**Soybean Aphid Aerial Insecticide Evaluation**

**Otter Tail County**

**Purpose of Study**
Compare soybean aphid control with an insecticide using air and ground applications.

**Results**
Warrior T provided excellent initial control of soybean aphid and appeared to be suppressing aphid populations 24 days after application with both application methods. Small differences between the ground and aerial application were observed in residual activity and seed/lb. There were no differences in yield due to application method.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Warrior Rate (product/l)</th>
<th>Water Volume (gallons/a)</th>
<th>Aphid ratings²/plant -days post</th>
<th>Yield (bu/a)</th>
<th>Seeds/lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground</td>
<td>3 oz</td>
<td>12</td>
<td>2.3</td>
<td>51.2</td>
<td>2692</td>
</tr>
<tr>
<td>Airplane</td>
<td>3 oz</td>
<td>5</td>
<td>2.9</td>
<td>5.9</td>
<td>2888</td>
</tr>
<tr>
<td>Untreated</td>
<td>-</td>
<td>-</td>
<td>6.4</td>
<td>7.0</td>
<td>3050</td>
</tr>
<tr>
<td>LSD (0.05)</td>
<td>0.76</td>
<td>0.69</td>
<td>0.71</td>
<td>3.2</td>
<td>84</td>
</tr>
</tbody>
</table>

²Aphid rating scale: 1=0 aphids, 2=1-10, 3=11-25, 4=26-50, 5=50-100, 6=101-200, 7=200+

**Soybean Conventional & Roundup Ready Variety Evaluation**

**Polk County**

**Purpose of Study**
To evaluate yield potential of conventional and Roundup Ready varieties in the inter-beach soils of northwest Minnesota.

**Results**
The conventional variety trial consisted of eleven varieties with a yield range of 41.4 to 56.5 bushels per acre. Variety comparisons with yields greater than 5.0 bushel differences are significantly different from each other. The Roundup Ready variety trial consisted of seventeen varieties with a yield range of 42.6 to 57.8 bushels per acre. Variety comparisons with yields greater than 10.1 bushel differences are significantly different from each other.

**Conventional**

<table>
<thead>
<tr>
<th>Company</th>
<th>Variety</th>
<th>Yield (bu/a)</th>
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</thead>
<tbody>
<tr>
<td>Legend</td>
<td>LS009</td>
<td>56.5</td>
</tr>
<tr>
<td>NorthStar Genetics</td>
<td>NS0001</td>
<td>56.3</td>
</tr>
<tr>
<td>NorthStar Genetics</td>
<td>NS0002</td>
<td>56.1</td>
</tr>
<tr>
<td>NDSU</td>
<td>Burns</td>
<td>55.1</td>
</tr>
<tr>
<td>Pioneer</td>
<td>90B43</td>
<td>55.0</td>
</tr>
<tr>
<td>Legend</td>
<td>LS0557</td>
<td>54.0</td>
</tr>
<tr>
<td>Syngenta-NK Brand</td>
<td>S00-A6</td>
<td>50.1</td>
</tr>
<tr>
<td>NDSU</td>
<td>Trail</td>
<td>48.5</td>
</tr>
<tr>
<td>U of M</td>
<td>MN0302</td>
<td>45.8</td>
</tr>
<tr>
<td>Mysogen</td>
<td>5007</td>
<td>45.0</td>
</tr>
<tr>
<td>Hyland</td>
<td>Emerson</td>
<td>41.4</td>
</tr>
<tr>
<td>LSD (0.05)</td>
<td></td>
<td>5.0</td>
</tr>
<tr>
<td>Average Yield</td>
<td></td>
<td>51.3</td>
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</tbody>
</table>

**Roundup Ready**

<table>
<thead>
<tr>
<th>Company</th>
<th>Variety</th>
<th>Yield (bu/a)</th>
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</thead>
<tbody>
<tr>
<td>Syngenta-NK Brand</td>
<td>S00-A6</td>
<td>50.1</td>
</tr>
<tr>
<td>NDSU</td>
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