

University of Georgia

FIELD CORN TOLERANCE TO BRAKE OR VALOR APPLIED IN 2018	
Trial ID: CN-01-19	Study Dir.: KYLE BRISCOE
Location: PONDER FARM	Investigator: Eric P. Prostko

Reps: 6 Plots: 6 by 25 feet
 Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 6 plots; minimum=1.173 L)

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Grow Unit	Appl Stg	Appl Code	Amt Product to Measure	Diluent	Rep					
										1	2	3	4	5	6
1	BRAKE	1.2 SL		16.0 oz/a	PRE	A		16.66 mL/mx	1983.3 mL	101	202	306	402	504	606
2	BRAKE	1.2 SL		21.0 oz/a	PRE	A		21.87 mL/mx	1978.1 mL	102	203	304	406	501	603
3	BRAKE	1.2 SL		32.0 oz/a	PRE	A		33.33 mL/mx	1966.7 mL	103	206	302	401	503	605
4	BRAKE	1.2 SL		42.0 oz/a	PRE	A		43.75 mL/mx	1956.3 mL	104	201	305	404	506	602
5	BRAKE	1.2 SL		64.0 oz/a	PRE	A		66.66 mL/mx	1933.3 mL	105	204	303	405	502	604
6	VALOR EZ	4 L		3.0 oz/a	PRE	A		3.125 mL/mx	1996.9 mL	106	205	301	403	505	601

Sort Order: Treatment

	Trial Comments
	MAINTAINED WEED-FREE ALL YEAR IN 2018
	BARE-GROUND
	PROWL H ₂ O WITH ALL PRE TRTS AT 24 OZ/A (25 MLS/1500 MLS)
	CADRE + DUAL MAGNUM + 2,4-DB - MAY 14, 2018
	GRAMOXONE 2SL @ 3 PT/A + DUAL MAGNUM @ 1 PT/A - JULY 10, 2018
	ROUNDUP POWERMAX @ 48 OZ/A + ATRAZINE 4L @ 64 OZ/A - AUGUST 15, 2018
	GRAMOXONE @ 3.5 PT/A + DUAL MAGNUM @ 21 OZ/A - OCTOBER 5, 2018
	ROUNDUP P-MAX @ 32 OZ/A + ATRAZINE 4L @ 32 OZ/A - JANUARY 11, 2019
	<u>MONTHLY RAINFALL TOTALS FOR 2018/2019:</u>
	APRIL = 2.91"
	MAY = 5.28"
	JUNE = 5.11"
	JULY = 8.14"
	AUGUST = 5.59"
	SEPTEMBER = 0.58"
	OCTOBER = 3.2"
	NOVEMBER = 6.0"
	DECEMBER = 9.73"
	JANUARY (2019) = 3.52"
	FEBRUARY (2019) = 1.75"
	MARCH (2019) = 4.37"
	STRIP-TILL RIG WITH RIPPER SHANKS - 1 DAY BEFORE PLANTING (APRIL 2, 2019)
	ROUNDUP P-MAX @ 32 OZ/A + ATRAZINE 4L @ 32 OZ/A + DUAL MAGNUM @ 16 OZ/A - APRIL 3, 2019 APPLIED PRE AFTER PLANTING
	ROUNDUP WEATHERMAX @ 32 OZ/A + ATRAZINE @ 48 OZ/a + PROWL h ₂ O @ 32 OZ/A - APRIL 23
	HARVEST MOISTURE: 18.02%
	YIELDS ADJUSTED TO 15.5% MOISTURE.
	MISSING YIELD DATA DUE TO COMBINE SCALE PROBLEMS.
	SUMMARY:
	1) NO RATE OF BRAKE 1.2SL APPLIED ON APRIL 18, 2018 HAD AN EFFECT ON FIELD CORN PLANTED ON APRIL 3, 2019. NO SIGNIFICANT DIFFERENCES WERE OBSERVED IN PLANT STAND, PLANT HEIGHT, VISUAL INJURY, AND YIELD BETWEEN ANY RATE OF BRAKE OR VALOR APPLIED ~1 YEAR PRIOR TO CORN PLANTING.

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 Location: PONDER FARM Investigator: Eric P. Prostko

GENERAL TRIAL INFORMATION

Study Director: KYLE BRISCOE **Title:** _____
Affiliation: _____ **Postal Code:** _____

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

Trial Status: E **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: ZEAMA **FIELD CORN** **Variety:** DKC 68-69 **Planting Date:** Apr-3-19
Planting Method: MONOSEM **Rate:** 36300 SEED/A **Depth:** 2 IN
Perennial Age: _____ **Row Spacing:** 36 IN **Seed Bed:** _____
Soil Temperature: _____ **Soil Moisture:** OPTIMUM **Emergence Date:** _____

Plot Width, Unit: 6 FT **Plot Length, Unit:** 25 FT **Reps:** 6
Site Type: _____ **Study Design:** RACOBL
Tillage Type: CONVENTIONAL
Trial Initiation Comments: 800 LBS/A 5-15-30 PREPLANT; 125 LBS/A NITROGEN ON APRIL 22; 128 LBS/A NITROGEN ON MAY 1; AXILO MIX 5 @ 2 LBS/A ON MAY 2;
Previous: Crops **Pesticides** **Year**
 1. FALLOW 2018 _____

