

University of Georgia

Developing the most economically effective Brake F2 system in RR cotton. Loc 2.

Trial ID: C44-14

Study Dir.: Stanley Culpepper

Location: Sunbelt Expo.

Investigator: Stanley Culpepper

Use 2 liters(s) per treatment mixture to spray 14.8 gal/ac

Plots: 6 by 24 feet

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. 1	By Rep 2	3	4
1	SP1174-L15	1.8	L	16	oz/a	PRE	A	16.89 ml/mx	101	209	307	404
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Warrant	3	L	48	oz/a	POST1	B	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
	Direx	4	L	1	lb ai/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	1.5	lb ai/a	Layby	D	33.78 ml/mx				
	COC		L	1	qt/a	Layby	D	33.78 ml/mx				
2	SP1174-L17	2.2	L	16	oz/a	PRE	A	16.89 ml/mx	102	214	308	409
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Warrant	3	L	48	oz/a	POST1	B	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
	Direx	4	L	1	lb ai/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	1.5	lb ai/a	Layby	D	33.78 ml/mx				
	COC		L	1	qt/a	Layby	D	33.78 ml/mx				
3	SP1174-R1	2.6	L	16	oz/a	PRE	A	16.89 ml/mx	103	204	303	405
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Warrant	3	L	48	oz/a	POST1	B	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
	Direx	4	L	1	lb ai/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	1.5	lb ai/a	Layby	D	33.78 ml/mx				
	COC		L	1	qt/a	Layby	D	33.78 ml/mx				
4	Reflex	2	L	12	oz/a	PRE	A	12.67 ml/mx	104	203	311	408
	Warrant	3	L	48	oz/a	PRE	A	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Warrant	3	L	48	oz/a	POST1	B	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
	Direx	4	L	1	lb ai/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	1.5	lb ai/a	Layby	D	33.78 ml/mx				
	COC		L	1	qt/a	Layby	D	33.78 ml/mx				
5	SP1174-L15	1.8	L	16	oz/a	PRE	A	16.89 ml/mx	105	211	301	402
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Staple	3.2	L	2.6	oz/a	POST1	B	2.745 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
	Direx	4	L	1	lb ai/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	1.5	lb ai/a	Layby	D	33.78 ml/mx				
	COC		L	1	qt/a	Layby	D	33.78 ml/mx				
6	SP1174-L17	2.2	L	16	oz/a	PRE	A	16.89 ml/mx	106	210	312	413
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Staple	3.2	L	2.6	oz/a	POST1	B	2.745 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
	Direx	4	L	1	lb ai/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	1.5	lb ai/a	Layby	D	33.78 ml/mx				
	COC		L	1	qt/a	Layby	D	33.78 ml/mx				
7	SP1174-R1	2.6	L	16	oz/a	PRE	A	16.89 ml/mx	107	201	314	403
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Staple	3.2	L	2.6	oz/a	POST1	B	2.745 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
	Direx	4	L	1	lb ai/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	1.5	lb ai/a	Layby	D	33.78 ml/mx				
	COC		L	1	qt/a	Layby	D	33.78 ml/mx				

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Use 2 liters(s) per treatment mixture to spray 14.8 gal/ac

Plots: 6 by 24 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
8	Reflex	2	L	12	oz/a	PRE	A	12.67 ml/mx	108	212	305	412
	Warrant	3	L	48	oz/a	PRE	A	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Staple	3.2	L	2.6	oz/a	POST1	B	2.745 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
	Direx	4	L	1	lb ai/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	1.5	lb ai/a	Layby	D	33.78 ml/mx				
	COC		L	1	qt/a	Layby	D	33.78 ml/mx				
9	SP1174-L15	1.8	L	16	oz/a	PRE	A	16.89 ml/mx	109	205	313	410
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Warrant	3	L	48	oz/a	POST1	B	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
10	SP1174-L17	2.2	L	16	oz/a	PRE	A	16.89 ml/mx	110	202	306	407
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Warrant	3	L	48	oz/a	POST1	B	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
11	SP1174-R1	2.6	L	16	oz/a	PRE	A	16.89 ml/mx	111	207	304	406
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Warrant	3	L	48	oz/a	POST1	B	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
12	Reflex	2	L	12	oz/a	PRE	A	12.67 ml/mx	112	206	302	414
	Warrant	3	L	48	oz/a	PRE	A	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST1	B	33.78 ml/mx				
	Warrant	3	L	48	oz/a	POST1	B	50.67 ml/mx				
	Roundup WMAX	4.5	L	32	oz/a	POST2	C	33.78 ml/mx				
	Dual Magnum	7.64	L	16	oz/a	POST2	C	16.89 ml/mx				
13	Non-treated Control								113	208	309	411
14	Non-treated Control								114	213	310	401

