

University of Georgia

GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX

Trial ID: GS-01-19 Study Dir.:
 Location: PONDER Investigator: Eric P. Prostko

Reps: 4 Plots: 6 by 25 feet
 Appl. Amount: 15 GAL/AC Mix Size: 1.5 L (total for 4 plots; minimum=0.782 L)

Trt No.	Treatment Name	Form Conc Type	Form Rate	Grow Unit	Appl Stg	Code	Amt Product to Measure	Diluent	Rep 1	2	3	4
1	NTC							-	101	202	307	408
2	SINBAR	80 WG	1.0 oz/a	PRE	A		0.7489 g/mx	1499.3 mL	102	210	305	402
3	SINBAR	80 WG	2.0 oz/a	PRE	A		1.498 g/mx	1498.5 mL	103	204	303	406
4	SINBAR	80 WG	3.0 oz/a	PRE	A		2.247 g/mx	1497.8 mL	104	206	302	404
5	SINBAR	80 WG	4.0 oz/a	PRE	A		2.996 g/mx	1497.0 mL	105	203	306	411
6	REFLEX	2 SL	2.0 oz/a	PRE	A		1.562 mL/mx	1498.4 mL	106	205	301	403
7	REFLEX	2 SL	4.0 oz/a	PRE	A		3.125 mL/mx	1496.9 mL	107	208	311	407
8	REFLEX	2 SL	8.0 oz/a	PRE	A		6.249 mL/mx	1493.8 mL	108	209	308	410
9	REFLEX	2 SL	12.0 oz/a	PRE	A		9.374 mL/mx	1490.6 mL	109	207	309	401
10	REFLEX	2 SL	16.0 oz/a	PRE	A		12.5 mL/mx	1487.5 mL	110	211	310	405
11	NTC							-	111	201	304	409

Sort Order: Treatment

Trial Comments

MAINTAINED WEED-FREE
 MECHANICAL CULTIVATION (AUGUST 1)

ATRAZINE 4L (2 QT/A) + DUAL MAGNUM (16 OZ/A) OVER ENTIRE TEST AREA INCLUDING CHECK (APRIL 10)
 GRAMOXONE 2SL @ 48 OZ/A (APRIL 23)
 GRAMOXONE 2SL @ 3 PT/A + DUAL MAGNUM + 16 OZ/A + NIS @ 0.25% V/V (MAY 16)
 LIBERTY 2.34SL @ 32 OZ/A (MAY 29)
 LIBERTY 2.34SL @ 32 OZ/A + ROUNDUP PMAX 5.5 SL @ 32 OZ/A (JUNE 24)
 GRAMOXONE 2SL @ 3 PT/A + DUAL MAGNUM + 16 OZ/A + NIS @ 0.25% V/V (JULY 9) - AFTER SORGHUM PLANTING
 PROWL H₂O @ 32 OZ/A + ATRAZINE @ 48 OZ/A + NIS @ 0.25% V/V (JULY 22)

125 LBS/A NITROGEN SIDEDRESS (JULY 23)

PLANTED SORGHUM 90 DAYS AFTER APPLICATION (JULY 9)

0.6" rainfall - July 14
 0.5" irrigation - July 15
 0.25" RAINFALL - JULY 31
 0.25" IRRIGATION - AUGUST 2

HARVEST DATE: OCTOBER 28
 HARVEST MOISTURE: 17%
 YIELDS ADJUSTED TO 13% MOISTURE.

SUMMARY:

- 1) GENERALLY, SINBAR CAUSED ONLY SLIGHT SORGHUM INJURY IN THE FORM OF STUNTING (<7%).
- 2) ON JULY 16 (7 DAP), REFLEX @ 8, 12, AND 16 OZ/A CAUSED SIGNIFICANT LEAF NECROSIS.
- 3) ON JULY 23 (14 DAP), REFLEX @ 8, 12, AND 16 OZ/A CAUSED SIGNIFICANT ABOVE-GROUND BIOMASS REDUCTIONS.
- 4) ON AUGUST 1 (23 DAP), ONLY REFLEX @ 16 OZ/A REDUCED SORGHUM PLANT DENSITY.
- 5) ON AUGUST 1 (23 DAP), REFLEX @ 8, 12, OR 16 OZ/A CAUSED SIGNIFICANT SORGHUM HEIGHT REDUCTIONS.
- 6) GRAIN SORGHUM YIELDS WERE SIGNIFICANTLY REDUCED BY 12 AND 16 OZ/A OF REFLEX (14.7% AND 19.9% YIELD LOSSES, RESPECTIVELY).