MAINTENANCE

Field Prep./Maintenance: _____

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

SOIL DESCRIPTION

Texture: SAND **% OM:** 0.8 **% Sand:** 94 **% Silt:** 4 **% Clay:** 2
pH: 6.0 **CEC:** 2.8 **Soil Name:** TIFTON **Fertility Level:** GOOD

MOISTURE CONDITIONS

On: Date	Time	Amount	Unit	Type	Interval	Unit
1.	Apr-4-19	0.25	IN	SPRINKLER - LATERAL MOVE	_____	_____
2.	Apr-4-19	0.02	IN	RAIN	_____	_____
3.	Apr-5-19	0.02	IN	RAIN	_____	_____
4.	Apr-6-19	0.21	IN	RAIN	_____	_____
5.	Apr-9-19	0.17	IN	RAINFALL	_____	_____
6.	Apr-11-19	0.5	IN	SPRINKLER - LATERAL MOVE	_____	_____
7.	Apr-14-19	0.83	IN	RAINFALL	_____	_____
8.	Apr-19-19	0.43	IN	RAINFALL	_____	_____
9.	Apr-25-19	0.5	IN	SPRINKLER - LATERAL MOVE	_____	_____
10.	Apr-25-19	0.05	IN	RAINFALL	_____	_____
11.	Apr-26-19	0.03	IN	RAINFALL	_____	_____
12.	Apr-29-19	0.5	IN	SPRINKLER - LATERAL MOVE	_____	_____
13.	May-6-19	0.75	IN	SPRINKLER - LATERAL MOVE	_____	_____
14.	May-9-19	0.195	IN	RAINFALL	_____	_____
15.	May-10-19	0.3	IN	SPRINKLER - LATERAL MOVE	_____	_____
16.	May-10-19	0.11	IN	RAINFALL	_____	_____
17.	May-11-19	0.65	IN	RAINFALL	_____	_____
18.	May-12-19	0.27	IN	RAINFALL	_____	_____
19.	May-16-19	0.5	IN	SPRINKLER - LATERAL MOVE	_____	_____
20.	May-17-19	0.62	IN	RAINFALL	_____	_____
21.	May-21-19	0.5	IN	SPRINKLER - LATERAL MOVE	_____	_____
22.	May-23-19	0.75	IN	SPRINKLER - LATERAL MOVE	_____	_____
23.	May-24-19	0.75	IN	SPRINKLER - LATERAL MOVE	_____	_____
24.	May-27-19	0.75	IN	SPRINKLER - LATERAL MOVE	_____	_____

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

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Trial ID: CN-01-19 Study Dir.: KYLE BRISCOE
Location: PONDER FARM Investigator: Eric P. Prostko

		APPLICATION DESCRIPTION					
		A	B	C	D	E	F
Application Date:	Apr-18-18	_____	_____	_____	_____	_____	_____
Time of Day:	7:30 AM	_____	_____	_____	_____	_____	_____
Application Method:	BROADCAST	_____	_____	_____	_____	_____	_____
Application Timing:	PRE	_____	_____	_____	_____	_____	_____
Applic. Placement:	SOIL	_____	_____	_____	_____	_____	_____
Air Temp., Unit:	55 F	_____	_____	_____	_____	_____	_____
% Relative Humidity:	93	_____	_____	_____	_____	_____	_____
Wind Velocity, Unit:	0 MPH	_____	_____	_____	_____	_____	_____
Dew Presence (Y/N):	Y	_____	_____	_____	_____	_____	_____
Water Hardness:	--	_____	_____	_____	_____	_____	_____
Soil Temp., Unit:	59 F	_____	_____	_____	_____	_____	_____
Soil Moisture:	OPTIMUM	_____	_____	_____	_____	_____	_____
% Cloud Cover:	0	_____	_____	_____	_____	_____	_____

