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INSECT, PLANT DISEASE, & WEED SCIENCE NEWS [No. 88-23] [September 13, 1988]

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INSECT PLANT DISEASE WEED SCIENCE NEWS

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In This Issue:

Rangeland Weed Control with Atrazine

Downy brome, hairy chess, pennycress, and mustards can be effectively controlled in rangeland with atrazine. It's not necessary to wait until late fall. Actually the most effective control would be from applications made in early fall. Winter annual weeds start growth in late August and September. Atrazine applications in September would be most effective on the newly germinated weeds. Use 1 to 2 pints of atrazine or AAtrex 4L or equivalent amounts of other atrazine formulations. Bluegrass and intermediate wheatgrass may be injured by the treatments. Aerial or ground applications can be made. According to the label, livestock should not be grazed for 7 months after making fall treatments.

Musk Thistle Control

October and early November are excellent times to control musk thistle providing the weather cooperates. A good fall control program normally eliminates the need for spring control. This is because plants that would flower next summer are normally growing in the fall. However, the success of a fall control program depends on adequate fall rainfall. Dry weather reduces musk thistle seed germination and plant establishment. Where the weather has been dry, there may be no plants to control. Examine the site and determine if the thistle population justifies spraying. Herbicides and per acre rates to use on musk thistle are Tordon 22K at 6 to 8 fluid ounces, 2,4-D + Banvel at 1.0 lb + 0.5 pt, and 2,4-D at 1.5 to 2.0 lb. These treatments are ranked in order of effectiveness for fall application. Under very dry, cool conditions only Tordon can be expected to perform well. Treatments should be applied after October 1.

Field Bindweed and Other Perennials

Perennial weeds including field bindweed, Canada thistle, and others can be effectively treated with herbicides in the fall. Food storage in the root system of these plants is taking place in the fall. Herbicides applied at this time to plants with excellent top growth readily move down to the roots along with the food. In the fall, temperatures and soil moisture are generally more favorable for plant growth than during the summer, a condition required for best herbicide performance.

Herbicides most useful for controlling these perennial weeds are 2,4-D, combinations of 2,4-D + Banvel, Roundup, and Tordon. Treatment with 2,4-D and combinations of 2,4-D + Banvel must be made repeatedly to obtain satisfactory control. Tordon use for perennial weeds is limited to grazingland and non-crop areas. Glean is also finding its niche in Canada thistle control programs.

Fall treatments can be made any time after mid-September but before hard freezes occur. Daytime temperatures in the 50's are satisfactory. It is not necessary to spray before frost as long as the plants are still green and growing.

Leafy Spurge Control

Special attention should be given to the control of leafy spurge during the fall. Research has shown more consistent control of leafy spurge with fall herbicide treatments compared to spring applications.

Control on a large area is costly and difficult. Small patches should be treated before they spread and become a more costly problem. Plants in a new infestation are more readily controlled than established stands because the root system is not fully developed. Once leafy spurge has become well established it cannot be eliminated with a single herbicide treatment.

Herbicides for leafy spurge control are 2,4-D ester at 2 lb/A, 1 lb of 2,4-D + 1 pt of Banvel/A or Tordon 22K at 2 to 4 qt/A. The treatments would cost $5.00 to $8.00 per acre for 2,4-D or 2,4-D + Banvel and from $45.00 to $90.00 per acre for Tordon. Tordon 22K is much more effective than 2,4-D or Banvel against leafy spurge. A 2 qt/A application usually provides 50-80% control a year later, and the 4 qt rate gives 90-100% control. Tordon is long-lasting and mobile in the soil. It should not be used near trees or on sandy soil where the water table is within 15 feet of the soil surface at any time. Don't expect to get rid of leafy spurge in 1 or 2 years. It will take several years to make progress.

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