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GR Palmer amaranth and cotton response to acetochlor progams.

Trial ID: C7-2009 Study Director: Stanley Culpepper
Location: Macon County Investigator: Stanley Culpepper

Use 2 liters(s) per treatment mixture to spray 14.8 gal/ac
Plots: 12 by 25 feet

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	Amt Product to Measure	Plot No. By Rep 1	2	3	4
1	VALOR	50	WG	0.062	lb ai/a	BD	A	2.008 g/mx	101	204	302	405
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	BD	A	22.52 ml/mx				
	COTORAN 4	4	SC	1	lb ai/a	PRE	B	33.78 ml/mx				
	PARRLAY	8	SC	1.33	lb ai/a	POST	C	22.46 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	POST	C	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	POST	C	40.0 g/mx				
	DIURON	4	SC	0.75	lb ai/a	PD	D	25.34 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	PD	D	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	PD	D	40.0 g/mx				
2	VALOR	50	WG	0.062	lb ai/a	BD	A	2.008 g/mx	102	207	301	402
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	BD	A	22.52 ml/mx				
	COTORAN 4	4	SC	1	lb ai/a	PRE	B	33.78 ml/mx				
	DUAL MAGNUM	7.62	EC	0.95	lb ai/a	POST	C	16.85 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	POST	C	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	POST	C	40.0 g/mx				
	DIURON	4	SC	0.75	lb ai/a	PD	D	25.34 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	PD	D	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	PD	D	40.0 g/mx				
3	VALOR	50	WG	0.062	lb ai/a	BD	A	2.008 g/mx	103	205	304	406
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	BD	A	22.52 ml/mx				
	COTORAN 4	4	SC	1	lb ai/a	PRE	B	33.78 ml/mx				
	MON 63410	3	CS	1.13	lb ai/a	POST	C	50.9 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	POST	C	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	POST	C	40.0 g/mx				
	DIURON	4	SC	0.75	lb ai/a	PD	D	25.34 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	PD	D	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	PD	D	40.0 g/mx				
4	VALOR	50	WG	0.062	lb ai/a	BD	A	2.008 g/mx	104	206	305	408
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	BD	A	22.52 ml/mx				
	COTORAN 4	4	SC	1	lb ai/a	PRE	B	33.78 ml/mx				
	MON 63410	3	CS	1.13	lb ai/a	POST	C	50.9 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	POST	C	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	POST	C	40.0 g/mx				
	MON 63410	3	CS	1.13	lb ai/a	PD	D	50.9 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	PD	D	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	PD	D	40.0 g/mx				
5	VALOR	50	WG	0.062	lb ai/a	BD	A	2.008 g/mx	105	208	303	404
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	BD	A	22.52 ml/mx				
	COTORAN 4	4	SC	1	lb ai/a	PRE	B	33.78 ml/mx				
	PARRLAY	8	SC	1.33	lb ai/a	POST	C	22.46 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	POST	C	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	POST	C	40.0 g/mx				
	MON 63410	3	CS	1.13	lb ai/a	PD	D	50.9 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	PD	D	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	PD	D	40.0 g/mx				
6	VALOR	50	WG	0.062	lb ai/a	BD	A	2.008 g/mx	106	201	308	407
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	BD	A	22.52 ml/mx				
	COTORAN 4	4	SC	1	lb ai/a	PRE	B	33.78 ml/mx				
	PARRLAY	8	SC	1.33	lb ai/a	POST	C	22.46 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	POST	C	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	POST	C	40.0 g/mx				
	MON 63410	3	CS	1.5	lb ai/a	PD	D	67.56 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	PD	D	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	PD	D	40.0 g/mx				

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Use 2 liters(s) per treatment mixture to spray 14.8 gal/ac
Plots: 12 by 25 feet

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	Amt Product to Measure	Plot No. By Rep 1	2	3	4
7	VALOR	50	WG	0.062	lb ai/a	BD	A	2.008 g/mx	107	203	306	401
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	BD	A	22.52 ml/mx				
	COTORAN 4	4	SC	1	lb ai/a	PRE	B	33.78 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	POST	C	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	POST	C	40.0 g/mx				
	DIURON	4	SC	0.75	lb ai/a	PD	D	25.34 ml/mx				
	ROUNDUP POWERMAX	4.5	SL	0.75	lb ai/a	PD	D	22.52 ml/mx				
	AMS PREM BLEND	100	DF	2	% w/v	PD	D	40.0 g/mx				
8	Non-treated Control								108	202	307	403

Sort Order: Treatment

Trial Comments

OBJECTIVE: Determine cotton and Palmer amaranth response to MON 63410 applied POST and POST-directed.