		CROP STAGE AT EACH APPLICATION					
		A	B	C	D	E	F
Crop 1	Stage: ZEAMA	_____	_____	_____	_____	_____	_____
	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:	BACKPACK	_____	_____	_____	_____	_____	_____
Operating Pressure:	25	_____	_____	_____	_____	_____	_____
Nozzle Type:	AIXR	_____	_____	_____	_____	_____	_____
Nozzle Size:	11002	_____	_____	_____	_____	_____	_____
Nozzle Spacing, Unit:	15 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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Trial ID: CN-01-19		Study Dir.: KYLE BRISCOE															
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.	AMAPA	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama
			CONTROL	PERCENT	May-9-18	21 DA-A			-----	Injury	Stand	Injury	Stand	Hgt1	Hgt2	Hgt3	
										Percent	#/3 ft	Percent	#/3 ft	In	In	In	
										Apr-10-19	Apr-10-19	Apr-16-19	Apr-24-19	Apr-26-19	Apr-26-19	Apr-26-19	
										357 DA-A	357 DA-A	363 DA-A	371 DA-A	373 DA-A	373 DA-A	373 DA-A	
														- 1	- 1	- 1	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Appl Stg	Code		1	2	3	4	5	6	7	8	
1	BRAKE	1.2 SL	16.0 oz/a	PRE	A				99.2 -	1.7 -	6.8 -	0.0 b	6.8 -	7.6 -	8.2 -	8.1 -	
2	BRAKE	1.2 SL	21.0 oz/a	PRE	A				100.0 -	1.7 -	6.8 -	3.3 a	7.5 -	7.9 -	8.1 -	8.0 -	
3	BRAKE	1.2 SL	32.0 oz/a	PRE	A				100.0 -	0.0 -	6.7 -	0.8 b	7.2 -	8.0 -	8.1 -	8.4 -	
4	BRAKE	1.2 SL	42.0 oz/a	PRE	A				100.0 -	1.7 -	6.3 -	0.0 b	7.2 -	7.7 -	7.8 -	8.2 -	
5	BRAKE	1.2 SL	64.0 oz/a	PRE	A				100.0 -	0.0 -	7.2 -	0.0 b	7.2 -	7.8 -	7.8 -	7.9 -	
6	VALOR EZ	4 L	3.0 oz/a	PRE	A				100.0 -	0.0 -	7.3 -	0.0 b	7.2 -	8.0 -	7.7 -	8.3 -	
	LSD P=.10								0.82	2.73	0.66	1.28	0.64	0.63	0.60	0.49	
	Standard Deviation								0.83	2.77	0.67	1.30	0.65	0.64	0.61	0.49	
	CV								0.83	332.26	9.83	187.45	9.11	8.21	7.63	6.05	
	Grand Mean								99.86	0.83	6.86	0.69	7.17	7.83	7.94	8.15	
	Bartlett's X2								0.00	0.00	3.399	0.269	5.64	3.168	8.766	3.319	
	P(Bartlett's X2)								.	.	0.639	0.604	0.343	0.674	0.119	0.651	

Means followed by same letter or symbol do not significantly differ (P=.10, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Average=21,22

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Trial ID: CN-01-19		Study Dir.: KYLE BRISCOE													
Location: PONDER FARM		Investigator: Eric P. Prostko													
Weed Code	Crop Code	Zeama		Zeama		Zeama		Zeama							
Part Rated	Rating Data Type	Hgt4	Hgt5	HGT-AVG	Stunt	Chlorosi	Stunting	Height1	Height2						
Rating Unit	Rating Date	In	In	In	Percent	Percent	Percent	Inches	Inches						
		Apr-26-19	Apr-26-19	Apr-26-19	May-2-19	May-2-19	May-14-19	Jul-16-19	Jul-16-19						
Trt-Eval Interval		373 DA-A	373 DA-A	373 DA-A	379 DA-A	379 DA-A	391 DA-A	454 DA-A	454 DA-A						
PRM Data Type				T1											
# Subsamples, Dec.		- 1	- 1	- 1											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Appl Stg	Code	9	10	11	12	13	14	15	16
1	BRAKE	1.2 SL		16.0 oz/a	PRE	A		8.1 -	8.1 -	8.0 -	2.5 -	2.5 -	0.0 -	103.8 -	104.7 -
2	BRAKE	1.2 SL		21.0 oz/a	PRE	A		8.0 -	8.1 -	8.0 -	3.3 -	3.3 -	3.3 -	102.3 -	100.7 -
3	BRAKE	1.2 SL		32.0 oz/a	PRE	A		8.3 -	7.8 -	8.1 -	0.8 -	1.7 -	1.7 -	99.3 -	103.7 -
4	BRAKE	1.2 SL		42.0 oz/a	PRE	A		8.1 -	8.5 -	8.1 -	0.0 -	0.0 -	1.7 -	100.5 -	104.3 -
5	BRAKE	1.2 SL		64.0 oz/a	PRE	A		7.8 -	8.3 -	8.0 -	2.5 -	0.8 -	1.7 -	104.2 -	104.0 -
6	VALOR EZ	4 L		3.0 oz/a	PRE	A		8.0 -	7.6 -	7.9 -	0.0 -	0.0 -	0.0 -	104.8 -	105.3 -
LSD P=.10								0.58	0.58	0.37	3.07	2.63	3.24	6.07	4.78
Standard Deviation								0.59	0.59	0.37	3.11	2.67	3.28	6.16	4.85
CV								7.32	7.3	4.64	203.8	192.0	236.37	6.01	4.67
Grand Mean								8.06	8.07	8.01	1.53	1.39	1.39	102.50	103.78
Bartlett's X2								4.018	4.173	7.207	3.688	3.272	0.427	5.375	1.417
P(Bartlett's X2)								0.547	0.525	0.206	0.297	0.352	0.935	0.372	0.922

Means followed by same letter or symbol do not significantly differ (P=.10, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Average=21,22