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GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX

Trial ID: GS-01-19 Study Dir.:
 Location: PONDER Investigator: Eric P. Prostko

GENERAL TRIAL INFORMATION

Study Director: _____ **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: SORBI SORGHUM **Variety:** DKS37-07 **Planting Date:** Jul-9-19
Planting Method: MONOSEM **Rate:** 87000 SEED/A **Depth:** 1.5 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:** 4

Site Type: _____ **Study Design:** RACOBL
Tillage Type: CONVENTIONAL
Trial Initiation Comments: CONCEP II AND PONCHO TREATED SORGHUM SEED

Previous: Crops Pesticides Year
 1. PEANUT 2018 _____

MAINTENANCE

Field Prep./Maintenance: _____

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

SOIL DESCRIPTION

Texture: SAND **% OM:** 0.91 **% Sand:** 94 **% Silt:** 0 **% Clay:** 6
pH: 6.0 **CEC:** 3.6 **Soil Name:** TIFTON **Fertility Level:** GOOD

MOISTURE CONDITIONS

On:	Date	Time	Amount	Unit	Type	Interval	Unit
1.	Apr-9-19	_____	0.16	IN	RAIN	_____	_____
2.	Apr-11-19	_____	0.50	IN	SPRINKLER - LATERAL MOVE	_____	_____
3.	Apr-25-19	_____	0.5	IN	SPRINKLER - LATERAL MOVE	_____	_____
4.	Apr-25-19	_____	0.05	IN	RAIN	_____	_____
5.	Apr-26-19	_____	0.03	IN	RAIN	_____	_____
6.	Apr-29-19	_____	0.5	IN	SPRINKLER - LATERAL MOVE	_____	_____
7.	May-6-19	_____	0.75	IN	SPRINKLER - LATERAL MOVE	_____	_____
8.	May-10-19	_____	0.11	IN	RAIN	_____	_____
9.	May-11-19	_____	0.65	IN	RAIN	_____	_____
10.	May-12-19	_____	0.27	IN	RAIN	_____	_____
11.	Apr-14-19	_____	0.83	IN	RAIN	_____	_____
12.	Apr-19-19	_____	1.43	IN	RAIN	_____	_____

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

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GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX

Trial ID: GS-01-19 Study Dir.:
 Location: PONDER Investigator: Eric P. Prostko

		APPLICATION DESCRIPTION					
		A	B	C	D	E	F
Application Date:	Apr-10-19	_____	_____	_____	_____	_____	_____
Time of Day:	7:55 am	_____	_____	_____	_____	_____	_____
Application Method:	BROADCAST	_____	_____	_____	_____	_____	_____
Application Timing:	PRE	_____	_____	_____	_____	_____	_____
Applic. Placement:	SOIL	_____	_____	_____	_____	_____	_____
Air Temp., Unit:	62 F	_____	_____	_____	_____	_____	_____
% Relative Humidity:	96	_____	_____	_____	_____	_____	_____
Wind Velocity, Unit:	2 MPH	_____	_____	_____	_____	_____	_____
Dew Presence (Y/N):	N	_____	_____	_____	_____	_____	_____
Water Hardness:	--	_____	_____	_____	_____	_____	_____
Soil Temp., Unit:	66 F	_____	_____	_____	_____	_____	_____
Soil Moisture:	OPTIMUM	_____	_____	_____	_____	_____	_____
% Cloud Cover:	5	_____	_____	_____	_____	_____	_____

