

University of Georgia

Grain sorghum, wheat, cotton, squash and sweet corn response to Direx or Sinbar.

Trial ID: Veg18-11B
Location: TVP

Study Dir.: Stanley Culpepper
Investigator: Stanley Culpepper

Use 2 liters(s) per treatment mixture to spray 14.8 gal/ac
Plots: 6 by 32 feet

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep					
									1	2	3	4	5	6
1	None								101	205	302	403	505	601
2	Direx	4	L	1	pt/a	preplant	A	16.89 ml/mx	102	201	303	401	506	602
3	Direx	4	L	2	pt/a	preplant	A	33.78 ml/mx	103	206	305	406	502	603
4	Direx	4	L	4	pt/a	preplant	A	67.56 ml/mx	104	203	304	402	501	604
5	Sinbar	80	DF	4	oz/a	preplant	A	4.048 g/mx	105	204	301	404	503	605
6	Sinbar	80	DF	8	oz/a	preplant	A	8.096 g/mx	106	202	306	405	504	606

Sort Order: Treatment

Trial Comments

OBJECTIVE: Determine tolerance of numerous vegetables to Direx and Sinbar.

Visual injury, plant stand, crop heights, and biomass were taken for each crop and is reported in the data.

All crops were seeded by hand.

GRAIN SORGHUM:

1. Direx at 1 pt/A caused less than 10% visual injury and no impact on stand or growth were noted.
2. Direx at 2 pt/A caused up to 24% injury but still no impact on stand or growth were noted.
3. All other treatments caused severe injury.

WHEAT:

1. Direx at 1 pt caused up to 37% visual injury, did not impact stand, reduced plant height, but did not reduce biomass.
2. All other treatments caused severe injury.

COTTON:

1. Direx at 1 or 2 pt/A had little affect; Direx at 4 pt/A caused as much as 37% visual injury.
2. Sinbar killed the cotton.

SEEDED YELLOW SQUASH:

1. Severe injury occurred with all treatments.

SWEET CORN:

1. Direx at 1 pt/A visually injured corn up to 14% but did not impact stand, height, or biomass.
2. All other treatments caused severe injury.

FEB 16 2011: TELONE II 12 GPA APPLIED OVER ENTIRE STUDY AREA

University of Georgia

Grain sorghum, wheat, cotton, squash and sweet corn response to Direx or Sinbar.

Trial ID: Veg18-11B
Location: TVP

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Weed Code	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU
Crop Code	INJURY	INJURY	INJURY	STAND CTS	STAND CTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS
Rating Data Type	%	%	%	#	#	CM	CM	CM	CM
Rating Unit	4/14/2011	4/22/2011	4/27/2011	4/13/2011	5/4/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011
Rating Date				#/PLOT	#/PLOT	PLANT 1	PLANT 2	PLANT 3	PLANT 4
Crop Stage	SC	JS	SC	18 DA-A	39 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A
Assessed By	19 DA-A	27 DA-A	32 DA-A						
Trt-Eval Interval									

ARM Action Codes

Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7	8	9	10	11							
1	None			0.0	b	0.0	c	0.0	e	25.7	a	19.8	a	4.8	a	5.3	a	6.2	a	6.0	a
2	Direx	1	pt/a	0.0	b	0.0	c	7.5	e	25.3	a	21.5	a	5.0	a	5.7	a	5.5	a	5.5	a
3	Direx	2	pt/a	10.0	ab	12.5	b	24.0	d	21.2	a	18.2	a	5.7	a	4.5	a	4.7	a	4.0	a
4	Direx	4	pt/a	20.0	a	12.5	b	60.0	b	22.5	a	10.2	bc	4.3	a	4.5	a	4.7	a	5.3	a
5	Sinbar	4	oz/a	5.0	b	14.2	b	46.7	c	26.3	a	16.3	ab	5.5	a	4.8	a	5.2	a	5.7	a
6	Sinbar	8	oz/a	20.0	a	41.7	a	83.5	a	25.0	a	9.7	c	4.5	a	5.2	a	4.2	a	4.2	a
LSD (P=.05)				10.41		12.13		11.91	.	6.83		6.30		1.31		1.68		2.26		1.55	
Standard Deviation				8.76		10.20		10.01	.	5.74		5.29		1.10		1.41		1.90		1.30	
CV				95.52		75.71		27.1	.	23.58		33.21		22.16		28.19		37.55		25.49	
Bartlett's X2				6.091		22.403		7.074	.	3.299		5.725		3.956		4.248		12.778		4.085	
P(Bartlett's X2)				0.107		0.001*		0.132	.	0.654		0.334		0.556		0.514		0.026*		0.537	
Replicate F				2.304		1.112		5.872		2.314		4.052		6.281		1.779		0.253		1.950	
Replicate Prob(F)				0.0748		0.3792		0.0010		0.0739		0.0079		0.0007		0.1539		0.9344		0.1215	
Treatment F				6.587		13.385		62.171		0.751		5.303		1.395		0.671		0.845		2.421	
Treatment Prob(F)				0.0005		0.0001		0.0001		0.5932		0.0019		0.2600		0.6490		0.5311		0.0638	

