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PEANUT RESPONSE TO VALOR AND DUAL MAGNUM HIGH MOISTURE			
Trial ID: PE-09-18	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 L (total for 4 plots; minimum=0.782 L)

Trt No.	Treatment Name	Form Form		Rate	Grow	Appl	Amt Product to Measure	Rep				
		Conc	Type					Rate	Unit	Stg	Code	1
1	VALOR SX	51	WG	3.0	oz/a	PRE	A	2.247 g/mx	101	202	305	408
	DUAL MAGNUM	7.62	EC	16.0	oz/a	PRE	A	12.5 mL/mx				
2	VALOR SX	51	WG	3.0	oz/a	PRE	A	2.247 g/mx	102	206	304	405
	DUAL MAGNUM	7.62	EC	21.0	oz/a	PRE	A	16.4 mL/mx				
3	VALOR SX	51	WG	3.0	oz/a	PRE	A	2.247 g/mx	103	212	301	407
	DUAL MAGNUM	7.62	EC	42.0	oz/a	PRE	A	32.81 mL/mx				
4	VALOR SX NO DUAL MAGNUM	51	WG	3.0	oz/a	PRE	A	2.247 g/mx	104	203	310	406
5	VALOR SX	51	WG	6.0	oz/a	PRE	A	4.493 g/mx	105	201	307	401
	DUAL MAGNUM	7.62	EC	16.0	oz/a	PRE	A	12.5 mL/mx				
6	VALOR SX	51	WG	6.0	oz/a	PRE	A	4.493 g/mx	106	210	311	409
	DUAL MAGNUM	7.62	EC	21.0	oz/a	PRE	A	16.4 mL/mx				
7	VALOR SX	51	WG	6.0	oz/a	PRE	A	4.493 g/mx	107	205	308	403
	DUAL MAGNUM	7.62	EC	42.0	oz/a	PRE	A	32.81 mL/mx				
8	VALOR SX NO DUAL MAGNUM	51	WG	6.0	oz/a	PRE	A	4.493 g/mx	108	211	302	404
9	NO VALOR DUAL MAGNUM	7.62	EC	16.0	oz/a	PRE	A	12.5 mL/mx	109	204	306	402
10	NO VALOR DUAL MAGNUM	7.62	EC	21.0	oz/a	PRE	A	16.4 mL/mx	110	208	303	410
11	NO VALOR DUAL MAGNUM	7.62	EC	42.0	oz/a	PRE	A	32.81 mL/mx	111	209	312	411
12	NO VALOR NO DUAL MAGNUM								112	207	309	412

Sort Order: Treatment

Trial Comments

MAINTAIN WEED-FREE

PROWL H2O @ 32 OZ/A + STRONGARM @ 0.45 OZ/A - PRE (MAY 1)
 CADRE @ 4 OZ/A + DUAL MAGNUM @ 16 OZ/A - (MAY 14)

PLOTS 104, 204, 304, 404 = MISSING YIELD DATA TO TO MECHANICAL PLANTER PROBLEMS

MAY 21: PLOTS 103 AND 310 = MISSING DATA DUE TO BAG PROBLEMS/MIXING OF SAMPLES/WIND

5.335" OF IRRIGATION IN FIRST 0-7 DAYS AFTER APPLICATION
 1.06" OF RAINFALL 8-14 DAYS AFTER APPLICATION
 1.56" RAINFALL 15-21 DAYS AFTER APPLICATION
 3.36" RAINFALL 22-30 DAYS AFTER APPLICATION
 11.315" OF TOTAL IRRIGATION/RAINFALL IN FIRST 30 DAYS AFTER APPLICATION

DIGGING DATE: SEPTEMBER 17
 HARVEST DATE: SEPTEMBER 20
 HARVEST MOISTURE: 11.0
 YIELDS ADJUSTED TO 10% MOISTURE.
 2% DEDUCTED FROM PLOT YIELD FOR FM/ROCKS, ETC.

SUMMARY:

- 1) GENERALLY, THERE WERE NO INTERACTIONS FOR ANY VARIABLE BETWEEN VALOR AND DUAL MAGNUM EXCEPT PLANT STAND ON MAY 21 (19 DAT).
- 2) NEITHER VALOR NOR DUAL HAD AN EFFECT ON PEANUT STAND/EMERGENCE WHEN COMPARED TO THE NTC.
- 3) WHOLE PLANT FRESH WEIGHTS OF PEANUT WERE REDUCED BY VALOR AT 3 OR 6 OZ/A AND DUAL MAGNUM @ 42 OZ/A (19 DAT).

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4) J-ROOTING WAS NOT AFFECTED BY EITHER VALOR OR DUAL MAGNUM

5) AT 50 DAT, BOTH RATES OF VALOR CAUSED SIGNIFICANT PEANUT STUNTING. 6 OZ/A WAS MORE INJURIOUS THAN 3 OZ/A. DUAL MAGNUM @ 21 AND 42 OZ/A WAS ALSO CAUSING SIGNIFICANT PEANUT STUNTING AT THAT TIME. 42 OZ/A WAS MORE INJURIOUS THAN 21 OZ/A.

6) AT 83 DAT, VALOR INJURY WAS NO LONGER OBSERVEABLE. BUT DUAL MAGNUM AT 21 AND 42 OZ/A WERE STILL CAUSING PEANUT STUNTING (42 OZ/A MORE INJURIOUS THAN 21 OZ/A).

