### By Mode of Action (effect on plant growth)

This chart groups herbicides by their modes of action to assist you in selecting herbicides 1) to maintain greater diversity in herbicide use and 2) to rotate among herbicides from different sites of action to delay the development of herbicide resistance.

The Site of Action Group is a classification system developed by the Weed Science Society of America.

**Site of Action Group**
- **Amino Acid Synthesis Inhibitors**
- **Cytochrome P450 Inhibitors**
- **Growth Regulators (Continued)**
- **Nitrogen Metabolism**
- **Photosynthesis Inhibitors**
- **Pigment Inhibitors**
- **Cell Membrane Disrupters**
- **Seeding Root Growth Inhibitors**
- **Seeding Shoot Growth Inhibitors**

**Number of resistant weed species at U.S.**

<table>
<thead>
<tr>
<th>Site of Action Group</th>
<th>Active Ingredient</th>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amino Acid Synthesis Inhibitors</strong></td>
<td>Glyphosate, Weeds, and Crop Series</td>
<td>Distributed by weed scientists from 16 North Central Universities, who are working on weed management in Great Plains Region.</td>
</tr>
</tbody>
</table>

**By Premix**

This chart lists premix herbicides alphabetically by their trade names so you can identify the premix's component herbicides and their respective site of action group. Refer to the Mode of Action chart, left, for more information.

**Site of Action Group**

<table>
<thead>
<tr>
<th>Active Ingredient</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amino Acid Synthesis Inhibitors</strong></td>
<td>Glyphosate, Weeds, and Crop Series</td>
</tr>
<tr>
<td><strong>Cytochrome P450 Inhibitors</strong></td>
<td><strong>Growth Regulators (Continued)</strong></td>
</tr>
</tbody>
</table>