



# Peanut Weed Control Update - 2021

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Department of Crop & Soil Sciences



UNIVERSITY OF  
**GEORGIA**

College of Agricultural &  
Environmental Sciences



# Peanut Weed Control

## *Integrated Program Approach*

Tillage



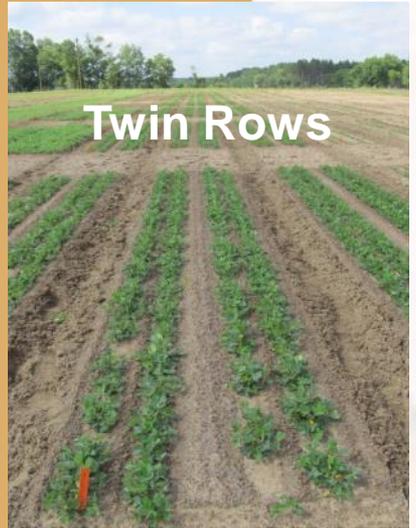
Rye Cover Crop



Irrigation



Twin Rows



Herbicides



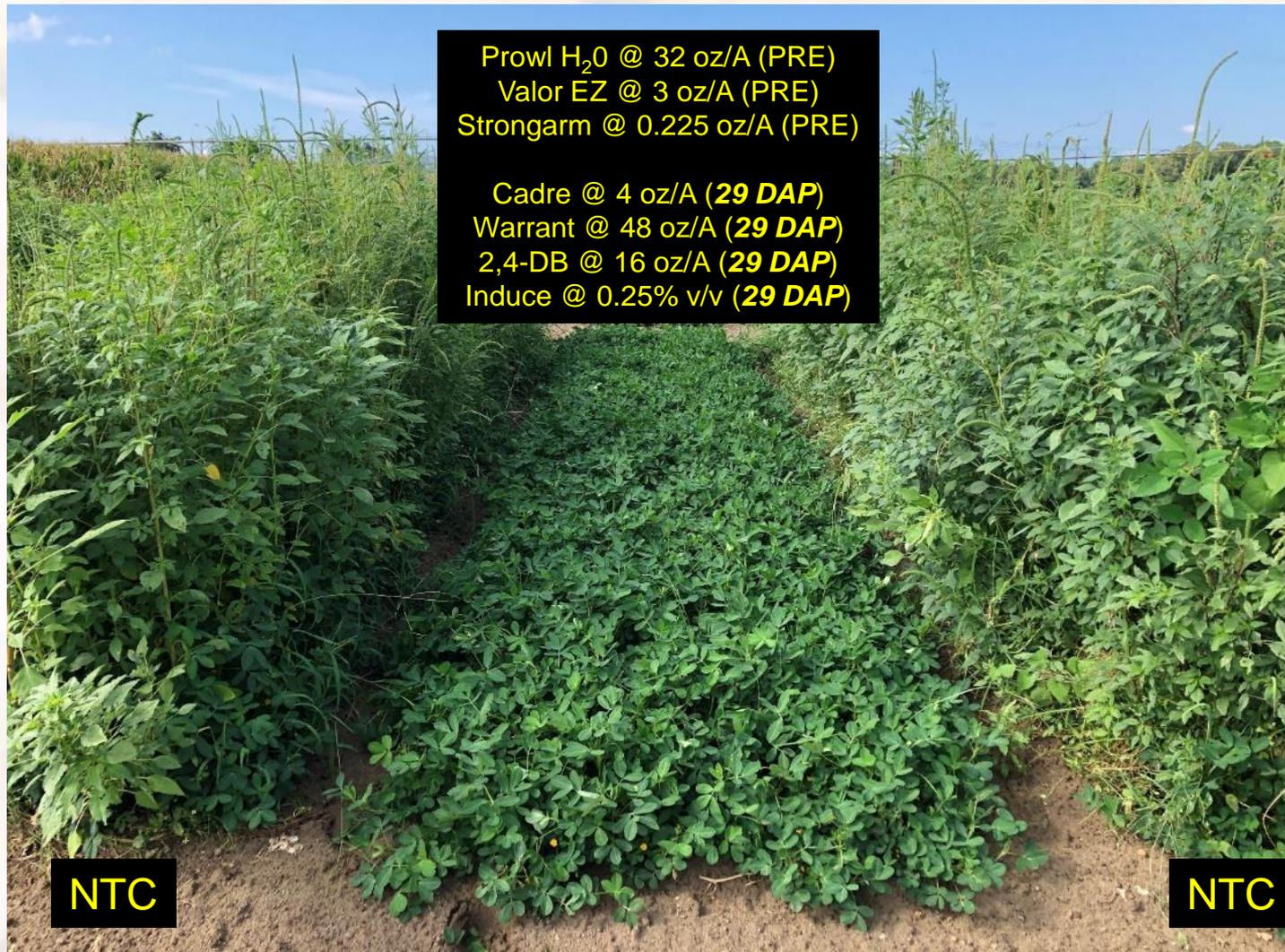
Hand-Weeding





# Peanut Weed Control – 2020 Program Approach

Started CLEAN!  
Twin Rows  
4 residuals  
Timely POST



Prowl H<sub>2</sub>O @ 32 oz/A (PRE)  
Valor EZ @ 3 oz/A (PRE)  
Strongarm @ 0.225 oz/A (PRE)

Cadre @ 4 oz/A (29 DAP)  
Warrant @ 48 oz/A (29 DAP)  
2,4-DB @ 16 oz/A (29 DAP)  
Induce @ 0.25% v/v (29 DAP)

NTC

NTC

PE-05-20  
July 21  
71 DAP

# Prowl vs. Sonalan??



We create chemistry

Pendimethalin Group 3 Herbicide

## SPECIMEN

# Prowl® H2O

Herbicide

### For Use in Selected Crops

(See Table 1, Crop List)

#### Active Ingredient\*

pendimethalin: N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine . . . . . 38.7%

Other Ingredients: . . . . . 61.3%

**Total:** . . . . . 100.0%

\*1 gallon contains 3.8 pounds of pendimethalin formulated as an aqueous capsule suspension.

EPA Reg. No. 241-418

EPA Est. No.