7) PEANUT YIELDS WERE NOT REDUCED BY VALOR AT ANY RATE.

8) PEANUT YIELDS WERE REDUCED BY ALL RATES OF DUAL MAGNUM AS FOLLOWS:

NTC = 6195 LBS/A

16 OZ/A = 5937 LBS/A (4.2% YIELD LOSS)

21 OZ/A = 5859 LBS/A (5.4% YIELD LOSS)

42 OZ/A = 5528 LBS/A (10.8% YIELD LOSS)

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PEANUT RESPONSE TO VALOR AND DUAL MAGNUM
 HIGH MOISTURE
 Trial ID: PE-09-18 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-30-18
Planting Method: MONOSEM TWIN ROW **Rate:** 3.1 **SEED/FT** **Depth:** 2 IN
Perennial Age: _____ **Row Spacing:** _____ **Seed Bed:** _____
Soil Temperature: _____ **Soil Moisture:** DRY TO OPT **Emergence Date:** _____

Plot Width, Unit: 6 FT **Plot Length, Unit:** 25 FT **Reps:** 4
Site Type: _____ **Study Design:** FACTOR
Tillage Type: CONVENTIONAL
Trial Initiation Comments: DYNASTY P/D SEED TRT; THIMET 20G INFR AT 7.5 LBS/A;
 36"-9" TWIN ROWS; 400 LBS/A 5-15-30 PREPLANT
Previous: Crops **Pesticides** **Year**
 1. FIELD CORN 2017 _____

MAINTENANCE

Field Prep./Maintenance: _____

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

SOIL DESCRIPTION

Texture: SAND **% OM:** 0.93 **% Sand:** 94 **% Silt:** 4 **% Clay:** 2
pH: 6.0 **CEC:** 3.7 **Soil Name:** TIFTON **Fertility Level:** GOOD

MOISTURE CONDITIONS

On: Date	Time	Amount	Unit	Type	Interval	Unit
1.	May-2-18	2.675	IN	SPRINKLER - LATERAL MOVE	_____	_____
2.	May-3-18	2.16	IN	SPRINKLER - LATERAL MOVE	_____	_____
3.	May-8-18	0.5	IN	SPRINKLER - LATERAL MOVE	_____	_____
4.	May-14-18	0.02	IN	RAINFALL	_____	_____
5.	May-15-18	0.35	IN	RAINFALL	_____	_____
6.	May-16-18	0.69	IN	RAINFALL	_____	_____
7.	May-17-18	0.26	IN	RAINFALL	_____	_____
8.	May-20-18	0.10	IN	RAINFALL	_____	_____
9.	May-21-18	0.07	IN	RAINFALL	_____	_____
10.	May-22-18	0.22	IN	RAINFALL	_____	_____
11.	May-23-18	0.91	IN	RAINFALL	_____	_____
12.	May-24-18	0.01	IN	RAINFALL	_____	_____
13.	May-26-18	0.23	IN	RAINFALL	_____	_____
14.	May-27-18	0.34	IN	RAINFALL	_____	_____
15.	May-28-18	0.32	IN	RAINFALL	_____	_____
16.	May-29-18	1.69	IN	RAINFALL	_____	_____
17.	May-30-18	0.07	IN	RAINFALL	_____	_____
18.	Jun-2-18	0.7	IN	RAINFALL	_____	_____

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

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		APPLICATION DESCRIPTION					
		A	B	C	D	E	F
Application Date:	May-2-18	_____	_____	_____	_____	_____	_____
Time of Day:	7:28 AM	_____	_____	_____	_____	_____	_____
Application Method:	BROADCAST	_____	_____	_____	_____	_____	_____
Application Timing:	PRE	_____	_____	_____	_____	_____	_____
Applic. Placement:	SOIL	_____	_____	_____	_____	_____	_____
Air Temp., Unit:	58 F	_____	_____	_____	_____	_____	_____
% Relative Humidity:	92	_____	_____	_____	_____	_____	_____
Wind Velocity, Unit:	1 MPH	_____	_____	_____	_____	_____	_____
Dew Presence (Y/N):	N	_____	_____	_____	_____	_____	_____
Water Hardness:	--	_____	_____	_____	_____	_____	_____
Soil Temp., Unit:	69 F	_____	_____	_____	_____	_____	_____
Soil Moisture:	DRY/OPT	_____	_____	_____	_____	_____	_____
% Cloud Cover:	0	_____	_____	_____	_____	_____	_____

		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:	BCKPACK	_____	_____	_____	_____	_____	_____
Operating Pressure:	27	_____	_____	_____	_____	_____	_____
Nozzle Type:	AIXR	_____	_____	_____	_____	_____	_____
Nozzle Size:	11002	_____	_____	_____	_____	_____	_____
Nozzle Spacing, Unit:	15 IN	_____	_____	_____	_____	_____	_____
Nozzles/Row:	2	_____	_____	_____	_____	_____	_____
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 VALOR AND DUAL MAGNUM HIGH MOISTURE	
Trial ID: PE-09-18	Study Dir.: _____
Location: PONDER FARM	Investigator: Eric P. Prostko