		CROP STAGE AT EACH APPLICATION					
		A	B	C	D	E	F
Crop 1 Stage:	SORBI	_____	_____	_____	_____	_____	_____
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:	28	_____	_____	_____	_____	_____	_____
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: GS-01-19		Study Dir.: Eric P. Prostko					
Location: PONDER		Investigator: Eric P. Prostko					
Weed Code	-----	-----	-----	-----	Sorbi	Sorbi	Sorbi
Crop Code	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi
Part Rated	Plant -	Leaf -	Plant -	Fresh -	Stand	Height1	Height2
Rating Data Type	Stand	Necrosis	Stand	Biomass	Stand	Inches	Inches
Rating Unit	#/3 ft	Percent	#/3 ft	g/3 ft	#/3 ft		
Rating Date	Jul-16-19	Jul-16-19	Jul-23-19	Jul-23-19	Aug-1-19	Aug-1-19	Aug-1-19
Trt-Eval Interval	97 DA-A	97 DA-A	104 DA-A	104 DA-A	113 DA-A	113 DA-A	113 DA-A
PRM Data Type							
# Subsamples, Dec.							
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Appl Stg	Code
1	2	3	4	5	6	7	
1	NTC						
2	SINBAR	80 WG	1.0 oz/a	PRE	A		
3	SINBAR	80 WG	2.0 oz/a	PRE	A		
4	SINBAR	80 WG	3.0 oz/a	PRE	A		
5	SINBAR	80 WG	4.0 oz/a	PRE	A		
6	REFLEX	2 SL	2.0 oz/a	PRE	A		
7	REFLEX	2 SL	4.0 oz/a	PRE	A		
8	REFLEX	2 SL	8.0 oz/a	PRE	A		
9	REFLEX	2 SL	12.0 oz/a	PRE	A		
10	REFLEX	2 SL	16.0 oz/a	PRE	A		
11	NTC						
LSD	P=.10	1.80	8.71	2.05	12.83	2.06	1.71
Standard Deviation		1.50	7.26	1.71	10.69	1.72	1.43
CV		8.19	73.42	9.25	28.71	9.51	15.59
Grand Mean		18.34	9.89	18.45	37.23	18.07	9.16
Bartlett's X2		15.742	4.22	19.655	5.849	18.247	9.121
P(Bartlett's X2)		0.107	0.239	0.02*	0.828	0.051	0.521

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=14,15

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GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX															
Trial ID: GS-01-19		Study Dir.:													
Location: PONDER		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.	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	SORBI PLOT - YIELD LBS/PLOT
									Height3 Inches Aug-1-19 113 DA-A	Height4 Inches Aug-1-19 113 DA-A	Height5 Inches Aug-1-19 113 DA-A	Hgt-AVG Inches Aug-1-19 113 DA-A	Injury Percent Aug-8-19 120 DA-A	Injury Percent Aug-20-19 132 DA-A	201 DA-A
												T1 - 1			- 1
Trt No.	Treatment Name	Form	Form	Rate	Grow	App			8	9	10	11	12	13	14
		Conc	Type	Rate	Unit	Stg	Code								
1	NTC								10.0 a	10.0 abc	10.3 ab	10.0 ab	0.0 d	0.0 d	15.0 a
2	SINBAR	80	WG	1.0	oz/a	PRE	A		10.3 a	11.0 ab	10.5 ab	10.5 ab	6.3 cd	1.3 d	15.3 a
3	SINBAR	80	WG	2.0	oz/a	PRE	A		10.8 a	11.8 a	11.3 a	11.0 a	0.0 d	0.0 d	15.3 a
4	SINBAR	80	WG	3.0	oz/a	PRE	A		10.0 a	10.3 abc	10.3 ab	10.2 ab	5.0 cd	0.0 d	14.6 a
5	SINBAR	80	WG	4.0	oz/a	PRE	A		10.5 a	11.3 ab	11.3 a	10.8 a	2.5 d	0.0 d	14.8 a
6	REFLEX	2	SL	2.0	oz/a	PRE	A		10.5 a	10.3 abc	11.0 ab	10.5 ab	5.0 cd	2.5 cd	14.2 ab
7	REFLEX	2	SL	4.0	oz/a	PRE	A		9.5 ab	9.3 bcd	9.3 bcd	9.0 bc	18.8 bc	2.5 cd	14.1 ab
8	REFLEX	2	SL	8.0	oz/a	PRE	A		7.8 bc	7.5 d	8.3 cd	7.8 c	25.0 b	8.8 c	15.3 a
9	REFLEX	2	SL	12.0	oz/a	PRE	A		7.5 c	8.8 cd	7.8 d	7.8 c	40.0 a	17.5 b	12.6 bc
10	REFLEX	2	SL	16.0	oz/a	PRE	A		6.0 c	4.5 e	5.3 e	5.3 d	50.0 a	25.0 a	11.8 c
11	NTC								10.8 a	10.0 abc	9.8 abc	10.3 ab	0.0 d	0.0 d	14.5 a
LSD P=.10									1.94	2.20	1.92	1.72	14.51	7.38	1.81
Standard Deviation									1.61	1.83	1.60	1.43	12.09	6.15	1.50
CV									17.14	19.28	16.76	15.31	87.19	117.56	10.52
Grand Mean									9.41	9.50	9.52	9.35	13.86	5.23	14.29
Bartlett's X2									9.562	8.77	6.298	11.27	9.409	13.13	9.182
P(Bartlett's X2)									0.48	0.554	0.79	0.337	0.225	0.022*	0.515