Sort Order: Treatment

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Trial ID: C44-14

Study Dir.: Stanley Culpepper

Location: Sunbelt Expo.

Investigator: Stanley Culpepper

Weed Code						AMAPA	AMAPA
Crop Code							
Rating Data Type	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI		
Rating Unit	INJURY	INJURY	CONTROL	INJURY	STAND COUNT	CONTROL	CONTROL
Rating Date	%	%	%	%	#/PLOT	%	%
Crop Stage	5/21/2014	5/29/2014	6/24/2014	7/25/2014	5/21/2014	5/29/2014	6/10/2014
Assessed By	SC	JS	SC	SC		SC	JS
Trt-Eval Interval	12 DA-A	20 DA-A	12 DA-C	31 DA-D	12 DA-A	20 DA-A	12 DA-B
ARM Action Codes					T1		
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Rate Unit	Rate											
				1	2	3	4	8	11	12					
1	SP1174-L15	16	oz/a	5.0	a	7.5	a	0.0	a	142.8	a	80.0	c	90.8	d
	Roundup WMAX	32	oz/a												
	Warrant	48	oz/a												
	Roundup WMAX	32	oz/a												
	Dual Magnum	16	oz/a												
	Direx	1	lb ai/a												
	MSMA	1.5	lb ai/a												
	COC	1	qt/a												
2	SP1174-L17	16	oz/a	4.5	a	7.5	a	0.0	a	136.0	a	86.0	bc	95.5	bc
	Roundup WMAX	32	oz/a												
	Warrant	48	oz/a												
	Roundup WMAX	32	oz/a												
	Dual Magnum	16	oz/a												
	Direx	1	lb ai/a												
	MSMA	1.5	lb ai/a												
	COC	1	qt/a												
3	SP1174-R1	16	oz/a	6.0	a	10.0	a	0.0	a	143.0	a	97.3	a	98.0	ab
	Roundup WMAX	32	oz/a												
	Warrant	48	oz/a												
	Roundup WMAX	32	oz/a												
	Dual Magnum	16	oz/a												
	Direx	1	lb ai/a												
	MSMA	1.5	lb ai/a												
	COC	1	qt/a												
4	Reflex	12	oz/a	5.0	a	10.0	a	0.0	a	133.0	a	99.3	a	100.0	a
	Warrant	48	oz/a												
	Roundup WMAX	32	oz/a												
	Warrant	48	oz/a												
	Roundup WMAX	32	oz/a												
	Dual Magnum	16	oz/a												
	Direx	1	lb ai/a												
	MSMA	1.5	lb ai/a												
5	SP1174-L15	16	oz/a	6.3	a	8.8	a	0.0	a	142.3	a	86.5	bc	98.5	ab
	Roundup WMAX	32	oz/a												
	Staple	2.6	oz/a												
	Roundup WMAX	32	oz/a												
	Dual Magnum	16	oz/a												
	Direx	1	lb ai/a												
	MSMA	1.5	lb ai/a												
	COC	1	qt/a												
6	SP1174-L17	16	oz/a	4.5	a	7.5	a	0.0	a	136.3	a	85.0	bc	99.0	a
	Roundup WMAX	32	oz/a												
	Staple	2.6	oz/a												
	Roundup WMAX	32	oz/a												
	Dual Magnum	16	oz/a												
	Direx	1	lb ai/a												
	MSMA	1.5	lb ai/a												
	COC	1	qt/a												