Weed Code	----- ARAHY STAND - PLANTS #/3 FT May-9-18	----- ARAHY PLANT - STUNTING PERCENT May-18-18	----- ARAHY STAND - PLANTS #/3 FT May-21-18	----- ARAHY FRESH - WGT G/3 FT May-21-18	----- ARAHY JROOT - PLANT #/ FT May-21-18	----- ARAHY FRESH - WGT G/PLANT May-21-18
Trt-Eval Interval	7 DA-A	16 DA-A	19 DA-A	19 DA-A	19 DA-A	19 DA-A
PRM Data Type						T1
# Subsamples, Dec.						- 1
Trt Treatment No. Name	Form Conc	Form Type	Rate Rate	Grow Unit	Appl Stg	Code
1						2
2						3
3						4
4						5
5						6
6						
TABLE OF R MEANS						
Replicate 1	5.4	19.2	15.9	89.5	10.1	5.6
Replicate 2	5.7	16.7	17.8	95.9	11.8	5.4
Replicate 3	7.0	21.7	16.6	95.8	10.5	5.8
Replicate 4	7.1	21.7	17.3	101.5	11.0	5.9
TABLE OF A (VALOR RATE) MEANS						
1 VALOR SX	51 WG	3.0 oz/a	PRE	A	6.3 a	20.6 a
2 VALOR SX	51 WG	6.0 oz/a	PRE	A	5.6 a	28.1 a
3 NO VALOR					7.0 a	10.6 b
Tukey's HSD P=.10					2.53	7.70
Standard Deviation					2.84	8.66
CV					45.17	43.76
TABLE OF B (DUAL MAGNUM RATE) MEANS						
1 DUAL MAGNUM	7.62 EC	16.0 oz/a	PRE	A	7.9 a	15.8 bc
2 DUAL MAGNUM	7.62 EC	21.0 oz/a	PRE	A	6.0 ab	20.8 b
3 DUAL MAGNUM	7.62 EC	42.0 oz/a	PRE	A	4.7 b	30.0 a
4 NO DUAL MAGNUM					6.6 ab	12.5 c
Tukey's HSD P=.10					2.24	5.15
Standard Deviation					2.07	4.74
CV					32.84	23.94
TABLE OF A (VALOR RATE) B (DUAL MAGNUM RATE) MEANS						
1 VALOR SX	51 WG	3.0 oz/a	PRE	A	7.8 a	15.0 def
1 DUAL MAGNUM	7.62 EC	16.0 oz/a	PRE	A		
2 VALOR SX	51 WG	6.0 oz/a	PRE	A	8.0 a	22.5 b-e
1 DUAL MAGNUM	7.62 EC	16.0 oz/a	PRE	A		
3 NO VALOR					8.0 a	10.0 fg
1 DUAL MAGNUM	7.62 EC	16.0 oz/a	PRE	A		
1 VALOR SX	51 WG	3.0 oz/a	PRE	A	7.0 a	22.5 b-e
2 DUAL MAGNUM	7.62 EC	21.0 oz/a	PRE	A		
2 VALOR SX	51 WG	6.0 oz/a	PRE	A	4.3 a	27.5 abc
2 DUAL MAGNUM	7.62 EC	21.0 oz/a	PRE	A		
3 NO VALOR					6.8 a	12.5 ef
2 DUAL MAGNUM	7.62 EC	21.0 oz/a	PRE	A		
1 VALOR SX	51 WG	3.0 oz/a	PRE	A	4.5 a	32.5 ab
3 DUAL MAGNUM	7.62 EC	42.0 oz/a	PRE	A		
2 VALOR SX	51 WG	6.0 oz/a	PRE	A	4.3 a	37.5 a
3 DUAL MAGNUM	7.62 EC	42.0 oz/a	PRE	A		
3 NO VALOR					5.3 a	20.0 c-f
3 DUAL MAGNUM	7.62 EC	42.0 oz/a	PRE	A		
1 VALOR SX	51 WG	3.0 oz/a	PRE	A	6.0 a	12.5 ef
4 NO DUAL MAGNUM						
2 VALOR SX	51 WG	6.0 oz/a	PRE	A	5.8 a	25.0 bcd
4 NO DUAL MAGNUM						
3 NO VALOR					8.0 a	0.0 g
4 NO DUAL MAGNUM						
Tukey's HSD P=.10					5.68	12.08
Standard Deviation					2.39	5.09
CV					38.06	25.73

Means followed by same letter or symbol do not significantly differ (P=.10, Tukey's HSD)