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=14,15

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GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX						
Trial ID:	GS-01-19	Study Dir.:				
Location:	PONDER	Investigator:	Eric P. Prostko			
Weed Code	-----					
Crop Code	SORBI					
Part Rated	PLOT -					
Rating Data Type	YIELD					
Rating Unit	BU/A					
Rating Date	Oct-28-19					
Trt-Eval Interval	201 DA-A					
PRM Data Type	TY2					
# Subsamples, Dec.	- 1					
Trt No.	Treatment Name	Form Type	Form Rate	Grow Unit	Appl Stg	Code
1	NTC					15
2	SINBAR	80 WG	1.0 oz/a	PRE	A	74.0 a
3	SINBAR	80 WG	2.0 oz/a	PRE	A	75.7 a
4	SINBAR	80 WG	3.0 oz/a	PRE	A	75.7 a
5	SINBAR	80 WG	4.0 oz/a	PRE	A	72.0 a
6	REFLEX	2 SL	2.0 oz/a	PRE	A	73.2 a
7	REFLEX	2 SL	4.0 oz/a	PRE	A	70.4 ab
8	REFLEX	2 SL	8.0 oz/a	PRE	A	69.5 ab
9	REFLEX	2 SL	12.0 oz/a	PRE	A	75.4 a
10	REFLEX	2 SL	16.0 oz/a	PRE	A	62.1 bc
11	NTC					58.3 c
11	NTC					71.5 a
LSD P=.10					8.94	
Standard Deviation					7.44	
CV					10.52	
Grand Mean					70.70	
Bartlett's X2					9.182	
P(Bartlett's X2)					0.515	

