffalo bur	Quackgrass
Chess (cheat)	Sandburs
Crabgrass	Spurge
Ferns	Violets
Foxtails	Wild strawberry
Goosegrass	Wood sorrel

These weeds are hard to kill:

Bindweed	Lamb's quarter
Bouncing bet	Lettuce (prickly)
Buckbrush	Mallow
Buckwheat (wild)	Poison ivy
Buttercups	Pokeweed
Canada thistle	Poverty weed
Coral berry	Purslane
Dock	Red sorrel
Dodder	Russian thistle
Dog fennel	Shepherd's purse
Fleabane	Smartweeds
Goatsbeard	Speedwells
Goldenrod	Teasel
Goosefoot	Wild garlic
Gourd (wild)	Wild onion
Knotweed	Yarrow

These weeds are easily killed:

Artichoke	Jimson weed
Beggar ticks	Kochia
Black medic	Marsh elder
Blue bur	Morning-glory
Buckhorn	Nettle (singing)
Bull thistle	Pennywort
Burdock	Peppergrass
Butter print	Mustards
Carpetweed	Pigweed
Catnip	Plantains
Chickweed	Puncture vine
Chicory	Radish (wild)
Cinquefoil	Ragweed
Cocklebur	Rape
Cucumber (wild)	Rosinweed
Dandelion	Slender rush
Evening primrose	Sow thistle
False flax	Stickweed
Fanweed	Sumac
Flower-of-an-hour	Sunflower
Galinsoga	Water hemlock
Ground ivy	Wild parsnip
Gumweed	Wild sweet potato
Hedge nettle	Winter cress
Hemp	Vervain
Hemp nettle	Vetch (wild)
Henbit	Virginia creeper
Honeysuckle	Yellow rocket
Horsetail	Yellow sorrel
Jewelweed	

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