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Weed Code	-----		-----		-----		-----		-----		-----	
Crop Code	ARAHY		ARAHY		ARAHY		ARAHY		ARAHY		ARAHY	
Part Rated	JROOT -		PLANT -		PLANT -		PLOT -		PLOT -		PLOT -	
Rating Data Type	PLANTS		STUNTING		STUNTING		YIELD		YIELD		YIELD	
Rating Unit	PERCENT		PERCENT		PERCENT		LBS/PLOT		LBS/PLOT		LBS/A	
Rating Date	May-21-18		Jun-21-18		Jul-24-18		Sep-20-18		Sep-20-18		Sep-20-18	
Trt-Eval Interval	19 DA-A		50 DA-A		83 DA-A		141 DA-A		141 DA-A		141 DA-A	
PRM Data Type	T2								T3		TY4	
# Subsamples, Dec.	- 1						- 2		- 2		- 0	
Trt Treatment	Form	Form	Rate	Grow	Appl							
No. Name	Conc	Type	Unit	Stg	Code	7	8	9	10	11	12	
TABLE OF R MEANS												
Replicate 1						63.0	17.2	4.2	21.36	20.93	6011	
Replicate 2						66.9	12.4	3.6	20.71	20.30	5828	
Replicate 3						63.4	11.0	4.7	20.46	20.05	5759	
Replicate 4						63.2	12.1	3.3	21.04	20.62	5921	
TABLE OF A (VALOR RATE) MEANS												
1 VALOR SX 51 WG 3.0 oz/a PRE A						64.3 a	12.1 b	3.5 a	20.63 a	20.21 a	5805 a	
2 VALOR SX 51 WG 6.0 oz/a PRE A						66.0 a	18.4 a	5.6 a	20.82 a	20.40 a	5859 a	
3 NO VALOR						62.1 a	9.0 c	2.7 a	21.23 a	20.81 a	5975 a	
Tukey's HSD P=.10						10.36	3.12	4.33	2.093	2.051	589.0	
Standard Deviation						11.66	3.52	4.87	2.355	2.308	662.8	
CV						18.18	26.72	123.16	11.273	11.273	11.3	
TABLE OF B (DUAL MAGNUM RATE) MEANS												
1 DUAL MAGNUM 7.62 EC 16.0 oz/a PRE A						60.7 a	10.3 bc	1.9 bc	21.10 b	20.68 b	5937 b	
2 DUAL MAGNUM 7.62 EC 21.0 oz/a PRE A						65.2 a	12.6 b	4.7 b	20.82 b	20.40 b	5859 b	
3 DUAL MAGNUM 7.62 EC 42.0 oz/a PRE A						63.8 a	24.2 a	9.2 a	19.64 c	19.25 c	5528 c	
4 NO DUAL MAGNUM						67.0 a	5.6 c	0.0 c	22.01 a	21.57 a	6195 a	
Tukey's HSD P=.10						14.59	6.94	4.10	0.835	0.818	235.0	
Standard Deviation						13.44	6.40	3.77	0.769	0.754	216.4	
CV						20.95	48.60	95.28	3.680	3.680	3.7	
TABLE OF A (VALOR RATE) B (DUAL MAGNUM RATE) MEANS												
1 VALOR SX 51 WG 3.0 oz/a PRE A						65.8 a	8.8 def	0.0 b	20.36 a	19.96 a	5731 a	
1 DUAL MAGNUM 7.62 EC 16.0 oz/a PRE A												
2 VALOR SX 51 WG 6.0 oz/a PRE A						49.4 a	13.8 b-e	2.5 b	21.16 a	20.74 a	5956 a	
2 DUAL MAGNUM 7.62 EC 16.0 oz/a PRE A												
3 NO VALOR						66.7 a	8.3 def	3.3 ab	21.77 a	21.33 a	6126 a	
1 DUAL MAGNUM 7.62 EC 16.0 oz/a PRE A												
1 VALOR SX 51 WG 3.0 oz/a PRE A						53.0 a	11.7 b-e	6.7 ab	20.22 a	19.81 a	5690 a	
2 DUAL MAGNUM 7.62 EC 21.0 oz/a PRE A												
2 VALOR SX 51 WG 6.0 oz/a PRE A						75.9 a	17.5 bcd	7.5 ab	20.68 a	20.26 a	5819 a	
2 DUAL MAGNUM 7.62 EC 21.0 oz/a PRE A												
3 NO VALOR						66.7 a	8.8 def	0.0 b	21.56 a	21.13 a	6068 a	
2 DUAL MAGNUM 7.62 EC 21.0 oz/a PRE A												
1 VALOR SX 51 WG 3.0 oz/a PRE A						63.4 a	21.3 b	7.5 ab	19.88 a	19.48 a	5593 a	
3 DUAL MAGNUM 7.62 EC 42.0 oz/a PRE A												
2 VALOR SX 51 WG 6.0 oz/a PRE A						65.4 a	32.5 a	12.5 a	19.89 a	19.49 a	5597 a	
3 DUAL MAGNUM 7.62 EC 42.0 oz/a PRE A												
3 NO VALOR						62.5 a	18.8 bc	7.5 ab	19.16 a	18.78 a	5393 a	
3 DUAL MAGNUM 7.62 EC 42.0 oz/a PRE A												
1 VALOR SX 51 WG 3.0 oz/a PRE A						75.2 a	6.7 ef	0.0 b	22.05 a	21.61 a	6206 a	
4 NO DUAL MAGNUM												
2 VALOR SX 51 WG 6.0 oz/a PRE A						73.3 a	10.0 cde	0.0 b	21.55 a	21.12 a	6065 a	
4 NO DUAL MAGNUM												
3 NO VALOR						52.4 a	0.0 f	0.0 b	22.44 a	21.99 a	6315 a	
4 NO DUAL MAGNUM												
Tukey's HSD P=.10						43.12	9.77	9.77	3.586	3.514	1009.2	
Standard Deviation						17.95	4.00	4.00	1.469	1.440	413.4	
CV						27.98	30.42	101.07	7.032	7.032	7.0	

Means followed by same letter or symbol do not significantly differ (P=.10, Tukey's HSD)

