Herbosol® to improve effectiveness and reduce stress of Butisan Top in oilseed rape

Background
Herbicide treatments with metazachlor in oilseed rape are an absolute must in autumn. However, these mean stress for the oilseed rape, as metazachlor is easily transported and also acts aggressively on the crop plant. In particular with unfavourable weather factors, such as heavy rain after the application of herbicide and cool temperatures, the metazachlor treatments can quickly lose their effect and/or lead to inhibited growth. What’s more, the degradation products of metazachlor transported deep in the ground can affect drinking water. This study investigated whether stress due to the transportation of Butisan Top can be reduced by adding Herbosol® and whether the efficiency of the herbicide can be increased.

Result

<table>
<thead>
<tr>
<th>Weeds per m²</th>
<th>5th Oct</th>
<th>21st Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>188</td>
<td>68</td>
</tr>
<tr>
<td>2 l/ha Butisan Top</td>
<td>63</td>
<td>34</td>
</tr>
<tr>
<td>2 l/ha Butisan Top + 0.4 l/ha Herbosol®</td>
<td>48</td>
<td>23</td>
</tr>
</tbody>
</table>

As there were no rain showers after the post-emergence treatment, no visible signs of stress occurred. However, the success of controlling the weeds was higher. The Herbosol® effect continued until the spring.

Metazachlor damage in juvenile oilseed rape plants: Butisan Top was sprayed on oilseed rape pre-emergence. Due to a subsequent rain shower (20 l/m²), poor germination and stress occurred.
Result

Practical demo in Groningen, Netherlands, 2007

At this site with heavy clay soil, 20 l/m² rain fell after the pre-emergence treatment and metazachlor was washed into the soil, which led to a poor germination rate.

Experimental procedure

Crop: Winter oilseed rape, variety Dimension
Soil: silty loam
Cultivation: Sowing on 28.08.11
Climate: rainy August (94 mm), rain shower on 05.09 (27 mm), then no weather extremes
Experimental plan: Butisan Top was applied post-emergence with or without Herbosol® at GS 14 (10.09.11).

Recommended application

Apply 0.4 l/ha Herbosol® with soil-applied herbicides to improve effectiveness and tolerability (always add Herbosol® as the last component)
- Increase to 0.6 l/ha on light soils with a low humus content
- Reduce to 0.2 l/ha for heavy soils with a high humus content

You can find more information on the hotline: +49 (0) 63 28-9 84 94-80 or on our website www.lebosol.de.