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RR Flex cotton response to several trifloxysulfuron systems.

Trial ID: C12-06

Study Dir.: Stanley Culpepper

Location: Ponder (5130)

Investigator: Stanley Culpepper

Reps: 4

Plots: 12 by 30 feet

Spray vol: 14.8 gal/ac

Mix size: 2 liters (min 1.852)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep			
										1	2	3	4
1	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	101	208	312	407
	Roundup WeatherMax "new"	4.5		L	22	OZ/A	8 leaf	B	23.23 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
2	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	102	214	301	412
	Touchdown Total	4.17		L	24	OZ/A	8 leaf	B	25.34 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
3	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	103	202	308	415
	Touchdown HiTECH 5	5		L	19.2	OZ/A	8 leaf	B	20.27 ml/mx				
	NIS			L	0.25	% V/V	8 leaf	B	4.999 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
4	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	104	209	303	404
	Sequence	5.25		EW	2.5	PT/A	8 leaf	B	42.23 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
5	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	105	203	307	402
	Envoke	75		DF	0.1	OZ/A	8 leaf	B	0.1012 g/mx				
	NIS			L	0.25	% V/V	8 leaf	B	4.999 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
6	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	106	215	316	414
	Envoke	75		DF	0.15	OZ/A	8 leaf	B	0.1518 g/mx				
	NIS			L	0.25	% V/V	8 leaf	B	4.999 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
7	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	107	204	302	416
	A15292			L	24	OZ/A	8 leaf	B	25.34 ml/mx				
	NIS			L	0.25	% V/V	8 leaf	B	4.999 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
8	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	108	206	310	406
	A15292			L	36	OZ/A	8 leaf	B	38.01 ml/mx				
	NIS			L	0.25	% V/V	8 leaf	B	4.999 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
9	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	109	205	313	401
	A15292			L	24	OZ/A	8 leaf	B	25.34 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
10	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	110	216	304	408
	A15292			L	36	OZ/A	8 leaf	B	38.01 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				
11	Sequence	5.25		EW	2.5	PT/A	1-2 leaf	A	42.23 ml/mx	111	207	311	405
	Touchdown HiTECH 5	5		L	19.2	OZ/A	8 leaf	B	20.27 ml/mx				
	Envoke	75		DF	0.1	OZ/A	8 leaf	B	0.1012 g/mx				
	NIS			L	0.25	% V/V	8 leaf	B	4.999 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby	D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby	D	16.89 ml/mx				

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Reps: 4 Plots: 12 by 30 feet
 Spray vol: 14.8 gal/ac Mix size: 2 liters (min 1.852)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep			
									1	2	3	4
12	Sequence	5.25		EW	2.5	PT/A	1-2 leaf A	42.23 ml/mx	112	201	314	411
	Touchdown HiTECH 5	5		L	19.2	OZ/A	8 leaf B	20.27 ml/mx				
	Envoke	75		DF	0.15	OZ/A	8 leaf B	0.1518 g/mx				
	NIS			L	0.25	% V/V	8 leaf B	4.999 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby D	16.89 ml/mx				
13	Sequence	5.25		EW	2.5	PT/A	1-2 leaf A	42.23 ml/mx	113	212	315	410
	Touchdown HiTECH 5	5		L	19.2	OZ/A	8 leaf B	20.27 ml/mx				
	Envoke	75		DF	0.1	OZ/A	8 leaf B	0.1012 g/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby D	16.89 ml/mx				
14	Sequence	5.25		EW	2.5	PT/A	1-2 leaf A	42.23 ml/mx	114	210	305	403
	Touchdown HiTECH 5	5		L	19.2	OZ/A	8 leaf B	20.27 ml/mx				
	Envoke	75		DF	0.15	OZ/A	8 leaf B	0.1518 g/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby D	16.89 ml/mx				
15	Sequence	5.25		EW	2.5	PT/A	1-2 leaf A	42.23 ml/mx	115	211	309	413
	A15292			L	36	OZ/A	7 leaf B	38.01 ml/mx				
	NIS			L	0.25	% V/V	8 leaf B	4.999 ml/mx				
	A15292			L	36	OZ/A	11 leaf C	38.01 ml/mx				
	NIS			L	0.25	% V/V	11 leaf C	4.999 ml/mx				
	Touchdown Total	4.17		L	24	OZ/A	layby D	25.34 ml/mx				
	Direx	4		L	16	OZ/A	layby D	16.89 ml/mx				
16	Non-treated								116	213	306	409

