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## PEANUT RESPONSE TO 2,4-DB

Trial ID: PE-06-15      Study Dir.:  
 Location: PONDER FARM      Investigator: Eric P. Prostko

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Appl Stg	Appl Code	Amt Product to Measure	Rep			
									1	2	3	4
1	NTC								101	204	309	402
2	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	31 DAP	A	18.75 ml/mx	102	212	305	407
							A	15.0 ml/mx				
3	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	63 DAP	B	18.75 ml/mx	103	209	304	403
							B	15.0 ml/mx				
4	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	93 DAP	C	18.75 ml/mx	104	205	302	406
							C	15.0 ml/mx				
5	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	123DAP	D	18.75 ml/mx	105	211	308	405
							D	15.0 ml/mx				
6	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	31 DAP	A	18.75 ml/mx	106	201	312	409
							A	15.0 ml/mx				
	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	63 DAP	B	18.75 ml/mx				
							B	15.0 ml/mx				
7	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	31 DAP	A	18.75 ml/mx	107	208	307	412
							A	15.0 ml/mx				
	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	93 DAP	C	18.75 ml/mx				
							C	15.0 ml/mx				
8	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	31 DAP	A	18.75 ml/mx	108	202	310	411
							A	15.0 ml/mx				
	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	123DAP	D	18.75 ml/mx				
							D	15.0 ml/mx				
9	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	63 DAP	B	18.75 ml/mx	109	210	306	408
							B	15.0 ml/mx				
	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	93 DAP	C	18.75 ml/mx				
							C	15.0 ml/mx				
10	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	63 DAP	B	18.75 ml/mx	110	207	303	404
							B	15.0 ml/mx				
	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	123DAP	D	18.75 ml/mx				
							D	15.0 ml/mx				
11	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	93 DAP	C	18.75 ml/mx	111	206	301	410
							C	15.0 ml/mx				
	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	123DAP	D	18.75 ml/mx				
							D	15.0 ml/mx				
12	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	31 DAP	A	18.75 ml/mx	112	203	311	401
							A	15.0 ml/mx				
	2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	63 DAP	B	18.75 ml/mx				
							B	15.0 ml/mx				
2,4-DB COC	1.75	SL	24.0 oz/a	1.0 % v/v	93 DAP	C	18.75 ml/mx					
						C	15.0 ml/mx					

Sort Order: Treatment

### Trial Comments

MAINTAINED WEED-FREE  
 PROWL (32 OZ/A) + STRONGARM (0.45 OZ/A) - PRE  
 GRAMOXONE @ 12 OZ/A + STORM @ 16 OZ/A + DUAL MAGNUM @ 16 OZ/A - MAY 15  
 SELECT MAX @ 16 OZ/A + COC @ 1% V/V - JUNE 2  
 CADRE @ 4 OZ/A + NIS @ 0.25% V/V - JUNE 4

DIGGING DATE: SEPTEMBER 14  
 HARVEST DATE: SEPTEMBER 21  
 HARVEST MOISTURE: 9.9%  
 YIELDS ADJUSTED TO 10%.

DATA NOT COLLECTED FROM PLOTS 112, 212, 312, AND 412 DUE TO MOWING ERROR.

**SUMMARY:**

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1) 2,4-DB HAD NO EFFECT ON PEANUT YIELD (P = 0.7391) OR POD SIZE (P = 0.3120).

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PEANUT RESPONSE TO 2,4-DB

Trial ID: PE-06-15      Study Dir.:  
 Location: PONDER FARM      Investigator: Eric P. Prostko

### GENERAL TRIAL INFORMATION

**Study Director:** \_\_\_\_\_ **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-27-15  
**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:** RACOB  
**Trial Initiation Comments:** DYNASTY PD SEED TRT; THIMET INFR; 36"-9" TWIN ROW SPACING

**Previous: Crops**      **Pesticides**      **Year**  
 1. SOYBEAN      2014

### MAINTENANCE

**Field Prep./Maintenance:** \_\_\_\_\_

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

### SOIL DESCRIPTION

**Texture:** SAND **% OM:** 0.61 **% Sand:** 94 **% Silt:** 4 **% Clay:** 2  
**pH:** 6.2 **CEC:** 2.5 **Soil Name:** TIFTON **Fertility Level:** GOOD

### MOISTURE CONDITIONS

On: Date	Time	Amount	Unit	Type	Interval	Unit
1. May-7-15		0.5		IN SPRINKLER - LATERAL MOVE		
2. May-12-15		0.5		IN SPRINKLER - LATERAL MOVE		
3. May-14-15		0.35		IN SPRINKLER - LATERAL MOVE		
4. May-18-15		0.5		IN SPRINKLER - LATERAL MOVE		
5. Jun-2-15		0.5		IN SPRINKLER - LATERAL MOVE		
6.						