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Weed Code	AVG5PLAN		AVG5PLAN		AVG5PLAN		AVG5PLAN		AVG5PLAN		AVG5PLAN		AVG5PLAN		AVG5PLAN		AVG5PLAN		AVG5PLAN	
Crop Code	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	SORVU
Rating Data Type	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS
Rating Unit	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM
Rating Date	4/13/2011	4/13/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011
Crop Stage	PLANT 5	AVERAGE	PLANT 1	PLANT 2	PLANT 3	PLANT 4	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5
Assessed By																				
Trt-Eval Interval	18 DA-A	18 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A
ARM Action Codes		T1																		
Trt No.	Treatment Name	Rate	Unit	12	13	14	15	16	17	18	19	20	21	22						
1	None			4.0	a 5.27	a	38.8	ab 39.7	a 38.8	a 39.7	ab 41.7	a 39.73	a	19.8	a					
2	Direx	1	pt/a	4.2	a 5.17	a	43.5	a 42.0	a 41.7	a 42.0	a 43.7	a 42.57	a	21.5	a					
3	Direx	2	pt/a	4.2	a 4.60	a	45.3	a 46.7	a 45.3	a 44.5	a 42.5	a 44.87	a	14.8	ab					
4	Direx	4	pt/a	4.0	a 4.57	a	31.0	bc 28.8	b 29.7	b 30.0	bc 22.7	b 28.43	b	9.2	b					
5	Sinbar	4	oz/a	5.7	a 5.37	a	25.7	c 25.5	b 27.0	b 28.8	c 27.5	b 26.90	b	16.3	ab					
6	Sinbar	8	oz/a	4.2	a 4.43	a	9.0	d 8.3	c 8.2	c 9.0	d 7.8	c 8.47	c	9.7	b					
LSD (P=.05)				1.69	0.946	.	9.57	9.17	9.11	9.73	10.40	8.833	.	7.32						
Standard Deviation				1.42	0.795	.	8.05	7.71	7.66	8.18	8.75	7.426	.	6.15						
CV				32.54	16.22	.	24.98	24.22	24.1	25.31	28.24	23.33	.	40.42						
Bartlett's X2				6.018	3.885	.	6.771	9.989	9.395	6.594	8.966	7.974	.	5.963						
P(Bartlett's X2)				0.304	0.566	.	0.238	0.076	0.094	0.253	0.11	0.158	.	0.31						
Replicate F				1.933	3.844		2.940	4.104	4.409	3.603	4.827	4.539		3.498						
Replicate Prob(F)				0.1244	0.0101		0.0320	0.0074	0.0051	0.0137	0.0032	0.0044		0.0156						
Treatment F				1.238	1.599		17.168	19.904	18.741	15.368	16.080	20.222		4.108						
Treatment Prob(F)				0.3211	0.1969		0.0001	0.0001	0.0001	0.0001	0.0001	0.0001		0.0074						

Means followed by same letter do not significantly differ (P=.05, LSD)