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Weed Code							AMAPA	AMAPA
Crop Code		GOSHI	GOSHI	GOSHI	GOSHI	GOSHI		
Rating Data Type		INJURY	INJURY	CONTROL	INJURY	STAND COUNT	CONTROL	CONTROL
Rating Unit		%	%	%	%	#/PLOT	%	%
Rating Date		5/21/2014	5/29/2014	6/24/2014	7/25/2014	5/21/2014	5/29/2014	6/10/2014
Crop Stage								
Assessed By		SC	JS	SC	SC	12 DA-A	SC	JS
Trt-Eval Interval		12 DA-A	20 DA-A	12 DA-C	31 DA-D	T1	20 DA-A	12 DA-B
ARM Action Codes								
# Subsamples, Dec.								

Trt	Treatment	Rate	Unit	1	2	3	4	8	11	12	
7	SP1174-R1	16	oz/a	5.5	a 8.8	a 0.0	a 0.0	a 139.8	a 92.0	ab 98.8	ab
	Roundup WMAX	32	oz/a								
	Staple	2.6	oz/a								
	Roundup WMAX	32	oz/a								
	Dual Magnum	16	oz/a								
	Direx	1	lb ai/a								
	MSMA	1.5	lb ai/a								
	COC	1	qt/a								
8	Reflex	12	oz/a	7.5	a 10.0	a 0.0	a 0.0	a 140.8	a 97.3	a 100.0	a
	Warrant	48	oz/a								
	Roundup WMAX	32	oz/a								
	Staple	2.6	oz/a								
	Roundup WMAX	32	oz/a								
	Dual Magnum	16	oz/a								
	Direx	1	lb ai/a								
	MSMA	1.5	lb ai/a								
	COC	1	qt/a								
9	SP1174-L15	16	oz/a	4.0	a 7.5	a 0.0	a 0.0	a 143.3	a 90.0	ab 93.5	cd
	Roundup WMAX	32	oz/a								
	Warrant	48	oz/a								
	Roundup WMAX	32	oz/a								
	Dual Magnum	16	oz/a								
10	SP1174-L17	16	oz/a	5.0	a 7.5	a 0.0	a 0.0	a 143.0	a 90.0	ab 94.3	c
	Roundup WMAX	32	oz/a								
	Warrant	48	oz/a								
	Roundup WMAX	32	oz/a								
	Dual Magnum	16	oz/a								
11	SP1174-R1	16	oz/a	7.5	a 8.8	a 0.0	a 0.0	a 139.8	a 91.8	ab 97.8	ab
	Roundup WMAX	32	oz/a								
	Warrant	48	oz/a								
	Roundup WMAX	32	oz/a								
	Dual Magnum	16	oz/a								
12	Reflex	12	oz/a	7.0	a 10.0	a 0.0	a 0.0	a 135.3	a 98.0	a 100.0	a
	Warrant	48	oz/a								
	Roundup WMAX	32	oz/a								
	Warrant	48	oz/a								
	Roundup WMAX	32	oz/a								
	Dual Magnum	16	oz/a								
13	Non-treated Control			0.0	b 0.0	b 0.0	a 0.0	a 138.5	a 0.0	d 0.0	e
14	Non-treated Control			0.0	b 0.0	b 0.0	a 0.0	a 141.0	a 0.0	d 0.0	e
LSD (P=.05)				3.99	4.99	0.00	0.00	9.36	9.38	3.42	
Standard Deviation				2.79	3.49	0.00	0.00	6.55	6.56	2.40	
CV				57.72	47.16	0.0	0.0	4.69	8.4	2.88	
Bartlett's X2				13.522	9.81	0.0	0.0	19.062	24.159	13.645	
P(Bartlett's X2)				0.261	0.457	.	.	0.121	0.012*	0.092	
Replicate F				3.225	0.134	0.000	0.000	0.562	0.859	0.813	
Replicate Prob(F)				0.0328	0.9392	1.0000	1.0000	0.6431	0.4702	0.4947	
Treatment F				2.779	3.579	0.000	0.000	1.037	104.512	872.350	
Treatment Prob(F)				0.0068	0.0010	1.0000	1.0000	0.4379	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.