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Trial ID: CN-01-19		Study Dir.: KYLE BRISCOE				
Location: PONDER FARM		Investigator: Eric P. Prostko				
Weed Code	Crop Code	Zeama	Zeama	Zeama	Zeama	----- ZEAMA
Part Rated	Rating Data Type	Height3 Inches	Height4 Inches	Height5 Inches	Plant - Height Inches	PLOT - YIELD LBS
Rating Unit	Rating Date	Jul-16-19	Jul-16-19	Jul-16-19	Jul-16-19	Aug-29-19
Trt-Eval Interval	PRM Data Type	454 DA-A	454 DA-A	454 DA-A	454 DA-A	498 DA-A
# Subsamples, Dec.					T2 - 1	TY3 - 0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Appl Stg
						Code
						17
						18
						19
						20
						21
						22
1	BRAKE	1.2 SL	16.0 oz/a	PRE	A	103.5 -
2	BRAKE	1.2 SL	21.0 oz/a	PRE	A	103.5 -
3	BRAKE	1.2 SL	32.0 oz/a	PRE	A	104.0 -
4	BRAKE	1.2 SL	42.0 oz/a	PRE	A	105.7 -
5	BRAKE	1.2 SL	64.0 oz/a	PRE	A	102.7 -
6	VALOR EZ	4 L	3.0 oz/a	PRE	A	105.3 -
LSD P=.10			3.94	4.52	4.62	3.57
Standard Deviation			4.00	4.58	4.69	3.62
CV			3.84	4.46	4.57	3.51
Grand Mean			104.11	102.81	102.53	103.14
Bartlett's X2			4.431	0.724	2.973	2.773
P(Bartlett's X2)			0.489	0.982	0.704	0.735
						51.3 -
						49.0 -
						47.7 -
						48.0 -
						47.8 -
						50.8 -
						18.4
						18.0
						7.29
						246.9
						3.341
						0.648

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Missing data estimates are included in columns: Average=21,22

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Trial ID: CN-01-19		Study Dir.: KYLE BRISCOE				
Location: PONDER FARM		Investigator: Eric P. Prostko				
Randomized Complete Block (RCB) AOV For AMAPA ----- CONTROL PERCENT May-9-18 21 DA-A (Data Column 1)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	24.305556				
Replicate	5	3.472222	0.694444	1.000	0.4381	
Treatment	5	3.472222	0.694444	1.000	0.4381	
Error	25	17.361111	0.694444			
Randomized Complete Block (RCB) AOV For Zeama Injury Percent Apr-10-19 357 DA-A (Data Column 2)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	275.000000				
Replicate	5	58.333333	11.666667	1.522	0.2189	
Treatment	5	25.000000	5.000000	0.652	0.6626	
Error	25	191.666667	7.666667			
Randomized Complete Block (RCB) AOV For Zeama Stand #/3 ft Apr-10-19 357 DA-A (Data Column 3)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	16.305556				
Replicate	5	1.138889	0.227778	0.501	0.7724	
Treatment	5	3.805556	0.761111	1.675	0.1775	
Error	25	11.361111	0.454444			
Randomized Complete Block (RCB) AOV For Zeama Injury Percent Apr-16-19 363 DA-A (Data Column 4)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	107.638889				
Replicate	5	11.805556	2.361111	1.393	0.2606	
Treatment	5	53.472222	10.694444	6.311	0.0006	
Error	25	42.361111	1.694444			
Randomized Complete Block (RCB) AOV For ----- Zeama Stand #/3 ft Apr-24-19 371 DA-A (Data Column 5)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	13.000000				
Replicate	5	1.000000	0.200000	0.469	0.7958	
Treatment	5	1.333333	0.266667	0.625	0.6822	
Error	25	10.666667	0.426667			
Randomized Complete Block (RCB) AOV For Zeama Hgt1 In Apr-26-19 373 DA-A 1 (Data Column 6)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	19.500000				
Replicate	5	8.250000	1.650000	3.992	0.0085	
Treatment	5	0.916667	0.183333	0.444	0.8138	
Error	25	10.333333	0.413333			
Randomized Complete Block (RCB) AOV For Zeama Hgt2 In Apr-26-19 373 DA-A 1 (Data Column 7)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	14.388889				
Replicate	5	4.055556	0.811111	2.205	0.0856	
Treatment	5	1.138889	0.227778	0.619	0.6863	
Error	25	9.194444	0.367778			
Randomized Complete Block (RCB) AOV For Zeama Hgt3 In Apr-26-19 373 DA-A 1 (Data Column 8)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	14.909722				
Replicate	5	7.701389	1.540278	6.323	0.0006	
Treatment	5	1.118056	0.223611	0.918	0.4856	
Error	25	6.090278	0.243611			
Randomized Complete Block (RCB) AOV For Zeama Hgt4 In Apr-26-19 373 DA-A 1 (Data Column 9)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	16.388889				
Replicate	5	6.888889	1.377778	3.962	0.0088	
Treatment	5	0.805556	0.161111	0.463	0.7998	
Error	25	8.694444	0.347778			
Randomized Complete Block (RCB) AOV For Zeama Hgt5 In Apr-26-19 373 DA-A 1 (Data Column 10)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	18.576389				
Replicate	5	6.618056	1.323611	3.815	0.0105	
Treatment	5	3.284722	0.656944	1.894	0.1314	
Error	25	8.673611	0.346944			
Randomized Complete Block (RCB) AOV For Zeama HGT-AVG In Apr-26-19 373 DA-A T1 1 (Data Column 11)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	9.475556				
Replicate	5	5.848889	1.169778	8.474	0.0001	
Treatment	5	0.175556	0.035111	0.254	0.9336	
Error	25	3.451111	0.138044			