**Overall Moisture Conditions:** \_\_\_\_\_  
**Closest Weather Station:** \_\_\_\_\_ **Distance:** \_\_\_\_\_ **Unit:** \_\_\_\_\_

### APPLICATION DESCRIPTION

	A	B	C	D	E	F
<b>Application Date:</b>	May-28-15	Jun-29-15	Jul-29-15	Aug-28-15		
<b>Time of Day:</b>	8:00 AM	7:30 AM	7:15 AM	7:30 AM		
<b>Application Method:</b>	BROADCAST	BROADCAST	BROADCAST	BROADCAST		
<b>Application Timing:</b>	31 DAP	63 DAP	93 DAP	123 DAP		
<b>Applic. Placement:</b>	FOLIAGE	FOLIAGE	FOLIAGE	FOLIAGE		
<b>Air Temp., Unit:</b>	73 F	71 F	77 F	73 F		
<b>% Relative Humidity:</b>	78	99	99	99		
<b>Wind Velocity, Unit:</b>	1 MPH	1 MPH	1 MPH	2 MPH		
<b>Dew Presence (Y/N):</b>	Y	Y	Y	Y		
<b>Water Hardness:</b>	--	--	--	--		
<b>Soil Temp., Unit:</b>	76 F	71 F	84 F	78 F		
<b>Soil Moisture:</b>	WET	WET	OPTIMUM	DRY		
<b>% Cloud Cover:</b>	60	85	30	100		

### CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
<b>Crop 1 Stage:</b> ARAHY	24" WIDE	LAPPED	LAPPED			
<b>Stage Scale:</b>	V6	R5	R6	R7-R8		
<b>Height, Unit:</b>	3 IN	11 IN	17 IN	19 IN		