### KEEP OUT OF REACH OF CHILDREN

### CAUTION/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See inside for complete **First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

#### Net Contents:

BASF Corporation  
26 Davis Drive, Research Triangle Park, NC 27709

# Sonalan® HFP

HERBICIDE

A herbicide for preemergence control of certain annual grasses and broadleaf weeds in, borage, calendula, castor oil plant, Chinese tallowtree, crambe, cuphea, dry beans, dry peas, echium, euphorbia, evening primrose, flax seed, gold of pleasure, hare's ear mustard, joboba, lesquerella, lunaria, meadowfoam, milkweed, mustard seed, niger seed, peanuts, rapeseed, oil radish, poppy seed, rose hip, safflower, sesame, soybeans, stokes aster, sweet rocket, sunflower, tallwoodweed, tea oil plant and vernonia

ACTIVE INGREDIENT:	% BY WT.
Ethalfluzin: N-ethyl-N-(2-methyl-2-propenyl)-2, 6-dinitro-4-(trifluoromethyl)benzenamine . . . . .	35.4%
OTHER INGREDIENTS: . . . . .	64.6%
<b>TOTAL</b>	<b>100.0%</b>

Contains 3 lb active ingredient per gallon.

### KEEP OUT OF REACH OF CHILDREN

### DANGER / PELIGRO

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FIRST AID	
<b>IF IN EYES</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>IF ON SKIN OR CLOTHING</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>IF SWALLOWED</b>	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>IF INHALED</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-0796 for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b>	
Probable mucosal damage may contraindicate the use of gastric lavage.	

**Notice:** Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened. Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing. Avoid Freezing -- Store Above 40°F

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Corrosive • Causes Skin Burns And Irreversible Eye Damage • Harmful If Swallowed Or Inhaled • Prolonged or Frequently Repeated Skin Contact. May Cause Allergic Reactions in Some Individuals. Do not get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist.

NET CONTENTS \_\_\_\_\_

EPA Reg. No. 10163-356  
EPA Est. No.



Produced For:  
Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366



# Peanut Weed Control – 2020

## *Sonalan or Prowl?*



NTC



Prowl H<sub>2</sub>O @ 32 oz/A +  
Valor SX @ 3 oz/A (PRE)



Sonalan @ 32 oz/A +  
Valor SX @ 3 oz/A (PRE)

Cadre @ 4 oz/A +  
Dual Magnum @ 16 oz/A +  
2,4-D @ 16 oz/A (30 DAP)

Cadre 4 oz/A +  
Dual Magnum @ 16 oz/A +  
2,4-DB @ 16 oz/A (30 DAP)

PE-11-20  
August 3  
84 DAP



# Peanut Weed Control – 2020

## *Gramoxone Program*



**NTC**

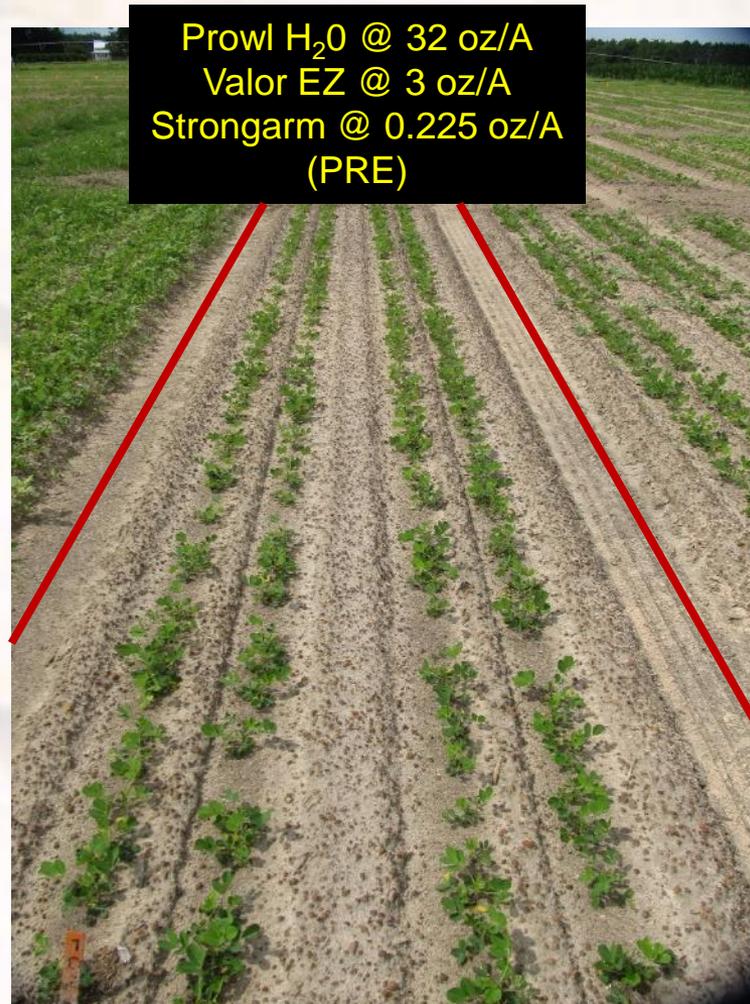
Prowl H<sub>2</sub>O 3.8ASC @ 32 oz/A (PRE)  
Gramoxone 3SL @ 8 oz/A (14 DAP)  
Storm 4SL @ 16 oz/A (14 DAP)  
Dual Magnum 7.62EC @ 16 oz/A (14 DAP)  
Cadre 2AS @ 4 oz/A (29 DAP)  
Dual Magnum 7.62EC @ 16 oz/A (29 DAP)  
2,4-DB 1.75SL @ 16 oz/A (29 DAP)

PE-05-20  
June 18  
38 DAP



# Peanut Weed Control – 2020

## *Do you really need a “cracking” spray?*



NTC

Prowl H<sub>2</sub>O @ 32 oz/A  
Valor EZ @ 3 oz/A  
Strongarm @ 0.225 oz/A  
(PRE)

PE-13-20  
June 3  
22 DAP

# Wrong Mixing Order



Was: 1) Gramoxone; 2) Storm; 3) Zidua SC

Should have been: 1) Zidua SC; 2) Storm;  
3) Gramoxone

# WSSA Group 15 Herbicides?



**Outlook<sup>®</sup>**  
Herbicide



 **DualMagnum<sup>®</sup>**



**Zidua<sup>®</sup> SC**

Herbicide

Group 15 Herbicide



# WSSA Group 15's in Peanut

## *How much?*

<b>Herbicide</b>	<b>Peanut Registration</b>	<b>Normal Use Rate (oz/A)</b>	<b>Total Amount Season (oz/A)</b>	<b>Latest Application</b>	<b>PHI (days)</b>
Anthem Flex 4SE	2020	3.0	9.12	R3 (beginning pod)	NL
Dual Magnum 7.62EC	1997	16.0	45.0	--	90
Outlook 6EC	1999	12.8	21.0	--	80
Warrant 3ME	2014	48.0	128.0	R1 (Beginning bloom)	NL
Zidua 4.17SC	2017	2.5	8.25	R3	0