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=14,15

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Trial ID:	GS-01-19	Study Dir.:			
Location:	PONDER	Investigator: Eric P. Prostko			
Randomized Complete Block (RCB) AOV For ----- Sorbi Plant Stand #/3 ft Jul-16-19 97 DA-A (Data Column 1)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	87.886364			
Replicate	3	2.613636	0.871212	0.386	0.7636
Treatment	10	17.636364	1.763636	0.782	0.6452
Error	30	67.636364	2.254545		
Randomized Complete Block (RCB) AOV For ----- Sorbi Leaf Necrosis Percent Jul-16-19 97 DA-A (Data Column 2)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	12624.431818			
Replicate	3	238.068182	79.356061	1.506	0.2330
Treatment	10	10805.681818	1080.568182	20.508	0.0001
Error	30	1580.681818	52.689394		
Randomized Complete Block (RCB) AOV For ----- Sorbi Plant Stand #/3 ft Jul-23-19 104 DA-A (Data Column 3)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	112.909091			
Replicate	3	10.545455	3.515152	1.206	0.3245
Treatment	10	14.909091	1.490909	0.511	0.8684
Error	30	87.454545	2.915152		
Randomized Complete Block (RCB) AOV For ----- Sorbi Fresh Biomass g/3 ft Jul-23-19 104 DA-A (Data Column 4)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	10115.727273			
Replicate	3	792.454545	264.151515	2.312	0.0962
Treatment	10	5895.227273	589.522727	5.159	0.0002
Error	30	3428.045455	114.268182		
Randomized Complete Block (RCB) AOV For Sorbi Stand #/3 ft Aug-1-19 113 DA-A (Data Column 5)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	162.795455			
Replicate	3	11.704545	3.901515	1.322	0.2856
Treatment	10	62.545455	6.254545	2.119	0.0548
Error	30	88.545455	2.951515		
Randomized Complete Block (RCB) AOV For Sorbi Height1 Inches Aug-1-19 113 DA-A (Data Column 6)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	225.886364			
Replicate	3	36.613636	12.204545	5.989	0.0025
Treatment	10	128.136364	12.813636	6.288	0.0001
Error	30	61.136364	2.037879		
Randomized Complete Block (RCB) AOV For Sorbi Height2 Inches Aug-1-19 113 DA-A (Data Column 7)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	216.545455			
Replicate	3	23.454545	7.818182	3.972	0.0170
Treatment	10	134.045455	13.404545	6.811	0.0001
Error	30	59.045455	1.968182		
Randomized Complete Block (RCB) AOV For Sorbi Height3 Inches Aug-1-19 113 DA-A (Data Column 8)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	210.636364			
Replicate	3	31.000000	10.333333	3.974	0.0169
Treatment	10	101.636364	10.163636	3.909	0.0018
Error	30	78.000000	2.600000		
Randomized Complete Block (RCB) AOV For Sorbi Height4 Inches Aug-1-19 113 DA-A (Data Column 9)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	297.000000			
Replicate	3	29.909091	9.969697	2.973	0.0474
Treatment	10	166.500000	16.650000	4.966	0.0003
Error	30	100.590909	3.353030		
Randomized Complete Block (RCB) AOV For Sorbi Height5 Inches Aug-1-19 113 DA-A (Data Column 10)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	228.977273			
Replicate	3	19.340909	6.446970	2.531	0.0759
Treatment	10	133.227273	13.322727	5.231	0.0002
Error	30	76.409091	2.546970		

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Randomized Complete Block (RCB) AOV For Sorbi Hgt-AVG Inches Aug-1-19 113 DA-A T1 1 (Data Column 11)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	213.989091			
Replicate	3	26.709091	8.903030	4.339	0.0118
Treatment	10	125.729091	12.572909	6.128	0.0001
Error	30	61.550909	2.051697		
Randomized Complete Block (RCB) AOV For ----- Sorbi Injury Percent Aug-8-19 120 DA-A (Data Column 12)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	17293.181818			
Replicate	3	679.545455	226.515152	1.550	0.2219
Treatment	10	12230.681818	1223.068182	8.372	0.0001
Error	30	4382.954545	146.098485		
Randomized Complete Block (RCB) AOV For ----- Sorbi Injury Percent Aug-20-19 132 DA-A (Data Column 13)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	43	4047.727273			
Replicate	3	29.545455	9.848485	0.261	0.8531
Treatment	10	2885.227273	288.522727	7.640	0.0001
Error	30	1132.954545	37.765152		
Randomized Complete Block (RCB) AOV For ----- SORBI PLOT YIELD LBS/PLOT Oct-28-19 201 DA-A 1 (Data Column 14)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	42	133.476364			
Replicate	3	15.234545	5.078182	2.246	0.1041
Treatment	10	52.661364	5.266136	2.329	0.0370
Error	29	65.580455	2.261395		
Randomized Complete Block (RCB) AOV For ----- SORBI PLOT YIELD BU/A Oct-28-19 201 DA-A TY2 1 (Data Column 15)					
Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	42	3266.925864			
Replicate	3	372.875985	124.291995	2.246	0.1041
Treatment	10	1288.923119	128.892312	2.329	0.0370
Error	29	1605.126760	55.349199		
Part Rated					
Plant = PLANT / PLANT BIOMASS (includes Shrub, Tree, Turf)					
Leaf = LEAF / FOLIAGE					
PRM Data Type					
T1 = ([6]+[7]+[8]+[9]+[10])/5					
TY2 = 4.947291*[14]					