Sort Order: Treatment

Product quantities required for listed treatments and applications in one trial:

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
844.506	ml	Sequence	5.25	EW	
29.033	ml	Roundup WeatherMax "new"	4.5	L	
506.758	ml	Touchdown Total	4.17	L	
316.724	ml	Direx	4	L	
126.689	ml	Touchdown HiTECH 5	5	L	
56.244	ml	NIS		L	
0.949	g	Envoke	75	DF	
253.379	ml	A15292		L	

- * 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 2 liters (mix size basis).
- * Product amount calculations increased 25 % for overage adjustment.
- * 'Per volume' calculations use spray volume= 14.8 gal/ac, mix size= 2 liters.

Trial Comments

OBJECTIVE: Evaluate several trifloxysulfuron weed management systems in RR cotton.

COTTON RESPONSE:

1. Applying Sequence otop of 1-2 leaf cotton caused 10 to 12% spotting as always (data not shown).
2. At 2 d after the 8 leaf applications: glyphosate caused minimal injury; Sequence and all glyphosate plus Envoke combinations caused 10 to 15% spotting/speckling or chlorosis at this time.
3. By 11 d after the 8 leaf applications:
 - A. injury from glyphosate and Sequence was less than 10%;

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- B. injury from Envoke alone ranged from 12 to 18%
 - C. injury from A15292 was rate dependent but not impacted by adjuvant;
 - D. injury from 24 oz of A15292 was less than 10%
 - E. injury from 36 of of A15292 was 12 to 15%
 - F. injury from Touchdown plus Envoke (with or without NIS) was 13 to 18%
 - G. injury from 2 applications of A15292 (second application only out for 1 d) was greater than 20%.
4. By 20 d after the 8 leaf applications: cotton had recovered except where 2 applications of A15292 were made with 20% injury still noted.

WEED RESPONSE:

Wild Radish, Palmer amaranth:

1. Good to excellent control was noted with all systems throughout the season.

Smallflower morningglory:

1. Prior to layby, the only programs providing less than 90% control included Envoke plus NIS as the 8 leaf POST treatment.
2. Layby treatments were timely and late season control was excellent with all programs.

Common cocklebur:

1. Prior to layby, all programs except for the one with Envoke 0.1 oz + NIS overtop of 8 leaf cotton provided at least 90% control.
2. By late-season control was excellent with all programs.

Large crabgrass:

1. Prior to layby, all programs except for the two with Envoke + NIS overtop of 8 leaf cotton provided at least 90% control.
2. By late-season control was excellent with all programs.

Florida pusley:

1. The two programs with only Envoke POST at 8 leaf cotton were less effective than other programs throughout the season.

SEED COTTON YIELD:

1. Obvious trends for lower yields were noted with 1) programs using only Envoke overtop of 8 leaf cotton (likely response to lack of weed control) and 2) the program with sequential A152292 applications (likely a response to extended crop injury).

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RR Flex cotton response to several trifloxysulfuron systems.

Trial ID: C12-06

Study Dir.: Stanley Culpepper

Location: Ponder (5130)

Investigator: Stanley Culpepper

Weed Code		GOSHI	GOSHI	GOSHI	RAPSS	RAPSS	AMAPA	AMAPA
Crop Code		injury	injury	injury	control	control	control	control
Rating Data Type		%	%	%	%	%	%	%
Rating Unit								
Rating Date		Jun-07-06	Jun-16-06	Jun-25-06	Jun-16-06	Jun-25-06	Jun-16-06	Jul-05-06
Assessed By		AD	AD	SC	AD	SC	AD	AD
Trt-Eval Interval		26 DA-A	35 DA-A	44 DA-A	35 DA-A	44 DA-A	35 DA-A	54 DA-A
ARM Action Codes								
# Subsamples, Dec.								
Trt Treatment	Rate							
No. Name	Rate Unit	1	2	3	4	5	6	7
1 Sequence	2.5 PT/A	5 bc	6 cde	0 b	100 a	93 d	100 a	100 a
Roundup WeatherMax "new"	22 OZ/A							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
2 Sequence	2.5 PT/A	5 bc	8 b-e	0 b	100 a	94 cd	100 a	100 a
Touchdown Total	24 OZ/A							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
3 Sequence	2.5 PT/A	8 abc	9 b-e	0 b	100 a	93 d	100 a	100 a
Touchdown HiTECH 5	19.2 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
4 Sequence	2.5 PT/A	13 abc	5 de	0 b	100 a	93 d	100 a	100 a
Sequence	2.5 PT/A							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
5 Sequence	2.5 PT/A	6 abc	13 bcd	0 b	100 a	92 d	98 a	100 a
Envoke	0.1 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
6 Sequence	2.5 PT/A	19 a	19 ab	0 b	100 a	94 cd	99 a	100 a
Envoke	0.15 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
7 Sequence	2.5 PT/A	10 abc	9 b-e	0 b	100 a	98 ab	100 a	100 a
A15292	24 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
8 Sequence	2.5 PT/A	12 abc	15 bcd	0 b	100 a	99 a	100 a	100 a
A15292	36 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
9 Sequence	2.5 PT/A	10 abc	9 b-e	0 b	100 a	95 bcd	99 a	100 a
A15292	24 OZ/A							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							