# Peanut Weed Control – 2020

## *Dual Magnum/Cadre Programs*



**NTC**



**Prowl H<sub>2</sub>O @ 32 oz/A (PRE)**

**Gramoxone 3SL @ 8 oz/A +  
Storm @ 16 oz/A +  
Dual Magnum @ 16 oz/A (14 DAP)**

**Cadre @ 4 oz/A +  
Dual Magnum @ 16 oz/A +  
2,4-DB @ 16 oz/A (29 DAP)**



**Prowl H<sub>2</sub>O @ 32 oz/A +  
Valor EZ @ 3 oz/A + Strongarm  
@ 0.225 oz/A (PRE)**

**Cadre @ 4 oz/A +  
Dual Magnum @ 16 oz/A +  
2,4-DB @ 16 oz/A (29 DAP)**

**PE-05-20  
August 20  
101 DAP**



# Peanut Weed Control – 2020

## *Outlook/Cadre Programs*



NTC



Prowl H<sub>2</sub>O @ 32 oz/A (PRE)  
Gramoxone 3SL @ 8 oz/A +  
Storm @ 16 oz/A +  
Outlook @ 10.5 oz/A (14 DAP)  
Cadre @ 4 oz/A +  
Outlook @ 10.5 oz/A +  
2,4-DB @ 16 oz/A (29 DAP)



Prowl H<sub>2</sub>O @ 32 oz/A +  
Valor EZ @ 3 oz/A +  
Strongarm @ 0.225 oz/A (PRE)  
Cadre @ 4 oz/A +  
Outlook @ 12.8 oz/A +  
2,4-DB @ 16 oz/A (29 DAP)

PE-05-20  
August 20  
101 DAP



# Peanut Weed Control – 2020

## *Warrant/Cadre Programs*



NTC



Prowl H<sub>2</sub>O @ 32 oz/A (PRE)

Gramoxone 3SL @ 8 oz/A +  
Storm @ 16 oz/A +  
Warrant @ 48 oz/A +  
Induce @ 0.25% v/v (14 DAP)

Cadre @ 4 oz/A +  
Warrant @ 48 oz/A +  
2,4-DB @ 16 oz/A  
Induce @ 0.25% v/v (29 DAP)



Prowl H<sub>2</sub>O @ 32 oz/A +  
Valor EZ @ 3 oz/A +

Strongarm @ 0.225 oz/A (PRE)

Cadre @ 4 oz/A +  
Warrant @ 48 oz/A +  
2,4-DB @ 16 oz/A +  
Induce @ 0.25% v/v (29 DAP)

PE-05-20  
August 20  
101 DAP



# Peanut Weed Control – 2020

## *Zidua/Cadre Programs*



NTC



Prowl H<sub>2</sub>O @ 32 oz/A (PRE)

Gramoxone 3SL @ 8 oz/A +  
Storm @ 16 oz/A +  
Zidua SC @ 2.5 oz/A +  
Induce @ 0.25% v/v (14 DAP)

Cadre @ 4 oz/A +  
Zidua SC @ 2.5 oz/A +  
2,4-DB @ 16 oz/A  
Induce @ 0.25% v/v (29 DAP)



Prowl H<sub>2</sub>O @ 32 oz/A +  
Valor EZ @ 3 oz/A +

Strongarm @ 0.225 oz/A (PRE)

Cadre @ 4 oz/A +  
Zidua SC @ 2.5 oz/A +  
2,4-DB @ 16 oz/A +  
Induce @ 0.25% v/v (29 DAP)

PE-05-20  
August 20  
101 DAP



# Peanut Weed Control – 2020

## *Anthem Flex/Cadre Programs*



NTC



Prowl H<sub>2</sub>O @ 32 oz/A (PRE)

Gramoxone 3SL @ 8 oz/A +  
Storm @ 16 oz/A +  
Anthem Flex @ 3 oz/A +  
Induce @ 0.25% v/v (14 DAP)

Cadre @ 4 oz/A +  
Anthem Flex @ 3 oz/A +  
2,4-DB @ 16 oz/A  
Induce @ 0.25% v/v (29 DAP)



Prowl H<sub>2</sub>O @ 32 oz/A +  
Valor EZ @ 3 oz/A +

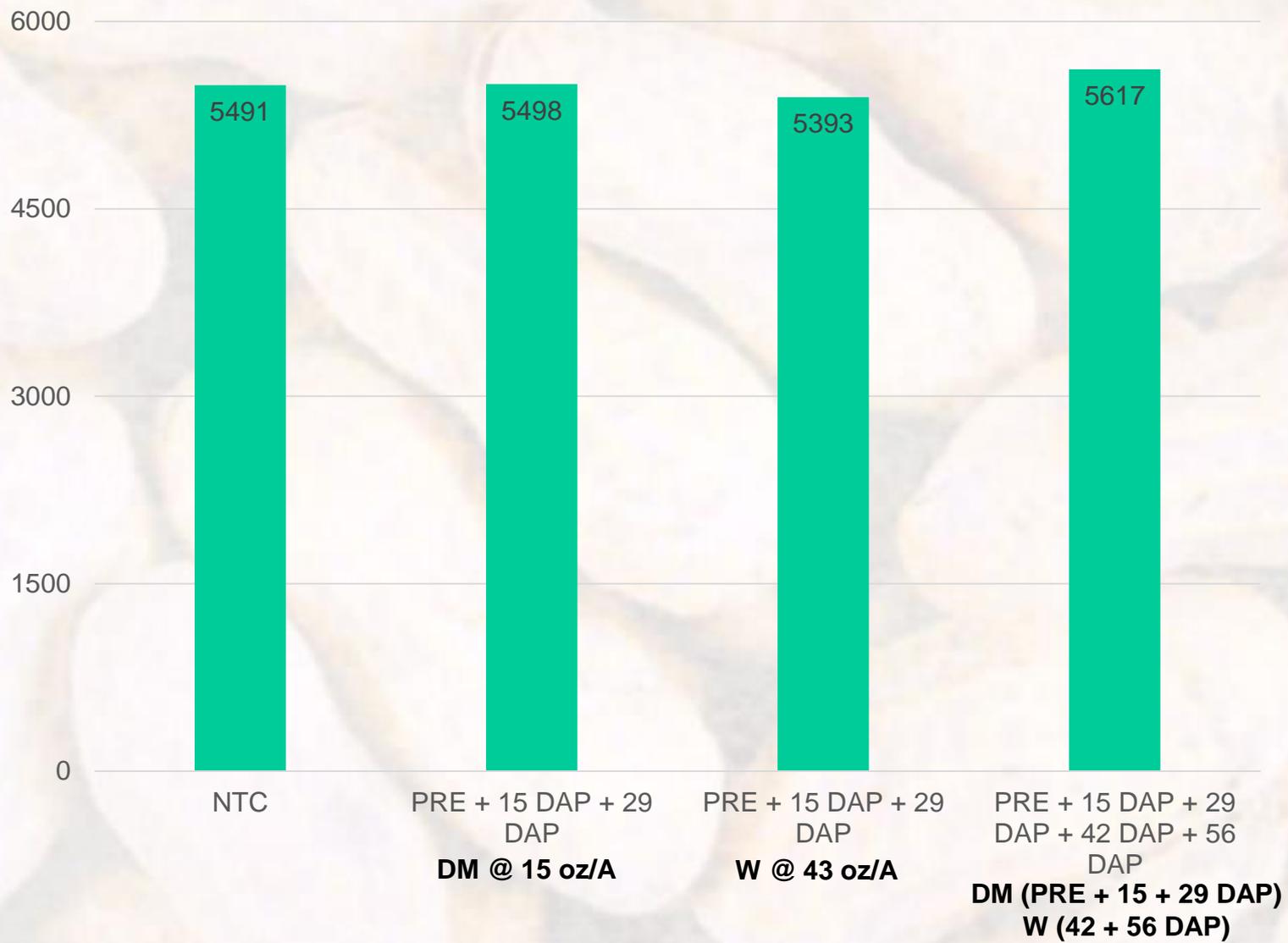
Strongarm @ 0.225 oz/A (PRE)