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COMPLETE FACTORIAL AOV For ----- ARAHY STAND PLANTS #/3 FT May-9-18 7 DA-A (Data Column 1)							
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)	
Total	47	315.916667					
R	3	27.416667	9.138889	1.594	0.2258		
A	2	16.541667	8.270833	1.024	0.4143	2.5	
RA	6	48.458333	8.076389				
B	3	65.416667	21.805556	5.108	0.0246	2.2	
RB	9	38.416667	4.268519				
AB	6	16.458333	2.743056	0.478	0.8156	5.7	
RAB	18	103.208333	5.733796				

COMPLETE FACTORIAL AOV For ----- ARAHY PLANT STUNTING PERCENT May-18-18 16 DA-A (Data Column 2)							
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)	
Total	47	6097.916667					
R	3	206.250000	68.750000	2.652	0.0799		
A	2	2466.666667	1233.333333	16.444	0.0037	7.7	
RA	6	450.000000	75.000000				
B	3	2089.583333	696.527778	31.021	0.0001	5.1	
RB	9	202.083333	22.453704				
AB	6	216.666667	36.111111	1.393	0.2707	12.1	
RAB	18	466.666667	25.925926				

COMPLETE FACTORIAL AOV For ----- ARAHY STAND PLANTS #/3 FT May-21-18 19 DA-A (Data Column 3) Missing values in column 3 results in unbalanced data, Least Squares Analysis is preferred							
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)	
Total	45	163.990741					
R	3	23.527778	7.842593	3.242	0.0499		
A	2	4.782407	2.391204	1.075	0.3990	1.3	
RA	6	13.347222	2.224537				
B	3	17.583333	5.861111	1.619	0.2527	2.1	
RB	9	32.583333	3.620370				
AB	6	33.458333	5.576389	2.305	0.0853	3.7	
RAB	16	38.708333	2.419271				

COMPLETE FACTORIAL AOV For ----- ARAHY FRESH WGT G/3 FT May-21-18 19 DA-A (Data Column 4) Missing values in column 4 results in unbalanced data, Least Squares Analysis is preferred							
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)	
Total	45	14286.666667					
R	3	865.500000	288.500000	1.256	0.3228		
A	2	2701.166667	1350.583333	11.511	0.0088	9.6	
RA	6	704.000000	117.333333				
B	3	2920.166667	973.388889	5.193	0.0235	14.9	
RB	9	1687.000000	187.444444				
AB	6	1732.833333	288.805556	1.257	0.3304	36.4	
RAB	16	3676.000000	229.750000				

COMPLETE FACTORIAL AOV For ----- ARAHY JROOT PLANT #/ FT May-21-18 19 DA-A (Data Column 5) Missing values in column 5 results in unbalanced data, Least Squares Analysis is preferred							
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)	
Total	45	388.851852					
R	3	20.166667	6.722222	0.729	0.5498		
A	2	3.476852	1.738426	0.398	0.6882	1.9	
RA	6	26.208333	4.368056				
B	3	8.388889	2.796296	0.337	0.7991	3.1	
RB	9	74.666667	8.296296				
AB	6	108.319444	18.053241	1.957	0.1327	7.3	
RAB	16	147.625000	9.226563				

COMPLETE FACTORIAL AOV For ----- ARAHY FRESH WGT G/PLANT May-21-18 19 DA-A T1 1 (Data Column 6) Missing values in column 6 results in unbalanced data, Least Squares Analysis is preferred							
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)	
Total	45	37.481182					
R	3	1.548350	0.516117	1.518	0.2481		
A	2	8.093152	4.046576	19.142	0.0025	0.4	
RA	6	1.268414	0.211402				
B	3	13.042124	4.347375	7.354	0.0086	0.8	
RB	9	5.320491	0.591166				
AB	6	2.767687	0.461281	1.356	0.2902	1.4	
RAB	16	5.440963	0.340060				

Means followed by same letter or symbol do not significantly differ (P=.10, Tukey's HSD)

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COMPLETE FACTORIAL AOV For ----- ARAHY JROOT PLANTS PERCENT May-21-18 19 DA-A T2 1 (Data Column 7) Missing values in column 7 results in unbalanced data, Least Squares Analysis is preferred

Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)
Total	45	11090.684542				
R	3	125.126569	41.708856	0.129	0.9412	
A	2	125.558898	62.779449	0.461	0.6510	10.4
RA	6	816.355466	136.059244			
B	3	256.212860	85.404287	0.473	0.7086	14.6
RB	9	1624.919857	180.546651			
AB	6	2987.329593	497.888266	1.545	0.2267	43.1
RAB	16	5155.181298	322.198831			

COMPLETE FACTORIAL AOV For ----- ARAHY PLANT STUNTING PERCENT Jun-21-18 50 DA-A (Data Column 8) Missing values in column 8 results in unbalanced data, Least Squares Analysis is preferred

Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)
Total	43	4062.442130				
R	3	277.025463	92.341821	5.761	0.0088	
A	2	746.643519	373.321759	30.192	0.0007	3.1
RA	6	74.189815	12.364969			
B	3	2250.636574	750.212191	18.342	0.0004	6.9
RB	9	368.113426	40.901492			
AB	6	121.412037	20.235340	1.262	0.3348	9.8
RAB	14	224.421296	16.030093			

