



2024 Peanut Weed Control Update

Eric P. Prostko

Extension Weed Specialist

Dept. Crop & Soil Sciences



2023 Problems





Glyphosate/Peanut



6.8 ppm
glyphosate
detected



Sadly, I have information about peanut response to the following “non-peanut” herbicides:

- 2,4-D
- Dicamba
- Roundup
- Liberty
- Diuron
- Garlon
- Arsenal
- Milestone
- Grazon P+D



Peanut Yield Response to 2,4-D in Georgia

Russ M. Merchant and Eric M. Sauer
Graduate Research Assistants

Eric P. Prasitko, PI, PI
Professor and Extension Weed Specialist
Department of Crop & Soil Sciences

The herbicide 2,4-D has been used to control broadleaf weeds in numerous grass crops, including field corn, grain sorghum, rice, cereal grains, pastures and turf, for more than 65 years. The evolution and spread of glyphosate-resistant weeds has led to the development of 2,4-D-resistant crops, including soybean and cotton. Despite advancements in both formulation and spray nozzle technologies, planting 2,4-D-resistant crops in close proximity to peanut increases the risk of 2,4-D injury through off-target movement (drift, volatilization) and/or spray contamination. Therefore, the objective of this publication is to provide growers, county agents, crop consultants, etc. with information regarding peanut yield response to 2,4-D injury.



2,4-D/Peanut Symptomology

When evaluating peanut fields for suspected off-target movement or spray contamination of 2,4-D, it is important to eliminate other potential causes such as drought, nutrient deficiencies or various plant diseases/viruses. In some instances, these problems might mimic the symptoms caused by 2,4-D or other growth regulator herbicides. Typical peanut injury symptoms caused by 2,4-D include plant stunting, stem twisting (opisthony) and occasional leaf burn. Amino injury to peanut are presented in Figure 1.



2,4-D/Peanut Yield Loss

Field trials were conducted in Georgia during 21 separate peanut yield response to various rates of 2,4-D are presented in Tables 1-3. When applied at 30, 75 and 150 lb ae/acre of 2,4-D resulted in a loss in excess of 10%. Generally, average peanut yield when 2,4-D was applied 60 lb ae/acre. At that time, in the R2 to R4 stages of growth (beginning pod to mature) research has shown that yield losses in soybean have been greater when 2,4-D was applied during early growth (Silke, 1956; Wu et al., 1969). Surprisingly, yield losses from 2,4-D applied at 90 lb ae/acre were