Cadre @ 4 oz/A +  
Anthem Flex @ 3 oz/A +  
2,4-DB @ 16 oz/A +  
Induce @ 0.25% v/v (29 DAP)

PE-05-20  
August 20  
101 DAP



# Peanut Yield (lbs/A) Response to WSSA Group 15's - 2020



PE-18-20  
GA-06G  
Weed-free  
P = 0.6901  
CV = 7.26



# Cobra vs. Blazer

GROUP 14 HERBICIDE



Active Ingredient By Wt  
 \*Lactofen ..... 24%  
 Other Ingredients ..... 76%  
 Total ..... 100%  
 \*2-ethoxy-1-methyl-2-oxoethyl-5-[2-chloro-4-(trifluoromethyl)-phenoxy]-2-nitrobenzoate

Contains petroleum distillates.  
 Contains 2 lbs active ingredient per gallon.  
**Do not apply this product through any type of irrigation system.**

EPA Reg. No. 59629-34  
 EPA Est. 5905-1A-01\*, 70989-1A-01\*, 228-1L-1\*  
 Superscript is first letter of lot number.

**KEEP OUT OF REACH OF CHILDREN  
 DANGER – PELIGRO**

**SEE BELOW FOR ADDITIONAL  
 PRECAUTIONARY STATEMENTS.**  
**Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)**

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS & DOMESTIC ANIMALS  
 DANGER:** Corrosive. Causes skin burns and irreversible eye damage. Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes or on skin or clothing. Avoid breathing vapor or spray mist. This product contains lactofen, which has been determined to cause tumors in laboratory animals (mouse, rat). Risks can be reduced by closely following use directions and precautions, and by wearing the protective clothing specified elsewhere on this label.

**FIRST AID**  
**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

(continued)

**FIRST AID (continued)**  
**If swallowed:** Immediately call a poison control center or doctor. Do not induce vomiting unless told to by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-892-0099 for emergency medical treatment information.

**NOTE TO PHYSICIAN**

Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical-resistant category selection chart.

**Applicators and other handlers must wear:** coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, such as Barrier Laminate or Viton ≥ 14 mils, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure and chemical-resistant apron when cleaning equipment, mixing or loading.

**Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.** Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

GROUP 14 HERBICIDE



For use on peanuts, rice, soybeans, and strawberries

**ACTIVE INGREDIENT:** Sodium salt of acifluorfen\* ..... 20.1%  
**OTHER INGREDIENTS:** ..... 79.9%  
**TOTAL:** ..... 100.0%  
 \* Equivalent to 2 pounds of active ingredient per gallon.

EPA Reg. No. 70506-60

**KEEP OUT OF REACH OF CHILDREN  
 DANGER/PELIGRO**

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**FIRST AID**

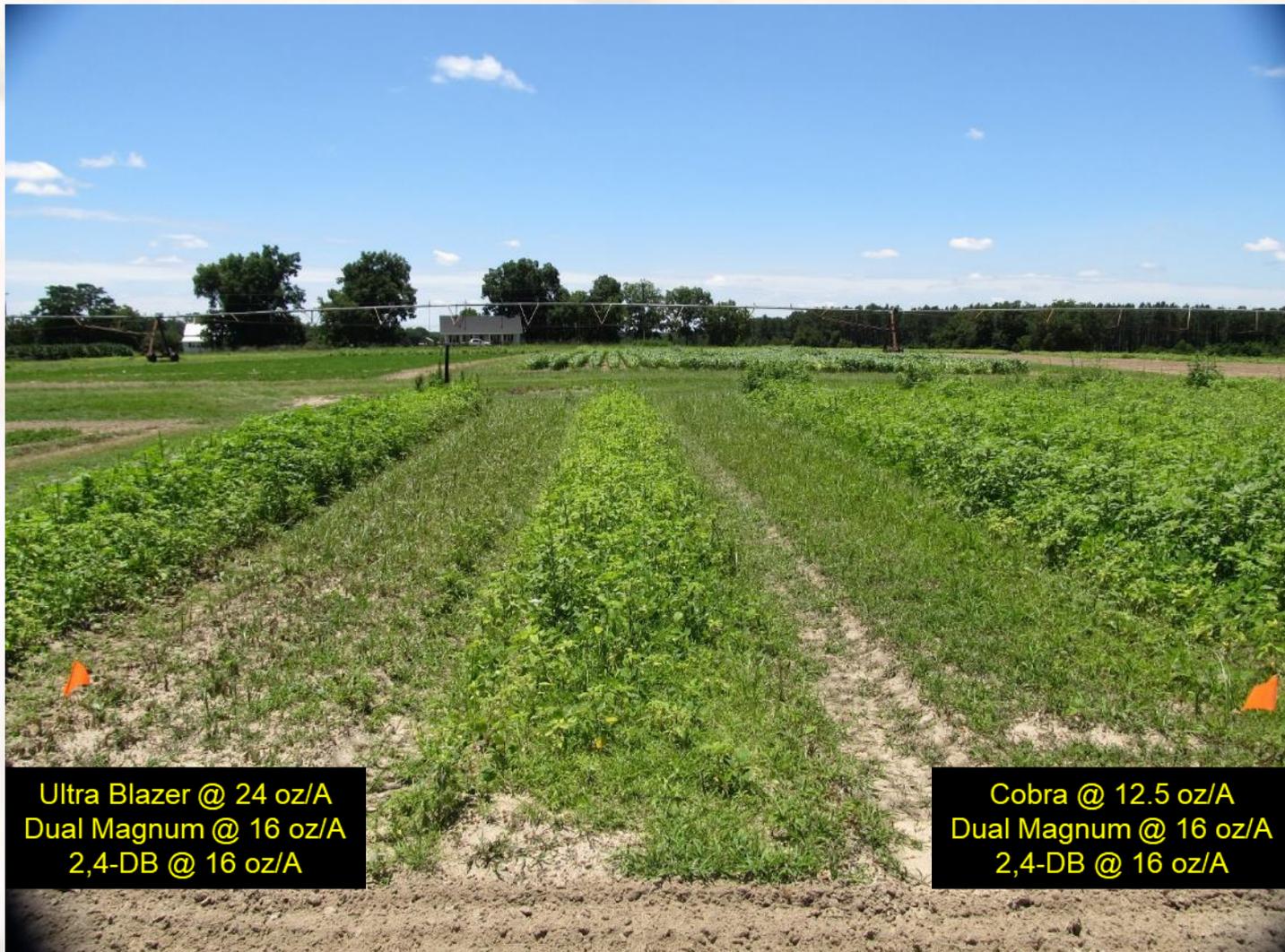
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>Hotline Number:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, contact the Rocky Mountain Poison Control Center at 1-866-673-6671.	
<b>Note to Physician:</b> Probable mucosal damage may contraindicate the use of gastric lavage. ANTIDOTE—No specific antidote is available. Treat symptomatically.	