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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: BACKPACK	SAME		SAME	SAME	_____	_____
Operating Pressure: 40	_____	_____	_____	_____	_____	_____
Nozzle Type: FLAT FAN	_____	_____	_____	_____	_____	_____
Nozzle Size: 11002DG	_____	_____	_____	_____	_____	_____
Nozzle Spacing, Unit: 20	IN	_____	_____	_____	_____	_____
Nozzles/Row: _____	_____	_____	_____	_____	_____	_____
Band Width, Unit: _____	_____	_____	_____	_____	_____	_____
Boom Length, Unit: 60	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 2,4-DB											
Trial ID: PE-06-15		Study Dir.:									
Location: PONDER FARM		Investigator: Eric P. Prostko									
Weed Code		-----		-----		-----		-----			
Crop Code		ARAHY		ARAHY		ARAHY		ARAHY			
Part Rated		PLANT -		100 -		PLOT -		PLOT -			
Rating Data Type		STUNTING		POD WGT		YIELD		YIELD			
Rating Unit		PERCENT		GRAMS		LBS/PLOT		LBS/A			
Rating Date		Jun-23-15		Sep-17-15		Sep-21-15		Sep-21-15			
PRM Data Type								TY1			
# Subsamples, Dec.						- 2		- 0			
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Grow Unit	Stg	Appl Code	1	2	3	4
1	NTC							0.0 a	207.8 a	20.61 a	5993 a
2	2,4-DB COC	1.75	SL	24.0 oz/a 1.0 % v/v		31 DAP 31 DAP	A A	0.0 a	214.3 a	20.35 a	5916 a
3	2,4-DB COC	1.75	SL	24.0 oz/a 1.0 % v/v		63 DAP 63 DAP	B B	0.0 a	213.5 a	20.81 a	6051 a
4	2,4-DB COC	1.75	SL	24.0 oz/a 1.0 % v/v		93 DAP 93 DAP	C C	0.0 a	219.5 a	20.83 a	6054 a
5	2,4-DB COC	1.75	SL	24.0 oz/a 1.0 % v/v		123DAP 123DAP	D D	0.0 a	200.5 a	20.26 a	5891 a
6	2,4-DB COC 2,4-DB COC	1.75 1.75	SL SL	24.0 oz/a 1.0 % v/v 24.0 oz/a 1.0 % v/v		31 DAP 31 DAP 63 DAP 63 DAP	A A B B	0.0 a	210.7 a	20.41 a	5934 a
7	2,4-DB COC 2,4-DB COC	1.75 1.75	SL SL	24.0 oz/a 1.0 % v/v 24.0 oz/a 1.0 % v/v		31 DAP 31 DAP 93 DAP 93 DAP	A A C C	0.0 a	192.8 a	19.30 a	5611 a
8	2,4-DB COC 2,4-DB COC	1.75 1.75	SL SL	24.0 oz/a 1.0 % v/v 24.0 oz/a 1.0 % v/v		31 DAP 31 DAP 123DAP 123DAP	A A D D	0.0 a	196.3 a	20.85 a	6062 a
9	2,4-DB COC 2,4-DB COC	1.75 1.75	SL SL	24.0 oz/a 1.0 % v/v 24.0 oz/a 1.0 % v/v		63 DAP 63 DAP 93 DAP 93 DAP	B B C C	0.0 a	202.3 a	20.06 a	5833 a
10	2,4-DB COC 2,4-DB COC	1.75 1.75	SL SL	24.0 oz/a 1.0 % v/v 24.0 oz/a 1.0 % v/v		63 DAP 63 DAP 123DAP 123DAP	B B D D	0.0 a	219.0 a	20.63 a	5996 a
11	2,4-DB COC 2,4-DB COC	1.75 1.75	SL SL	24.0 oz/a 1.0 % v/v 24.0 oz/a 1.0 % v/v		93 DAP 93 DAP 123DAP 123DAP	C C D D	0.0 a	193.8 a	18.43 a	5357 a
12	2,4-DB COC 2,4-DB COC 2,4-DB COC	1.75 1.75 1.75	SL SL SL	24.0 oz/a 1.0 % v/v 24.0 oz/a 1.0 % v/v 24.0 oz/a 1.0 % v/v		31 DAP 31 DAP 63 DAP 63 DAP 93 DAP 93 DAP	A A B B C C	0.0 a	210.8 a	20.22 a	5879 a
LSD P=.10									20.45	2.064	600.0
Standard Deviation								0.00	17.02	1.718	499.4
CV								0.0	8.23	8.49	8.49
Grand Mean								0.00	206.76	20.230	5881.3
Bartlett's X2								0.0	6.215	27.014	27.014
P(Bartlett's X2)								.	0.859	0.005*	0.005*
Replicate F								0.000	0.260	0.752	0.752
Replicate Prob(F)								1.0000	0.8535	0.5301	0.5301
Treatment F								0.000	1.230	0.688	0.688
Treatment Prob(F)								1.0000	0.3120	0.7391	0.7391

Part Rated  
 PLANT = PLANT / PLANT BIOMASS (includes Shrub, Tree, Turf)  
 PRM Data Type  
 TY1 = 290.7227\*[3]

Means followed by same letter 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.  
 Missing data estimates are included in columns: Yates=2,3,4  
 Could not calculate LSD (% mean diff) for columns 1 because error mean square = 0.

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## PEANUT RESPONSE TO 2,4-DB

Trial ID: PE-06-15      Study Dir.:  
 Location: PONDER FARM      Investigator: Eric P. Prostko