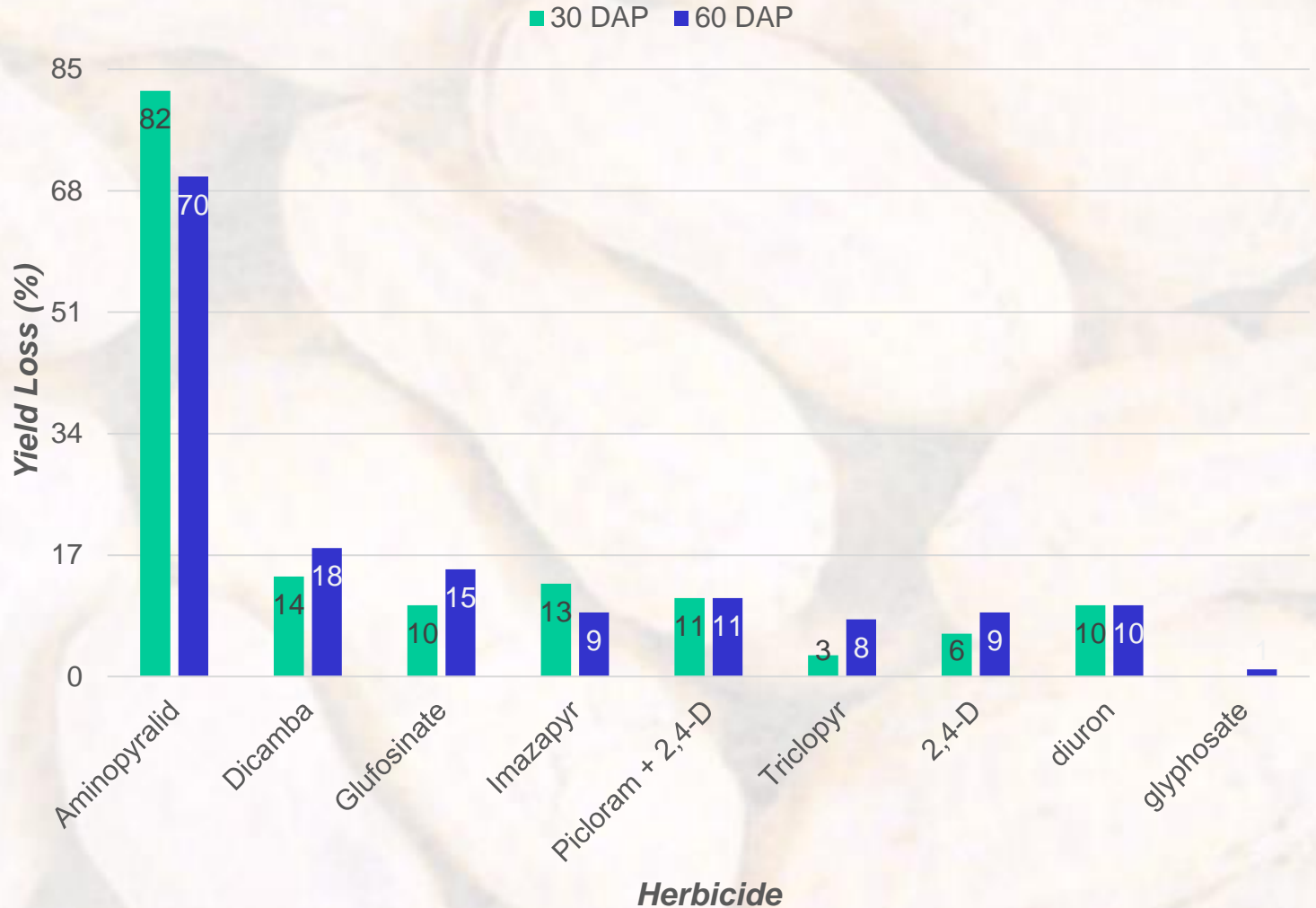
Peanut Response to Grazon® P+D

Eric P. Prasitko and O. Wen Carler, Department of Crop & Soil Sciences





Numerical Peanut Yield Loss (%) from “Non-Peanut” Herbicides Applied at 1/10thX Rates at Different Times in Georgia





Dicamba is NOT labeled for preplant use in peanuts!

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

This EPA registration expires December 20, 2025. DO NOT use or distribute this product after December 20, 2025.

BASF
We create chemistry

Dicamba Group 4 Herbicide

Engeria[®]
Herbicide

For weed control in Dicamba-tolerant (DT) cotton¹; Dicamba-tolerant (DT) soybean¹

¹ Only for use in states listed as US EPA approved in the Dicamba-tolerant (DT) Crops.

Active Ingredient¹:
dicamba: N,N-Diisobutyl-3-aminoxypropylmethanamine salt of 3,6-dichloro-*p*-anisic acid 60.8%

Other Ingredients: 39.2%

Total: 100.0%

¹ Contains 49.08% dicamba (3 pounds acid equivalent per gallon or 400 grams per liter)

EPA Reg. No. 7969-472 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 full label for complete First Aid, Precautionary Statements, Directions for Use, Conditions of Sale and Warranty, and state-specific use 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

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

DICAMBA GROUP 4 HERBICIDE

XTENDIMAX[®]
With VaporGrip[®] Technology

This labeling expires on 12/20/2025. DO NOT use or distribute this product after 12/20/2025.

For weed control in cotton with XtendFlex[®] Technology dicamba-tolerant cotton; XtendFlex[®] Technology (dicamba-tolerant soybean).

XtendMax[®] With VaporGrip[®] Technology is approved by U.S. EPA for use in dicamba-tolerant cotton and dicamba-tolerant soybeans only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Jefferson County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using. The user must check www.xtendimax.com for requirements no more than 7 days before application of this product for additional details, including state restrictions. Where applicable, users must comply with additional requirements found on this website.