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Weed Code		GOSHI	GOSHI	GOSHI	RAPSS	RAPSS	AMAPA	AMAPA		
Crop Code		GOSHI	GOSHI	GOSHI	RAPSS	RAPSS	AMAPA	AMAPA		
Rating Data Type		injury	injury	injury	control	control	control	control		
Rating Unit		%	%	%	%	%	%	%		
Rating Date		Jun-07-06	Jun-16-06	Jun-25-06	Jun-16-06	Jun-25-06	Jun-16-06	Jul-05-06		
Assessed By		AD	AD	SC	AD	SC	AD	AD		
Trt-Eval Interval		26 DA-A	35 DA-A	44 DA-A	35 DA-A	44 DA-A	35 DA-A	54 DA-A		
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7
10	Sequence	2.5	PT/A	11 abc	13 bcd	0 b	100 a	98 a	100 a	100 a
	A15292	36	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
11	Sequence	2.5	PT/A	14 ab	16 abc	0 b	100 a	97 abc	98 a	100 a
	Touchdown HiTECH 5	19.2	OZ/A							
	Envoke	0.1	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
12	Sequence	2.5	PT/A	10 abc	18 ab	0 b	100 a	99 a	100 a	100 b
	Touchdown HiTECH 5	19.2	OZ/A							
	Envoke	0.15	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
13	Sequence	2.5	PT/A	15 ab	14 bcd	0 b	100 a	99 a	100 a	100 a
	Touchdown HiTECH 5	19.2	OZ/A							
	Envoke	0.1	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
14	Sequence	2.5	PT/A	11 abc	14 bcd	0 b	100 a	99 a	100 a	100 a
	Touchdown HiTECH 5	19.2	OZ/A							
	Envoke	0.15	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
15	Sequence	2.5	PT/A	10 abc	25 a	20 a	100 a	99 a	100 a	100 a
	A15292	36	OZ/A							
	NIS	0.25	% V/V							
	A15292	36	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
16	Non-treated			0 c	0 e	0 b	0 b	0 e	0 b	0 c
LSD (P=.05)				10.9	9.0	0.4	0.0	3.2	2.4	0.2
Standard Deviation				7.6	6.3	0.3	0.0	2.3	1.7	0.1
CV				77.25	52.79	20.51	0.0	2.51	1.84	0.13
Bartlett's X2				20.32	20.82	0.0	0.0	38.61	6.333	0.0
P(Bartlett's X2)				0.061	0.106	.	.	0.001*	0.176	.

