WEED MANAGEMENT IN WHEAT

Mike Patterson and Brandon Dillard
Auburn University
Dec 16, 2011
Chickweed
Carolina geranium
Plaintain
Ryegrass
Wild garlic
SITE PREP PRIOR TO PLANTING WHEAT

1) Tillage plant immediately
2) Tillage, stale seedbed, burndown.
3) Burndown, plant
SITE PREP PRIOR TO PLANTING WHEAT

Burndown herbicides.

– Glyphosate (Roundup, Touchdown, etc.)
– Paraquat (Gramoxone, Firestorm, etc.)
– 2,4-D (no more than 1 pint/ac and wait 30 days)
– Aim or ET (usually with glyphosate)
– Valor (usually with glyphosate, 30 days prior)
– Sharpen (usually with glyphosate)
POST GRASS HERBICIDES

• **Hoelon** (Bayer) : annual ryegrass, 1.33 to 2.66 pt/ac.

• **Axial** (Syngenta) : annual ryegrass, 8.2 fl. oz/ac.

• **Osprey** (Bayer) : annual ryegrass, bluegrass, several small broadleaf weeds, 4.75 fl. oz./ac.

• **Power Flex** (Dow) : annual ryegrass, some small broadleaf weeds. 3.5 oz/ac.
EARLY POST BROADLEAF WEED HERBICIDES

- **Express SG** (Dupont) : wild mustard & radish, 0.25-0.5 oz/ac.
- **Harmony SG** (Dupont) : wild garlic, 0.45-0.5 oz/ac.
- **Harmony Extra XP** (Dupont) : combination of above two products, 0.3-0.6 oz./ac.
- **ET** (Nichino) : several broadleaf weeds including primrose, 0.5-1 oz/ac.
- **AIM** (FMC) : several broadleaf weeds, 0.5-2 oz.
LATE POST BROADLEAF WEED HERBICIDES

- **2,4-D**: several small broadleaf weeds, 1-1.25 pt/ac.
- **MCPA**: several small broadleaf weeds, 0.5-1 pt/ac.
- **Dicamba**: several small broadleaf weeds, 0.25 pt/ac.
- **ET (Nichino)**: several broadleaf weeds including primrose, 0.5-1 oz/ac.
- **AIM (FMC)**: several broadleaf weeds, 0.5-2 oz
Effect of Stage of Growth on Wheat Injury by Various Herbicides (Univ. of Georgia)

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>0-1 tiller</th>
<th>2-3 tiller</th>
<th>Full tiller</th>
<th>Jointing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4-D</td>
<td>&gt;80%</td>
<td>30%</td>
<td>0-10%</td>
<td>70-90%</td>
</tr>
<tr>
<td>MCPA</td>
<td>&gt;40%</td>
<td>5%</td>
<td>0-5%</td>
<td>50-70%</td>
</tr>
<tr>
<td>Peak</td>
<td>0-5%</td>
<td>0-5%</td>
<td>0-5%</td>
<td>5-10%</td>
</tr>
<tr>
<td>Express</td>
<td>0-5%</td>
<td>0-5%</td>
<td>0-5%</td>
<td>5-10%</td>
</tr>
<tr>
<td>Harmony X</td>
<td>0-5%</td>
<td>0-5%</td>
<td>0-5%</td>
<td>5-10%</td>
</tr>
<tr>
<td>Express + MCPA</td>
<td>&gt;40%</td>
<td>5%</td>
<td>0-5%</td>
<td>50-80%</td>
</tr>
<tr>
<td>Osprey</td>
<td>0-5%</td>
<td>0-5%</td>
<td>0-5%</td>
<td>0-5%</td>
</tr>
</tbody>
</table>
SPECIAL USE WHEAT HERBICIDES

- **Axiom** (Bayer) combination metribuzin and flufenacet. Apply to wheat in spike stage for annual ryegrass and bluegrass and wild radish. Wheat is variety sensitive. 4-10 oz/ac.