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GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX							
Trial ID:	GS-01-19	Study Dir.:					
Location:	PONDER	Investigator:	Eric P. Prostko				

Weed Code	-----	-----	-----	-----	-----	-----	-----
Crop Code	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi
Part Rated	Plant -	Leaf -	Plant -	Fresh -	Stand	Stand	Stand
Rating Data Type	Stand	Necrosis	Stand	Biomass	#/3 ft	Height1	Height2
Rating Unit	#/3 ft	Percent	#/3 ft	g/3 ft	#/3 ft	Inches	Inches
Rating Date	Jul-16-19	Jul-16-19	Jul-23-19	Jul-23-19	Aug-1-19	Aug-1-19	Aug-1-19
Trt-Eval Interval	97 DA-A	97 DA-A	104 DA-A	104 DA-A	113 DA-A	113 DA-A	113 DA-A
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
							7
1	NTC						101
							202
							307
							408
							Mean =
2	SINBAR	80 WG	1.0 oz/a	PRE	A		102
							210
							305
							402
							Mean =
3	SINBAR	80 WG	2.0 oz/a	PRE	A		103
							204
							303
							406
							Mean =
4	SINBAR	80 WG	3.0 oz/a	PRE	A		104
							206
							302
							404
							Mean =
5	SINBAR	80 WG	4.0 oz/a	PRE	A		105
							203
							306
							411
							Mean =
6	REFLEX	2 SL	2.0 oz/a	PRE	A		106
							205
							301
							403
							Mean =
7	REFLEX	2 SL	4.0 oz/a	PRE	A		107
							208
							311
							407
							Mean =
8	REFLEX	2 SL	8.0 oz/a	PRE	A		108
							209
							308
							410
							Mean =
9	REFLEX	2 SL	12.0 oz/a	PRE	A		109
							207
							309
							401
							Mean =
10	REFLEX	2 SL	16.0 oz/a	PRE	A		110
							211
							310
							405
							Mean =

University of Georgia

GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX

Trial ID: GS-01-19 Study Dir.:
 Location: PONDER Investigator: Eric P. Prostko

Weed Code	-----	-----	-----	-----	-----	-----	-----	
Crop Code	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	
Part Rated	Plant -	Leaf -	Plant -	Fresh -	Stand	Stand	Stand	
Rating Data Type	Stand	Necrosis	Stand	Biomass	#/3 ft	Height1	Height2	
Rating Unit	#/3 ft	Percent	#/3 ft	g/3 ft	#/3 ft	Inches	Inches	
Rating Date	Jul-16-19	Jul-16-19	Jul-23-19	Jul-23-19	Aug-1-19	Aug-1-19	Aug-1-19	
Trt-Eval Interval	97 DA-A	97 DA-A	104 DA-A	104 DA-A	113 DA-A	113 DA-A	113 DA-A	
PRM Data Type								
# Subsamples, Dec.								
Trt Treatment Form Form	Rate	Grow	Appl					
No. Name	Conc	Type	Rate	Unit	Stg	Code	Plot	
11 NTC	111	19.0	0.0	20.0	29.0	20.0	10.0	9.0
	201	17.0	0.0	18.0	48.0	19.0	12.0	11.0
	304	18.0	0.0	20.0	52.0	19.0	12.0	11.0
	409	19.0	0.0	19.0	42.0	18.0	10.0	9.0
	Mean =	18.3	0.0	19.3	42.8	19.0	11.0	10.0

