



# 2023 Soybean Weed Control Update

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# Dicamba Drift or Aminopyralid Carryover?

*Pierce Co - 2022*



Original



Replant

# Soybean Weed Control Simplified



- Start clean
- Narrow rows (< 30")
- **PRE**
  - Metribuzin + Group 15 or Prowl
    - tolerant variety
  - Irrigation or rainfall
- **POST + Residual (weeds <3" tall)**
  - Post = Reflex or Prefix or Warrant Ultra or Liberty or Dicamba (Engenia/Tavium/ Xtendimax) or Enlist One (2,4-D choline) or Enlist Duo (glyphosate + 2,4-D choline)
  - Residual = Anthem Flexx/Max or Dual or Warrant or Outlook or Zidua
    - *Check tank-mix sites first*



# Metribuzin Products



| Manufacturer | Trade Name             | Active Ingredients                                                                              |
|--------------|------------------------|-------------------------------------------------------------------------------------------------|
| FMC          | Authority MTZ          | sulfentrazone + <b>metribuzin</b>                                                               |
| Syngenta     | Boundary               | s-metolachlor + <b>metribuzin</b>                                                               |
| Corteva      | Canopy<br>Canopy Blend | chlorimuron (10.7%) + <b>metribuzin</b> (64.3%)<br>chlorimuron (8.3%) + <b>metribuzin</b> (50%) |
| NuFarm       | Cloak                  | chlorimuron (10.7%) + <b>metribuzin</b> (64.3%)                                                 |
| Valent       | Fierce MTZ             | flumioxazin + pyroxasulfone + <b>metribuzin</b>                                                 |
| Loveland     | Intimidator            | s-metolachlor + fomesafen + <b>metribuzin</b>                                                   |
| NuFarm       | Panther MTZ            | flumioxazin + <b>metribuzin</b>                                                                 |
| NuFarm       | Panther Pro            | flumioxazin + imazethapyr + <b>metribuzin</b>                                                   |
| Valent       | Mauler                 | <b>metribuzin</b>                                                                               |
| UPL          | TriCor                 | <b>metribuzin</b>                                                                               |
| Corteva      | Trivence               | flumioxazin + chlorimuron + <b>metribuzin</b>                                                   |

# Metribuzin in Soybeans - 2022



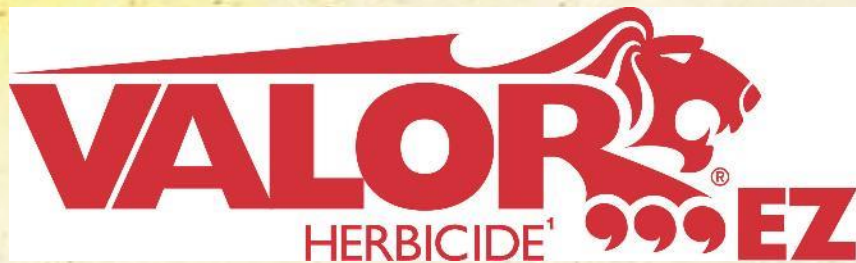
NTC  
(~40-50 AMAPA/ft<sup>2</sup>)



Tricor 4F  
8 oz/A  
PRE

SB-01-22  
April 26  
12 DAT

# Valor in GA Soybeans?



- Effective, legal and labeled but.....
- Valor fb Reflex/Prefix/Warrant Ultra is a good weed control program but a **bad** resistance mgt plan!
  - *Unless you hand-weed escapes!*
- Weed control in cotton and peanut without Valor/Reflex?

# PPO-Resistance in US



- 40 reported cases worldwide
  - 26 reported cases in US
- first identified in US in 2002
  - tall waterhemp (Illinois)
- 6 weed species (US)
  - tall waterhemp, Palmer amaranth, redroot pigweed, common ragweed, goosegrass, annual bluegrass
- **1 recently confirmed case in GA**



# But would be OK with .....



- **PRE**

- **Valor** or
- **Envive** (Valor + Classic + Harmony) or
- **Surveil** (Valor + FirstRate) or
- **Fierce** (Valor + Zidua)

- **POST**

- Roundup + Xtendimax/  
Engenia + residual  
(Xtend System) or
- Liberty + residual  
(Liberty-Link or  
XtendFlex System) or
- Liberty + Enlist One +  
residual (Enlist System)