Weed Code						----- ARAHY PLANT - STUNTING PERCENT Jun-23-15	----- ARAHY 100 - POD WGT GRAMS Sep-17-15	----- ARAHY PLOT - YIELD LBS/PLOT Sep-21-15	----- ARAHY PLOT - YIELD LBS/A Sep-21-15 TY1 - 0
Trt	Treatment	Form	Form	Rate	Grow	Appl			
No.	Name	Conc	Type	Rate	Unit	Stg	Code	Plot	
1	NTC						101		0.0
							204		214.0
							309		187.0
							402		216.0
							Mean =		207.8
2	2,4-DB	1.75	SL	24.0	oz/a	31 DAP A	102		216.0
	COC			1.0	% v/v	31 DAP A	212		217.4*
							305		217.0
							407		207.0
							Mean =		214.3
3	2,4-DB	1.75	SL	24.0	oz/a	63 DAP B	103		234.0
	COC			1.0	% v/v	63 DAP B	209		192.0
							304		209.0
							403		219.0
							Mean =		213.5
4	2,4-DB	1.75	SL	24.0	oz/a	93 DAP C	104		224.0
	COC			1.0	% v/v	93 DAP C	205		220.0
							302		228.0
							406		206.0
							Mean =		219.5
5	2,4-DB	1.75	SL	24.0	oz/a	123DAP D	105		220.0
	COC			1.0	% v/v	123DAP D	211		179.0
							308		192.0
							405		211.0
							Mean =		200.5
6	2,4-DB	1.75	SL	24.0	oz/a	31 DAP A	106		204.0
	COC			1.0	% v/v	31 DAP A	201		239.0
	2,4-DB	1.75	SL	24.0	oz/a	63 DAP B	312		211.7*
	COC			1.0	% v/v	63 DAP B	409		188.0
							Mean =		210.7
7	2,4-DB	1.75	SL	24.0	oz/a	31 DAP A	107		189.0
	COC			1.0	% v/v	31 DAP A	208		176.0
	2,4-DB	1.75	SL	24.0	oz/a	93 DAP C	307		216.0
	COC			1.0	% v/v	93 DAP C	412		190.4*
							Mean =		192.8
8	2,4-DB	1.75	SL	24.0	oz/a	31 DAP A	108		187.0
	COC			1.0	% v/v	31 DAP A	202		214.0
	2,4-DB	1.75	SL	24.0	oz/a	123DAP D	310		184.0
	COC			1.0	% v/v	123DAP D	411		200.0
							Mean =		196.3
9	2,4-DB	1.75	SL	24.0	oz/a	63 DAP B	109		201.0
	COC			1.0	% v/v	63 DAP B	210		201.0
	2,4-DB	1.75	SL	24.0	oz/a	93 DAP C	306		216.0
	COC			1.0	% v/v	93 DAP C	408		191.0
							Mean =		202.3
10	2,4-DB	1.75	SL	24.0	oz/a	63 DAP B	110		195.0
	COC			1.0	% v/v	63 DAP B	207		219.0
	2,4-DB	1.75	SL	24.0	oz/a	123DAP D	303		232.0
	COC			1.0	% v/v	123DAP D	404		230.0
							Mean =		219.0
11	2,4-DB	1.75	SL	24.0	oz/a	93 DAP C	111		169.0
	COC			1.0	% v/v	93 DAP C	206		216.0
	2,4-DB	1.75	SL	24.0	oz/a	123DAP D	301		203.0
	COC			1.0	% v/v	123DAP D	410		187.0
							Mean =		193.8

# University of Georgia

Weed Code	-----	-----	-----	-----
Crop Code	ARAHY	ARAHY	ARAHY	ARAHY
Part Rated	PLANT -	100 -	PLOT -	PLOT -
Rating Data Type	STUNTING	POD WGT	YIELD	YIELD
Rating Unit	PERCENT	GRAMS	LBS/PLOT	LBS/A
Rating Date	Jun-23-15	Sep-17-15	Sep-21-15	Sep-21-15
PRM Data Type				TY1
# Subsamples, Dec.			- 2	- 0

  

Trt	Treatment	Form	Rate	Grow	Appl				
No.	Name	Conc	Type	Rate	Unit	Stg	Code	Plot	
								1	2
								3	4
12	2,4-DB	1.75	SL	24.0	oz/a	31 DAP	A	112	0.0
	COC			1.0	% v/v	31 DAP	A	203	0.0
	2,4-DB	1.75	SL	24.0	oz/a	63 DAP	B	311	0.0
	COC			1.0	% v/v	63 DAP	B	401	0.0
	2,4-DB	1.75	SL	24.0	oz/a	93 DAP	C		
	COC			1.0	% v/v	93 DAP	C		
								Mean =	0.0
									210.8
									20.22
									5879

Part Rated  
 PLANT = PLANT / PLANT BIOMASS (includes Shrub, Tree, Turf)  
PRM Data Type  
 TY1 = 290.7227\*[3]