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GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX															
Trial ID: GS-01-19		Study Dir.:													
Location: PONDER		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.							
Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	Sorbi	SORBI								
Height3 Inches Aug-1-19 113 DA-A	Height4 Inches Aug-1-19 113 DA-A	Height5 Inches Aug-1-19 113 DA-A	Hgt-AVG Inches Aug-1-19 113 DA-A	Injury Percent Aug-8-19 120 DA-A	Injury Percent Aug-20-19 132 DA-A	YIELD LBS/PLOT Oct-28-19 201 DA-A									
			T1 - 1					- 1							
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Appl Stg	Code	Plot							
								8							
								9							
								10							
								11							
								12							
								13							
								14							
1	NTC							101	9.0	11.0	11.0	10.0	0.0	0.0	14.0
								202	11.0	10.0	11.0	10.6	0.0	0.0	15.9
								307	9.0	8.0	9.0	9.0	0.0	0.0	13.8
								408	11.0	11.0	10.0	10.2	0.0	0.0	16.1
								Mean =	10.0	10.0	10.3	10.0	0.0	0.0	15.0
2	SINBAR	80 WG		1.0 oz/a	PRE	A		102	10.0	11.0	11.0	10.6	0.0	0.0	12.7
								210	6.0	9.0	8.0	7.4	25.0	5.0	16.5
								305	13.0	12.0	12.0	12.4	0.0	0.0	16.7
								402	12.0	12.0	11.0	11.4	0.0	0.0	15.3
								Mean =	10.3	11.0	10.5	10.5	6.3	1.3	15.3
3	SINBAR	80 WG		2.0 oz/a	PRE	A		103	11.0	12.0	11.0	10.8	0.0	0.0	14.9
								204	11.0	13.0	12.0	11.6	0.0	0.0	13.9
								303	11.0	11.0	11.0	10.8	0.0	0.0	17.1
								406	10.0	11.0	11.0	10.8	0.0	0.0	.
								Mean =	10.8	11.8	11.3	11.0	0.0	0.0	15.3
4	SINBAR	80 WG		3.0 oz/a	PRE	A		104	10.0	10.0	11.0	10.2	0.0	0.0	14.5
								206	8.0	9.0	8.0	8.8	20.0	0.0	13.6
								302	11.0	11.0	10.0	10.6	0.0	0.0	15.1
								404	11.0	11.0	12.0	11.2	0.0	0.0	15.0
								Mean =	10.0	10.3	10.3	10.2	5.0	0.0	14.6
5	SINBAR	80 WG		4.0 oz/a	PRE	A		105	10.0	11.0	11.0	10.0	0.0	0.0	13.7
								203	11.0	12.0	12.0	11.4	0.0	0.0	16.5
								306	9.0	10.0	9.0	9.8	10.0	0.0	11.9
								411	12.0	12.0	13.0	12.0	0.0	0.0	17.1
								Mean =	10.5	11.3	11.3	10.8	2.5	0.0	14.8
6	REFLEX	2 SL		2.0 oz/a	PRE	A		106	8.0	7.0	8.0	7.6	20.0	5.0	13.5
								205	11.0	12.0	12.0	11.6	0.0	5.0	15.2
								301	11.0	11.0	11.0	11.4	0.0	0.0	13.0
								403	12.0	11.0	13.0	11.4	0.0	0.0	15.2
								Mean =	10.5	10.3	11.0	10.5	5.0	2.5	14.2
7	REFLEX	2 SL		4.0 oz/a	PRE	A		107	7.0	6.0	7.0	6.6	30.0	5.0	13.1
								208	8.0	9.0	9.0	8.0	35.0	5.0	14.1
								311	11.0	11.0	10.0	10.0	10.0	0.0	13.9
								407	12.0	11.0	11.0	11.2	0.0	0.0	15.1
								Mean =	9.5	9.3	9.3	9.0	18.8	2.5	14.1
8	REFLEX	2 SL		8.0 oz/a	PRE	A		108	5.0	4.0	6.0	4.6	60.0	20.0	14.1
								209	9.0	8.0	9.0	8.6	10.0	0.0	16.7
								308	8.0	7.0	8.0	7.8	30.0	15.0	12.7
								410	9.0	11.0	10.0	10.0	0.0	0.0	17.5
								Mean =	7.8	7.5	8.3	7.8	25.0	8.8	15.3
9	REFLEX	2 SL		12.0 oz/a	PRE	A		109	5.0	5.0	5.0	5.2	40.0	10.0	13.2
								207	7.0	9.0	7.0	7.4	60.0	20.0	12.0
								309	10.0	10.0	10.0	9.6	20.0	10.0	13.7
								401	8.0	11.0	9.0	8.8	40.0	30.0	11.3
								Mean =	7.5	8.8	7.8	7.8	40.0	17.5	12.6
10	REFLEX	2 SL		16.0 oz/a	PRE	A		110	5.0	5.0	5.0	4.6	50.0	20.0	12.1
								211	8.0	7.0	7.0	7.2	40.0	10.0	12.9
								310	7.0	5.0	6.0	6.0	50.0	30.0	11.5
								405	4.0	1.0	3.0	3.2	60.0	40.0	10.6
								Mean =	6.0	4.5	5.3	5.3	50.0	25.0	11.8