ACTIVE INGREDIENT: dicamba (glycoamine salt of dicamba (3,6-dichloro-*p*-anisic acid)) 42.80%

OTHER INGREDIENTS: 57.20%

TOTAL: 100.00%

Contains 29.0% 3,6-dichloro-*p*-anisic acid (3 pounds acid equivalent per U.S. gallon or 350 grams per liter)

**CAUTION
KEEP OUT OF REACH OF CHILDREN**

Please refer to booklet for additional precautionary statements and directions for use.

For MEDICAL and TRANSPORTATION Emergencies ONLY
Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-908BAYER (1-866-982-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-6363)

EPA Reg. No. 264-1210

Produced For:
Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
©2022 Bayer Group. All rights reserved.

BAYER

19582114210 - 220315E - 1/2022



Soil-Applied Dicamba Injury on Peanut





What are you buying?



FOR WEED CONTROL IN ASPARAGUS, CONSERVATION RESERVE PROGRAMS, CORN, COTTON, FALLOW CROPLANDS, GENERAL FARMSTEAD (NONCROPLAND), SORGHUM, GRASS GROWN FOR SEED, HAY, PROSO MILLET, PASTURE, RANGELAND, SMALL GRAINS, SOD FARMS AND FARMSTEAD TURF, SOYBEAN, AND SUGARCANE.

ACTIVE INGREDIENT:

Diglycolamine salt of 3, 6-dichloro-*o*-anisic acid*

% BY WT.

58.1%

OTHER INGREDIENTS:

41.9%

TOTAL:

100.0%

*Contains 39.4% 3,6-dichloro-*o*-anisic acid (4 pounds acid equivalent per gallon or 480 grams per liter).

**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 booklet for complete **First Aid, Precautionary Statements, Directions For Use, State-Specific Crop and/or Use Site Restrictions and Conditions of Sale and Warranty.**

In case of an emergency endangering life or property involving this product, call Chemtrec **1-800-424-9300**.

PRODUCT OF U.S. AND CHINA

EPA Reg. No.: 7969-137-89391

091312R11 0216A



HERBICIDE



Distributed By:
INNICTIS® CROP CARE, LLC
1880 Fall River Drive, Suite 100
Loveland, CO 80538



Perennial Weeds in Peanut -I



maypop passionflower
J. Hand, Tift Co.
07/06/23



horsenettle
L. Stanley, Montgomery Co.
07/07/23



Perennial Weeds in Peanut - II



dogfennel
G. Hancock, Turner Co.
06/23



Blue heliotrope
07/17



Perennial Weeds in Peanut - III



alligatorweed
R. Ethredge, Seminole Co.
07/24/23



goldenrod?
M. Frye, Wayne Co.
08/11/23

Revenge Spraying Rarely Works!





Gramoxone 3SL @ 16 oz/A + Ultra Blazer 2SL @ 24 oz/A +
2,4-DB 1.75SL @ 16 oz/A + Anthem Flex 4SE @ 3 oz/A +
PowerLock @ 8 oz/A

Applied ~60 DAP/Mid-Afternoon application/12 GPA



J. Bennett
Wilcox Co.
07/10/23
~3 DAT



Gramoxone 3SL @ 16 oz/A + Ultra Blazer 2SL @ 24 oz/A +
2,4-DB 1.75SL @ 16 oz/A + Anthem Flex 4SE @ 3 oz/A +
PowerLock @ 8 oz/A

Applied ~60 DAP/Mid-Afternoon application/12 GPA



J. Bennett
Wilcox Co.
07/18/23
~11 DAT



Peanut Weed Control - 2023



“The Program”

- 1) Weed-free at planting (tillage/cover crops/herbicides)
- 2) Twin Rows (if possible)
- 3) Multiple Over-Lapping Residuals (PRE/EPOST/POST)
- 4) Timely POST's (3" or less)
- 5) Prevent Seed-Rain from Escapes (hand-weeding, non-selective applicators/mowing)

PE-14-23
July 24
83 DAP



The Peanut Herbicide Toolbox

24 Active ingredients

- PPLNT/PPI/PRE

Brake

Sonalan

Prowl/Pendimax

Dual Magnum/Generics

Outlook/Propel

Pursuit

Spartan Charge

Solicam

Strongarm/Diclom

Warrant

Valor

Roundup (PPLNT)

- POST

Aim (Harvest Aid)

Gramoxone

Basagran

Ultra Blazer

Cadre/Impose

Classic

Cobra

Fusilade

Poast/Poast Plus

Pursuit

Select/Arrow/Trigger

Storm

2,4-DB

Anthem Maxx/Zidua

(residual only)



Peanut Tillage Systems



Strip-Tillage (Worth Co.)