COMPLETE FACTORIAL AOV For ----- ARAHY PLANT STUNTING PERCENT Jul-24-18 83 DA-A (Data Column 9) Missing values in column 9 results in unbalanced data, Least Squares Analysis is preferred

Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)
Total	43	1303.472222				
R	3	13.657407	4.552469	0.284	0.8358	
A	2	72.222222	36.111111	1.519	0.2925	4.3
RA	6	142.592593	23.765432			
B	3	569.212963	189.737654	13.340	0.0012	4.1
RB	9	128.009259	14.223251			
AB	6	153.703704	25.617284	1.601	0.2191	9.8
RAB	14	224.074074	16.005291			

COMPLETE FACTORIAL AOV For ----- ARAHY PLOT YIELD LBS/PLOT Sep-20-18 141 DA-A 2 (Data Column 10) Missing values in column 10 results in unbalanced data, Least Squares Analysis is preferred

Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)
Total	43	119.352755				
R	3	5.461690	1.820563	0.844	0.4926	
A	2	3.070359	1.535179	0.277	0.7674	2.09
RA	6	33.281956	5.546993			
B	3	34.397245	11.465748	19.394	0.0003	0.83
RB	9	5.320671	0.591186			
AB	6	7.605567	1.267595	0.587	0.7353	3.59
RAB	14	30.215266	2.158233			

COMPLETE FACTORIAL AOV For ----- ARAHY PLOT YIELD LBS/PLOT Sep-20-18 141 DA-A T3 2 (Data Column 11) Missing values in column 11 results in unbalanced data, Least Squares Analysis is preferred

Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)
Total	43	114.626386				
R	3	5.245407	1.748469	0.844	0.4926	
A	2	2.948773	1.474386	0.277	0.7674	2.05
RA	6	31.963991	5.327332			
B	3	33.035114	11.011705	19.394	0.0003	0.82
RB	9	5.109973	0.567775			
AB	6	7.304387	1.217398	0.587	0.7353	3.51
RAB	14	29.018742	2.072767			

COMPLETE FACTORIAL AOV For ----- ARAHY PLOT YIELD LBS/A Sep-20-18 141 DA-A TY4 0 (Data Column 12) Missing values in column 12 results in unbalanced data, Least Squares Analysis is preferred

Source	DF	Sum of Squares	Mean Square	F	Prob(F)	HSD (.10)
Total	43	9453066.561626				
R	3	432580.860983	144193.620328	0.844	0.4926	
A	2	243180.864652	121590.432326	0.277	0.7674	589
RA	6	2636022.490813	439337.081802			
B	3	2724356.476159	908118.825386	19.394	0.0003	235
RB	9	421411.806309	46823.534034			
AB	6	602381.843120	100396.973853	0.587	0.7353	1009
RAB	14	2393132.219589	170938.015685			

Part Rated

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

PRM Data Type

T1 = [C4]/[C3]

Means followed by same letter or symbol do not significantly differ (P=.10, Tukey's HSD)

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T2 = ([C5]/[C3])*100
T3 = [C10]*0.98
TY4 = 287.1733*[11]

