

University of Georgia

PEANUT RESPONSE TO METRIBUZIN

Trial ID: PE-06-17 Study Dir.: CULPEPPER
 Location: PONDER FARM Investigator: Eric P. Prostko

Reps: 4 Plots: 6 by 25 feet
 Spray vol: 15 GAL/AC Mix Size: 1.5 liters (.78211 liters calculated mix size)

Trt No.	Treatment Name	Form Conc Type	Rate	Grow Unit	Appl Stg Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	TRICOR	4 F	16.0	oz/a	PRE A	12.5 ml/mx	101	204	302	407
2	TRICOR	4 F	12.0	oz/a	PRE A	9.374 ml/mx	102	201	303	404
3	TRICOR	4 F	8.0	oz/a	PRE A	6.249 ml/mx	103	202	304	402
4	TRICOR	4 F	4.0	oz/a	PRE A	3.125 ml/mx	104	207	305	406
5	TRICOR	4 F	2.0	oz/a	PRE A	1.562 ml/mx	105	203	306	401
6	TRICOR	4 F	1.0	oz/a	PRE A	0.7812 ml/mx	106	205	307	403
7	TRICOR	4 F	0.0	oz/a	PRE A		107	206	301	405

Sort Order: Treatment

Trial Comments

PROWL H20 @ 32 OZ/A + STRONGARM @ 0.225 OZ/A + VALOR @ 3 OZ/A - PRE
 CADRE @ 4 OZ/A + DUAL MAGNUM @ 16 OZ/A + 2,4-DB @ 16 OZ/A- MAY 22
 WEED-FREE

DIGGING DATE: SEPTEMBER 14 (143 DAP)
 HARVEST DATE: SEPTEMBER 18
 HARVEST MOISTURE: 17.0
 YIELDS ADJUSTED TO 10%

SUMMARY:

- 1) GENERALLY, THERE WAS A RATE RESPONSE TO TRICOR 4F FOR PEANUT INJURY, STAND, AND YIELD LOSS.
- 2) TRICOR 4F RATES RANGING FROM 4 TO 16 OZ/A CAUSED SIGNIFICANT PEANUT INJURY AND STAND LOSS.
- 3) TRICOR 4F RATES RANGING FROM 8 TO 16 OZ/A CAUSED SIGNIFICANT PEANUT YIELD LOSS.
- 4) PEANUT YIELDS WERE NOT REDUCED BY TRICOR 4F AT RATES OF 4 OZ/A AND BELOW.

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PEANUT RESPONSE TO METRIBUZIN

Trial ID: PE-06-17 Study Dir.: CULPEPPER
 Location: PONDER FARM Investigator: Eric P. Prostko

GENERAL TRIAL INFORMATION

Study Director: CULPEPPER **Title:** _____
Affiliation: _____ **Postal Code:** _____

Investigator: Eric P. Prostko **Title:** _____
Affiliation: _____ **Postal Code:** _____

Trial Status: _____ **Initiation Date:** _____ **Country:** _____
City: _____ **State/Prov.:** _____ **Postal Code:** _____
Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N

Objective: _____
Conclusions: _____

CROP AND PEST DESCRIPTION

Weed 1. _____ **2.** _____

Crop 1: ARAHY PEANUT **Variety:** GA-06G **Planting Date:** Apr-24-17
Planting Method: MONOSEM TWIN ROW **Rate:** 3.1 **SEED/FT** **Depth:** 2 IN
Perennial Age: _____ **Row Spacing:** _____ **Seed Bed:** _____
Soil Temperature: _____ **Soil Moisture:** OPTIMUM **Emergence Date:** _____

Plot Width, Unit: 6 FT **Plot Length, Unit:** 25 FT **Reps:** 4
Site Type: _____
Tillage Type: CONVENTIONAL **Study Design:** RACOBL
Trial Initiation Comments: THIMET INFR @ 3.5 LBS/A; DYNASTY PD SEED TRT; 36"-9" TWIN ROWS; 300 LBS/A 3-9-18 PREPLANT

Previous: Crops	Pesticides	Year
1. FIELD CORN	2016	

MAINTENANCE

Field Prep./Maintenance: _____

	Form	Form	Form	Rate				
No.	Date	Treatment Name	Conc	Unit	Type	Rate	Unit	
1.								