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.





# Ultra Blazer or Cobra – 2020 15 GPA, AIXR



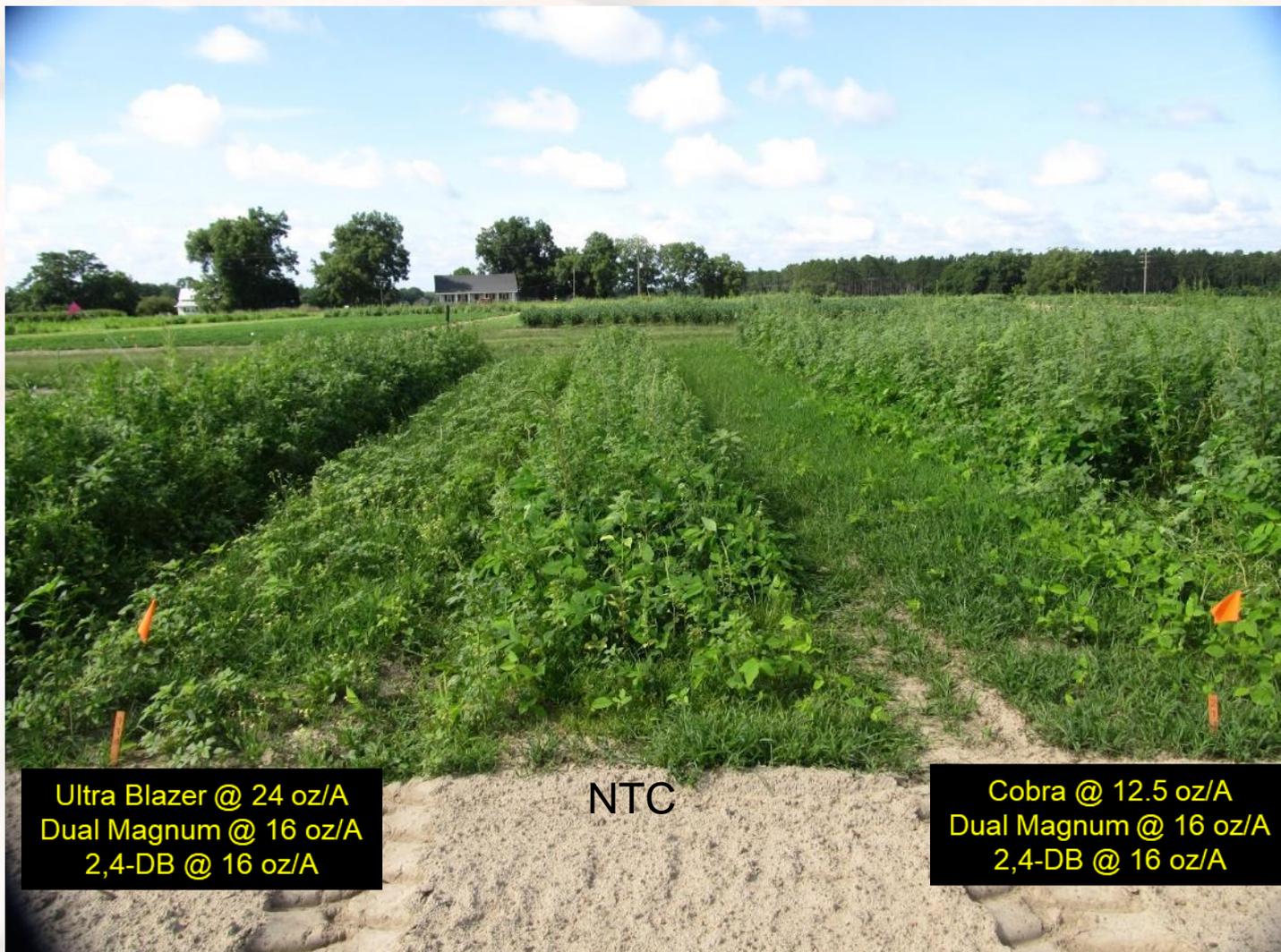
Ultra Blazer @ 24 oz/A  
Dual Magnum @ 16 oz/A  
2,4-DB @ 16 oz/A

Cobra @ 12.5 oz/A  
Dual Magnum @ 16 oz/A  
2,4-DB @ 16 oz/A

2"-10" tall AMAPA  
13 DAT  
June 17



# Ultra Blazer or Cobra – 2020 15 GPA, AIXR Tips



Ultra Blazer @ 24 oz/A  
Dual Magnum @ 16 oz/A  
2,4-DB @ 16 oz/A

NTC

Cobra @ 12.5 oz/A  
Dual Magnum @ 16 oz/A  
2,4-DB @ 16 oz/A

2"-10" tall AMAPA  
25 DAT  
June 29



# Strip-Tillage Peanut Weed Control

- 1) cereal rye planted Dec 18, 2019 (70 lbs/A) – broadcast
- 2) 45 lbs/A N on Jan 22, 2020
- 3) Burndown on March 30 - Roundup + Valor (2 oz/A)
- 4) strip-till rig on April 29
- 5) Planted May 25 - Twin row
- 6) Gramoxone + Prowl + Valor + Strongarm at planting
- 7) Cadre + Dual Magnum + 2,4-DB (~40 DAP)
- 8) hard-hose irrigation