# Soybean Injury Caused by Envive 41.3WG @ 3.5 oz/A 10 DAP



NTC



Envive

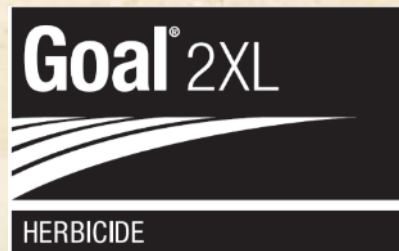
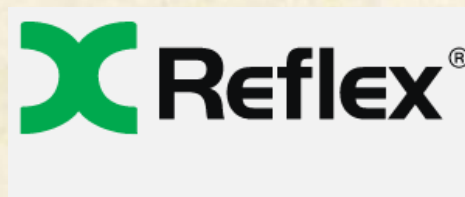
# “Old School” *Conventional Systems*



# Weed Control in Conventional Soybeans



- All depends upon the development and spread of PPO resistance (WSSA/HRAC MOA #14)!

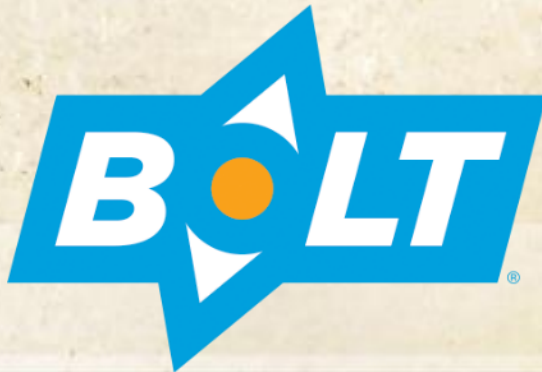


# Conventional Soybeans



**STS®**

herbicide tolerant trait

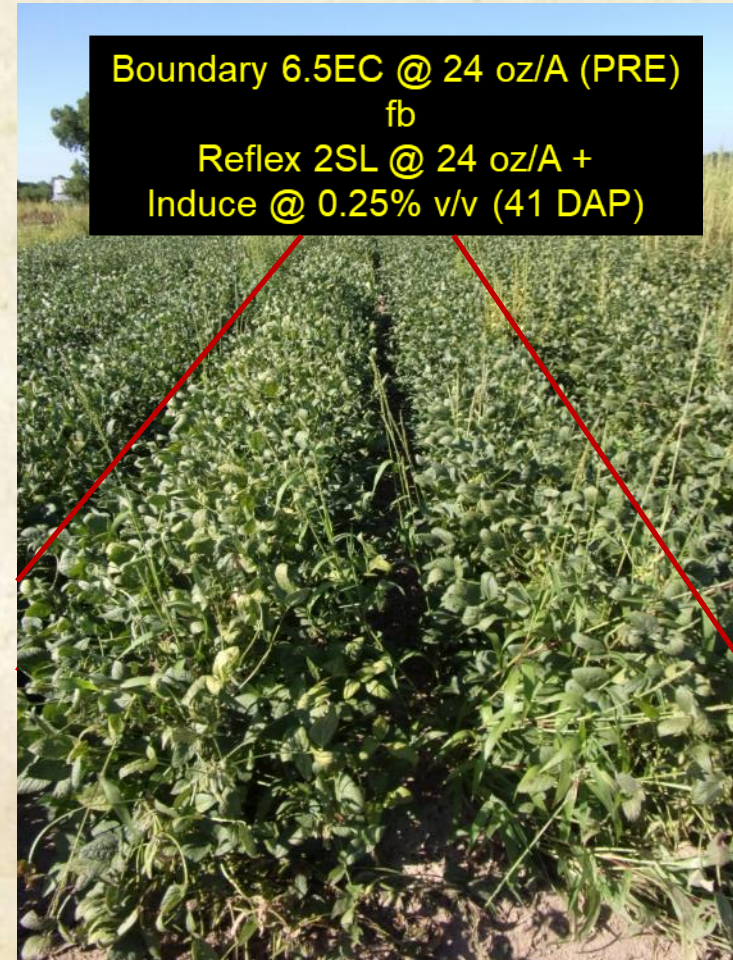


- PPO resistant weeds = SOL (really!)
- Metribuzin – PRE
- Prowl or Group 15's
- Reflex, Cobra, Ultra Blazer, Prefix, Warrant Ultra
- Classic or FirstRate (sicklepod + MG)
  - STS® (1993) - single gene (non-GMO)
  - Bolt™ (2015) - 2 genes (non-GMO)