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University of Georgia

Weed Code

Crop Code

Rating Data Type

Rating Unit

Rating Date

Crop Stage

Assessed By

Trt-Eval Interval

ARM Action Codes

SORVU

BIOMASS

LBS

5/5/2011

TOTAL WT

40 DA-A

TRZAW

INJURY

%

4/14/2011

19 DA-A

TRZAW

INJURY

%

4/22/2011

27 DA-A

TRZAW

INJURY

%

4/27/2011

32 DA-A

TRZAW

STAND CTS

#

4/13/2011

18 DA-A

TRZAW

STAND CTS

#

5/4/2011

39 DA-A

TRZAW

HEIGHTS

CM

4/13/2011

18 DA-A

TRZAW

HEIGHTS

CM

4/13/2011

18 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	23	24	25	26	27	28	29	30	31	32	33	34					
1	None			0.425	ab		0.0	d	0.0	d	0.0	c	31.0	a	29.5	a	10.0	a		
2	Direx	1	pt/a	0.542	a		11.7	c	22.0	c	36.5	b	27.7	ab	30.0	a	8.2	ab	9.3	a
3	Direx	2	pt/a	0.583	a		66.7	b	72.3	b	87.8	a	21.0	bc	6.2	b	6.0	bc	5.3	b
4	Direx	4	pt/a	0.192	bc		81.7	a	99.0	a	99.0	a	13.8	c	0.0	b	4.5	cd	4.8	b
5	Sinbar	4	oz/a	0.217	bc		82.2	a	99.0	a	99.0	a	21.7	bc	0.0	b	5.7	c	4.7	b
6	Sinbar	8	oz/a	0.117	c		87.5	a	99.0	a	99.0	a	15.7	c	0.0	b	3.2	d	3.8	b
LSD (P=.05)				0.2658	.	.	11.23	8.50	17.66	.	8.11	7.81	.	2.22	.	2.16	.	.	.	.
Standard Deviation				0.2235	.	.	9.44	7.14	14.85	.	6.82	6.56	.	1.87	.	1.81	.	.	.	.
CV				64.63	.	.	17.18	10.95	21.15	.	31.28	59.98	.	30.0	.	28.65	.	.	.	.
Bartlett's X2				5.471	.	.	11.451	10.393	3.786	.	8.238	0.822	.	4.375	.	9.312	.	.	.	.
P(Bartlett's X2)				0.361	.	.	0.022*	0.001*	0.052	.	0.144	0.663	.	0.497	.	0.097	.	.	.	.
Replicate F				3.479			2.268	1.282	0.869		1.468	1.684		0.472		0.810				
Replicate Prob(F)				0.0160			0.0786	0.3028	0.5155		0.2357	0.1752		0.7935		0.5538				
Treatment F				4.660			101.594	225.579	48.223		5.694	30.338		10.153		12.652				
Treatment Prob(F)				0.0038			0.0001	0.0001	0.0001		0.0012	0.0001		0.0001		0.0001				

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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Crop Stage	Assessed By	Trt-Eval Interval	ARM Action Codes						
	TRZAW	HEIGHTS	CM	4/13/2011	PLANT 3		18 DA-A							
	TRZAW	HEIGHTS	CM	4/13/2011	PLANT 4		18 DA-A							
	TRZAW	HEIGHTS	CM	4/13/2011	PLANT 5		18 DA-A							
	TRZAW	HEIGHTS	CM	4/13/2011	AVERAGE		18 DA-A T3							
	TRZAW	HEIGHTS	CM	5/4/2011	PLANT 1		39 DA-A							
	TRZAW	HEIGHTS	CM	5/4/2011	PLANT 2		39 DA-A							
	TRZAW	HEIGHTS	CM	5/4/2011	PLANT 3		39 DA-A							
	TRZAW	HEIGHTS	CM	5/4/2011	PLANT 4		39 DA-A							
	TRZAW	HEIGHTS	CM	5/4/2011	PLANT 5		39 DA-A							
Trt No.	Treatment Name	Rate	Unit	35	36	37	38	39	40	41	42	43	44	
1	None			9.3	a 8.7	a 8.8	a 9.33	a	19.8	a 19.5	a 19.3	a 20.5	a 18.2	a
2	Direx	1	pt/a	8.7	a 7.7	ab 8.5	a 8.47	a	14.8	b 13.3	b 14.2	a 13.3	b 13.0	b
3	Direx	2	pt/a	5.0	b 5.3	c 5.8	b 5.50	b	7.0	c 5.7	c 6.0	b 2.3	c 3.2	c
4	Direx	4	pt/a	4.0	b 3.8	c 4.0	b 4.23	c	0.0	d 0.0	d 0.0	c 0.0	c 0.0	c
5	Sinbar	4	oz/a	5.2	b 5.5	bc 4.8	b 5.17	bc	0.0	d 0.0	d 0.0	c 0.0	c 0.0	c
6	Sinbar	8	oz/a	4.5	b 4.3	c 4.8	b 4.13	c	0.0	d 0.0	d 0.0	c 0.0	c 0.0	c
LSD (P=.05)				2.36	2.22	2.24	1.148	.	3.75	4.44	5.17	4.32	3.49	
Standard Deviation				1.98	1.86	1.89	0.965	.	3.16	3.73	4.35	3.63	2.94	
CV				32.47	31.64	30.74	15.72	.	45.46	58.14	66.04	60.25	51.3	
Bartlett's X2				2.028	0.907	4.836	3.508	.	0.337	0.334	1.735	2.026	3.351	
P(Bartlett's X2)				0.845	0.97	0.436	0.622	.	0.845	0.846	0.42	0.363	0.187	
Replicate F				0.638	0.512	2.348	0.677		0.533	0.262	0.271	1.008	1.212	
Replicate Prob(F)				0.6730	0.7644	0.0705	0.6451		0.7492	0.9294	0.9249	0.4336	0.3325	
Treatment F				7.951	6.216	7.047	31.720		44.924	29.584	22.246	35.075	43.528	
Treatment Prob(F)				0.0001	0.0007	0.0003	0.0001		0.0001	0.0001	0.0001	0.0001	0.0001	

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Weed Code	AVG5PLAN																	
Crop Code	TRZAW	TRZAW	TRZAW	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI										
Rating Data Type	HEIGHTS	BIOMASS	BIOMASS	INJURY	INJURY	INJURY	STAND CTS	STAND CTS										
Rating Unit	CM	#	LBS	%	%	%	#	#										
Rating Date	5/4/2011	5/5/2011	5/5/2011	4/14/2011	4/22/2011	4/27/2011	4/13/2011	5/4/2011										
Crop Stage	AVERAGE	#/PLOT	TOTAL WT				#/PLOT	#/PLOT										
Assessed By				SC	JS	SC												
Trt-Eval Interval	39 DA-A	40 DA-A	40 DA-A	19 DA-A	27 DA-A	32 DA-A	18 DA-A	39 DA-A										
ARM Action Codes	T4																	

