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Late Season Broadleaf Weed Control in Corn and Sorghum

Corn should not be sprayed with 2,4-D from a week before tassel emergence until after the silks turn brown. Treatments during this critical time often interfere with pollination and cause yield reductions. After the silks turn brown, pollination is complete and 2,4-D use can safely resume. The early planted corn in Nebraska is now in the stage where it should not be sprayed with 2,4-D.

Grain sorghum should not be sprayed with 2,4-D from the boot stage through dough stage of the grain. As in corn, pollination problems and yield reductions result from spraying sorghum during this sensitive period. Spraying with 2,4-D can be resumed after the soft dough stage. Between 12" height and boot stage, drop extensions should be used to direct 2,4-D away from the sorghum whorl. Under no conditions should Banvel be used on grain sorghum after it is 15" tall.

Rescue Treatments for Soybeans

Most broadleaf weeds taller than 6" can not be consistently controlled in soybeans with postemergence herbicides. There are no soybean herbicides that perform like 2,4-D and Banvel.

Rescue from Uniroyal is a combination of Alanap and 2,4-DB registered for control of escaped sunflower 12" to flowerbud and cocklebur 8" to 24" tall in soybeans. Applications should be made after soybeans are 14" tall or first bloom. Crop oil concentrate or a nonionic surfactant should be used with Rescue. Spray pressures of 40 to 50 psi result in better coverage and weed control. Aerial application and spot spraying are also labeled. Under dry conditions, soybeans may wilt and suffer set back by a Rescue treatment. Recovery may not be complete if the weather stays dry. Weeds under dry conditions may not be completely controlled.

Butyrac 200 (2,4-DB) is registered as a broadcast treatment for cocklebur control from 10 days prebloom to midbloom. Some control of morningglory may also occur. Cocklebur must form a protective canopy over the soybeans or crop injury may occur. Soybeans may show some effects of the herbicide for several days after treatment. Without a protective weed canopy, considerable soybean injury results from broadcast treatments.
Prepare Now for Conservation Tillage Next Year

Control weeds in small grain stubble this summer for planting wheat in the fall or for 1989 spring planting of corn, sorghum, and soybeans. Advances in chemical weed control make possible the control of weeds and volunteer grain without tillage. Weed control without tillage conserves moisture (which is critical this year), reduces wind and water erosion, and cuts back on energy, machinery, and labor costs. Successful chemical weed control requires consideration of certain basics:

1. Straw and chaff behind the combine should be uniformly spread—if not, bale it. Excess straw and chaff interferes with herbicide performance and planting the next crop.
2. A poor job of combining will contribute to poor herbicide performance. Heavy stands of volunteer grain are likely to strain herbicide capabilities.
3. Let the straw residue "settle-in" on the field for two weeks before applying herbicides.
4. Spray equipment should be operated at a minimum of 30 psi to provide thorough coverage. Uniform herbicide distribution is a must for satisfactory herbicide performance and some type of marking system will aid in this goal.
5. Use at least 20 gallons of water per acre with atrazine and Bladex. Do not use the 4L formulation of Bladex as it "hangs-up" on the residue and does not perform well.
6. Use as little water as possible when applying Roundup. Unsatisfactory performance is likely if either Roundup or Gramoxone is applied to dust-laden plants.

Suggested Herbicide Treatments Applied This Summer for Weed Control in Small Grain Stubble to be Planted to the Following Crops

<table>
<thead>
<tr>
<th>Corn-Sorghum-1989</th>
<th>Soybeans-1989</th>
<th>Wheat (this fall)</th>
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<tbody>
<tr>
<td>Atrazine 2-3 lb ai + 2,4-D ester 1 qt + Crop Oil Concentrate</td>
<td>Bladex 2.75 lb ai + 2,4-D ester 1-2 pt + Crop Oil Concentrate</td>
<td>Bladex 2-2.25 lb ai + 2,4-D ester 1 qt + Crop Oil Concentrate</td>
</tr>
</tbody>
</table>

Where annual grasses are more than 3" tall or very dry conditions exist, use Cyclone + X-77 in place of 2,4-D. Treatments containing 2,4-D will help control field bindweed and hemp dogbane. The addition of 0.5 pt Banvel applied in areas at least 1/2 mile from sensitive crops will improve control of perennials including milkweed.

Postemergence Non-Residual Herbicide Treatments

1. Roundup 0.75-1 pt + 1 pt 2,4-D amine or 0.5 pt Banvel + 4 oz X-77. Ammonium sulfate (feed or fluid grade) at 17 lb/100 gallons of spray mixture can be added for improved consistency. Use no more than 10 gallons of water per acre. Controls annual grass and broadleaf weeds.
2. Several Roundup prepacks also exist for use in small grain stubble. Landmaster BW is recommended for control of field bindweed as well as other annual weeds. It contains 1.2 lb of Roundup + 1.9 lb of 2,4-D amine per gallon. Landmaster II has a lower amount of 2,4-D and contains 1.2 lb of Roundup + 1.0 lb of 2,4-D. Fallow Master contains 1.5 lb Roundup + 0.6 lb of Banvel and is suggested for use where kochia and other tough broadleaf weeds are a problem.
3. Cyclone (2 lb paraquat per gallon) at 1.5-2 pts per acre + X-77. Use lower rates on weeds less than 4" tall. Will burn most weeds.
4. 2,4-D ester 1 qt/A. Controls annual and certain perennial broadleaf weeds. For improved control of perennials add 0.5 pt Banvel in areas at least 1/2 mile from sensitive crops.

For additional information, see the "Ecofallow Section" in the 1988 Herbicide Use Guide.

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