# Other Research



# Wild Radish Seedlings





Strongarm 84WG @ 0.3 oz/A + Induce @ 0.25% v/v on Large Wild Radish (20" flowering/pods) – 6 DAT (June 8 )





Strongarm 84WG @ 0.3 oz/A + Induce @ 0.25% v/v on Large Wild Radish (20" flowering/pods) – 20 DAT (June 22 )



untreated

treated



# Nozzle Type and Off-Target Movement

*(JD4630, 90' boom, 15" nozzle spacing, 13 GPA, 13.6 MPH, 41 PSI)*

**TTI-11004**



**TTI60-11004**



**XRC-11004**





# Nozzle Type Effects on Insect, Disease, and Yield of Peanut with a Commercial Sprayer – 2020\*

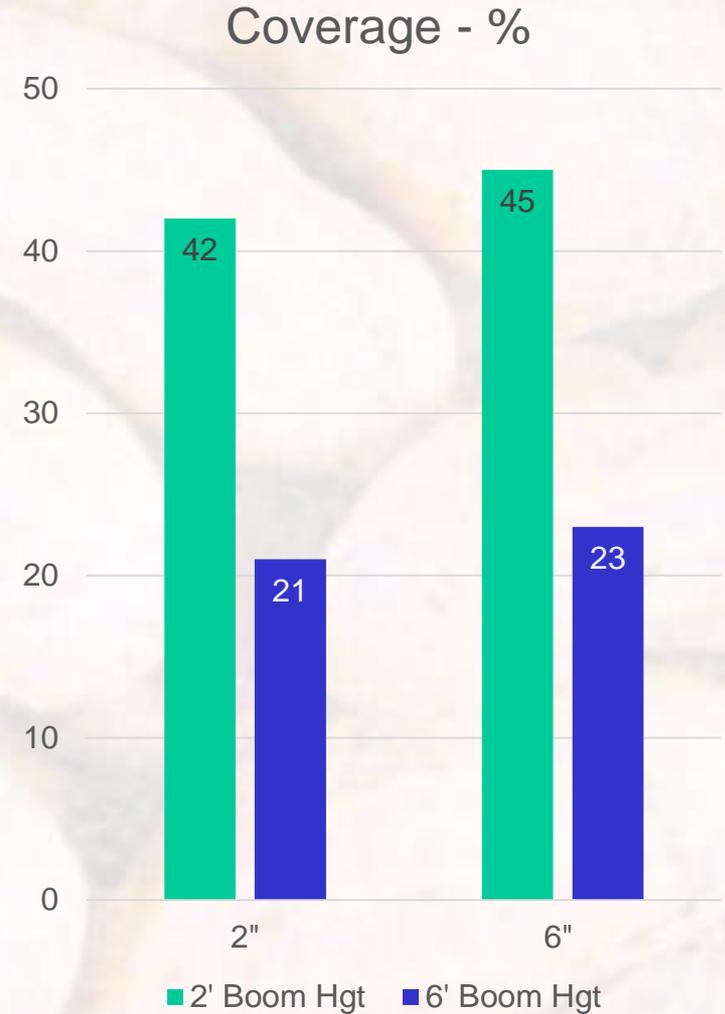
Nozzle Type	3-CAH (#/10 swps) 08-05-20	Leaf Spot (1-10) 08-27-20	Above- Ground White Mold (%) 08-27-20	Under- Ground White Mold (%) 09-17-20	Peanut Yield (lbs/A)
XRC-11004	5.5	1	5.8	11.5	4665
TTI60-11004	5.8	1	3.3	20.3	4776
TTI-11004	4.3	1	4.8	21.1	4526
<b>LSD (0.10)</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>
<b>P-Value</b>	<b>0.7176</b>	<b>1.0</b>	<b>0.7389</b>	<b>0.2610</b>	<b>0.3234</b>
<b>CV</b>	<b>52.51</b>	<b>0</b>	<b>97.3</b>	<b>46.4</b>	<b>4.59</b>

\*JD4630, 90' boom, 15" nozzle spacing, 13.6 MPH, 13 GPA, 41 PSI





# Influence of Boom Height on Spray Coverage - 2020



RoGator 700B  
TTJ60-03 nozzle  
15 GPA  
5 MPH  
June 29



# Glyphosate in Soils\*

- Average ½ life in soils is about 30 days with range of 5.7 to 40.9 days.
- Once in the soil, glyphosate is bound tightly by mostly non-organic soil components, particularly charged minerals such as aluminum and iron oxides (Borggaard and Gimsing 2008).
- Glyphosate is more tightly bound to soils than most other herbicides and competes for adsorption sites in soil with phosphate, so phosphate fertilizers can cause remobilization of glyphosate (Bott et al. 2011). In **extreme** cases, this phenomenon can result in phytotoxicity to plants from unbound glyphosate (*greenhouse-soybean*).
- Also, in very sandy soils without enough binding sites, glyphosate residues can cause phytotoxicity (Cornish 1992). (*tomato transplants*)