Trt No.	Treatment Name	Rate	Rate Unit	45	46	47	48	49	50	51	52	53	54	55	56				
1	None			19.47	a	29.5	a	0.108	a	0.0	c	0.0	c	0.0	c	2.8	a	2.8	a
2	Direx	1	pt/a	13.73	b	30.0	a	0.100	a	1.7	bc	0.0	c	0.0	c	1.8	a	3.3	a
3	Direx	2	pt/a	4.83	c	6.0	b	0.032	b	6.7	bc	8.3	c	0.0	c	2.0	a	2.7	a
4	Direx	4	pt/a	0.00	d	0.0	b	0.000	b	0.0	c	35.7	b	27.5	b	2.3	a	2.2	a
5	Sinbar	4	oz/a	0.00	d	0.0	b	0.000	b	10.8	ab	94.2	a	99.0	a	2.3	a	0.0	b
6	Sinbar	8	oz/a	0.00	d	0.0	b	0.000	b	17.5	a	99.0	a	99.0	a	2.8	a	0.0	b
LSD (P=.05)				3.488	.	7.85	0.0380	.	.	10.58	16.37	2.03	.	1.48	.	1.35	.	.	.
Standard Deviation				2.933	.	6.60	0.0319	.	.	8.89	13.76	1.71	.	1.24	.	1.13	.	.	.
CV				46.26	.	60.46	79.84	.	.	145.55	34.82	4.54	.	52.69	.	61.71	.	.	.
Bartlett's X2				0.694	.	0.772	0.345	.	.	15.382	15.532	0.0	.	6.777	.	3.817	.	.	.
P(Bartlett's X2)				0.707	.	0.68	0.841	.	.	0.002*	0.001*	.	.	0.238	.	0.282	.	.	.
Replicate F				0.588		1.665	0.719			0.878	1.100	1.000		0.836		0.677			
Replicate Prob(F)				0.7088		0.1799	0.6153			0.5102	0.3850	0.4381		0.5365		0.6448			
Treatment F				48.813		30.063	15.458			3.743	67.378	4889.092		0.664		10.104			
Treatment Prob(F)				0.0001		0.0001	0.0001			0.0115	0.0001	0.0001		0.6541		0.0001			

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Weed Code				AVG5PLAN											
Crop Code	Rating Data Type			GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS	GOSHI HEIGHTS
Rating Unit	Rating Date			CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM
Crop Stage	Assessed By			4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011
Trt-Eval Interval	ARM Action Codes			PLANT 1	PLANT 2	PLANT 3	PLANT 4	PLANT 5	PLANT 6	PLANT 7	PLANT 8	PLANT 9	PLANT 10	PLANT 11	PLANT 12
				18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A
Trt No.	Treatment Name	Rate	Unit	57	58	59	60	61	62	63	64	65	66	67	
1	None				3.5	a 2.5	a 2.0	a 0.8	a 0.0	a 1.77	a	12.5	ab 8.0	b 10.7	a
2	Direx	1	pt/a		3.5	a 3.3	a 2.7	a 0.8	a 0.0	a 2.07	a	13.8	a 13.8	a 7.0	ab
3	Direx	2	pt/a		3.0	a 2.7	a 1.5	a 0.3	a 0.0	a 1.50	a	13.0	ab 13.8	a 7.2	ab
4	Direx	4	pt/a		2.2	a 2.2	a 1.0	a 0.5	a 0.0	a 1.17	a	8.5	b 7.8	b 5.7	ab
5	Sinbar	4	oz/a		3.0	a 3.5	a 1.0	a 0.5	a 0.7	a 1.73	a	0.0	c 0.0	c 0.0	b
6	Sinbar	8	oz/a		2.3	a 1.2	a 0.3	a 0.5	a 0.0	a 0.87	a	0.0	c 0.0	c 0.0	b
LSD (P=.05)				.	1.31	1.68	2.00	1.74	0.79	1.043	.	5.24	5.34	7.30	
Standard Deviation				.	1.10	1.42	1.68	1.46	0.67	0.877	.	4.40	4.49	6.13	
CV				.	37.71	55.4	118.61	250.19	600.0	57.82	.	55.21	61.97	120.66	
Bartlett's X2				.	8.773	8.466	4.006	5.637	0.0	0.885	.	2.643	1.491	1.047	
P(Bartlett's X2)				.	0.118	0.132	0.549	0.343	.	0.971	.	0.45	0.684	0.79	
Replicate F					1.143	0.721	0.537	1.338	1.000	0.318		0.820	0.614	0.079	
Replicate Prob(F)					0.3641	0.6141	0.7462	0.2809	0.4381	0.8973		0.5468	0.6905	0.9949	
Treatment F					1.584	2.151	1.458	0.117	1.000	1.494		12.853	11.457	2.909	
Treatment Prob(F)					0.2010	0.0923	0.2387	0.9874	0.4381	0.2274		0.0001	0.0001	0.0333	