Conventional Tillage (Macon Co.)

Pre-Plant Burndowns - 2023



NTC



Roundup PowerMax3 5.88SL @ 22 oz/A
2,4-D 3.8SL @ 16 oz/A
Valor EZ 4SC @ 2 oz/A

Pre-Plant Burndowns - 2023



NTC



Gramoxone 2SL @ @ 48 oz/A
2,4-D 3.8SL @ 16 oz/A
Valor EZ 4SC @ 2 oz/A
Induce @ 0.25% v/v



Peanut Weed Control – 2023

Prowl vs. Sonalan



NTC



5445 lbs/A

Prowl H₂O 3.8SC @ 32 oz/A
Valor EZ 4SC @ 3 oz/A
Strongarm 84WG @ 0.225 oz/A
PRE (1 DAP)
Cadre 2AS @ 4 oz/A
Dual Magnum 7.62EC @ 16 oz/A
2,4-DB 2SL @ 16 oz/A
POST (28 DAP)



5501 lbs/A

Sonalan 3EC @ 32 oz/A
Valor EZ 4SC @ 3 oz/A
Strongarm 84WG @ 0.225 oz/A
PRE (1 DAP)
Cadre 2AS @ 4 oz/A
Dual Magnum 7.62EC @ 16 oz/A
2,4-DB 2SL @ 16 oz/A
POST (28 DAP)



Peanut Weed Control – 2023

Dual Magnum vs. Anthem Flex



NTC



Gramoxone 2SL @ 12 oz/A
Dual Magnum 7.62EC @ 16 oz/A
Storm 4SC @ 16 oz/A
Applied 13 DAP
Cadre 2AS @ 4 oz/A
2,4-DB 2SL @ 16 oz/A
Dual Magnum 7.62EC @ 16 oz/A
Induce @ 0.25% v/v
Applied 28 DAP



Gramoxone 2SL @ 12 oz/A
Anthem Flex 4SE @ 3 oz/A
Storm 4SC @ 16 oz/A
Induce @ 0.25% v/v
Applied 13 DAP
Cadre 2AS @ 4 oz/A
2,4-DB 2SL @ 16 oz/A
Anthem Flex 4SE @ 3 oz/A
Induce @ 0.25% v/v
Applied 28 DAP

WSSA Group 15 Herbicides?



Outlook[®]
Herbicide



 **DualMagnum[®]**



Zidua[®] SC

Herbicide

Group 15 Herbicide



Tropical Spiderwort/Benghal Dayflower/Spreading Dayflower

- 1) Plow (i.e. bury seed)
- 2) Twin Rows
- 3) Group 15's (Dual Magnum, Warrant, Outlook, Zidua, Anthem Flex)
- 4) Paraquat
- 5) Cadre?
- 6) Strongarm?
- 7) Manage after field corn harvest.





Spreading Dayflower in Peanut - 2023



NTC



Gramoxone 2SL @ 12 oz/A
Broadloom 4LC @ 8 oz/A
Dual Magnum 7.62EC @ 16 oz/A



Spreading Dayflower in Peanut - 2023



NTC



Broadloom 4LC @ 32 oz/A
Dual Magnum 7.62EC @ 16 oz/A



Spreading Dayflower in Peanut - 2023



NTC



Strongarm 84WG @ 0.45 oz/A
Dual Magnum 7.62EC @ 16 oz/A



Generic Strongarm?

