WEED MANAGEMENT IN SOYBEANS
How many growing points are on this plant?

Easier to control weeds when they are small and have fewer growing points.
WHAT TO DO WITH SO MANY TRAIT CHOICES?
Effect of Soybean-trait systems on Waterhemp Control

Bars labeled by the same letter are statistically equal.

Source: University of Missouri research.
Don’t select varieties simply on herbicide trait

![Bar chart showing White Mold (% of diseased plants) for RR2X (124 varieties) and RR2Y (95 varieties).]

- RR2X with +8% RR2X
- RR2Y with p-value = 0.003

[Bar A for RR2X (124 varieties) with 35% White Mold]
[Bar B for RR2Y (95 varieties) with 25% White Mold]
2 Post passes are not as effective in LL Soybeans

Source: University of Missouri research.
Value of Xtend System

Source: University of Missouri research.
GT27 Soybeans

Five-Way Resistance

Source: University of Missouri research.
HT3 Soybeans

- Stack of Xtendimax and Liberty
- Not yet approved

<table>
<thead>
<tr>
<th>Program</th>
<th>Late Season Waterhemp Control (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrant fb Xtendimax (EPOST)</td>
<td>90</td>
</tr>
<tr>
<td>Warrant+Xtenidmax (EPOST) fb Liberty (LPOST)</td>
<td>99</td>
</tr>
</tbody>
</table>

Source: University of Missouri research.
Most 2 and 3 way premixes are good on waterhemp

Source: 5 year averages from University of Missouri research.
Apply residual (Group 15) herbicide postemergence 30 days after planting.
Hooded Sprayers

- 85% reduction in drift
- Better weed control
  - More product on the target
- Less risk
- Less capacity
Final Comments

• Know what is in your premix herbicide
  • https://store.extension.iastate.edu/Product/12150

• Favor products that have more
  • flumioxazin (Valor)
  • sulfentrazone (Authority)
  • Watch out for diluted premixes

• Fields with high pressure require a layered residual
Dicamba drift

- Problem since 1969
- Damage is worse on flowering soybeans
- Hot weather increases injury
- Visual crop response from dicamba drift does not predict yield loss.
- Not all leaf cupping is dicamba.
Cautions for Xtend Soybean Users

- Use Engenia, Xtendimax, or FeXapan
- Do not spray if sensitive crop is downwind
- Wind speed: 3-10 mph. Watch the wind gusts
- Spray time: 1 hour after sunrise and 2 hours before sunset
- Do not spray if conditions are right for temperature inversions. Use Spray Smart app.
- Use approved nozzles
- Only use approved tankmix partners and adjuvants
- Reduce Boom Heights to 24 inches above target
- Work with your neighbors