Means followed by same letter do not significantly differ ($P=.05$, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code											AVG5PLAN													
Crop Code											GOSHI			GOSHI			CUUPE							
Rating Data Type											GOSHI HEIGHTS			GOSHI BIOMASS			CUUPE INJURY							
Rating Unit											CM			#			%							
Rating Date											5/4/2011			5/5/2011			4/14/2011							
Crop Stage											PLANT 4			PLANT 5			AVERAGE							
Assessed By																								
Trt-Eval Interval											39 DA-A			39 DA-A			39 DA-A							
ARM Action Codes											T6			40 DA-A			40 DA-A							
																19 DA-A			27 DA-A			32 DA-A		
Trt No.	Treatment Name	Rate	Unit	68	69	70	71	72	73	74	75	76	77	78	79									
1	None			2.7	a	0.0	a	6.77	a	2.8	a	0.050	a	0.0	e	0.0	d	0.0	d					
2	Direx	1	pt/a	4.0	a	2.8	a	8.30	a	3.3	a	0.050	a	18.7	d	37.5	c	50.8	c					
3	Direx	2	pt/a	0.8	a	0.0	a	6.97	a	2.0	ab	0.042	a	54.2	c	83.5	b	76.3	b					
4	Direx	4	pt/a	4.2	a	0.0	a	5.23	a	1.0	bc	0.050	a	84.2	b	95.5	ab	99.0	a					
5	Sinbar	4	oz/a	0.0	a	0.0	a	0.00	b	0.0	c	0.000	a	97.3	a	99.0	a	99.0	a					
6	Sinbar	8	oz/a	0.0	a	0.0	a	0.00	b	0.0	c	0.000	a	97.3	a	99.0	a	99.0	a					
LSD (P=.05)				5.78	3.37	3.427	.	1.38	0.0491	.	.	11.35	15.05	13.30	.	.	.	.	.					
Standard Deviation				4.86	2.83	2.882	.	1.16	0.0413	.	.	9.55	12.66	11.18	.	.	.	.	.					
CV				249.72	600.0	63.41	.	75.99	129.18	.	.	16.29	18.32	15.81	.	.	.	.	.					
Bartlett's X2				6.439	0.0	4.958	.	1.792	9.213	.	.	18.993	6.017	0.043	.	.	.	.	.					
P(Bartlett's X2)				0.092	.	0.175	.	0.617	0.002*	.	.	0.001*	0.049*	0.836	.	.	.	.	.					
Replicate F				0.743	1.000	0.374	.	0.367	1.117	.	.	3.366	0.757	1.501	.	.	.	.	.					
Replicate Prob(F)				0.5989	0.4381	0.8616	.	0.8664	0.3765	.	.	0.0184	0.5894	0.2250	.	.	.	.	.					
Treatment F				0.941	1.000	9.637	.	9.023	2.194	.	.	114.601	63.420	75.168	.	.	.	.	.					
Treatment Prob(F)				0.4721	0.4381	0.0001	.	0.0001	0.0870	.	.	0.0001	0.0001	0.0001	.	.	.	.	.					

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code														AVG5PLAN			
Crop Code				CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE				
Rating Data Type				STAND CTS	STAND CTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS				
Rating Unit				#	#	CM	CM	CM	CM	CM	CM	CM	CM				
Rating Date				4/13/2011	5/4/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	5/4/2011				
Crop Stage				#/PLOT	#/PLOT	PLANT 1	PLANT 2	PLANT 3	PLANT 4	PLANT 5	AVERAGE		PLANT 1				
Assessed By																	
Trt-Eval Interval				18 DA-A	39 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	39 DA-A				
ARM Action Codes																	
Trt	Treatment	Rate	Unit	80	81	82	83	84	85	86	87	88	89	90			
1	None			4.5	a 4.7	a	4.3	a 4.2	ab 3.8	a 3.7	a 3.3	a 3.87	abc	31.3 a			
2	Direx	1	pt/a	4.7	a 2.2	b	4.7	a 4.3	ab 4.8	a 3.2	a 3.8	a 4.17	a	22.3 b			
3	Direx	2	pt/a	4.7	a 1.0	c	4.0	a 4.5	a 4.3	a 4.5	a 3.3	a 4.13	ab	18.0 b			
4	Direx	4	pt/a	4.0	a 0.0	d	3.8	a 3.5	abc 3.7	a 3.5	a 1.2	a 3.13	cd	0.0 c			
5	Sinbar	4	oz/a	4.8	a 0.0	d	3.5	a 3.3	bc 3.8	a 3.0	a 2.7	a 3.27	bcd	0.0 c			
6	Sinbar	8	oz/a	4.5	a 0.0	d	3.3	a 3.0	c 3.2	a 2.7	a 2.0	a 2.83	d	0.0 c			
LSD (P=.05)				0.81	0.84	.	1.04	1.08	1.51	1.85	2.27	0.872	.	7.78			
Standard Deviation				0.68	0.70	.	0.87	0.91	1.27	1.56	1.91	0.734	.	6.54			
CV				15.11	53.86	.	22.17	23.91	32.25	45.56	70.13	20.57	.	54.73			
Bartlett's X2				6.491	4.839	.	5.305	2.3	6.446	6.495	1.766	9.068	.	7.265			
P(Bartlett's X2)				0.261	0.089	.	0.38	0.806	0.265	0.261	0.88	0.106	.	0.026*			
Replicate F				1.200	1.539		0.843	1.403	0.687	0.818	1.348	1.318		1.527			
Replicate Prob(F)				0.3380	0.2137		0.5322	0.2574	0.6379	0.5481	0.2773	0.2885		0.2174			
Treatment F				1.057	41.854		1.977	2.691	1.223	1.011	1.622	3.538		26.633			
Treatment Prob(F)				0.4073	0.0001		0.1172	0.0444	0.3279	0.4320	0.1908	0.0148		0.0001			