# Soybean Weed Control Without New Technology - 2022



SB-01-22  
August 1  
110 DAP



Boundary 6.5EC @ 24 oz/A (PRE)  
fb  
Reflex 2SL @ 24 oz/A +  
Induce @ 0.25% v/v (41 DAP)

# Anthem Max, Dual, Warrant, Zidua, Outlook, Prowl????



 **Dual Magnum<sup>®</sup>**



 **Zidua<sup>®</sup> SC**  
Herbicide Group 15 Herbicide

**Outlook<sup>®</sup>**  
Herbicide

**ANTHEM<sup>®</sup>**  
 **MAXX**  
HERBICIDE

**PROWL<sup>®</sup> H<sub>2</sub>O**  
herbicide

# Group 15's - Residuals



NTC



Dual II Magnum 7.62EC  
16 oz/A (PRE)

# PPO Injury on Soybean



# Classic 25DG @ 0.67 oz/A + NIS Injury on Non-STS Soybeans



WT-01-21  
July 19  
6 DAT



- tolerant to glyphosate, glufosinate, isoxaflutole (Alite™ 27)
- Alite™ 27
  - NOT labeled for use GA
    - PPI or PRE
    - 1.5-2.0 oz/A
- No UGA-OVT variety data
- I have conducted no research?

SPECIMEN

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**RESTRICTED USE PESTICIDE**

May injure susceptible non-target plants.  
For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification. Commercial and certified applicators must ensure that all persons involved in these activities are informed of the precautionary statements.

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**BASF**

We create chemistry

ISOXAFLUTOLE   GROUP 27   HERBICIDE

**Alite™ 27**

Herbicide

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For: weed control in isoxaflutole-resistant soybean grown in select counties in certain states.

**This product can only be used on GT27 or isoxaflutole-resistant soybean. Crops not containing a gene expressing an HPPD protein will not be tolerant to Alite 27 Herbicide**

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[In the state of MN and WI use is only allowed in accordance with the State Specific Product Bulletin.]

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|                                                                                      |               |
|--------------------------------------------------------------------------------------|---------------|
| <b>ACTIVE INGREDIENT(S):</b>                                                         | <b>40.50%</b> |
| Isoxaflutole [5-cyclopropyl-4-(2-methylsulfonyl-4-trifluoromethylbenzoyl) isoxazole] | 59.50%        |
| <b>OTHER INGREDIENTS:</b>                                                            | 100.00%       |
| <b>TOTAL:</b>                                                                        | 100.00%       |

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Contains 4.00 pounds isoxaflutole per U.S. gallon

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**EPA Reg. No. 7969-433**

**EPA Est.**

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**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

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For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-832-HELP (4357)

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BASF  
 26 Davis Drive  
 Research Triangle Park, North Carolina 27709

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# Tropical Spiderwort - 2022



Roundup PowerMax3 5.88SL @ 25 oz/A  
Pursuit 2SL @ 4 oz/A



Roundup PowerMax3 5.88SL @ 25 oz/A  
Classic 25DG @ 0.5 oz/A



Roundup PowerMax3 5.88SL @ 25 oz/A  
FirstRate 84WG @ 0.3 oz/A

TSW-01-22  
August 17  
22 DAT

# Other Options???

## (Seedbank Mgt.)



- **Seed Mills**

- Integrated Harrington Seed Destructor
  - ~\$55,000
- Redekop Seed Control
  - ~\$70,000

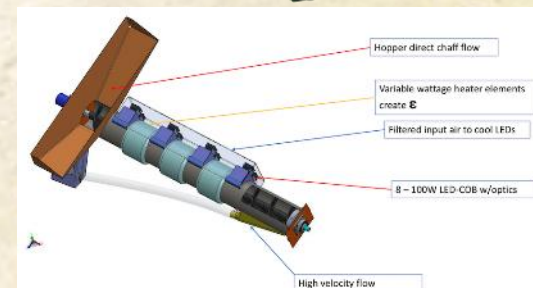


- **Chaff Lining**

- \$5000-\$6,000

- **Blue LED Light**

- Weed Seed Destroyer
  - heat + blue light
- \$30,000



- **Weed Zapper**

- \$69,000-\$89,000

- **Crop Zone**

- Electrophysical weeder + Volt.fuel
- Cost????????