Weed Code	AMAPA	AMAPA	AMAPA	PANTE	PANTE	PANTE	PANTE
Crop Code							
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%	%
Rating Date	6/24/2014	7/25/2014	9/7/2014	5/29/2014	6/10/2014	6/24/2014	7/25/2014
Crop Stage							
Assessed By	SC	SC	SC	SC	JS	SC	SC
Trt-Eval Interval	12 DA-C	31 DA-D	75 DA-D	20 DA-A	12 DA-B	12 DA-C	31 DA-D
ARM Action Codes							
# Subsamples, Dec.							

[illegible]

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Weed Code	AMAPA	AMAPA	AMAPA	PANTE	PANTE	PANTE	PANTE
Crop Code							
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%	%
Rating Date	6/24/2014	7/25/2014	9/7/2014	5/29/2014	6/10/2014	6/24/2014	7/25/2014
Crop Stage							
Assessed By	SC	SC	SC	SC	JS	SC	SC
Trt-Eval Interval	12 DA-C	31 DA-D	75 DA-D	20 DA-A	12 DA-B	12 DA-C	31 DA-D
ARM Action Codes							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	13		14		15		16	17	18		19		20		21	
8	Reflex	12	oz/a	98.3	a	98.3	a	98.0	a			97.5	a	100.0	a	100.0	a	100.0	a
	Warrant	48	oz/a																
	Roundup WMAX	32	oz/a																
	Staple	2.6	oz/a																
	Roundup WMAX	32	oz/a																
	Dual Magnum	16	oz/a																
	Direx	1	lb ai/a																
	MSMA	1.5	lb ai/a																
	COC	1	qt/a																
9	SP1174-L15	16	oz/a	76.3	cd	56.3	d	58.8	c			77.5	e	98.5	ab	100.0	a	100.0	a
	Roundup WMAX	32	oz/a																
	Warrant	48	oz/a																
	Roundup WMAX	32	oz/a																
	Dual Magnum	16	oz/a																
10	SP1174-L17	16	oz/a	77.5	cd	63.8	cd	68.8	bc			89.3	bc	99.3	ab	100.0	a	100.0	a
	Roundup WMAX	32	oz/a																
	Warrant	48	oz/a																
	Roundup WMAX	32	oz/a																
	Dual Magnum	16	oz/a																
11	SP1174-R1	16	oz/a	86.0	bc	75.8	c	71.5	bc			95.0	ab	98.0	b	100.0	a	100.0	a
	Roundup WMAX	32	oz/a																
	Warrant	48	oz/a																
	Roundup WMAX	32	oz/a																
	Dual Magnum	16	oz/a																
12	Reflex	12	oz/a	98.0	a	95.8	a	93.3	a			95.3	ab	98.5	ab	100.0	a	96.3	b
	Warrant	48	oz/a																
	Roundup WMAX	32	oz/a																
	Warrant	48	oz/a																
	Roundup WMAX	32	oz/a																
	Dual Magnum	16	oz/a																
13	Non-treated Control			0.0	e	0.0	e	0.0	d			0.0	f	0.0	c	0.0	b	0.0	c
14	Non-treated Control			0.0	e	0.0	e	0.0	d			0.0	f	0.0	c	0.0	b	0.0	c
LSD (P=.05)				10.57		14.84		12.89		.	.	6.15		1.60		0.00		1.83	
Standard Deviation				7.40		10.39		9.02		.	.	4.30		1.12		0.00		1.28	
CV				9.73		14.35		12.37		.	.	5.69		1.32		0.0		1.5	
Bartlett's X2				29.374		33.828		15.464		.	.	24.505		3.675		0.0		0.0	
P(Bartlett's X2)				0.002*		0.001*		0.162		.	.	0.011*		0.721		.		.	
Replicate F				1.857		0.105		0.217				2.904		5.708		0.000		1.000	
Replicate Prob(F)				0.1529		0.9568		0.8842				0.0468		0.0024		1.0000		0.4031	
Treatment F				81.218		42.180		55.758				231.970		4150.128		0.000		3204.693	
Treatment Prob(F)				0.0001		0.0001		0.0001				0.0001		0.0001		1.0000		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.