SOIL DESCRIPTION

Texture: SAND **% OM:** 0.53 **% Sand:** 94 **% Silt:** 4 **% Clay:** 2
pH: 6.0 **CEC:** 3.5 **Soil Name:** FUQUAY **Fertility Level:** GOOD

MOISTURE CONDITIONS

On: Date	Time	Amount	Unit	Type	Interval	Unit
1. Apr-27-17		0.5		IN SPRINKLER - LATERAL MOVE		
2. May-1-17		0.1		IN RAINFALL		
3. May-2-17		0.01		IN RAINFALL		
4. May-4-17		1.47		IN RAINFALL		
5. May-10-17		0.5		IN SPRINKLER - LATERAL MOVE		
6. May-17-17		0.5		IN SPRINKLER - LATERAL MOVE		
7. May-21-17		0.11		IN RAINFALL		
8. May-23-17		0.5		IN SPRINKLER - LATERAL MOVE		
9. May-23-17		0.9		IN RAINFALL		
10. May-24-17		0.51		IN RAINFALL		

Overall Moisture Conditions: _____
Closest Weather Station: _____ **Distance:** _____ **Unit:** _____

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date: Apr-26-17						
Time of Day: 9:00 AM						
Application Method: BROADCAST						
Application Timing: PRE						
Applic. Placement: SOIL						
Air Temp., Unit: 65 F						
% Relative Humidity: 90						
Wind Velocity, Unit: 5 MPH						
Dew Presence (Y/N): N						
Water Hardness: --						
Soil Temp., Unit: 67 F						
Soil Moisture: OPTIMUM						
% Cloud Cover: 0						

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CROP STAGE AT EACH APPLICATION							
		A	B	C	D	E	F
Crop 1	Stage: ARAHY	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Height, Unit:	_____	_____	_____	_____	_____	_____

WEED STAGE AT EACH APPLICATION							
		A	B	C	D	E	F
Weed 1	Stage: _____	_____	_____	_____	_____	_____	_____
	Stage Scale:	_____	_____	_____	_____	_____	_____
	Density, Unit:	_____	_____	_____	_____	_____	_____

APPLICATION EQUIPMENT							
		A	B	C	D	E	F
Appl. Equipment:	BACKAPCK	_____	_____	_____	_____	_____	_____
Operating Pressure:	35	_____	_____	_____	_____	_____	_____
Nozzle Type:	AIXR	_____	_____	_____	_____	_____	_____
Nozzle Size:	11002	_____	_____	_____	_____	_____	_____
Nozzle Spacing, Unit:	18	IN	_____	_____	_____	_____	_____
Nozzles/Row:	2	_____	_____	_____	_____	_____	_____
Band Width, Unit:	_____	_____	_____	_____	_____	_____	_____
Boom Length, Unit:	72	IN	_____	_____	_____	_____	_____
Boom Height, Unit:	20	IN	_____	_____	_____	_____	_____
Ground Speed, Unit:	3.5	MPH	_____	_____	_____	_____	_____
Incorporation Equip.:	_____	_____	_____	_____	_____	_____	_____
Hours to Incorp.:	_____	_____	_____	_____	_____	_____	_____
Incorp. Depth, Unit:	_____	_____	_____	_____	_____	_____	_____
Carrier:	WATER	_____	_____	_____	_____	_____	_____
Spray Volume, Unit:	15	GPA	_____	_____	_____	_____	_____
Spray pH:	_____	_____	_____	_____	_____	_____	_____
Propellant:	CO2	_____	_____	_____	_____	_____	_____
Tank Mix (Y/N):	-	-	-	-	-	-	-