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code		AMAPA	IAQTA	IAQTA	IAQTA	IAQTA	XANST	XANST		
Crop Code										
Rating Data Type		control	control	control	control	control	control	control		
Rating Unit		%	%	%	%	%	%	%		
Rating Date		Aug-28-06	Jun-16-06	Jun-25-06	Jul-05-06	Aug-28-06	Jun-16-06	Jun-25-06		
Assessed By		SC	AD	SC	AD	SC	AD	SC		
Trt-Eval Interval		63 DA-D	35 DA-A	44 DA-A	54 DA-A	63 DA-D	35 DA-A	44 DA-A		
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Unit	8	9	10	11	12	13	14
1	Sequence	2.5	PT/A	100 a	92 ab	92 b	98 a	94 a	100 a	92 bc
	Roundup WeatherMax "new"	22	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
2	Sequence	2.5	PT/A	100 a	93 a	91 b	97 a	96 a	99 a	92 b
	Touchdown Total	24	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
3	Sequence	2.5	PT/A	100 a	91 ab	93 ab	100 a	97 a	100 a	93 b
	Touchdown HiTECH 5	19.2	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
4	Sequence	2.5	PT/A	100 a	99 a	92 b	100 a	96 a	100 a	93 b
	Sequence	2.5	PT/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
5	Sequence	2.5	PT/A	100 a	82 b	76 c	98 a	94 a	99 a	88 c
	Envoke	0.1	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
6	Sequence	2.5	PT/A	100 a	95 a	81 c	100 a	95 a	100 a	92 b
	Envoke	0.15	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
7	Sequence	2.5	PT/A	100 a	91 ab	94 ab	98 a	95 a	98 a	96 ab
	A15292	24	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
8	Sequence	2.5	PT/A	100 a	98 a	96 ab	100 a	95 a	97 a	98 a
	A15292	36	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
9	Sequence	2.5	PT/A	100 a	90 ab	93 ab	100 a	95 a	100 a	95 ab
	A15292	24	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
10	Sequence	2.5	PT/A	100 a	93 a	97 ab	100 a	95 a	100 a	98 a
	A15292	36	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							

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Weed Code		AMAPA	IAQTA	IAQTA	IAQTA	IAQTA	XANST	XANST
Crop Code								
Rating Data Type		control	control	control	control	control	control	control
Rating Unit		%	%	%	%	%	%	%
Rating Date		Aug-28-06	Jun-16-06	Jun-25-06	Jul-05-06	Aug-28-06	Jun-16-06	Jun-25-06
Assessed By		SC	AD	SC	AD	SC	AD	SC
Trt-Eval Interval		63 DA-D	35 DA-A	44 DA-A	54 DA-A	63 DA-D	35 DA-A	44 DA-A
ARM Action Codes								
# Subsamples, Dec.								
Trt Treatment	Rate							
No. Name	Rate Unit	8	9	10	11	12	13	14
11 Sequence	2.5 PT/A	100 a	94 a	93 ab	100 a	98 a	100 a	94 ab
Touchdown HiTECH 5	19.2 OZ/A							
Envoke	0.1 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
12 Sequence	2.5 PT/A	100 b	97 a	96 ab	100 a	97 a	100 a	98 a
Touchdown HiTECH 5	19.2 OZ/A							
Envoke	0.15 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
13 Sequence	2.5 PT/A	100 a	96 a	98 a	100 a	98 a	100 a	98 a
Touchdown HiTECH 5	19.2 OZ/A							
Envoke	0.1 OZ/A							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
14 Sequence	2.5 PT/A	100 a	95 a	96 ab	97 a	98 a	100 a	98 a
Touchdown HiTECH 5	19.2 OZ/A							
Envoke	0.15 OZ/A							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
15 Sequence	2.5 PT/A	100 a	97 a	99 a	100 a	95 a	100 a	99 a
A15292	36 OZ/A							
NIS	0.25 % V/V							
A15292	36 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
16 Non-treated		0 c	0 c	0 d	0 b	0 b	0 b	0 d
LSD (P=.05)		0.2	9.0	5.5	2.8	5.9	2.9	4.3
Standard Deviation		0.1	6.3	3.8	2.0	4.2	2.1	3.0
CV		0.13	7.2	4.41	2.13	4.63	2.2	3.36
Bartlett's X2		0.0	27.927	41.074	29.285	14.494	3.44	49.028
P(Bartlett's X2)		.	0.015*	0.001*	0.001*	0.414	0.329	0.001*