# Questions/Comments





Seth McAllister, Terrell Co. (October 2022)

# ■ Weed Control in Grain Sorghum – 2023

■ *Eric P. Prostko*  
*Extension Weed Specialist*



# Grain Sorghum Weed Control

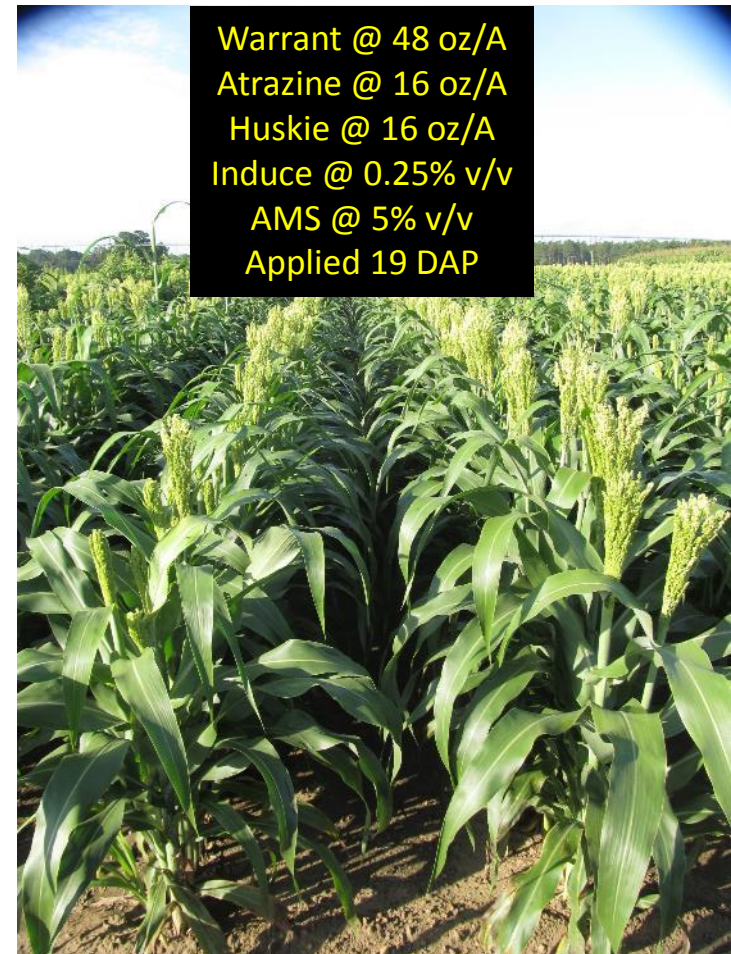
- 1) Start clean!
- 2) **Concep** treated seed
- 3) Dual Magnum or Outlook or Warrant (PRE)
- 4) Atrazine 4L @ 1.5 QT/A (EPOST)
  - 1) *Add Huskie if you have ATZ resistance*
- 5) Paraquat (Hooded sprayer)
- 6) Mechanical Cultivation

# A New (er) Product to Consider?

- **Huskie 2.06EC**
- Bayer CropScience
- Buctril (1.75 lbs/gal) + pyrasulfotole (0.31 lbs/gal)
- MOA = 6 + 27
- Postemergence (13-16 oz/A)
- 3-leaf to 12" tall sorghum
- Broadleaf weeds, good on pigweed
- Tank-mix with atrazine (16 oz/A)
- **Huskie FX = Huskie + Starane**



# Grain Sorghum Weed Control - 2021



# Huskie Injury on Sorghum



# Texas Panicum in Grain Sorghum



# New Grain Sorghum Weed Control Technologies (Non-GMO)

- **Igrowth™**
  - Alta/UPL
  - ImiFlex (imazamox)
    - PRE/POST
- **DoubleTeam™**
  - S&W Seed Partners/ADAMA
  - FirstAct (quizalofop)
    - POST
    - **Maybe** cultivars???
      - S&W Seeds
        - SP58M85DT/SP45A45DT
        - SP31C06DT (cream colored)
- **Inzen™**
  - Pioneer/Corteva
  - Zest (nicosulfuron)
    - POST