Trt No	Treatment Application Comment
_____	_____

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PEANUT RESPONSE TO METRIBUZIN															
Trial ID: PE-06-17		Study Dir.: CULPEPPER													
Location: PONDER FARM		Investigator: Eric P. Prostko													
Weed Code	Crop Code	Part Rated	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	PRM Data Type	# Subsamples, Dec.	----- ARAHY PLANT - STUNTING PERCENT May-8-17 12 DA-A	----- ARAHY PLANT - CHLORSIS PERCENT May-8-17 12 DA-A	----- ARAHY PLANT - STUNTING PERCENT May-15-17 19 DA-A	----- ARAHY PLANT - CHLORSIS PERCENT May-15-17 19 DA-A	----- ARAHY PLANT - INJURY PERCENT May-23-17 27 DA-A	----- ARAHY PLANT - POPULATI #/5' ROW May-25-17 29 DA-A	----- ARAHY STAND - REDUCTIO PERCENT May-25-17 29 DA-A
Trt	Treatment	Form	Form	Rate	Grow	Appl									
No.	Name	Conc	Type	Rate	Unit	Stg	Code	1	2	3	4	5	6	7	
1	TRICOR	4	F	16.0 oz/a	PRE	A		0.0 a	25.0 a	53.8 a	80.0 a	95.0 a	0.0 d	100.0 a	
2	TRICOR	4	F	12.0 oz/a	PRE	A		0.0 a	15.0 b	45.0 a	72.5 a	88.8 a	1.0 d	96.0 a	
3	TRICOR	4	F	8.0 oz/a	PRE	A		0.0 a	5.0 c	30.0 b	38.8 b	62.5 b	9.5 c	64.3 b	
4	TRICOR	4	F	4.0 oz/a	PRE	A		0.0 a	2.5 c	10.0 c	6.3 c	17.5 c	23.8 b	10.3 c	
5	TRICOR	4	F	2.0 oz/a	PRE	A		0.0 a	1.3 c	3.8 c	3.8 c	2.5 d	26.3 a	4.0 cd	
6	TRICOR	4	F	1.0 oz/a	PRE	A		0.0 a	0.0 c	5.0 c	2.5 c	0.0 d	25.3 ab	4.8 cd	
7	TRICOR	4	F	0.0 oz/a	PRE	A		0.0 a	0.0 c	0.0 c	0.0 c	0.0 d	26.5 a	0.0 d	
LSD P=.10								.	4.81	10.70	8.12	8.02	1.93	6.52	
Standard Deviation								0.00	3.92	8.72	6.62	6.54	1.58	5.32	
CV								0.0	56.31	41.4	22.75	17.19	9.83	13.33	
Grand Mean								0.00	6.96	21.07	29.11	38.04	16.04	39.89	
Bartlett's X2								0.0	2.139	8.925	11.646	9.416	5.674	2.252	
P(Bartlett's X2)								.	0.71	0.112	0.04*	0.024*	0.225	0.522	
Replicate F								0.000	2.535	0.954	0.509	0.578	1.011	0.439	
Replicate Prob(F)								1.0000	0.0892	0.4355	0.6810	0.6371	0.4107	0.7278	
Treatment F								0.000	23.555	24.927	110.783	171.404	237.288	291.103	
Treatment Prob(F)								1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	

Means followed by same letter or symbol do not significantly differ (P=.10, Duncan's New MRT)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Could not calculate LSD (% mean diff) for columns 1 because error mean square = 0.