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FIELD CORN TOLERANCE TO BRAKE OR VALOR APPLIED IN 2018						
Trial ID: CN-01-19		Study Dir.: KYLE BRISCOE				
Location: PONDER FARM		Investigator: Eric P. Prostko				
Randomized Complete Block (RCB) AOV For Zeama Stunt Percent May-2-19 379 DA-A (Data Column 12)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	390.972222				
Replicate	5	86.805556	17.361111	1.791	0.1513	
Treatment	5	61.805556	12.361111	1.275	0.3057	
Error	25	242.361111	9.694444			
Randomized Complete Block (RCB) AOV For Zeama Chlorosi Percent May-2-19 379 DA-A (Data Column 13)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	280.555556				
Replicate	5	47.222222	9.444444	1.328	0.2847	
Treatment	5	55.555556	11.111111	1.563	0.2070	
Error	25	177.777778	7.111111			
Randomized Complete Block (RCB) AOV For Zeama Stunting Percent May-14-19 391 DA-A (Data Column 14)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	430.555556				
Replicate	5	113.888889	22.777778	2.113	0.0971	
Treatment	5	47.222222	9.444444	0.876	0.5111	
Error	25	269.444444	10.777778			
Randomized Complete Block (RCB) AOV For Zeama Height1 Inches Jul-16-19 454 DA-A (Data Column 15)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	2357.000000				
Replicate	5	1265.000000	253.000000	6.674	0.0004	
Treatment	5	144.333333	28.866667	0.762	0.5860	
Error	25	947.666667	37.906667			
Randomized Complete Block (RCB) AOV For Zeama Height2 Inches Jul-16-19 454 DA-A (Data Column 16)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	1444.222222				
Replicate	5	776.888889	155.377778	6.609	0.0005	
Treatment	5	79.555556	15.911111	0.677	0.6450	
Error	25	587.777778	23.511111			
Randomized Complete Block (RCB) AOV For Zeama Height3 Inches Jul-16-19 454 DA-A (Data Column 17)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	1867.555556				
Replicate	5	1427.888889	285.577778	17.888	0.0001	
Treatment	5	40.555556	8.111111	0.508	0.7674	
Error	25	399.111111	15.964444			
Randomized Complete Block (RCB) AOV For Zeama Height4 Inches Jul-16-19 454 DA-A (Data Column 18)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	2103.638889				
Replicate	5	1476.138889	295.227778	14.067	0.0001	
Treatment	5	102.805556	20.561111	0.980	0.4495	
Error	25	524.694444	20.987778			
Randomized Complete Block (RCB) AOV For Zeama Height5 Inches Jul-16-19 454 DA-A (Data Column 19)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	2292.972222				
Replicate	5	1666.805556	333.361111	15.170	0.0001	
Treatment	5	76.805556	15.361111	0.699	0.6292	
Error	25	549.361111	21.974444			
Randomized Complete Block (RCB) AOV For Zeama Plant Height Inches Jul-16-19 454 DA-A T2 1 (Data Column 20)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	35	1615.408889				
Replicate	5	1258.315556	251.663111	19.252	0.0001	
Treatment	5	30.288889	6.057778	0.463	0.7996	
Error	25	326.804444	13.072178			
Randomized Complete Block (RCB) AOV For ---- ZEAMA PLOT YIELD LBS Aug-29-19 498 DA-A (Data Column 21)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	23	371.534722				
Replicate	5	130.583333	26.116667	2.041	0.1392	
Treatment	5	74.618056	14.923611	1.166	0.3765	
Error	13	166.333333	12.794872			
Randomized Complete Block (RCB) AOV For ---- ZEAMA PLOT YIELD BU Aug-29-19 498 DA-A TY3 0 (Data Column 22)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	
Total	23	9404.140122				
Replicate	5	3305.273749	661.054750	2.041	0.1392	
Treatment	5	1888.702746	377.740549	1.166	0.3765	
Error	13	4210.163627	323.858741			

Weed Code
 AMAPA = AMARANTH, PALMER / AMARANTHUS PALMERI S.WATS.

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FIELD CORN TOLERANCE TO BRAKE OR VALOR
APPLIED IN 2018

Trial ID: CN-01-19 Study Dir.: KYLE BRISCOE
Location: PONDER FARM Investigator: Eric P. Prostko

Part Rated

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

Rating Data Type

Height = HEIGHT

PRM Data Type

T1 = (([6]+[7]+[8]+[9]+[10])/5)

T2 = ((([15]+[16]+[17]+[18]+[19])/5)

TY3 = 5.031064*[21]