DICLOSULAM GROUP 2 HERBICIDE

DICLOM Herbicide

For broadleaf weed control in peanuts

ACTIVE INGREDIENT:	% BY WT
diclosulam: N-(2,6-dichlorophenyl)-5-ethoxy-7-fluoro[1,2,4]triazolo-[1,5-c]pyrimidine-2-sulfonamide	84%
OTHER INGREDIENTS:	16%
TOTAL	100%

EPA Reg. No. 2749-628 EPA Est. No. 82778-CHN-001

KEEP OUT OF REACH OF CHILDREN
CAUTION

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)

Agricultural Use Requirements
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

FIRST AID	
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">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 IN EYES	<ul style="list-style-type: none">Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eyes.Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887.

See inside booklet for additional Precautionary Statements and Directions for Use.
Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.
FOR CHEMICAL SPILL, LEAK, FIRE, EXPOSURE OR MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887.

NET WEIGHT: 1 Pound Made in China
Manufactured for: Aceto Life Sciences, L.L.C.
4 Tri Harbor Court, Port Washington, NY 11050-4661



- Aceto/Actylis
- Only 1 year of field data?
- GreenPointAG
 - \$620/lb (2023)
 - 0.45 oz/A = \$17.43
- Strongarm
 - \$849/lb?
 - \$630/lb?



Peanut Weed Control – 2023

Strongarm vs. Diclom

1st irrigation/rainfall event @ 9 DAP



NTC



Sonalan 3EC @ 32 oz/A
Valor EZ 4SC @ 3 oz/A
Strongarm 84WG @ 0.225 oz/A
Applied 1 DAP
Cadre 2AS @ 4 oz/A
2,4-DB 2SL @ 16 oz/A
Dual Magnum 7.62EC @ 16 oz/A
Cobra 2EC @ 12.5 oz/A
Applied 29 DAP



Sonalan 3EC @ 32 oz/A
Valor EZ 4SC @ 3 oz/A
Diclom 84WG @ 0.225 oz/A
Applied 1 DAP
Cadre 2AS @ 4 oz/A
2,4-DB 2SL @ 16 oz/A
Dual Magnum 7.62EC @ 16 oz/A
Cobra 2EC @ 12.5 oz/A
Applied 29 DAP

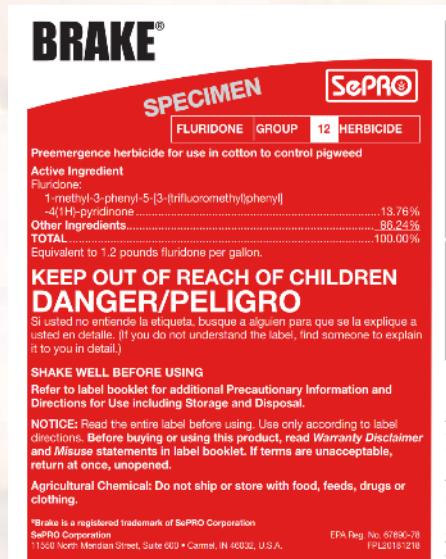
Future Products

- **Brake 1.2SL**

- SePRO
- fluridone
- WSSA/HRAC Group 12
- PRE
- 2023

- **Rexovor 4.17SL**

- BASF
- trifludimoxazin
- WSSA/HRAC Group 14
- PRE
- 2025??





Peanut Weed Control – 2023

Valor vs. Brake



NTC



Prowl H₂O 3.8SC @ 32 oz/A
Valor EZ 4SC @ 3 oz/A
Strongarm 84WG @ 0.225 oz/A
PRE (1 DAP)



Prowl H₂O 3.8SC @ 32 oz/A
Brake 1.2SL @ 12 oz/A
Strongarm 84WG @ 0.225 oz/A
PRE (1 DAP)

PE-13-23
June 26
23 DAP

1st Rainfall/Irrigation event did not occur until 8 DAP



Peanut Weed Control – 2023

Valor vs. Rexovor



NTC



Prowl H₂O 3.8SC @ 32 oz/A
Valor EZ 4SC @ 3 oz/A
Strongarm 84WG @ 0.225 oz/A
PRE (1 DAP)



Prowl H₂O 3.8SC @ 32 oz/A
Rexovor 4.17SC @ 1 oz/A
Strongarm 84WG @ 0.225 oz/A
PRE (1 DAP)