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code		XANST	XANST	DIGSA	DIGSA	DIGSA	RCHSC	RCHSC		
Crop Code										
Rating Data Type		control	control	control	control	control	control	control		
Rating Unit		%	&	%	%	%	%	%		
Rating Date		Jul-05-06	Aug-28-06	Jun-25-06	Jul-05-06	Aug-28-06	Jun-25-06	Jul-05-06		
Assessed By		AD	SC	SC	AD	SC	SC	AD		
Trt-Eval Interval		54 DA-A	63 DA-D	44 DA-A	54 DA-A	63 DA-D	44 DA-A	54 DA-A		
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Unit	15	16	17	18	19	20	21
1	Sequence	2.5	PT/A	100 a	99 a	92 ef	98 a	98 a	92 bc	100 a
	Roundup WeatherMax "new"	22	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
2	Sequence	2.5	PT/A	100 a	99 a	93 def	97 a	99 a	92 bc	100 a
	Touchdown Total	24	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
3	Sequence	2.5	PT/A	100 a	99 a	93 def	97 a	98 a	92 bc	100 a
	Touchdown HiTECH 5	19.2	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
4	Sequence	2.5	PT/A	100 a	99 a	93 cde	98 a	98 a	93 abc	100 a
	Sequence	2.5	PT/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
5	Sequence	2.5	PT/A	100 a	98 b	84 g	84 bc	99 a	73 d	88 b
	Envoke	0.1	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
6	Sequence	2.5	PT/A	100 a	99 a	89 f	82 c	98 a	73 d	89 b
	Envoke	0.15	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
7	Sequence	2.5	PT/A	100 a	99 a	96 a-d	97 a	99 a	94 abc	100 a
	A15292	24	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
8	Sequence	2.5	PT/A	100 a	99 ab	99 a	97 a	99 a	99 a	100 a
	A15292	36	OZ/A							
	NIS	0.25	% V/V							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
9	Sequence	2.5	PT/A	100 a	99 a	94 b-e	92 ab	99 a	96 ab	100 a
	A15292	24	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							
10	Sequence	2.5	PT/A	100 a	99 a	99 a	94 a	98 a	97 ab	100 a
	A15292	36	OZ/A							
	Touchdown Total	24	OZ/A							
	Direx	16	OZ/A							

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Weed Code	XANST	XANST	DIGSA	DIGSA	DIGSA	RCHSC	RCHSC	
Crop Code								
Rating Data Type	control	control	control	control	control	control	control	
Rating Unit	%	&	%	%	%	%	%	
Rating Date	Jul-05-06	Aug-28-06	Jun-25-06	Jul-05-06	Aug-28-06	Jun-25-06	Jul-05-06	
Assessed By	AD	SC	SC	AD	SC	SC	AD	
Trt-Eval Interval	54 DA-A	63 DA-D	44 DA-A	54 DA-A	63 DA-D	44 DA-A	54 DA-A	
ARM Action Codes								
# Subsamples, Dec.								
Trt Treatment								
No. Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
	Unit	Unit	Unit	Unit	Unit	Unit	Unit	
	15	16	17	18	19	20	21	
11 Sequence	2.5 PT/A	100 a	99 a	95 a-e	95 a	99 a	90 c	100 a
Touchdown HiTECH 5	19.2 OZ/A							
Envoke	0.1 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
12 Sequence	2.5 PT/A	100 a	99 a	98 ab	98 a	99 a	94 abc	100 a
Touchdown HiTECH 5	19.2 OZ/A							
Envoke	0.15 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
13 Sequence	2.5 PT/A	100 a	99 a	99 a	97 a	98 a	94 abc	100 a
Touchdown HiTECH 5	19.2 OZ/A							
Envoke	0.1 OZ/A							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
14 Sequence	2.5 PT/A	100 a	99 a	98 abc	96 a	99 a	97 ab	100 a
Touchdown HiTECH 5	19.2 OZ/A							
Envoke	0.15 OZ/A							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
15 Sequence	2.5 PT/A	100 a	99 ab	99 a	100 a	99 a	99 a	100 a
A15292	36 OZ/A							
NIS	0.25 % V/V							
A15292	36 OZ/A							
NIS	0.25 % V/V							
Touchdown Total	24 OZ/A							
Direx	16 OZ/A							
16 Non-treated		0 b	0 c	0 h	0 d	0 b	0 e	0 c
LSD (P=.05)	0.0	0.8	4.2	8.1	1.8	5.4	1.2	
Standard Deviation	0.0	0.6	2.9	5.6	1.3	3.8	0.8	
CV	0.0	0.62	3.28	6.36	1.37	4.38	0.9	
Bartlett's X2	0.0	8.883	42.224	35.124	15.266	26.124	0.009	
P(Bartlett's X2)	.	0.261	0.001*	0.001*	0.123	0.016*	0.923	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code			RCHSC	Seed Yld	Seed Yld
Crop Code				GOSHI	GOSHI
Rating Data Type			control	wt/lb	YIELD
Rating Unit			%	per plot	LB/A
Rating Date			Aug-28-06	Sep-05-06	Sep-05-06
Assessed By			SC	SC	SC
Trt-Eval Interval			108 DA-A	116 DA-A	116 DA-A
ARM Action Codes					TY1
# Subsamples, Dec.					1
Trt No.	Treatment Name	Rate	22	23	24
		Rate Unit			
1	Sequence	2.5 PT/A	97 a	10 ab	2922.9 ab
	Roundup WeatherMax "new"	22 OZ/A			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			
2	Sequence	2.5 PT/A	95 a	10 ab	2786.4 ab
	Touchdown Total	24 OZ/A			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			
3	Sequence	2.5 PT/A	87 a	9 ab	2754.4 ab
	Touchdown HiTECH 5	19.2 OZ/A			
	NIS	0.25 % V/V			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			
4	Sequence	2.5 PT/A	94 a	11 a	3120.3 a
	Sequence	2.5 PT/A			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			
5	Sequence	2.5 PT/A	71 b	9 b	2535.2 b
	Envoke	0.1 OZ/A			
	NIS	0.25 % V/V			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			
6	Sequence	2.5 PT/A	73 b	8 b	2451.0 b
	Envoke	0.15 OZ/A			
	NIS	0.25 % V/V			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			
7	Sequence	2.5 PT/A	86 a	9 ab	2718.1 ab
	A15292	24 OZ/A			
	NIS	0.25 % V/V			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			
8	Sequence	2.5 PT/A	90 a	11 a	3113.1 a
	A15292	36 OZ/A			
	NIS	0.25 % V/V			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			
9	Sequence	2.5 PT/A	91 a	10 ab	2859.0 ab
	A15292	24 OZ/A			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			
10	Sequence	2.5 PT/A	87 a	10 ab	2928.7 ab
	A15292	36 OZ/A			
	Touchdown Total	24 OZ/A			
	Direx	16 OZ/A			