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FIELD CORN TOLERANCE TO BRAKE OR VALOR APPLIED IN 2018 Trial ID: CN-01-19 Study Dir.: KYLE BRISCOE Location: PONDER FARM Investigator: Eric P. Prostko															
Weed Code	AMAPA	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama			
Crop Code	-----														
Part Rated															
Rating Data Type	CONTROL	Injury	Stand	Injury	Stand	Hgt1	Hgt2								
Rating Unit	PERCENT	Percent	#/3 ft	Percent	#/3 ft	In	In								
Rating Date	May-9-18	Apr-10-19	Apr-10-19	Apr-16-19	Apr-24-19	Apr-26-19	Apr-26-19								
Trt-Eval Interval	21 DA-A	357 DA-A	357 DA-A	363 DA-A	371 DA-A	373 DA-A	373 DA-A								
PRM Data Type															
# Subsamples, Dec.								- 1			- 1				
Trt	Treatment	Form	Form	Rate	Grow	Appl									
No.	Name	Conc	Type	Rate	Unit	Stg	Code	Plot	1	2	3	4	5	6	7
1	BRAKE	1.2	SL	16.0	oz/a	PRE	A	101	100.0	0.0	8.0	0.0	7.0	6.0	6.5
								202	95.0	10.0	7.0	0.0	7.0	7.5	7.5
								306	100.0	0.0	6.0	0.0	7.0	8.0	9.0
								402	100.0	0.0	7.0	0.0	6.0	8.0	8.5
								504	100.0	0.0	7.0	0.0	7.0	9.0	9.5
								606	100.0	0.0	6.0	0.0	7.0	7.0	8.0
								Mean =	99.2	1.7	6.8	0.0	6.8	7.6	8.2
2	BRAKE	1.2	SL	21.0	oz/a	PRE	A	102	100.0	0.0	7.0	5.0	8.0	6.5	7.0
								203	100.0	0.0	7.0	5.0	7.0	8.5	8.5
								304	100.0	10.0	6.0	5.0	8.0	8.5	8.5
								406	100.0	0.0	7.0	5.0	6.0	9.0	8.5
								501	100.0	0.0	8.0	0.0	8.0	7.0	8.0
								603	100.0	0.0	6.0	0.0	8.0	8.0	8.0
								Mean =	100.0	1.7	6.8	3.3	7.5	7.9	8.1
3	BRAKE	1.2	SL	32.0	oz/a	PRE	A	103	100.0	0.0	6.0	0.0	8.0	8.0	8.0
								206	100.0	0.0	7.0	0.0	7.0	8.0	9.0
								302	100.0	0.0	7.0	5.0	7.0	8.0	7.0
								401	100.0	0.0	6.0	0.0	7.0	7.0	8.0
								503	100.0	0.0	7.0	0.0	7.0	9.0	8.5
								605	100.0	0.0	7.0	0.0	7.0	8.0	8.0
								Mean =	100.0	0.0	6.7	0.8	7.2	8.0	8.1
4	BRAKE	1.2	SL	42.0	oz/a	PRE	A	104	100.0	0.0	5.0	0.0	7.0	7.0	8.0
								201	100.0	0.0	6.0	0.0	7.0	7.0	8.0
								305	100.0	10.0	7.0	0.0	7.0	8.0	7.5
								404	100.0	0.0	7.0	0.0	7.0	8.5	8.0
								506	100.0	0.0	7.0	0.0	8.0	8.0	8.0
								602	100.0	0.0	6.0	0.0	7.0	7.5	7.5
								Mean =	100.0	1.7	6.3	0.0	7.2	7.7	7.8
5	BRAKE	1.2	SL	64.0	oz/a	PRE	A	105	100.0	0.0	7.0	0.0	7.0	7.0	7.0
								204	100.0	0.0	7.0	0.0	7.0	8.0	7.5
								303	100.0	0.0	7.0	0.0	8.0	8.5	8.5
								405	100.0	0.0	7.0	0.0	7.0	9.0	7.5
								502	100.0	0.0	7.0	0.0	6.0	7.5	8.0
								604	100.0	0.0	8.0	0.0	8.0	7.0	8.5
								Mean =	100.0	0.0	7.2	0.0	7.2	7.8	7.8
6	VALOR EZ	4	L	3.0	oz/a	PRE	A	106	100.0	0.0	7.0	0.0	6.0	7.0	7.0
								205	100.0	0.0	8.0	0.0	8.0	8.0	8.0
								301	100.0	0.0	8.0	0.0	7.0	8.0	7.0
								403	100.0	0.0	7.0	0.0	8.0	8.5	8.0
								505	100.0	0.0	7.0	0.0	7.0	8.5	8.0
								601	100.0	0.0	7.0	0.0	7.0	8.0	8.0
								Mean =	100.0	0.0	7.3	0.0	7.2	8.0	7.7