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code						AVG5PLAN							
Crop Code	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	CUUPE	ZEAMS	ZEAMS
Rating Data Type	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	BIOMASS	BIOMASS	BIOMASS	INJURY	INJURY
Rating Unit	CM	CM	CM	CM	CM	CM	CM	CM	#	LBS	LBS	%	%
Rating Date	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/4/2011	5/5/2011	5/5/2011	5/5/2011	4/14/2011	4/22/2011
Crop Stage	PLANT 2	PLANT 3	PLANT 4	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	#/PLOT	TOTAL WT	TOTAL WT		
Assessed By												SC	JS
Trt-Eval Interval	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	39 DA-A	40 DA-A	40 DA-A	40 DA-A	19 DA-A	27 DA-A
ARM Action Codes						T8							

Trt	Treatment	Rate	Unit	91	92	93	94	95	96	97	98	99	100	101	102
1	None			28.5	a 29.8	a 28.5	a 20.3	a 27.70	a 4.7	a 1.192	a 0.0	c 0.0	d 0.0	d 0.0	d 0.0
2	Direx	1	pt/a	16.5	b 5.7	b 4.5	b 5.5	b 10.90	b 2.2	b 0.400	b 1.7	c 9.2	d 8.9	d 8.9	d 8.9
3	Direx	2	pt/a	6.7	c 0.0	b 0.0	b 0.0	b 4.93	c 1.0	c 0.208	b 21.7	b 22.5	c 22.5	c 22.5	c 22.5
4	Direx	4	pt/a	0.0	c 0.0	b 0.0	b 0.0	b 0.00	c 0.0	d 0.000	b 36.7	a 93.5	a 93.5	a 93.5	a 93.5
5	Sinbar	4	oz/a	0.0	c 0.0	b 0.0	b 0.0	b 0.00	c 0.0	d 0.000	b 20.0	b 29.2	c 29.2	c 29.2	c 29.2
6	Sinbar	8	oz/a	0.0	c 0.0	b 0.0	b 0.0	b 0.00	c 0.0	d 0.000	b 25.8	b 53.3	b 53.3	b 53.3	b 53.3
LSD (P=.05)				9.26	6.85	5.52	10.95	5.488	.	0.84	0.4822	.	.	10.30	10.57
Standard Deviation				7.79	5.76	4.64	9.21	4.614	.	0.70	0.4054	.	.	8.66	8.89
CV				90.45	97.4	84.32	213.93	63.59	.	53.86	135.14	.	.	49.11	25.69
Bartlett's X2				3.067	4.683	4.59	0.207	4.31	.	4.839	4.832	.	.	6.041	7.407
P(Bartlett's X2)				0.216	0.03*	0.032*	0.649	0.116	.	0.089	0.089	.	.	0.196	0.116
Replicate F				1.456	1.505	1.352	0.367	1.528		1.539	1.576			0.653	0.592
Replicate Prob(F)				0.2396	0.2239	0.2758	0.8661	0.2169		0.2137	0.2033			0.6616	0.7063
Treatment F				13.529	25.731	36.324	4.702	33.516		41.854	7.910			16.270	88.660
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0037	0.0001		0.0001	0.0001			0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code															AVG5PLAN
Crop Code	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS	ZEAMS
Rating Data Type	INJURY	STAND CTS	STAND CTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS
Rating Unit	%	#	#	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM	CM
Rating Date	4/27/2011	4/13/2011	5/4/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011	4/13/2011
Crop Stage		#/PLOT	#/PLOT	PLANT 1	PLANT 2	PLANT 3	PLANT 4	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	PLANT 5	AVERAGE
Assessed By	SC														
Trt-Eval Interval	32 DA-A	18 DA-A	39 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A
ARM Action Codes															T9

