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Virginia Polytechnic Institute, Blacksburg, Agricultural Extension Service.  
MR-170

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## 2,4-D SPRAYS FOR SMALL GRAINS AND GRASS SEED CROPS

The presence of green flower buds, flowers, and seed pods in small grain and grass seed crops often causes grain to heat and increases the need for a special drying process and may seriously reduce the value of the seed through contamination with noxious weed seed. This difficulty can be eliminated if the weeds causing the trouble are susceptible to a selective weed spray, such as 2,4-D.

### Small Grains

Wild mustard, winter cress, wild peas, hairy vetch, thistles, cockle, turnips, and ragweed are among those plants which are killed by 2,4-D or are so severely injured by it that the majority of the plants will not be tall enough to get into the grain at harvest.

When to Apply: Sprays for weed control should not be applied until after the plants have tillered (stooled), but before they begin to joint. Applications before or after this time may result in injury to the crop.

Do not apply a weed spray if it is likely to rain within several hours. At least 3 or 4 hours are required for the material to be absorbed by the plant, and a longer period may be necessary if it is cool. Best results will be obtained if the temperature is above 60°F.

Rate to Use: The amount to use per application varies with the 2,4-D acid equivalent of the material purchased. From 1/2 to 3/4 pound acid equivalent should be used. The amine or sodium form should be used if resistant weeds are not present.

To prevent aerial bulblets of wild onion or garlic from forming and getting onto the harvested grain, use 2,4-D ester at 1/2 pound acid equivalent per acre. This low rate will not kill wild garlic, but will prevent aerial bulblets from forming.

Legumes: If a legume is seeded in the grain, do not use heavy dosages of 2,4-D. Be guided by the label on the container. Less injury will be experienced when using the amine form. When a legume such as lespedeza is to be seeded after spraying, 3 weeks or more should lapse between operations, depending on the temperature and the rainfall.

### Grass Seed Crops

Wild onions or garlic and cockle are often a problem in areas in Northern Virginia where orchard grass is being grown for seed. Where these weeds are known to be present in a field to be saved for seed, their presence in the seed can be practically eliminated by spraying with 2,4-D ester in late winter.

When to Apply: A late winter application is most effective for wild garlic or onion. This application should be made sometime between the latter part of January and the middle of March, but before the onions begin to form new bulblets in the soil. The temperature should be near 60°F. for best results.

Amount to Use: Use 1 1/2 to 2 pounds acid equivalent per acre of the 2,4-D ester, and repeat the treatment each year until satisfactory control is obtained. Spot spraying will usually suffice after the first year or two.

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