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FIELD CORN TOLERANCE TO BRAKE OR VALOR APPLIED IN 2018 Trial ID: CN-01-19 Study Dir.: KYLE BRISCOE Location: PONDER FARM Investigator: Eric P. Prostko															
Weed Code			Zeama		Zeama		Zeama		Zeama		Zeama				
Crop Code			Hgt3	Hgt4	Hgt5	HGT-AVG	Stunt	Chlorosi	Stunting						
Part Rated			In	In	In	In	Percent	Percent	Percent						
Rating Data Type			Apr-26-19	Apr-26-19	Apr-26-19	Apr-26-19	May-2-19	May-2-19	May-14-19						
Rating Unit			373 DA-A	373 DA-A	373 DA-A	373 DA-A	379 DA-A	379 DA-A	391 DA-A						
Rating Date															
Trt-Eval Interval															
PRM Data Type															
# Subsamples, Dec.			- 1	- 1	- 1	- 1									
Trt	Treatment	Form	Form	Rate	Grow	Appl									
No.	Name	Conc	Type	Rate	Unit	Stg	Code	Plot	8	9	10	11	12	13	14
1	BRAKE	1.2	SL	16.0	oz/a	PRE	A	101	7.0	7.0	6.5	6.6	10.0	10.0	0.0
								202	8.0	8.0	8.0	7.8	0.0	0.0	0.0
								306	8.0	8.0	7.5	8.1	0.0	0.0	0.0
								402	9.0	8.5	8.5	8.5	0.0	0.0	0.0
								504	8.5	8.5	9.5	9.0	0.0	0.0	0.0
								606	8.0	8.5	8.5	8.0	5.0	5.0	0.0
								Mean =	8.1	8.1	8.1	8.0	2.5	2.5	0.0
2	BRAKE	1.2	SL	21.0	oz/a	PRE	A	102	7.0	7.0	7.0	6.9	10.0	10.0	0.0
								203	7.0	8.0	8.5	8.1	0.0	0.0	10.0
								304	8.0	7.5	8.0	8.1	0.0	0.0	0.0
								406	9.0	9.0	9.0	8.9	0.0	5.0	0.0
								501	8.5	7.5	8.5	7.9	10.0	5.0	0.0
								603	8.5	9.0	7.5	8.2	0.0	0.0	10.0
								Mean =	8.0	8.0	8.1	8.0	3.3	3.3	3.3
3	BRAKE	1.2	SL	32.0	oz/a	PRE	A	103	8.5	8.5	7.0	8.0	0.0	0.0	0.0
								206	8.5	8.0	9.0	8.5	0.0	5.0	0.0
								302	8.5	8.0	7.5	7.8	0.0	0.0	0.0
								401	9.0	9.0	8.0	8.2	0.0	0.0	0.0
								503	8.0	8.5	7.5	8.3	0.0	0.0	0.0
								605	8.0	8.0	8.0	8.0	5.0	5.0	10.0
								Mean =	8.4	8.3	7.8	8.1	0.8	1.7	1.7
4	BRAKE	1.2	SL	42.0	oz/a	PRE	A	104	7.0	7.5	8.0	7.5	0.0	0.0	0.0
								201	8.0	7.5	8.0	7.7	0.0	0.0	0.0
								305	8.5	8.0	8.5	8.1	0.0	0.0	0.0
								404	8.0	8.0	8.5	8.2	0.0	0.0	10.0
								506	9.5	9.5	9.0	8.8	0.0	0.0	0.0
								602	8.0	8.0	9.0	8.0	0.0	0.0	0.0
								Mean =	8.2	8.1	8.5	8.1	0.0	0.0	1.7
5	BRAKE	1.2	SL	64.0	oz/a	PRE	A	105	7.0	6.0	7.0	6.8	0.0	0.0	0.0
								204	8.5	8.0	8.0	8.0	0.0	0.0	0.0
								303	8.0	8.0	8.5	8.3	0.0	0.0	0.0
								405	8.5	9.0	9.0	8.6	0.0	0.0	0.0
								502	8.0	8.0	9.0	8.1	10.0	0.0	0.0
								604	7.5	8.0	8.5	7.9	5.0	5.0	10.0
								Mean =	7.9	7.8	8.3	8.0	2.5	0.8	1.7
6	VALOR EZ	4	L	3.0	oz/a	PRE	A	106	7.5	8.0	8.0	7.5	0.0	0.0	0.0
								205	7.5	8.0	8.0	7.9	0.0	0.0	0.0
								301	8.5	7.0	7.0	7.5	0.0	0.0	0.0
								403	9.0	8.0	7.0	8.1	0.0	0.0	0.0
								505	9.0	9.0	8.0	8.5	0.0	0.0	0.0
								601	8.5	8.0	7.5	8.0	0.0	0.0	0.0
								Mean =	8.3	8.0	7.6	7.9	0.0	0.0	0.0

