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INSECT, PLANT DISEASE, & WEED SCIENCE NEWS [No. 87-12] [June 5, 1987]

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INSECT PLANT DISEASE WEED SCIENCE NEWS

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Control Perennial Weeds on ACR Acres

Ideal growing conditions coupled with no tillage on ACR acres has set the stage for excellent control of perennial weeds. Keys to success in perennial weed control with herbicides are good growing conditions and correct growth stage of the weed.

Flower bud through flowering stages are ideal for treatment of perennial weeds with 2,4-D, Banvel, and Roundup. Canada thistle, field bindweed, hemp dogbane, and common milkweed on undisturbed sites are at or approaching these growth stages. Swamp smartweed will be later in reaching treatment stage. ACR acres are an opportunity to deal with these weeds without a crop involved.

Apply 1 1/2 quarts 2,4-D ester (4 lb/gallon) or 1 quart 2,4-D plus 1/2 pint Banvel for Canada thistle, field bindweed, and hemp dogbane control. A combination of 1 quart 2,4-D plus 1 pint Banvel can be used on swamp smartweed. Roundup can also be used on these weeds. The Banvel treatment will also suppress common milkweed. The best treatment for common milkweed is Roundup at 3-4 quarts per acre.

Fall is also an excellent, and often the best, time to control perennial weeds. However, ACR land going to wheat this fall is best treated in June for perennial weeds.

Poast Cleared For Use on Dry Edible Beans

The Environmental Protection Agency has granted Nebraska a specific exemption under the provisions of Section 18 to use Poast for the control of wild proso millet and volunteer corn in dry edible beans. Poast can be applied at a maximum rate of 1 1/2 pints per acre and may be applied twice during the growing season. The total amount of Poast applied during the growing season should not exceed 2 2/3 pints per acre. Applications of Poast should be made at least 60 days before harvest. Wild proso millet and volunteer corn should be treated when they are between 4 to 10 and 6 to 20 inches tall, respectively. Fieldbeans at all stages of growth are tolerant to Poast. Poast can be applied by air or ground in a minimum of 5 gallons of water per acre. A permit system will be in effect for the use of Poast on dry edible beans and, therefore, the grower should contact his local pesticide dealer for the appropriate permit.

Postemergence Weed Control in Soybeans

Timing of postemergence herbicide applications is more dependent on the weed growth stage than crop stage. However, small weeds are more readily controlled than large ones. Basagran, Blazer, Tackle, combinations of these, Classic, and Cobra should be used when most susceptible weeds are no taller than 4 inches for best control. Nitrogen solutions (28-0-0 and 32-0-0 at 1 gallon per acre) increase Basagran and Blazer activity but weed size limitations remain. Taller weeds are defoliated but they often recover.

The spectrum of weeds controlled varies with herbicide. Basagran is effective against cocklebur, smartweed, sunflower, and velvetleaf. Strong points of Blazer and Tackle include black nightshade, pigweeds, and smartweed control. A combination of Basagran and Blazer or Tackle is often used for broader spectrum control. Classic is effective against cocklebur, smartweed, sunflower, and provides pigweed suppression. The weed spectrum of Cobra is similar to Blazer and Tackle with one difference being its' greater effectiveness against velvetleaf.

Fusilade and Poast have excellent crop safety; soybean injury is not a concern with these herbicides. Annual grasses should be treated before they tiller. Tillering often occurs when grasses are 3 to 4 inches tall. Grasses treated after the tillering stage usually recover and regrow from the crown. Volunteer corn and shattercane are very susceptible to Fusilade and Poast. Good control can be achieved of plants up to 18 inches tall.

Spray additives are required with each of these herbicides. Additives include crop oil concentrate, nonionic surfactants, fertilizer solutions, and ammonium sulfate. Each herbicide has specific additive requirements--consult the label for details. In some cases lesser herbicide rates are required with certain additives. Nitrogen solution (28-0-0) has largely replaced crop oil concentrate as an additive with Basagran. Dash, a new additive for Poast, enhances activity and eliminates the need for increasing the Poast rate when tank mixing with Basagran.

Poison Hemlock

Poison hemlock is widely distributed throughout Nebraska and much of the rest of the world. It is a biennial which reproduces by seed only. The plant has large fern-like leaves and grows to a height of 5 to 6 feet during the second year. The plant produces large showy umbels of many white flowers in late May, June, and July. The stems are hollow with purple blotches. The plant grows in wet wasteland along streams, gardens, and roadsides.

Poison hemlock is notoriously poisonous and was the poison administered to Socrates. Children have been poisoned by whistles made from the hollow stems. The undesirable odor and taste make the plant unattractive to most animals and humans. However, it has been confused with parsnips, parsley, wild carrots, and anise. Add dill to that list since we did have "dill" pickles made with poison hemlock a few years ago in Lincoln. Fortunately the mistake was discovered before the pickles were eaten.

Control of poison hemlock must be done before flower stalks lengthen. 2,4-D + Banvel or Roundup applied in October provide reasonably good control; April and early May applications are second choice. Scattered plants can be dug either in the fall or spring. Poison hemlock is not a problem in cultivated fields.

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