Trt No.	Treatment Name	Rate	Unit	103	104	105	106	107	108	109	110	111	112	113	
1	None			0.0	e	3.7	a 4.5	a	4.8	a 5.5	a 3.5	a 2.5	a 2.8	a 3.83	a
2	Direx	1	pt/a	14.2	d	3.3	a 3.7	ab	4.3	a 5.8	a 5.3	a 1.5	a 0.8	a 3.57	a
3	Direx	2	pt/a	48.3	c	2.5	a 2.7	abc	4.3	a 3.7	a 0.5	a 1.2	a 1.5	a 2.23	a
4	Direx	4	pt/a	97.5	a	3.5	a 0.2	d	5.0	a 4.5	a 4.2	a 1.7	a 0.5	a 3.17	a
5	Sinbar	4	oz/a	79.0	b	3.2	a 1.8	bcd	4.3	a 2.8	a 3.3	a 2.8	a 2.0	a 3.07	a
6	Sinbar	8	oz/a	99.0	a	3.3	a 0.7	cd	4.2	a 5.0	a 2.5	a 2.2	a 1.8	a 3.13	a
LSD (P=.05)				9.18	.	1.41	2.01	.	2.32	3.05	3.06	3.05	2.77	1.588	
Standard Deviation				7.72	.	1.18	1.69	.	1.95	2.56	2.57	2.56	2.33	1.335	
CV				13.7	.	36.36	75.21	.	43.32	56.24	79.76	129.88	147.26	42.16	
Bartlett's X2				7.441	.	3.321	16.633	.	2.351	3.034	4.883	4.265	5.41	6.702	
P(Bartlett's X2)				0.059	.	0.651	0.005*	.	0.799	0.695	0.43	0.512	0.368	0.244	
Replicate F				0.712		1.850	0.809		1.509	0.667	0.875	1.122	2.781	1.257	
Replicate Prob(F)				0.6205		0.1395	0.5542		0.2228	0.6520	0.5120	0.3744	0.0395	0.3133	
Treatment F				182.143		0.704	5.978		0.175	1.185	2.429	0.370	0.782	1.001	
Treatment Prob(F)				0.0001		0.6257	0.0009		0.9693	0.3447	0.0632	0.8643	0.5724	0.4376	

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code

Crop Code

Rating Data Type

Rating Unit

Rating Date

Crop Stage

Assessed By

Trt-Eval Interval

ARM Action Codes

ZEAMS

ZEAMS

ZEAMS

ZEAMS

ZEAMS

AVG5PLAN

ZEAMS

ZEAMS

ZEAMS

BIOMASS

BIOMASS

#

LBS

5/5/2011

5/5/2011

#/PLOT

TOTAL WT

Assessed By

Trt-Eval Interval

ARM Action Codes

Trt No.	Treatment Name	Rate	Rate Unit	114	115	116	117	118	119	120	121	122	123							
1	None				30.8	a	33.8	a	15.0	ab	13.0	a	14.3	a	21.40	a	4.5	a	0.217	a
2	Direx	1	pt/a		30.2	a	32.3	ab	26.5	a	13.5	a	3.7	b	21.23	a	3.7	ab	0.225	a
3	Direx	2	pt/a		17.2	b	21.3	b	12.7	abc	4.7	a	0.0	b	11.17	b	2.7	abc	0.142	ab
4	Direx	4	pt/a		2.8	c	0.0	c	0.0	c	0.0	a	0.0	b	0.57	c	0.2	d	0.008	c
5	Sinbar	4	oz/a		5.7	c	5.3	c	6.5	bc	0.8	a	0.0	b	3.67	c	1.8	bcd	0.067	bc
6	Sinbar	8	oz/a		2.5	c	3.2	c	0.0	c	0.0	a	0.0	b	1.13	c	0.7	cd	0.017	bc
LSD (P=.05)				.	9.09		11.08		14.97		12.90		8.82		7.191	.	2.01		0.1322	
Standard Deviation				.	7.64		9.31		12.58		10.84		7.42		6.047	.	1.69		0.1112	
CV				.	51.41		58.2		124.45		203.31		247.33		61.32	.	75.21		98.82	
Bartlett's X2				.	4.318		6.924		2.504		14.042		1.748		23.258	.	16.633		23.304	
P(Bartlett's X2)				.	0.505		0.14		0.475		0.003*		0.186		0.001*	.	0.005*		0.001*	
Replicate F					0.353		1.955		0.550		0.399		1.469		0.682		0.809		0.307	
Replicate Prob(F)					0.8751		0.1207		0.7367		0.8451		0.2353		0.6410		0.5542		0.9042	
Treatment F					18.026		15.882		3.914		2.072		3.594		15.266		5.978		4.515	
Treatment Prob(F)					0.0001		0.0001		0.0093		0.1027		0.0138		0.0001		0.0009		0.0045	

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Grain sorghum, wheat, cotton, squash and sweet corn response to Direx or Sinbar.