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Weed Code							-----	-----	-----	-----	-----	-----	
Crop Code							ARAHY	ARAHY	ARAHY	ARAHY	ARAHY	ARAHY	
Part Rated							PLANT -	PLANT -	PLANT -	PLOT -	PLOT -	YIELD -	
Rating Data Type							INJURY	INJURY	INJURY	YIELD	YIELD	LOSS	
Rating Unit							PERCENT	PERCENT	PERCENT	LBS/PLOT	LBS/A	PERCENT	
Rating Date							Jun-5-17	Jun-29-17	Jul-31-17	Sep-18-17	Sep-18-17	Sep-18-17	
Trt-Eval Interval							40 DA-A	64 DA-A	96 DA-A	145 DA-A	145 DA-A	145 DA-A	
PRM Data Type											TY1		
# Subsamples, Dec.										- 2	- 1		
Trt	Treatment	Form	Form	Rate	Grow	Appl							
No.	Name	Conc	Type	Rate	Unit	Stg	Code	8	9	10	11	12	13
1	TRICOR	4	F	16.0	oz/a	PRE	A	99.5 a	98.5 a	94.5 a	0.00 c	0.0 c	100.0 a
2	TRICOR	4	F	12.0	oz/a	PRE	A	96.3 a	96.0 a	90.0 a	0.00 c	0.0 c	100.0 a
3	TRICOR	4	F	8.0	oz/a	PRE	A	61.3 b	61.3 b	55.0 b	8.10 b	2169.3 b	44.3 b
4	TRICOR	4	F	4.0	oz/a	PRE	A	21.3 c	22.5 c	12.5 c	13.90 a	3722.6 a	7.5 c
5	TRICOR	4	F	2.0	oz/a	PRE	A	1.3 d	3.8 d	0.0 d	15.85 a	4244.8 a	1.0 c
6	TRICOR	4	F	1.0	oz/a	PRE	A	0.0 d	3.8 d	0.0 d	15.35 a	4110.9 a	1.0 c
7	TRICOR	4	F	0.0	oz/a	PRE	A	0.0 d	0.0 d	0.0 d	14.65 a	3923.5 a	0.0 c
LSD P=.10							7.59	8.33	9.37	2.659	712.18	11.25	
Standard Deviation							6.19	6.79	7.64	2.169	580.81	9.18	
CV							15.51	16.63	21.23	22.37	22.37	25.31	
Grand Mean							39.93	40.82	36.00	9.693	2595.88	36.25	
Bartlett's X2							20.88	20.533	9.833	1.722	1.722	16.076	
P(Bartlett's X2)							0.001*	0.001*	0.02*	0.787	0.787	0.001*	
Replicate F							0.312	0.827	1.466	8.037	8.037	0.333	
Replicate Prob(F)							0.8166	0.4961	0.2572	0.0013	0.0013	0.8016	
Treatment F							212.286	166.864	127.170	42.895	42.895	101.485	
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	

Means followed by same letter or symbol do not significantly differ (P=.10, Duncan's New MRT)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Could not calculate LSD (% mean diff) for columns 1 because error mean square = 0.

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PEANUT RESPONSE TO METRIBUZIN

Trial ID: PE-06-17 Study Dir.: CULPEPPER
Location: PONDER FARM Investigator: Eric P. Prostko

Part Rated

PLANT = PLANT / PLANT BIOMASS (includes Shrub, Tree, Turf)

PRM Data Type

TY1 = 267.8133*[C11]