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FIELD CORN TOLERANCE TO BRAKE OR VALOR APPLIED IN 2018 Trial ID: CN-01-19 Study Dir.: KYLE BRISCOE Location: PONDER FARM Investigator: Eric P. Prostko													
Weed Code	Zeama	Zeama	Zeama	Zeama	Zeama	Zeama	ZEAMA	----					
Crop Code							Plant -	PLOT -					
Part Rated							Height	YIELD					
Rating Data Type	Height1	Height2	Height3	Height4	Height5		Inches	LBS					
Rating Unit	Inches	Inches	Inches	Inches	Inches								
Rating Date	Jul-16-19	Jul-16-19	Jul-16-19	Jul-16-19	Jul-16-19								
Trt-Eval Interval	454 DA-A	454 DA-A	454 DA-A	454 DA-A	454 DA-A								
PRM Data Type													
# Subsamples, Dec.							T2	Aug-29-19					
							- 1	498 DA-A					
Trt Treatment Form Form	Rate	Grow	Appl										
No. Name	Conc	Type	Rate Unit	Stg	Code	Plot	15	16	17	18	19	20	21
1 BRAKE	1.2 SL	16.0 oz/a	PRE	A		101	84.0	88.0	85.0	86.0	81.0	84.8	.
						202	109.0	104.0	110.0	111.0	102.0	107.2	52.0
						306	108.0	109.0	105.0	99.0	103.0	104.8	53.0
						402	102.0	109.0	105.0	103.0	105.0	104.8	53.0
						504	106.0	107.0	98.0	104.0	105.0	104.0	47.0
						606	114.0	111.0	118.0	112.0	112.0	113.4	.
						Mean =	103.8	104.7	103.5	102.5	101.3	103.2	51.3
2 BRAKE	1.2 SL	21.0 oz/a	PRE	A		102	99.0	94.0	92.0	93.0	95.0	94.6	.
						203	104.0	105.0	110.0	107.0	118.0	108.8	48.0
						304	100.0	94.0	103.0	93.0	99.0	97.8	46.0
						406	103.0	104.0	107.0	102.0	106.0	104.4	.
						501	99.0	96.0	96.0	95.0	90.0	95.2	.
						603	109.0	111.0	113.0	112.0	114.0	111.8	53.0
						Mean =	102.3	100.7	103.5	100.3	103.7	102.1	49.0
3 BRAKE	1.2 SL	32.0 oz/a	PRE	A		103	83.0	97.0	94.0	93.0	94.0	92.2	42.0
						206	108.0	109.0	104.0	112.0	105.0	107.6	.
						302	96.0	107.0	104.0	98.0	99.0	100.8	.
						401	98.0	104.0	106.0	99.0	105.0	102.4	51.0
						503	102.0	96.0	105.0	102.0	101.0	101.2	50.0
						605	109.0	109.0	111.0	106.0	112.0	109.4	.
						Mean =	99.3	103.7	104.0	101.7	102.7	102.3	47.7
4 BRAKE	1.2 SL	42.0 oz/a	PRE	A		104	89.0	99.0	98.0	92.0	89.0	93.4	38.0
						201	95.0	102.0	102.0	101.0	110.0	102.0	50.0
						305	100.0	101.0	103.0	100.0	96.0	100.0	51.0
						404	104.0	102.0	106.0	113.0	105.0	106.0	47.0
						506	107.0	109.0	113.0	109.0	106.0	108.8	50.0
						602	108.0	113.0	112.0	101.0	105.0	107.8	52.0
						Mean =	100.5	104.3	105.7	102.7	101.8	103.0	48.0
5 BRAKE	1.2 SL	64.0 oz/a	PRE	A		105	84.0	95.0	87.0	91.0	84.0	88.2	42.0
						204	108.0	112.0	109.0	109.0	105.0	108.6	48.0
						303	102.0	96.0	102.0	102.0	99.0	100.2	49.0
						405	114.0	107.0	108.0	111.0	107.0	109.4	.
						502	104.0	103.0	99.0	106.0	102.0	102.8	.
						604	113.0	111.0	111.0	115.0	107.0	111.4	52.0
						Mean =	104.2	104.0	102.7	105.7	100.7	103.4	47.8
6 VALOR EZ	4 L	3.0 oz/a	PRE	A		106	109.0	107.0	96.0	91.0	95.0	99.6	48.0
						205	112.0	110.0	108.0	110.0	110.0	110.0	.
						301	93.0	95.0	103.0	96.0	102.0	97.8	.
						403	100.0	106.0	108.0	114.0	105.0	106.6	52.0
						505	105.0	103.0	106.0	107.0	106.0	105.4	52.0
						601	110.0	111.0	111.0	106.0	112.0	110.0	51.0
						Mean =	104.8	105.3	105.3	104.0	105.0	104.9	50.8

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FIELD CORN TOLERANCE TO BRAKE OR VALOR APPLIED IN 2018 Trial ID: CN-01-19 Study Dir.: KYLE BRISCOE 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.	---- ZEAMA PLOT - YIELD BU Aug-29-19 498 DA-A TY3 - 0					
Trt	Treatment	Form	Form	Rate	Grow	Appl
No.	Name	Conc	Type	Rate	Unit	Stg Code Plot
1	BRAKE	1.2	SL	16.0	oz/a	PRE A 101
						202 262
						306 267
						402 267
						504 236
						606 .
						Mean = 258
2	BRAKE	1.2	SL	21.0	oz/a	PRE A 102
						203 241
						304 231
						406 .
						501 .
						603 267
						Mean = 247
3	BRAKE	1.2	SL	32.0	oz/a	PRE A 103
						206 .
						302 .
						401 257
						503 252
						605 .
						Mean = 240
4	BRAKE	1.2	SL	42.0	oz/a	PRE A 104
						201 252
						305 257
						404 236
						506 252
						602 262
						Mean = 241
5	BRAKE	1.2	SL	64.0	oz/a	PRE A 105
						204 241
						303 247
						405 .
						502 .
						604 262
						Mean = 240
6	VALOR EZ	4	L	3.0	oz/a	PRE A 106
						205 .
						301 .
						403 262
						505 262
						601 257
						Mean = 255

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FIELD CORN TOLERANCE TO BRAKE OR VALOR
APPLIED IN 2018

Trial ID: CN-01-19 Study Dir.: KYLE BRISCOE
Location: PONDER FARM Investigator: Eric P. Prostko

Weed Code

AMAPA = AMARANTH, PALMER / AMARANTHUS PALMERI S.WATS.

Part Rated

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

Rating Data Type

Height = HEIGHT

PRM Data Type

T1 = (([6]+[7]+[8]+[9]+[10])/5)

T2 = ((([15]+[16]+[17]+[18]+[19])/5)

TY3 = 5.031064*[21]