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PEANUT RESPONSE TO VALOR AND DUAL MAGNUM HIGH MOISTURE		
Trial ID: PE-09-18	Study Dir.: _____	
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.													
Trt Treatment	Form	Form	Rate	Grow	Appl								
No. Name	Conc	Type	Rate	Unit	Stg	Code	Plot	1	2	3	4	5	6
1 VALOR SX	51	WG	3.0	oz/a	PRE	A	101	11.0	10.0	17.0	106.0	11.0	6.2
DUAL MAGNUM	7.62	EC	16.0	oz/a	PRE	A	202	5.0	10.0	19.0	118.0	9.0	6.2
							305	7.0	20.0	18.0	96.0	13.0	5.3
							408	8.0	20.0	19.0	118.0	15.0	6.2
							Mean =	7.8	15.0	18.3	109.5	12.0	6.0
2 VALOR SX	51	WG	3.0	oz/a	PRE	A	102	4.0	20.0	16.0	76.0	13.0	4.8
DUAL MAGNUM	7.62	EC	21.0	oz/a	PRE	A	206	6.0	20.0	15.0	73.0	9.0	4.9
							304	10.0	20.0	15.0	86.0	5.0	5.7
							405	8.0	30.0	16.0	93.0	6.0	5.8
							Mean =	7.0	22.5	15.5	82.0	8.3	5.3
3 VALOR SX	51	WG	3.0	oz/a	PRE	A	103	4.0	20.0
DUAL MAGNUM	7.62	EC	42.0	oz/a	PRE	A	212	1.0	40.0	17.0	77.0	10.0	4.5
							301	9.0	30.0	21.0	107.0	11.0	5.1
							407	4.0	40.0	19.0	92.0	15.0	4.8
							Mean =	4.5	32.5	19.0	92.0	12.0	4.8
4 VALOR SX	51	WG	3.0	oz/a	PRE	A	104	4.0	10.0	15.0	100.0	10.0	6.7
NO DUAL MAGNUM							203	5.0	10.0	17.0	91.0	15.0	5.4
							310	9.0	10.0
							406	6.0	20.0	17.0	106.0	12.0	6.2
							Mean =	6.0	12.5	16.3	99.0	12.3	6.1
5 VALOR SX	51	WG	6.0	oz/a	PRE	A	105	4.0	30.0	16.0	83.0	8.0	5.2
DUAL MAGNUM	7.62	EC	16.0	oz/a	PRE	A	201	8.0	10.0	16.0	100.0	11.0	6.3
							307	9.0	30.0	16.0	98.0	7.0	6.1
							401	11.0	20.0	17.0	99.0	6.0	5.8
							Mean =	8.0	22.5	16.3	95.0	8.0	5.8
6 VALOR SX	51	WG	6.0	oz/a	PRE	A	106	3.0	30.0	17.0	75.0	15.0	4.4
DUAL MAGNUM	7.62	EC	21.0	oz/a	PRE	A	210	4.0	30.0	18.0	84.0	10.0	4.7
							311	5.0	30.0	16.0	78.0	14.0	4.9
							409	5.0	20.0	18.0	102.0	13.0	5.7
							Mean =	4.3	27.5	17.3	84.8	13.0	4.9
7 VALOR SX	51	WG	6.0	oz/a	PRE	A	107	4.0	40.0	13.0	56.0	5.0	4.3
DUAL MAGNUM	7.62	EC	42.0	oz/a	PRE	A	205	4.0	30.0	18.0	65.0	14.0	3.6
							308	5.0	40.0	15.0	68.0	11.0	4.5
							403	4.0	40.0	18.0	98.0	13.0	5.4
							Mean =	4.3	37.5	16.0	71.8	10.8	4.5
8 VALOR SX	51	WG	6.0	oz/a	PRE	A	108	5.0	30.0	15.0	81.0	11.0	5.4
NO DUAL MAGNUM							211	4.0	20.0	21.0	122.0	14.0	5.8
							302	7.0	20.0	15.0	92.0	13.0	6.1
							404	7.0	30.0	15.0	83.0	10.0	5.5
							Mean =	5.8	25.0	16.5	94.5	12.0	5.7
9 NO VALOR							109	12.0	10.0	17.0	118.0	10.0	6.9
DUAL MAGNUM	7.62	EC	16.0	oz/a	PRE	A	204	4.0	10.0	15.0	90.0	10.0	6.0
							306	7.0	10.0	16.0	82.0	10.0	5.1
							402	9.0	10.0	19.0	109.0	15.0	5.7
							Mean =	8.0	10.0	16.8	99.8	11.3	6.0
10 NO VALOR							110	6.0	10.0	15.0	82.0	9.0	5.5
DUAL MAGNUM	7.62	EC	21.0	oz/a	PRE	A	208	10.0	10.0	16.0	101.0	13.0	6.3
							303	6.0	20.0	17.0	122.0	8.0	7.2
							410	5.0	10.0	14.0	92.0	11.0	6.6
							Mean =	6.8	12.5	15.5	99.3	10.3	6.4
11 NO VALOR							111	2.0	20.0	17.0	110.0	8.0	6.5
DUAL MAGNUM	7.62	EC	42.0	oz/a	PRE	A	209	9.0	10.0	20.0	94.0	15.0	4.7
							312	3.0	30.0	18.0	87.0	15.0	4.8
							411	7.0	20.0	18.0	102.0	8.0	5.7
							Mean =	5.3	20.0	18.3	98.3	11.5	5.4