Weed Code	PANTE	AMAPA	AMAPA	AMAPA	PANTE	PANTE	PANTE
Crop Code							
Rating Data Type	CONTROL	COUNTS	COUNTS	COUNTS	COUNTS	COUNTS	COUNTS
Rating Unit	%	#/PLOT	#/PLOT	#/PLOT	#/PLOT	#/PLOT	#/PLOT
Rating Date	9/7/2014	5/29/2014	6/10/2014	6/26/2014	5/29/2014	6/10/2014	6/26/2014
Crop Stage							
Assessed By	SC						
Trt-Eval Interval	75 DA-D	20 DA-A	12 DA-B	2 DA-D	20 DA-A	12 DA-B	2 DA-D
ARM Action Codes							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate	Unit	Rate														
				22	23	24	25	26	27	28	29	30	31					
1	SP1174-L15	16	oz/a	100.0	a		34.5	b	16.5	b	17.8	c	120.5	bc	4.0	bc	0.0	d
	Roundup WMAX	32	oz/a															
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
	Direx	1	lb ai/a															
	MSMA	1.5	lb ai/a															
2	COC	1	qt/a															
	SP1174-L17	16	oz/a	100.0	a		13.8	d	9.0	c	10.3	d	83.8	d	3.0	bc	0.0	d
	Roundup WMAX	32	oz/a															
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
	Direx	1	lb ai/a															
3	MSMA	1.5	lb ai/a															
	COC	1	qt/a															
	SP1174-R1	16	oz/a	100.0	a		1.8	e	2.5	de	3.0	ef	29.5	e	8.0	bc	1.3	cd
	Roundup WMAX	32	oz/a															
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
4	Direx	1	lb ai/a															
	MSMA	1.5	lb ai/a															
	COC	1	qt/a															
	Reflex	12	oz/a	100.0	a		0.8	e	0.0	e	0.5	f	25.8	e	1.8	bc	0.3	d
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Warrant	48	oz/a															
5	Roundup WMAX	32	oz/a															
	Dual Magnum	32	oz/a															
	Dual Magnum	16	oz/a															
	Direx	1	lb ai/a															
	MSMA	1.5	lb ai/a															
	COC	1	qt/a															
	SP1174-L15	16	oz/a	100.0	a		26.0	bc	1.3	de	2.8	ef	115.5	bc	3.5	bc	0.0	d
6	Roundup WMAX	32	oz/a															
	Staple	2.6	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
	Direx	1	lb ai/a															
	MSMA	1.5	lb ai/a															
	COC	1	qt/a															
7	SP1174-L17	16	oz/a	100.0	a		9.5	de	3.5	de	1.8	ef	95.8	cd	2.5	bc	1.8	cd
	Roundup WMAX	32	oz/a															
	Staple	2.6	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
	Direx	1	lb ai/a															
	MSMA	1.5	lb ai/a															
8	COC	1	qt/a															
	SP1174-R1	16	oz/a	100.0	a		4.3	e	0.8	e	1.3	ef	28.0	e	0.5	c	0.0	d
	Roundup WMAX	32	oz/a															
	Staple	2.6	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
	Direx	1	lb ai/a															
9	MSMA	1.5	lb ai/a															
	COC	1	qt/a															

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Weed Code	PANTE	AMAPA	AMAPA	AMAPA	PANTE	PANTE	PANTE
Crop Code							
Rating Data Type	CONTROL	COUNTS	COUNTS	COUNTS	COUNTS	COUNTS	COUNTS
Rating Unit	%	#/PLOT	#/PLOT	#/PLOT	#/PLOT	#/PLOT	#/PLOT
Rating Date	9/7/2014	5/29/2014	6/10/2014	6/26/2014	5/29/2014	6/10/2014	6/26/2014
Crop Stage							
Assessed By	SC						
Trt-Eval Interval	75 DA-D	20 DA-A	12 DA-B	2 DA-D	20 DA-A	12 DA-B	2 DA-D
ARM Action Codes							
# Subsamples, Dec.							

