Effect of Roundup and Other Herbicides on Roundup Ready Soybean Yields
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Objective
The adoption of Roundup Ready soybeans has been rapid. However, there are a few weeds that Roundup Ultra doesn't control satisfactorily and it has no residual effect. As a result, producers may want to use other herbicides with Roundup Ultra. This trial was conducted to examine the effect of applying other herbicides with Roundup Ultra on the yield of Roundup Ready soybeans.

Background
Cooperator: Tom Weiler
Fertilizer: 0-0-60 (200 lbs/A)
County: Morrow
Variety: Callahan 7391RR
Nearest Town: Chesterville
Planting Date: May 12, 1998
Soil Type: Chili
Planting Rate: 200,000 seeds/A
Drainage: Systematic
Harvest Date: October 1, 1998
Tillage: Fall chisel and cultivate
Harvest Pop.: 168,000 plants/A (avg.)
Previous Crop: Corn
Soil Test: pH 7.0, P 23 ppm, K 154 ppm

Methods
The field chosen has tremendous giant ragweed, lambsquarter, and giant foxtail pressure. The field was chisel plowed and weeds worked out at planting time. The additional herbicides used were Cobra (5 oz./A), Canopy XL (3 oz./A), and Pursuit (1.44 oz./A). Canopy XL was applied preemergence. Pursuit and Cobra were applied post-emergent within an hour after an application of 1.5 quarts of Roundup Ultra and 3 pounds of AMS per acre at the V-3 stage of soybean growth. These treatments were compared to 1.5 quarts of Roundup Ultra sprayed alone at the V-3 stage.

Giant ragweed pressure was severe with 24- to 36-inch tall weeds at the time of the postemergence application. The treatments were replicated three times with individual treatment plots being 20 feet x 500 feet.
Results

<table>
<thead>
<tr>
<th>Herbicide Treatment</th>
<th>Soybean Yield (bu/A)</th>
<th>Herbicide Cost ($/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cobra + Roundup + 3# AMS/A</td>
<td>62.99</td>
<td>27.33</td>
</tr>
<tr>
<td>Canopy XL fb Roundup + 3# AMS/A</td>
<td>61.6</td>
<td>30.71</td>
</tr>
<tr>
<td>Roundup + 3# AMS/A (V3 Stage)</td>
<td>60.06</td>
<td>21.75</td>
</tr>
<tr>
<td>Pursuit + Roundup + 3# AMS/A</td>
<td>58.99</td>
<td>46.33</td>
</tr>
</tbody>
</table>

F = 0.83 No significant differences among treatment means at P = 0.05 CV = 11.0%
Abbreviations: A = acre, AMS = ammonium sulfate, fb = followed by

Summary and Notes

Weed control was excellent for all treatments. According to the results of this trial, the addition of the other herbicides used did not significantly effect yields of the Roundup Ready soybeans.

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