# Peanut Response to Glyphosate



NTC



Roundup P-Max II 5.5SL  
160 oz/A  
Applied 1 DAP

PE-16-20  
June 17  
44 DAP



# Peanut Response to Glyphosate



NTC



Roundup P-Max II 5.5SL  
160 oz/A  
Applied 1 DAP

PE-16-20  
July 7  
64 DAP



# Peanut Response to Glyphosate



NTC



Roundup P-Max II 5.5SL  
160 oz/A  
Applied 1 DAP

PE-16-20  
July 22  
79 DAP



# Peanut Response to Glyphosate



NTC



Roundup P-Max II 5.5SL  
160 oz/A  
Applied 1 DAP

PE-16-20  
August 17  
105 DAP



# Peanut Yield As Influenced by Soil Applied Glyphosate\*





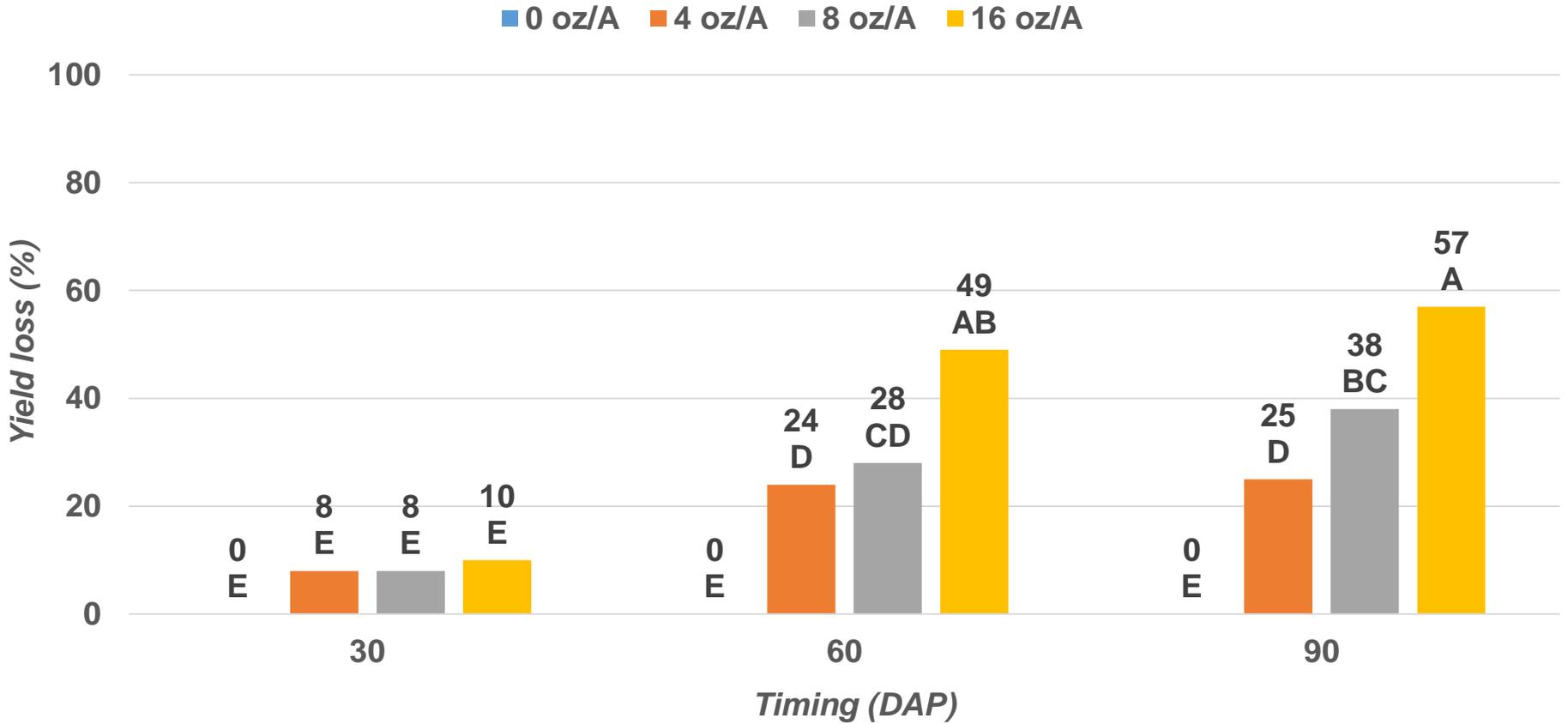
Is this glyphosate?  
No, it's diuron!



5900+ lbs/A

Planting Date: April 20  
Sprayed: June 7  
Picture: June 20  
Tift Co. 2018

# Peanut Yield Loss from Diuron 4L (2019-2020).





# Preplant Liberty (glufosinate) for Peanut?

- Why?
  - *used extensively in GA cotton so its around the farm and growers are very familiar with it.*
  - *Could be helpful for horseweed, morningglory, and pigweed control prior to planting*
  - *Peanut control for replant*
  - *prevent off-label usage*
  - *Current labeled rotation = 180 days*

**BASF** We create chemistry

SPECIMEN Group 10 Herbicide

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## Liberty® 280 SL

Herbicide

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Liberty® 280 SL herbicide is a nonselective herbicide that provides control of a broad spectrum of broadleaf and grassy weeds.

Liberty 280 SL is registered for use as a:

- burndown treatment prior to planting or prior to emergence of canola, corn, sweet corn, cotton, soybean, and sugar beet
- postemergence weed control herbicide to be applied on LibertyLink® or glufosinate-resistant crops including LibertyLink canola, LibertyLink corn, LibertyLink sweet corn, LibertyLink cotton, and LibertyLink soybeans
- postemergence weed control herbicide to be applied on cotton with a hooded sprayer only

**Active Ingredient:**  
glufosinate-ammonium\* ..... 24.5%\*\*  
**Other Ingredients:** ..... 75.5%  
**Total:** ..... 100.0%

\*CAS Number 77182-82-2  
\*\*Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

EPA Reg. No. 7969-448 EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN**  
**WARNING/AVISO**

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See inside for complete **First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.  
**In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).**