PE-13-23
June 26
23 DAP

1st Rainfall/Irrigation event did not occur until 8 DAP



UGA Current Classic[®]/Cultivar Use Recommendations



- **NO**

- GA-06G
- Tifguard
- GA-12Y
- *7-13% yield losses*



- **YES**

- Florida-07
- GA Greener
- GA-07W
- GA-09B
 - *No problems 60 DAE or 90 DAE or 105 DAE*
 - *5% yield loss when applied 75 DAE*
- GA-20VHO
- GA-18RU
- AUNPL-17
- TIFNV HIGH O/L
- FLORUN 331
- GA-16HO
 - *No problems at 60 DAE or 85 DAE.*
 - *17% yield loss when applied 75 DAE*



I sprayed herbicide X and it did not work therefore I must have resistance?

- Rate
- Timing
- Environment
 - *Hot/dry*
 - *Rain-free period*
- Calibration
- Coverage
 - *Droplet size*
 - *Nozzle type, pressure*
 - *Boom height*
 - *Tractor speed*
- Resistance





Annual Grass Control in Peanut

SelectMax 0.97EC @ 24 oz/A + Agridex @ 1% v/v
15 GPA, 3.5 MPH, AIXR11002 nozzles



07/31/23
0 DAT



08/07/23
7 DAT



08/11/23
11 DAT



Non-Selective Applicators



WeedWiper vs. TopCrop Wiper

50% Solution of Gramoxone Inteon

3.1 MPH, 20" Applicator Height

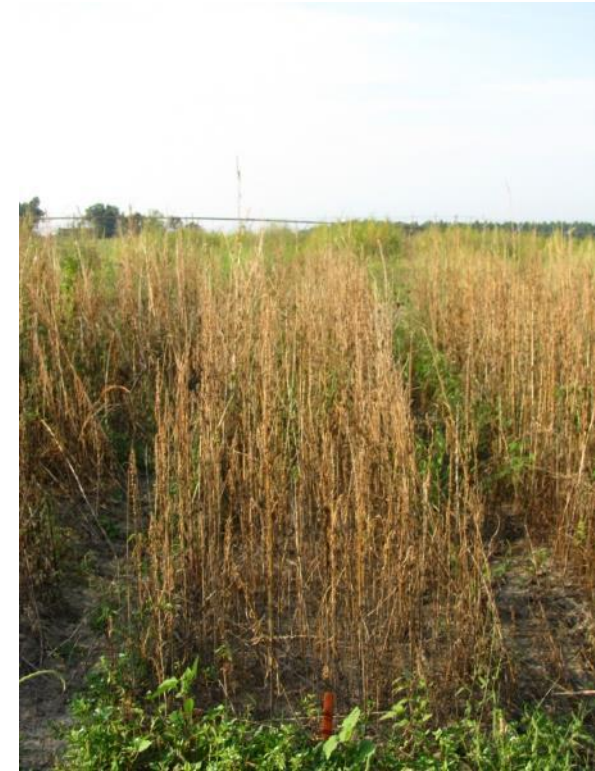
AMAPA = 36-86" tall, 66" avg.



NTC



WeedWiper



TopCrop



Flail Mower and Peanut - 2021



August 10, 2021
GA-16HO
92 DAP



Flail Mower and Peanut – 2021

Before



August 10, 2021
GA-16HO
92 DAP



Flail Mower and Peanut – 2021

After (2 passes in opposite directions, ~2 MPH)



August 10, 2021
GA-16HO
92 DAP



What do the top Georgia peanut growers do?

2022 Georgia Peanut Achievement Club Winners

- 17 growers
 - 101 to 1194 acres (range)
- **5688 lb/A average yield**
 - 4718-6493 lbs/A (range)
 - GA State Avg. = 4250 lb/A
- 94% - irrigated
- 59% - bottom plow
- 76% - twin rows
- 71% don't "crack" spray
- **Herbicides**
 - 53% - Sonalan
 - **76% - Valor**
 - 53% - Dual
 - **65% - Cadre**
 - **65% - 2,4-DB**
 - 41% - Prowl
 - 35% - Strongarm
 - 12% - Zidua
 - 12% - clethodim
 - 29% - paraquat





Questions/Comments