- **Prowl H20** (BASF) apply after wheat has emerged until flag leaf is visible. Must have rain or overhead irrigation to activate. If ryegrass has emerged add a product like Hoelon, Axial, or Osprey to mix. 2-3 pts/ac.
QUESTIONS?
WEED MANAGEMENT IN CORN

Mike Patterson
Auburn University
December 16, 2011
SITE PREP PRIOR TO PLANTING CORN

1) Tillage, plant immediately.
2) Tillage, stale seedbed, burndown.
3) Burndown, plant
   • Burndown herbicides.
     – Glyphosate (Roundup, Touchdown, etc.)
     – Paraquat (Gramoxone, Firestorm, etc.)
     – Ignite
     – Valor: usually with glyphosate (14 days prior to plant)
     – 2,4-D: 1 pt/ac (7 days prior to plant), 2 pts (14 days)
     – Aim or ET (usually with glyphosate)
     – Harmony Extra: usually with glyphosate, (14 days)
PREEMERGENCE HERBICIDES FOR CORN

- Atrazine 4L: 3-4 pts/ac.
- Simazine 4L: 4 pts/ac.
- Dual Magnum 7.6 EC: 1-1.6 pts/ac.
- Harness 7EC or Surpass 6.4EC: 1.5-3 pts/ac.
- Micro-Tech or Intrro 4ME: 4-5 pts/ac.
- Outlook 6L: 4-5 pts/ac.
- Python 80WG: 0.8-1 oz/ac.
POSTEMERGENCE HERBICIDES FOR CORN

- Atrazine 4L: 3-4 pts/ac + crop oil concentrate.
- 2,4-D or Banvel/Clarity 4L: 0.5-1 pt / 0.5 pt/ac.
- Basagran 4L: 1.5-2 pts/ac.
- Aim 2EC pts/ac: 0.5-1 fl oz/ac + crop oil concentrate.
- ET: 0.4-0.8 fl oz/ac + nonionic surfactant.
- Callisto 4SC: 3 fl oz/ac + crop oil concentrate.
- Laudis 3.5SC: 3 fl oz/ac + crop oil concentrate.
- Option 35WDG: 1.5-2 oz/ac + crop oil concentrate.
- Sandea 75DF: 0.66-1.33 oz/ac + crop oil concentrate.
POST-DIRECTED HERBICIDES FOR CORN

- Paraquat (Gramoxone, etc.): 1-2 pts/ac.
- Linuron 4L: 1-1.5 pts/ac.
- Evik 80DF: 1-2 lbs/ac.
- Prowl H20: 1.5-3 pts/ac.
ROUNDUP READY CORN

- Apply glyphosate (Roundup, etc.) over-the-top from emergence to V8 stage (about 30 inches).
- DO NOT apply more than 2 lbs active per acre per year to the crop (two applications of Roundup PowerMax at 22 fl oz each).
- Can mix with Dual Magnum (or use Sequence), or with Dual Magnum and Atrazine (or use Expert).
- Glyphosate-resistant palmer pigweed can be controlled with atrazine.
CORN FOR SILAGE

- Apply glyphosate (Roundup, etc.) over-the-top from emergence to V8 stage (about 30 inches).
- DO NOT apply more than 2 lbs active per acre per year to the crop (two applications of Roundup PowerMax at 22 fl oz each).
- Can mix glyphosate with Dual Magnum (or use Sequence).
- DO NOT use atrazine, Micro-Tech, or paraquat on corn grown for silage (Restricted use herbicides).
GRAIN SORGHUM WEED CONTROL

• Plant into clean seedbed using Concep treated seed.
• Use either Dual Magnum, Micro-Tech, or Outlook preemergence(soil applied) after planting.
• Use postemergence herbicides after sorghum emerges: atrazine, 2,4-D, Banvel, Basagran, Aim, Peak, Sandea.
SILAGE SORGHUM WEED CONTROL

- Plant into clean seedbed using Concep treated seed.
- Use either Dual Magnum or Outlook preemergence (soil applied) after planting.
- Use postemergence herbicides after sorghum emerges: 2,4-D, Banvel, Basagran, Aim, Peak, Sandea.