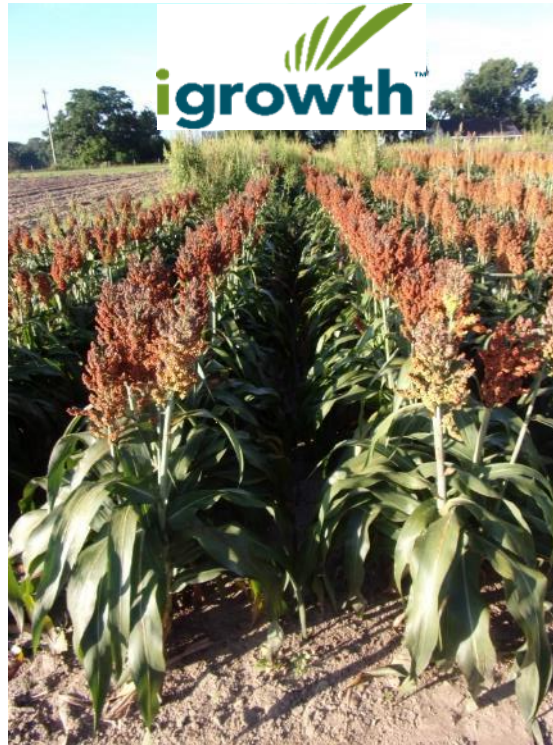


# Grain Sorghum Weed Control – 2022

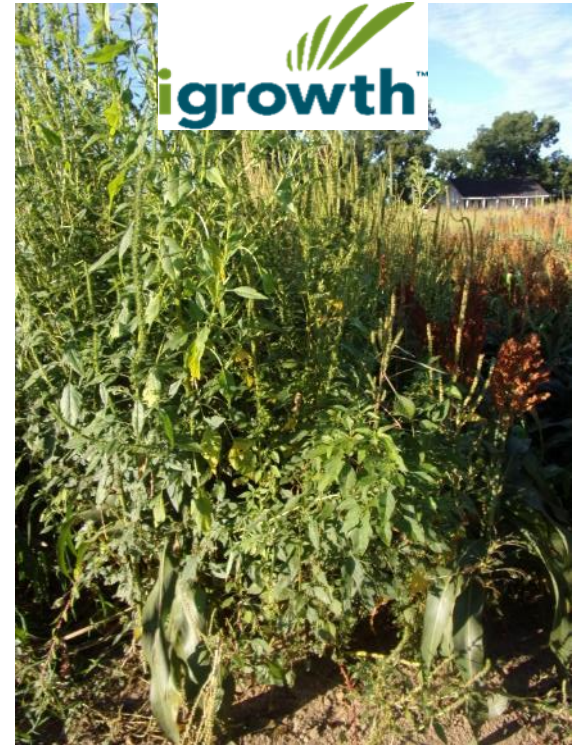
## I-Growth



NTC



Mocassin II Plus 7.64EC @ 21 oz/A (PRE)  
fb  
Imiflex 1AS @ 6 oz/A  
Agridex @ 1% v/v  
POST (V7, 9-10" tall, 22 DAP)



Imiflex 1AS @ 4 oz/A  
Agridex @ 1% v/v  
EPOST (V3, 4" tall, 14 DAP)

# DoubleTeam Sorghum - 2022



NTC



Parallel Plus 5.5F @ 72 oz/A  
**PRE**  
FirstAct 0.88EC @ 10 oz/A  
Agridex @ 1% v/v  
**POST (22 DAP)**

GS-01-22  
August 1  
69 DAT (POST)

# DoubleTeam™ System – First Act Off-Types



# Inzen Grain Sorghum - 2022



NTC

GS-01-22  
August 1  
69 DAT (POST)



Everprex 7.62EC @ 16 oz/A (PRE) fb  
Zest 75DG @ 0.67 oz/A +  
Aatrex 4L @ 48 oz/A + Agridex @ 1% v/v  
(POST)

Questions/Comments?  
[eprostko@uga.edu](mailto:eprostko@uga.edu)  
[gaweed.com](http://gaweed.com)



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