Trt No.	Treatment	Rate	Unit	22	23	24	25	26	27	28	29	30	31	d				
8	Reflex	12	oz/a	100.0	a		1.0	e	0.3	e	0.3	f	8.3	e	2.8	bc	0.3	d
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Staple	2.6	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
	Direx	1	lb ai/a															
	MSMA	1.5	lb ai/a															
	COC	1	qt/a															
9	SP1174-L15	16	oz/a	95.0	a		24.5	c	14.3	b	24.0	b	143.0	b	9.3	b	2.5	c
	Roundup WMAX	32	oz/a															
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
10	SP1174-L17	16	oz/a	100.0	a		9.5	de	8.0	c	16.0	c	82.8	d	0.5	c	0.0	d
	Roundup WMAX	32	oz/a															
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
11	SP1174-R1	16	oz/a	100.0	a		4.5	de	5.0	cd	4.3	e	24.0	e	2.3	bc	0.3	d
	Roundup WMAX	32	oz/a															
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
12	Reflex	12	oz/a	95.0	a		0.5	e	0.8	e	0.0	f	15.5	e	2.8	bc	4.8	b
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Warrant	48	oz/a															
	Roundup WMAX	32	oz/a															
	Dual Magnum	16	oz/a															
13	Non-treated Control			0.0	b		250.0	a	250.0	a	250.0	a	450.0	a	600.0	a	1000.0	a
14	Non-treated Control			0.0	b		250.0	a	250.0	a	250.0	a	450.0	a	600.0	a	1000.0	a
LSD (P=.05)				5.19	.	.	9.30		4.22		3.27	.	28.42		8.09		2.23	
Standard Deviation				3.63	.	.	6.51		2.95		2.29	.	19.88		5.66		1.56	
CV				4.27	.	.	14.45		7.36		5.51	.	16.65		6.39		1.09	
Bartlett's X2				0.0	.	.	43.612		34.255		26.658	.	14.27		47.813		21.627	
P(Bartlett's X2)				1.00	.	.	0.001*		0.001*		0.003*	.	0.218		0.001*		0.001*	
Replicate F				2.167			2.263		1.029		1.745		3.833		2.020		0.372	
Replicate Prob(F)				0.1074			0.0963		0.3902		0.1738		0.0169		0.1269		0.7734	
Treatment F				394.333			722.865		3641.475		5984.410		217.749		5860.545		216636.194	
Treatment Prob(F)				0.0001			0.0001		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.

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Weed Code	SEED
Crop Code	GOSHI
Rating Data Type	HARVEST YIELD
Rating Unit	LB/PLOT LB/A
Rating Date	10/6/2014 10/6/2014
Crop Stage	
Assessed By	
Trt-Eval Interval	
ARM Action Codes	TY2
# Subsamples, Dec.	1

Trt No.	Treatment Name	Rate	Unit	32	33	34	35
1	SP1174-L15	16	oz/a			4.130 bcd	2498.7 bcd
	Roundup WMAX	32	oz/a				
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
	Direx	1	lb ai/a				
	MSMA	1.5	lb ai/a				
	COC	1	qt/a				
2	SP1174-L17	16	oz/a			4.005 d	2423.0 d
	Roundup WMAX	32	oz/a				
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
	Direx	1	lb ai/a				
	MSMA	1.5	lb ai/a				
	COC	1	qt/a				
3	SP1174-R1	16	oz/a			4.978 a	3011.4 a
	Roundup WMAX	32	oz/a				
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
	Direx	1	lb ai/a				
	MSMA	1.5	lb ai/a				
	COC	1	qt/a				
4	Reflex	12	oz/a			5.290 a	3200.5 a
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
	Direx	1	lb ai/a				
	MSMA	1.5	lb ai/a				
	COC	1	qt/a				
5	SP1174-L15	16	oz/a			4.885 ab	2955.4 ab
	Roundup WMAX	32	oz/a				
	Staple	2.6	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
	Direx	1	lb ai/a				
	MSMA	1.5	lb ai/a				
	COC	1	qt/a				
6	SP1174-L17	16	oz/a			5.523 a	3341.1 a
	Roundup WMAX	32	oz/a				
	Staple	2.6	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
	Direx	1	lb ai/a				
	MSMA	1.5	lb ai/a				
	COC	1	qt/a				
7	SP1174-R1	16	oz/a			5.510 a	3333.6 a
	Roundup WMAX	32	oz/a				
	Staple	2.6	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
	Direx	1	lb ai/a				
	MSMA	1.5	lb ai/a				
	COC	1	qt/a				

