Uses and Caveats with Liberty Herbicide on Liberty Link and WideStrike Cotton Cultivars

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Glyphosate-resistant Weeds in the Mid-South

- Horseweed/marestail
- Palmer amaranth
- Waterhemp
- Johnsongrass
- Italian ryegrass
- Annual bluegrass
- Goosegrass
- Giant ragweed
- Common ragweed
- Spiny amaranth
Palmer Amaranth is the Driver Weed
No Activation of Residual Herbicides
Hooded Applications and Still Loose The field
40 oz/A Gramoxone + 32 oz/A Cotoran Pre fb/
32 oz/A Ignite + 16 oz/A Dual Mag fb/
32 oz/A Ignite fb/
16 oz/A Direx + 32 oz/A MSMA + 1 oz/A Valor
Liberty Based System Use in 2012

About 82% of TN cotton acres received Liberty over the top.

- About 34% was Liberty Link or Glytol/LL
- About 48% was WideStrike
Liberty Link
- Full tolerance to glufosinate

GlyTol + Liberty Link
- Full tolerance to glufosinate and glyphosate

WideStrike
- Moderate to glufosinate and full tolerance to glyphosate
WideStrike Cotton

- Glufosinate injury can range from minimal to severe
- 3 glufosinate applications can reduce yield
- Tank-mixing with Dual Magnum, Warrant, certain insecticides, etc. can increase injury
- The manufacturer of glufosinate, nor the maker of WideStrike cotton varieties, recommend this application
21 DAA 44 oz Roundup PowerMax
GR Goosegrass Control in Cotton

- Roundup PM 22 oz/A
- Ignite 29 oz/A + Select Max 16 oz/A
- Select Max 16 oz/A
- Fusliade 12 oz/A

LSD = 15
Early Season Weed Control

Start clean

- Burndown
- Preemergence:
  - Cotoran
  - Caparol
  - Reflex

AgResearch
Weed Control in Crop

Postemergence
• Liberty

Extend residual control
• Dual Magnum – risky on WideStrike
• Warrant – very risky on WideStrike
Soybeans Planted to Clean Soil on May 16

Picture Taken May 29
Tips for Using Liberty

- Pigweed 4 inches or less
  - Inconsistent control with 4-8 inch coverage, coverage, coverage
- Flatfan or XR nozzles
  - At least 15 GPA
  - No reduced-drift nozzles
Inconsistent Liberty Performance
Time of Liberty application to AMAPA. 15 DAT B. TN.

% control

Hrs after sunrise

Hrs before sunset
Time of Liberty application to AMAPA. 15 DAT. NC.

% control

Hrs after sunrise

Hrs before sunset
The Early Bird May Get the Worm, But Not the Weeds

- Applications of Liberty should wait until AT LEAST 2 hours after sunrise
- Applications of Liberty from 2 hours after sunrise until 1 hour after sunset provided consistent control of pigweed in TN study
Palmer Surviving After Repeated Burndowns

12 oz Dicamba + 32 oz Glyphosate + 1.5 oz Leadoff 30 DBP/ fb
48 oz Gramoxone + 32 oz Cotoran Pre $40/Acre
36 oz Liberty early post $58/Acre
Weed Control in TN Cotton

2003 weed control costs
• $60/A herbicide

2012 weed control costs
• $120/A herbicide
• $25/A chopping crew
Can Cover Crops Reduce Weed Control Costs?
Questions?