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GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX								
Trial ID:	GS-01-19	Study Dir.:						
Location:	PONDER	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.	Sorbi	Sorbi	Sorbi	Sorbi	----- Sorbi	----- Sorbi	----- SORBI PLOT - YIELD LBS/PLOT	
	Height3 Inches	Height4 Inches	Height5 Inches	Hgt-AVG Inches	Injury Percent	Injury Percent	Oct-28-19 201 DA-A	
	Aug-1-19 113 DA-A	Aug-1-19 113 DA-A	Aug-1-19 113 DA-A	Aug-1-19 113 DA-A	Aug-8-19 120 DA-A	Aug-20-19 132 DA-A	201 DA-A	
				T1 - 1			- 1	
Trt Treatment Form Form No. Name Conc Type Rate Unit Stg Code Plot	8	9	10	11	12	13	14	
11 NTC	111 9.0	7.0	7.0	8.4	0.0	0.0	11.6	
	201 12.0	11.0	11.0	11.4	0.0	0.0	13.9	
	304 11.0	12.0	11.0	11.4	0.0	0.0	16.3	
	409 11.0	10.0	10.0	10.0	0.0	0.0	16.0	
Mean =	10.8	10.0	9.8	10.3	0.0	0.0	14.5	

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GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX

Trial ID: GS-01-19 Study Dir.:
 Location: PONDER Investigator: Eric P. Prostko

Weed Code	-----																																																																																											
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# Subsamples, Dec.	- 1																																																																																											
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Trt</th> <th style="text-align: left;">Treatment Form</th> <th style="text-align: left;">Form</th> <th style="text-align: left;">Rate</th> <th style="text-align: left;">Grow</th> <th style="text-align: left;">Appl</th> <th style="text-align: left;">Plot</th> </tr> <tr> <th>No.</th> <th>Name</th> <th>Conc</th> <th>Type</th> <th>Rate</th> <th>Unit</th> <th>Stg</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>NTC</td> <td></td> <td></td> <td></td> <td></td> <td>15</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>111</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>201</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>304</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>409</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Mean =</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>57.4</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>68.8</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>80.6</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>79.2</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>71.5</td> </tr> </tbody> </table>		Trt	Treatment Form	Form	Rate	Grow	Appl	Plot	No.	Name	Conc	Type	Rate	Unit	Stg	11	NTC					15							111							201							304							409							Mean =							57.4							68.8							80.6							79.2							71.5
Trt	Treatment Form	Form	Rate	Grow	Appl	Plot																																																																																						
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GRAIN SORGHUM RESPONSE TO SINBAR AND REFLEX

Trial ID: GS-01-19 Study Dir.:
Location: PONDER Investigator: Eric P. Prostko

Part Rated

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

Leaf = LEAF / FOLIAGE

PRM Data Type

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

TY2 = 4.947291*[14]