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PEANUT RESPONSE TO METRIBUZIN															
Trial ID: PE-06-17		Study Dir.: CULPEPPER													
Location: PONDER FARM		Investigator: Eric P. Prostko													
Weed Code	Crop Code	Part Rated	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	PRM Data Type	# Subsamples, Dec.	----- ARAHY PLANT - STUNTING PERCENT May-8-17 12 DA-A	----- ARAHY PLANT - CHLORSIS PERCENT May-8-17 12 DA-A	----- ARAHY PLANT - STUNTING PERCENT May-15-17 19 DA-A	----- ARAHY PLANT - CHLORSIS PERCENT May-15-17 19 DA-A	----- ARAHY PLANT - INJURY PERCENT May-23-17 27 DA-A	----- ARAHY PLANT - POPULATI #/5' ROW May-25-17 29 DA-A	----- ARAHY STAND - REDUCTIO PERCENT May-25-17 29 DA-A
Trt	Treatment	Form	Form	Rate	Grow	Appl									
No.	Name	Conc	Type	Rate	Unit	Stg	Code	Plot	1	2	3	4	5	6	7
1	TRICOR	4 F	16.0 oz/a	PRE	A	A	101	0.0	20.0	55.0	85.0	95.0	0.0	100.0	
							204	0.0	20.0	60.0	85.0	95.0	0.0	100.0	
							302	0.0	30.0	50.0	85.0	95.0	0.0	100.0	
							407	0.0	30.0	50.0	65.0	95.0	0.0	100.0	
							Mean =	0.0	25.0	53.8	80.0	95.0	0.0	100.0	
2	TRICOR	4 F	12.0 oz/a	PRE	A	A	102	0.0	10.0	50.0	75.0	90.0	1.0	96.0	
							201	0.0	10.0	40.0	70.0	85.0	1.0	96.0	
							303	0.0	20.0	30.0	65.0	90.0	1.0	96.0	
							404	0.0	20.0	60.0	80.0	90.0	1.0	96.0	
							Mean =	0.0	15.0	45.0	72.5	88.8	1.0	96.0	
3	TRICOR	4 F	8.0 oz/a	PRE	A	A	103	0.0	0.0	35.0	30.0	60.0	8.0	69.0	
							202	0.0	10.0	20.0	35.0	60.0	11.0	59.0	
							304	0.0	10.0	50.0	55.0	70.0	7.0	73.0	
							402	0.0	0.0	15.0	35.0	60.0	12.0	56.0	
							Mean =	0.0	5.0	30.0	38.8	62.5	9.5	64.3	
4	TRICOR	4 F	4.0 oz/a	PRE	A	A	104	0.0	0.0	15.0	5.0	10.0	25.0	4.0	
							207	0.0	0.0	5.0	5.0	10.0	24.0	11.0	
							305	0.0	0.0	10.0	5.0	10.0	25.0	4.0	
							406	0.0	10.0	10.0	10.0	40.0	21.0	22.0	
							Mean =	0.0	2.5	10.0	6.3	17.5	23.8	10.3	
5	TRICOR	4 F	2.0 oz/a	PRE	A	A	105	0.0	0.0	10.0	5.0	0.0	29.0	0.0	
							203	0.0	0.0	0.0	5.0	10.0	26.0	4.0	
							306	0.0	5.0	5.0	5.0	0.0	23.0	12.0	
							401	0.0	0.0	0.0	0.0	0.0	27.0	0.0	
							Mean =	0.0	1.3	3.8	3.8	2.5	26.3	4.0	
6	TRICOR	4 F	1.0 oz/a	PRE	A	A	106	0.0	0.0	15.0	0.0	0.0	25.0	4.0	
							205	0.0	0.0	5.0	5.0	0.0	25.0	7.0	
							307	0.0	0.0	0.0	5.0	0.0	24.0	8.0	
							403	0.0	0.0	0.0	0.0	0.0	27.0	0.0	
							Mean =	0.0	0.0	5.0	2.5	0.0	25.3	4.8	
7	TRICOR	4 F	0.0 oz/a	PRE	A	A	107	0.0	0.0	0.0	0.0	0.0	26.0	0.0	
							206	0.0	0.0	0.0	0.0	0.0	27.0	0.0	
							301	0.0	0.0	0.0	0.0	0.0	26.0	0.0	
							405	0.0	0.0	0.0	0.0	0.0	27.0	0.0	
							Mean =	0.0	0.0	0.0	0.0	0.0	26.5	0.0	