**Net Contents:**

BASF Corporation  
26 Davis Drive, Research Triangle Park, NC 27709





# Peanut Response to Liberty



No Liberty



Liberty @ 64 oz/A  
7 DBP + 1 DAP

PE-21-20  
June 25  
30 DAP



# Peanut Response to Liberty



No Liberty



Liberty @ 64 oz/A  
7 DBP + 1 DAP

PE-21-20  
July 20  
55 DAP



# Peanut Response to Liberty



No Liberty



Liberty @ 64 oz/A  
7 DBP + 1 DAP

PE-21-20  
August 20  
86 DAP



# Peanut Response to Liberty



No Liberty

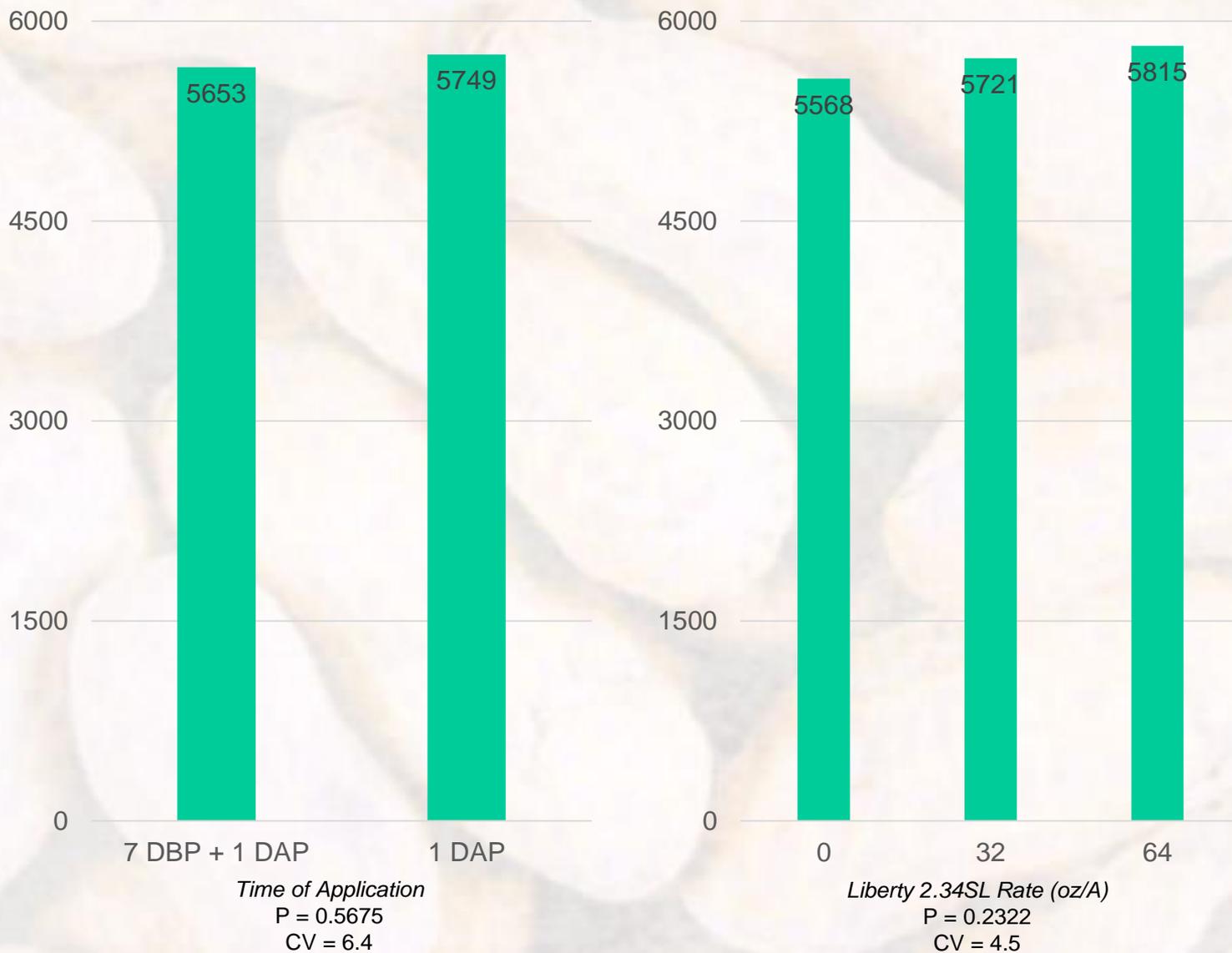


Liberty @ 64 oz/A  
7 DBP + 1 DAP

PE-21-20  
September 21  
118 DAP



# Liberty Timing and Rate Effects on Peanut Yield (lbs/A)



# Future Products?

- **Brake**
  - fluridone
  - *SePRO*
  - *WSSA #12*
- **Vulcarus**
  - trifludimoxazin
  - *BASF*
  - *WSSA #14*
- variety tolerance
- efficacy





# Weed Control in Peanut with Brake - 2020



NTC



Prowl H<sub>2</sub>O @ 32 oz/A (PRE)  
Valor @ 3 oz/A (PRE)  
Strongarm @ 0.225 oz/A (PRE)

Cadre @ 4 oz/A (23 DAP)  
Dual Magnum @ 16 oz/A (23 DAP)  
2,4-DB @ 18 oz/A (23 DAP)



Prowl H<sub>2</sub>O @ 32 oz/A (PRE)  
Brake @ 12 oz/A (PRE)  
Strongarm @ 0.225 oz/A (PRE)

Cadre @ 4 oz/A (23 DAP)  
Dual Magnum @ 16 oz/A (23 DAP)  
2,4-DB @ 18 oz/A (23 DAP)

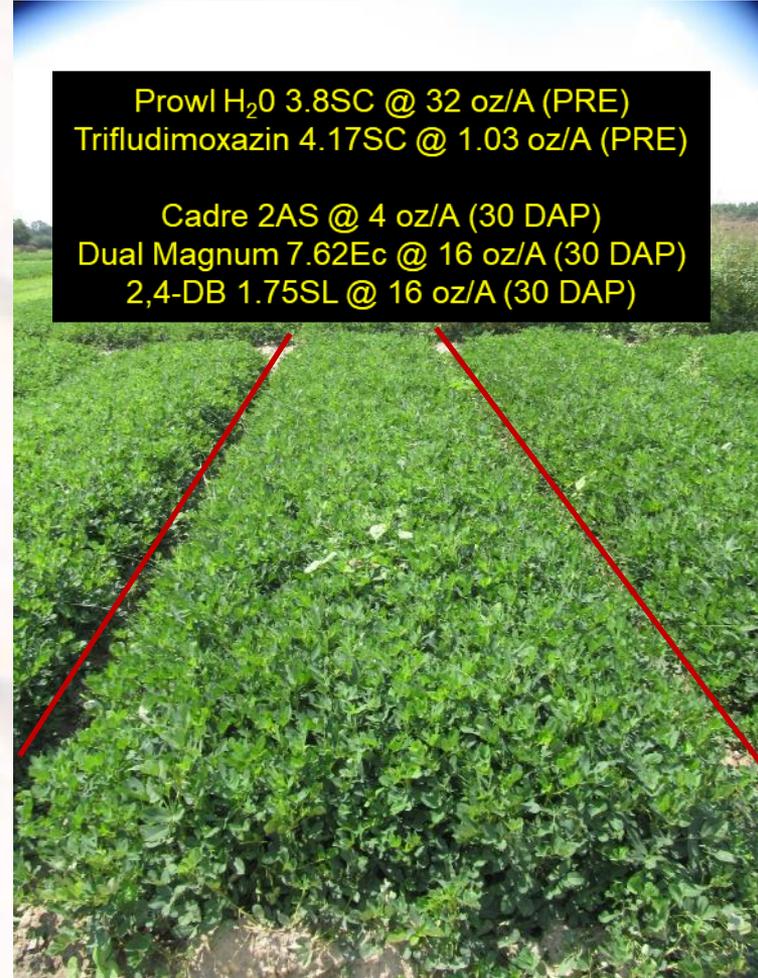
PE-13-20  
August 17  
97 DAP



# Weed Control in Peanut with Trifludimoxazin - 2020



NTC



Prowl H<sub>2</sub>O 3.8SC @ 32 oz/A (PRE)  
Trifludimoxazin 4.17SC @ 1.03 oz/A (PRE)

Cadre 2AS @ 4 oz/A (30 DAP)  
Dual Magnum 7.62Ec @ 16 oz/A (30 DAP)  
2,4-DB 1.75SL @ 16 oz/A (30 DAP)

PE-14-20  
August 18  
98 DAP



# Hairy Indigo in Peanut - 2020

Valor (PRE)  
Cobra (POST)  
Classic (LPOST)



J. Shealey  
August 3



# Hairy Indigo Control with Cobra (12.5 oz/A) + 2,4-DB (16 oz/A) + Agridex (1% v/v)



NTC

Grower Applied  
August 25  
6 DAT



# Hairy Indigo Control with Classic @ 0.5 oz/A + NIS (15 DAT)



PE-41-20  
10"-20" tall



# Questions/Comments?