Trial ID: Veg18-11B
Location: TVP

Study Dir.: Stanley Culpepper
Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Stanley Culpepper	Title: EXTENSION WEED SCIENCE
Affiliation: UNIVERSITY OF GEORGIA	
Postal Code: 31793	
Investigator: Stanley Culpepper	Title: EXTENSION WEED SCIENCE
Affiliation: UNIVERSITY OF GEORIGA	
Postal Code: 31793	

TRIAL LOCATION

City: TIFTON	Trial Status: COMPLETED
State/Prov.: GEORGIA	Trial Reliability: good
Postal Code: 31793	Initiation Date: 2/16/2011
Country: USA	

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Crop 1: GOSHI COTTON	Variety: FIBERMAX 1845
Planting Date: 4/1/2011	Planting Method: SEEDED
Rate: 1 6 IN	Depth: 1 IN
Row Spacing: 6 FT	Spacing Within Row: 6 IN
Soil Temperature: 63 F	Soil Moisture: MOIST
	Seed Bed: FLAT
	Emergence Date: 4/8/2011

Crop 2: TRZAW WINTER WHEAT	Variety: AGS 2060
Planting Date: 4/1/2011	Planting Method: DRILLED
Rate: 1 3 IN	Depth: 1 IN
Row Spacing: 6 FT	Spacing Within Row: 3 IN
Soil Temperature: 63 F	Soil Moisture: MOIST
	Seed Bed: FLAT
	Emergence Date: 4/8/2011

Crop 3: SORVU GRAIN SORGHUM	Variety: 83G66
Planting Date: 4/1/2011	Planting Method: DRILLED
Rate: 1 3 IN	Depth: 1 IN
Row Spacing: 6 FT	Spacing Within Row: 3 IN
Soil Temperature: 63 F	Soil Moisture: MOIST
	Seed Bed: FLAT
	Emergence Date: 4/8/2011

Crop 4: CUUPE SUMMER SQUASH	Variety: LIONESS F1 HYBRID
Planting Date: 4/1/2011	Planting Method: SEEDED
Rate: 1 6 IN	Depth: 1 IN
Row Spacing: 6 FT	Spacing Within Row: 6 IN
Soil Temperature: 63 F	Soil Moisture: MOIST
	Seed Bed: FLAT
	Emergence Date: 4/8/2011

Crop 5: ZEAMS SWEET CORN	Variety: BSS 0982
Planting Date: 5/25/2011	Planting Method: SEEDED
Rate: 1 6 IN	Depth: 1 IN
Row Spacing: 6 FT	Spacing Within Row: 6 IN
Soil Temperature: 91 F	Soil Moisture: MOIST
	Seed Bed: FLAT
	Emergence Date: 4/8/2011

SITE AND DESIGN

Plot Width, Unit: 6 FT	Plot Length, Unit: 32 FT	Reps: 6
Site Type: TIFTON VEGETABLE PARK		
Tillage Type: BAREGROUND	Study Design: RANDOMIZED COMPLETE BLOCK	

SOIL DESCRIPTION

% Sand: 88	% OM: 1.1	
% Silt: 10	pH: 6.6	Soil Name: TIFTON SANDY LOAM
% Clay: 2	CEC: 390	

Overall Moisture Conditions: DRIP IRRIGATION

Closest Weather Station: www.griffin.uga.edu/aemn

Distance: 200 **Unit:** yd

APPLICATION DESCRIPTION

Application Date:	A
	3/26/2011
Time of Day:	8:00 AM
Application Method:	BROADCAST
Application Timing:	PREPLANT
Applic. Placement:	ON SOIL
Air Temp., Unit:	61 F
% Relative Humidity:	68
Wind Velocity, Unit:	3 MPH
Dew Presence (Y/N):	N
Soil Temp., Unit:	65 F
Soil Moisture:	FAIR
% Cloud Cover:	0

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CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GOSHI
Stage Scale: preplant
Height, Unit: 0 inch
Crop 2 Code, Stage: TRZAW
Stage Scale: preplant
Height, Unit: 0 inch
Crop 3 Code, Stage: SORVU
Stage Scale: preplant
Height, Unit: 0 inch
Crop 4 Code, Stage: CUUPE
Stage Scale: preplant
Height, Unit: 0 inch
Crop 5 Code, Stage: ZEAMS
Stage Scale: preplant
Height, Unit: 0 inch

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 26 PSI
Nozzle Type: FLAT FAN
Nozzle Size: 11002
Nozzle Spacing, Unit: 18 IN
Nozzles/Row: 2
Boom Length, Unit: 4.5 FT
Boom Height, Unit: 15 IN
Ground Speed, Unit: 3 MPH
Carrier: H2O
Spray Volume, Unit: 15 GPA
Propellant: CO2
Tank Mix (Y/N): Y