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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 JROOT - PLANTS PERCENT May-21-18 19 DA-A T2 - 1	----- ARAHY PLANT - STUNTING PERCENT Jun-21-18 50 DA-A	----- ARAHY PLANT - STUNTING PERCENT Jul-24-18 83 DA-A	----- ARAHY PLOT - YIELD LBS/PLOT Sep-20-18 141 DA-A - 2	----- ARAHY PLOT - YIELD LBS/PLOT Sep-20-18 141 DA-A - 2	----- ARAHY PLOT - YIELD LBS/A Sep-20-18 141 DA-A TY4 - 0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Appl Stg Code Plot	7	8	9	10	11	12
1	VALOR SX DUAL MAGNUM	51 WG 7.62 EC		3.0 oz/a 16.0 oz/a	PRE PRE	A A 101 202 305 408 Mean =	64.7 47.4 72.2 78.9 65.8	10.0 10.0 10.0 5.0 8.8	0.0 0.0 0.0 0.0 0.0	18.65 21.75 19.45 21.60 20.36	18.28 21.32 19.06 21.17 19.96	5249 6121 5474 6079 5731
2	VALOR SX DUAL MAGNUM	51 WG 7.62 EC		3.0 oz/a 21.0 oz/a	PRE PRE	A A 102 206 304 405 Mean =	81.3 60.0 33.3 37.5 53.0	20.0 5.0 10.0 10.0 11.7	10.0 0.0 0.0 10.0 6.7	18.45 20.80 21.40 20.97 20.22	18.08 20.38 20.97 19.81	5192 5854 6023 5690
3	VALOR SX DUAL MAGNUM	51 WG 7.62 EC		3.0 oz/a 42.0 oz/a	PRE PRE	A A 103 212 301 407 Mean =	58.8 52.4 78.9 63.4	30.0 20.0 15.0 20.0 21.3	10.0 10.0 0.0 10.0 7.5	19.25 19.30 19.35 21.60 19.88	18.87 18.91 18.96 21.17 19.48	5418 5432 5446 6079 5593
4	VALOR SX NO DUAL MAGNUM	51 WG		3.0 oz/a	PRE	A 104 203 310 406 Mean =	66.7 88.2 70.6 75.2	5.0 5.0 10.0 6.7	0.0 0.0 0.0 0.0	20.90 22.40 22.85 22.05	20.48 21.95 22.39 21.61	5882 6304 6431 6206
5	VALOR SX DUAL MAGNUM	51 WG 7.62 EC		6.0 oz/a 16.0 oz/a	PRE PRE	A A 105 201 307 401 Mean =	50.0 68.8 43.8 35.3 49.4	20.0 10.0 15.0 10.0 13.8	0.0 0.0 10.0 0.0 2.5	22.55 19.00 21.70 21.40 21.16	22.10 18.62 21.27 20.97 20.74	6346 5347 6107 6023 5956
6	VALOR SX DUAL MAGNUM	51 WG 7.62 EC		6.0 oz/a 21.0 oz/a	PRE PRE	A A 106 210 311 409 Mean =	88.2 55.6 87.5 72.2 75.9	30.0 20.0 10.0 10.0 17.5	10.0 10.0 10.0 0.0 7.5	22.65 20.05 21.00 19.00 20.68	22.20 19.65 20.58 18.62 20.26	6374 5643 5910 5347 5819
7	VALOR SX DUAL MAGNUM	51 WG 7.62 EC		6.0 oz/a 42.0 oz/a	PRE PRE	A A 107 205 308 403 Mean =	38.5 77.8 73.3 72.2 65.4	40.0 30.0 30.0 30.0 32.5	10.0 10.0 20.0 10.0 12.5	21.30 19.25 17.05 21.95 19.89	20.87 18.87 16.71 21.51 19.49	5994 5418 4798 6177 5597
8	VALOR SX NO DUAL MAGNUM	51 WG		6.0 oz/a	PRE	A 108 211 302 404 Mean =	73.3 66.7 86.7 66.7 73.3	5.0 15.0 10.0 10.0	0.0 0.0 0.0 0.0	23.95 20.10 20.60 21.55	23.47 19.70 20.19 21.12	6740 5657 5797 6065
9	NO VALOR DUAL MAGNUM	7.62 EC		16.0 oz/a	PRE	A 109 204 306 402 Mean =	58.8 66.7 62.5 78.9 66.7	5.0 10.0 10.0 8.3	0.0 10.0 0.0 3.3	22.90 20.45 21.95 21.77	22.44 20.04 21.51 21.33	6445 5755 6177 6126
10	NO VALOR DUAL MAGNUM	7.62 EC		21.0 oz/a	PRE	A 110 208 303 410 Mean =	60.0 81.3 47.1 78.6 66.7	15.0 5.0 5.0 10.0 8.8	0.0 0.0 0.0 0.0 0.0	22.45 22.80 20.25 20.75 21.56	22.00 22.34 19.85 20.34 21.13	6318 6417 5699 5840 6068
11	NO VALOR DUAL MAGNUM	7.62 EC		42.0 oz/a	PRE	A 111 209 312 411 Mean =	47.1 75.0 83.3 44.4 62.5	25.0 20.0 10.0 20.0 18.8	10.0 10.0 0.0 10.0 7.5	19.70 20.30 20.25 16.40 19.16	19.31 19.89 19.85 16.07 18.78	5544 5713 5699 4615 5393

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Weed Code				ARAHY	ARAHY	ARAHY	ARAHY	ARAHY	ARAHY					
Crop Code				JROOT -	PLANT -	PLANT -	PLOT -	PLOT -	PLOT -					
Part Rated				PLANTS	STUNTING	STUNTING	YIELD	YIELD	YIELD					
Rating Data Type				PERCENT	PERCENT	PERCENT	LBS/PLOT	LBS/PLOT	LBS/A					
Rating Unit				May-21-18	Jun-21-18	Jul-24-18	Sep-20-18	Sep-20-18	Sep-20-18					
Rating Date				19 DA-A	50 DA-A	83 DA-A	141 DA-A	141 DA-A	141 DA-A					
Trt-Eval Interval				T2				T3	TY4					
PRM Data Type				- 1			- 2	- 2	- 0					
# Subsamples, Dec.														
Trt	Treatment	Form	Form	Rate	Grow	Appl								
No.	Name	Conc	Type	Rate	Unit	Stg	Code	Plot	7	8	9	10	11	12
12	NO VALOR							112	64.3	0.0	0.0	22.40	21.95	6304
	NO DUAL MAGNUM							207	57.1	0.0	0.0	22.50	22.05	6332
								309	43.8	0.0	0.0	22.85	22.39	6431
								412	44.4	0.0	0.0	22.00	21.56	6191
								Mean =	52.4	0.0	0.0	22.44	21.99	6315

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PEANUT RESPONSE TO VALOR AND DUAL MAGNUM
HIGH MOISTURE
Trial ID: PE-09-18 Study Dir.:
Location: PONDER FARM Investigator: Eric P. Prostko

Part Rated
PLANT = PLANT / PLANT BIOMASS (includes Shrub, Tree, Turf)
PRM Data Type
T1 = [C4]/[C3]
T2 = ([C5]/[C3])*100
T3 = [C10]*0.98
TY4 = 287.1733*[11]