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Weed Code Crop Code Part Rated Rating Data Type Rating Unit Rating Date Trt-Eval Interval PRM Data Type # Subsamples, Dec.							----- ARAHY PLANT - INJURY PERCENT Jun-5-17 40 DA-A	----- ARAHY PLANT - INJURY PERCENT Jun-29-17 64 DA-A	----- ARAHY PLANT - INJURY PERCENT Jul-31-17 96 DA-A	----- ARAHY PLOT - YIELD LBS/PLOT Sep-18-17 145 DA-A	----- ARAHY PLOT - YIELD LBS/A Sep-18-17 145 DA-A TY1	----- ARAHY YIELD - LOSS PERCENT Sep-18-17 145 DA-A		
Trt	Treatment	Form	Form	Rate	Grow	Appl								
No.	Name	Conc	Type	Rate	Unit	Stg	Code	Plot	8	9	10	11	12	13
1	TRICOR	4 F		16.0 oz/a		PRE A		101	99.0	98.0	90.0	0.00	0.0	100.0
								204	100.0	99.0	95.0	0.00	0.0	100.0
								302	99.0	98.0	95.0	0.00	0.0	100.0
								407	100.0	99.0	98.0	0.00	0.0	100.0
								Mean =	99.5	98.5	94.5	0.00	0.0	100.0
2	TRICOR	4 F		12.0 oz/a		PRE A		102	95.0	95.0	85.0	0.00	0.0	100.0
								201	95.0	95.0	85.0	0.00	0.0	100.0
								303	95.0	95.0	95.0	0.00	0.0	100.0
								404	100.0	99.0	95.0	0.00	0.0	100.0
								Mean =	96.3	96.0	90.0	0.00	0.0	100.0
3	TRICOR	4 F		8.0 oz/a		PRE A		103	65.0	60.0	60.0	10.55	2825.4	48.0
								202	60.0	60.0	50.0	9.35	2504.1	34.0
								304	70.0	75.0	60.0	4.25	1138.2	67.0
								402	50.0	50.0	50.0	8.25	2209.5	28.0
								Mean =	61.3	61.3	55.0	8.10	2169.3	44.3
4	TRICOR	4 F		4.0 oz/a		PRE A		104	15.0	10.0	0.0	20.50	5490.2	0.0
								207	15.0	20.0	0.0	14.15	3789.6	0.0
								305	15.0	20.0	10.0	13.00	3481.6	0.0
								406	40.0	40.0	40.0	7.95	2129.1	30.0
								Mean =	21.3	22.5	12.5	13.90	3722.6	7.5
5	TRICOR	4 F		2.0 oz/a		PRE A		105	0.0	5.0	0.0	19.35	5182.2	4.0
								203	0.0	0.0	0.0	17.65	4726.9	0.0
								306	5.0	10.0	0.0	13.30	3561.9	0.0
								401	0.0	0.0	0.0	13.10	3508.4	0.0
								Mean =	1.3	3.8	0.0	15.85	4244.8	1.0
6	TRICOR	4 F		1.0 oz/a		PRE A		106	0.0	5.0	0.0	19.35	5182.2	4.0
								205	0.0	0.0	0.0	15.05	4030.6	0.0
								307	0.0	10.0	0.0	13.65	3655.7	0.0
								403	0.0	0.0	0.0	13.35	3575.3	0.0
								Mean =	0.0	3.8	0.0	15.35	4110.9	1.0
7	TRICOR	4 F		0.0 oz/a		PRE A		107	0.0	0.0	0.0	20.10	5383.0	0.0
								206	0.0	0.0	0.0	14.10	3776.2	0.0
								301	0.0	0.0	0.0	13.00	3481.6	0.0
								405	0.0	0.0	0.0	11.40	3053.1	0.0
								Mean =	0.0	0.0	0.0	14.65	3923.5	0.0

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PEANUT RESPONSE TO METRIBUZIN

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Part Rated

PLANT = PLANT / PLANT BIOMASS (includes Shrub, Tree, Turf)

PRM Data Type

TY1 = 267.8133*[C11]