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Weed Code	SEED
Crop Code	GOSHI
Rating Data Type	HARVEST
Rating Unit	LB/PLOT
Rating Date	10/6/2014
Crop Stage	
Assessed By	
Trt-Eval Interval	
ARM Action Codes	TY2
# Subsamples, Dec.	1

Trt	Treatment	Rate	Unit	32	33	34	35
8	Reflex	12	oz/a			5.435 a	3288.2 a
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Staple	2.6	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
	Direx	1	lb ai/a				
	MSMA	1.5	lb ai/a				
	COC	1	qt/a				
9	SP1174-L15	16	oz/a			3.750 d	2268.8 d
	Roundup WMAX	32	oz/a				
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
10	SP1174-L17	16	oz/a			3.935 d	2380.7 d
	Roundup WMAX	32	oz/a				
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
11	SP1174-R1	16	oz/a			4.093 cd	2476.0 cd
	Roundup WMAX	32	oz/a				
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
12	Reflex	12	oz/a			4.835 abc	2925.2 abc
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Warrant	48	oz/a				
	Roundup WMAX	32	oz/a				
	Dual Magnum	16	oz/a				
13	Non-treated Control					0.000 e	0.0 e
14	Non-treated Control					0.000 e	0.0 e
LSD (P=.05)				.	.	0.7763	469.66
Standard Deviation				.	.	0.5432	328.65
CV				.	.	13.49	13.49
Bartlett's X2				.	.	15.93	15.931
P(Bartlett's X2)				.	.	0.144	0.144
Replicate F						2.545	2.545
Replicate Prob(F)						0.0700	0.0700
Treatment F						44.668	44.669
Treatment Prob(F)						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.

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Developing the most economically effective Brake F2 system in RR cotton. Loc 2.

Trial ID: C44-14

Study Dir.: Stanley Culpepper

Location: Sunbelt Expo.

Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Stanley Culpepper

Title: Ext. Weed Science

Affiliation: University of Georgia

Postal Code: 31794

Investigator: Stanley Culpepper

Title: Ext. Weed Science

Affiliation: University of Georgia

Postal Code: 31794

TRIAL LOCATION

City: Moultrie

Trial Status: COMPLETED

State/Prov.: GA

Trial Reliability: GOOD

Postal Code: 31788

Initiation Date: 5/9/2014

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. AMAPA	Palmer Amaranth	Amaranthus palmeri
2. PANTE	Texas Panicum	Panicum texanum

Crop 1: GOSHI COTTON, SHORT STAPLE

Variety: PHY 499 WRF

Planting Date: 5/9/2014

Planting Method: HILL DROP

Rate: 2 SEED/8.25"

Depth: 0.75 IN

Row Spacing: 36 IN

Spacing Within Row: 0.75 IN

Seed Bed: rototill flat

Soil Temperature: 80 F

Soil Moisture: MOIST

Emergence Date: 5/14/2014

SITE AND DESIGN

Plot Width, Unit: 6 FT

Plot Length, Unit: 24 FT

Reps: 4

Site Type: Sunbelt Ag Expo

Tillage Type: CONVENTIONAL

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 86 **% OM:** 1.2

Texture: LOAMY SAND

% Silt: 10 **pH:** 6.2

% Clay: 4

Overall Moisture Conditions: MOIST

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

Distance: 250 **Unit:** yd

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	5/9/2014	5/29/2014	6/12/2014	6/24/2014
Time of Day:	7:45am	9:00am	8:00am	11:00am
Application Method:	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Application Timing:	PRE	POST 1	POST 2	LAYBY
Applic. Placement:	ON SOIL	OVERTOP	OVERTOP	DIRECTED
Air Temp., Unit:	70 F	71 F	79 F	82 F
% Relative Humidity:	82	72	82	90
Wind Velocity, Unit:	5 MPH	2 MPH	4 MPH	5 MPH
Dew Presence (Y/N):	N	N	Y	N
Soil Temp., Unit:	76 F	73 F	78 F	82 F
Soil Moisture:	FAIR	MOIST	WET	MOIST
% Cloud Cover:	100	50	15	60

