

# Cotton Weed Control 2021

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- 1. Herbicide resistance - a perpetual nightmare!**
- 2. In-crop dicamba application changes!**

# GA Farmers - Most Challenging Pests

Response	Times provided
Palmer amaranth (pigweed)	1773
Morningglory	238
White flies	155
Dayflower (spiderwort)	131
Sicklepod	113
Stink bug	105
White mold	61
Nutsedge	48
Nematodes	47
Annual grasses	41

\*Growers were asked to list the 3 most problematic pests in agronomic crop production.  
All locations – **1737 growers** participated. Survey during 2019.

# Weed Resistance Reality Check - GA

## Palmer amaranth

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Roundup

Staple

Cadre

Atrazine

Prowl,

Sonalan,

Treflan



1 female = 253 g of seed

PPO Chemistry

# Commonly Used PPO's

## IMPORTANT NOTICE

U.S. LABEL - It is a violation of United States law to use this product in the United States in a manner inconsistent with its United States labeling.

GROUP 14 HERBICIDE

 **Reflex**<sup>®</sup>  
Herbicide

GROUP

14

HERBICIDE



**VALOR**<sup>®</sup>  
HERBICIDE  **SX**

**ET**<sup>®</sup>

HERBICIDE/DEFOLIANT

GROUP 14 HERBICIDE

PULL HERE TO OPEN

 **Flexstar**<sup>®</sup>

**Aim**<sup>®</sup>  
HERBICIDE **EC**

**Dow** Dow AgroSciences

**Goal**<sup>®</sup> 2XL

HERBICIDE

GROUP 14 HERBICIDE

**Blazer**<sup>®</sup>

POST-EMERGENCE HERBICIDE FOR  
SOYBEANS

**COBRA**<sup>®</sup>  
HERBICIDE

**SPARTAN**<sup>®</sup>

# Herbicide resistance – a perpetual nightmare

Greenhouse – 7 days



**None**

**Cobra**  
**125 oz**  
**+**  
**COC**

**Blazer**  
**240 oz**  
**+**  
**NIS**

**Reflex**  
**240 oz**  
**+**  
**NIS**



*Palmer response to RU + Dicamba.....hmmm*

# We must reduce selection pressure on the POST herbicide – Liberty, dicamba, 2,4-D



# Number of Palmer Amaranth Plants During Early Season. Macon Co., Georgia 2008.



**No Deep Tillage**



**Deep Turn**

No Herbicides



# Cover Crop Reduces Herbicide Resistance



Rye

Winter Weeds

# Level of Biomass is Important



7000 lb/A



3000 lb/A

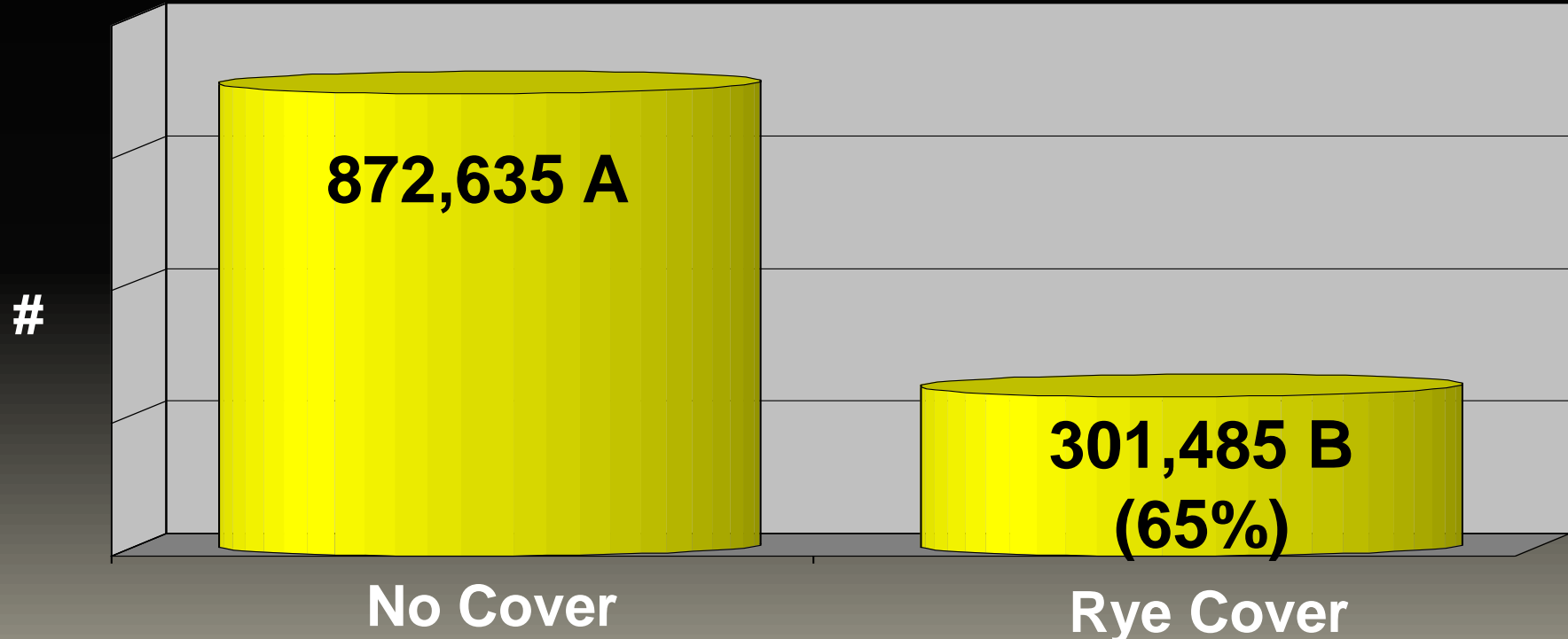


2000 lb/A

dry weight

# Number of Palmer to kill with POST herbicides during entire season, GA and TN. 4 Locations

# Palmer plants/A



\*Reduced # pigweed present at POST 1 by 75%, POST 2 by 70%, POST 3 by 54%. Averaged about 4500 lb of dry biomass.

**We must reduce selection pressure on the  
POST herbicide – Liberty, dicamba, 2,4-D**

**Single most effective option if activated!!!**



**PRE herbicide  
(two active ingredients)**

# Number of Palmer to kill with POST herbicides during entire season, GA and TN. 4 Locations

# Palmer plants/A