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Weed Code		RCHSC	Seed Yld	Seed Yld
Crop Code			GOSHI	GOSHI
Rating Data Type		control	wt/lb	YIELD
Rating Unit		%	per plot	LB/A
Rating Date		Aug-28-06	Sep-05-06	Sep-05-06
Assessed By		SC	SC	SC
Trt-Eval Interval		108 DA-A	116 DA-A	116 DA-A
ARM Action Codes				TY1
# Subsamples, Dec.				1
Trt Treatment	Rate			
No. Name	Rate Unit	22	23	24
11 Sequence	2.5 PT/A	93 a	10 ab	2869.2 ab
Touchdown HiTECH 5	19.2 OZ/A			
Envoke	0.1 OZ/A			
NIS	0.25 % V/V			
Touchdown Total	24 OZ/A			
Direx	16 OZ/A			
12 Sequence	2.5 PT/A	90 a	10 ab	2789.3 ab
Touchdown HiTECH 5	19.2 OZ/A			
Envoke	0.15 OZ/A			
NIS	0.25 % V/V			
Touchdown Total	24 OZ/A			
Direx	16 OZ/A			
13 Sequence	2.5 PT/A	90 a	10 ab	2854.6 ab
Touchdown HiTECH 5	19.2 OZ/A			
Envoke	0.1 OZ/A			
Touchdown Total	24 OZ/A			
Direx	16 OZ/A			
14 Sequence	2.5 PT/A	99 a	10 ab	2844.5 ab
Touchdown HiTECH 5	19.2 OZ/A			
Envoke	0.15 OZ/A			
Touchdown Total	24 OZ/A			
Direx	16 OZ/A			
15 Sequence	2.5 PT/A	97 a	9 b	2501.8 b
A15292	36 OZ/A			
NIS	0.25 % V/V			
A15292	36 OZ/A			
NIS	0.25 % V/V			
Touchdown Total	24 OZ/A			
Direx	16 OZ/A			
16 Non-treated		0 c	0 c	0.0 c
LSD (P=.05)		12.4	1.7	484.10
Standard Deviation		8.7	1.2	338.75
CV		10.35	12.89	12.89
Bartlett's X2		28.756	11.29	11.29
P(Bartlett's X2)		0.007*	0.663	0.663

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 24: TY1 = 290.4*[23]

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	Previous Crops	Previous Pesticides	Year
1.			