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	GOSHI	GOSHI	GOSHI	GOSHI
Stage Scale:	PRE	3 LEAF	7 LEAF	10 LEAF
Height, Unit:	0 IN	6.5 IN	9 IN	19 IN

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WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code, Stage:	AMAPA	AMAPA	AMAPA	AMAPA
Stage Scale:	PRE	0.5 inch	2-8 IN	2-16 IN
Density, Unit:	see data	see data	see data	see data
Weed 2 Code, Stage:	PANTE	PANTE	PANTE	PANTE
Stage Scale:	PRE	1 inch	1-3 IN	2-12 inch
Density, Unit:	see data	see data	see data	see data

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	BACKPACK	BACKPACK	BACKPACK	BACKPACK
Operating Pressure:	26	26	26	25
Nozzle Type:	AIXR	AIXR	AIXR	FLOODJET
Nozzle Size:	11002	11002	11002	TK3
Nozzle Spacing, Unit:	18 IN	18 IN	18 IN	36 IN
Nozzles/Row:	2	2	2	3
Boom Length, Unit:	4.5 FT	4.5 FT	4.5 FT	
Boom Height, Unit:	16 IN	16 IN	16 IN	15 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA
Propellant:	CO2	CO2	CO2	CO2
Tank Mix (Y/N) :	Y	Y	Y	Y

Trial Comments

OBJECTIVE: Compare Reflex + Warrant to 3 formulations of fluridone + fomesafen applied PRE.

VISUAL INJURY:

1. Little difference was noted when comparing treatments throughout the study; injury was 10% or less from PRE options throughout the study.
2. POST options caused 10 to 18% stunting with injury not influenced by PRE herbicide (data not shown).

STAND COUNTS:

1. The number of cotton plants per plot were counted at 12 DAT.
2. Treatments did not influence plant stand.

VISUAL PALMER CONTROL:

1. In the system with RU + Warrant POST 1, RU + Dual POST 2 plus a layby: Reflex + Warrant and SP R1 PRE were more effective than L15 or L17.
2. In the system with RU + Staple POST 1, RU + Dual POST 2 plus a layby: Reflex + Warrant and SP R1 were more effective than L15 or L17 only prior to POST 1; after POST 1 no differences in PRE options was noted.
3. In the system RU + Warrant POST 1 and Roundup + Dual POST 2 without a layby: Reflex + Warrant was more effective than any other PRE option.

VISUAL TEXAS MILLET CONTROL:

1. Prior to glyphosate mixtures POST 1: Reflex + Warrant and SP R1 were more effective than L17 which was generally more effective than L15.
2. Control was excellent throughout the season once glyphosate applications were initiated.

WEED COUNTS: The number of plants per plot were counted.

Palmer Amaranth:

1. In the full system when Staple was not applied POST: Reflex + Warrant and SP R1 had less plants per plot than L15 or L17.
2. In the full system when Staple was applied POST: no differences were noted among PRE options.
3. When no Staple or layby was applied: Reflex + Warrant was the most effective PRE option by mid-season.

Texas Millet:

1. Prior to glyphosate applications, Reflex + Warrant and SP R1 were more effective than L15 or L17.
2. After glyphosate applications, few plants were present in any system.

SEED YIELD:

1. In the full system without Staple: yields were greater with Reflex + Warrant and SP R1 compared to L15 or L17.
2. In the full system with Staple: yield differences were not noted among PRE options.
3. In the system without Staple or the layby: yields were greater in the Reflex + Warrant system.

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