MAINTENANCE

Field Prep./Maintenance:

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

SOIL DESCRIPTION

% Sand: 94	% OM: 1.3	Texture: Sand	
% Silt: 2	pH: 6.4	Soil Name: Tifton sandy loam	
% Clay: 4	CEC: _____	Fert. Level: _____	

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: _____

Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	May-12-06	Jun-05-06	Jun-15-06	Jun-26-06
Time of Day:	8:00am	8:30am	8:00am	8:00 am
Application Method:	Broadcast	Broadcast	Broadcast	Broadcast
Application Timing:	1-2 leaf	8 leaf	11 leaf	layby
Applic. Placement:	overtop	overtop	overtop	directed
Air Temp., Unit:	67 F	76 F	76 F	78 F
% Relative Humidity:	41	56	76	86
Wind Velocity, Unit:	0 mph	1 mph	1 mph	2 mph
Dew Presence (Y/N):	y	y	y	y
Water Hardness:				
Soil Temp., Unit:	68 F	79 F	79 F	82 F
Soil Moisture:	moist	moist	moist	fair
% Cloud Cover:	0	25	20	100

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	GOSHI 1-2 leaf	GOSHI 8 leaf	GOSHI 11 leaf	GOSHI layby
Stage Scale:	1-2 leaf	8 leaf	11 leaf	14 leaf
Height, Unit:	1.5 inch	10 inch	14 inch	18 inch

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WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code, Stage:	XANST 1-2 leaf	XANST 8 leaf	XANST 11 leaf	XANST layby
Stage Scale:	< 3 inch	< 7 inch	< 3 inch	< 5 inch
Density, Unit:	5 ydsq	5 ydsq	5 ydsq	5 ydsq
Weed 2 Code, Stage:	DIGSA 1-2 leaf	DIGSA 8 leaf	DIGSA 11 leaf	DIGSA layby
Stage Scale:	< 3 inch	< 8 inch	< 3 inch	< 5 inch
Density, Unit:	12 ydsq	12 ydsq	8 ydsq	8 ydsq
Weed 3 Code, Stage:	IAQTA 1-2 leaf	IAQTA 8 leaf	IAQTA 11 leaf	IAQTA layby
Stage Scale:	< 2 inch	< 2 inch	< 2 inch	< 2 inch
Density, Unit:	2 ydsq	2 ydsq	1 ydsq	1 ydsq
Weed 4 Code, Stage:	AMAPA 1-2 leaf	AMAPA 8 leaf	AMAPA 11 leaf	AMAPA layby
Stage Scale:	< 3 inch	< 3 inch	< 3 inch	< 3 inch
Density, Unit:	1 ydsq	1 ydsq	1 ydsq	1 ydsq
Weed 5 Code, Stage:	RAPSS 1-2 leaf	RAPSS 8 leaf	RAPSS 11 leaf	RAPSS layby
Stage Scale:	< 3 inch	< 3 inch	< 3 inch	< 3 inch
Density, Unit:	2 ydsq	1 ydsq	.5 ydsq	.1 ydsq
Weed 6 Code, Stage:	RCHSC 1-2 leaf	RCHSC 8 leaf	RCHSC 11 leaf	RCHSC layby
Stage Scale:	< 1 inch	< 4 inch	< 2 inch	< 3 inch
Density, Unit:	5 ydsq	5 ydsq	5 ydsq	5 ydsq

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	backpack	backpack	backpack	backpack
Operating Pressure:	23	23	23	18
Nozzle Type:	flat fan	flat fan	flat fan	flat fan
Nozzle Size:	11002	11002	11002	11002
Nozzle Spacing, Unit:	18 inch	18 inch	18 inch	12 inch
Nozzles/Row:	2	2	2	3
Band Width, Unit:				
Boom Length, Unit:	4.5 feet	4.5 feet	4.5 feet	2 feet
Boom Height, Unit:	15 inch	15 inch	15 inch	12 inch
Ground Speed, Unit:	3 mph	3 mph	3 mph	3 mph
Incorporation Equip.:				
Hours to Incorp.:				
Incorp. Depth, Unit:				
Carrier:	water	water	water	water
Spray Volume, Unit:	14.8 GPA	14.8 GPA	14.8 GPA	14.8 GPA
Spray pH:				
Propellant:	CO2	CO2	CO2	CO2
Tank Mix (Y/N):	Y	Y	Y	Y

Trt No	Treatment Application Comment