VISUAL INJURY:
1. Little to no injury was noted at 2 DAT.
2. At 7 DAT, injury was similar from topical applications of glyphosate plus Parrlay, Dual, or MON 63410 (15-18%).
3. At 12 DAT, injury from these same treatments ranged from 7 to 12%.
4. No injury from topical applications was noted 19 DAT.
5. Diuron atlayby caused 10 to 15% yellowing at 7 and 16 DAT, no injury was noted with directed applications of MON 63410. Layby treatments were applied 5 inches up the cotton stem because rains had delayed an ealier application.
6. No injury from directed applications was noted 35 d after treatment.

PALMER AMARANTH RESPONSE:
1. Preplant and at-plant residual herbicides did not provide adequate control of Palmer. On May 11, 15 plants per square yard were present in all treatments but was only 1/16 inch tall. Staple at 2.6 fl oz was applied topically to remove these plants except in the non-treated control.
2. On May 31, no pigweed was up in any system including herbicides thus the trial (except the control) was cultivated twice. Immediately after plowing topical applications were made, thus no pigweed was emerged at time of application. Rainfall occurred 4 d after application.
3. By 7 d after plowing and topical application, an intense flush of Palmer had emerged.
4. At 7 d after topical applicaitons, residual control from MON 63410, Dual Magnum, and Parrlay ranged from 99 to 99%.
5. By 12 d after topical applicaitons, resiual control from MON 63410 and Dual Magnum tended to be slightly more effective than Parraly.
6. By 19 d after topical applications, MON63410 provided at least 15% greater control than Dual Magnum which provided at least 12% better control than Parraly.
7. At 19 d after topical applications, layby treatments were made. Glyphosate plus MON 63410 provided little control of emerged plants while diuron mixtures provided good control of pigweed in plots prevously treated with MON 63410 or Dual Magnum. More pigweeds in plots previously treated with Parrlay were to large to control with diuron when compared to MON 63410 or Dual Magnum.

PALMER POPULATION COUNTS:
1. At 19 d after topical applications, four 1 square yard counts were made per plot.
2. Results were variable as usual but less plants numerically were noted in plots treated POST with MON 63410, followed by the Dual Magnum, followed by Parrlay.

GENERAL COMMENTS:
1. April 30, 2009: Gramoxone Inleon included with PRE treatments
2. May 11, 2009: Overspray trial exceptfor check with Staple 2.6 fl. oz. + NIS as AMAPA was 1/16 of an inch tall. Control was complete with this treatment.
3. May 31, 2009: Cultivated 2 hours before POST application

2009 Macon Co. Rainfall Data:
4-15: 0.75 in
4-21: 0.2 in

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4-23: 0.4 in

5-5: 0.25 in
5-6: 0.75 in
5-7: 0.25 in
5-10: 0.75 in
5-17: 0.75 in
5-28: 1.4 in

6-4: 0.77 in
6-5: 0.11 in
6-15: 0.56
7-5:0.1 in
7-6: 0.03 in
7-8: 1.1 in
7-13: 0.24 in
7-23: 0.41 in
7-26: 0.14 in
7-27: 0.01 in
7-28: 0.46 in
7-29: 0.1 in
7-30: 0.22 in
7-31: 0.25 in

8-2: 0.01 in
8-5: 1.04 in
8-9: 0.08 in
8-11: 0.16 in
8-16: 0.22 in
8-17: 1.03 in
8-19: 0.6 in
8-21: 0.02 in
8-27: 0.21 in
8-28: 1.35 in
8-30: 0.25 in
8-31: 0.01 in

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GR Palmer amaranth and cotton response to acetochlor progams.

Trial ID: C7-2009 Study Director: Stanley Culpepper
Location: Macon County Investigator: Stanley Culpepper

Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6	7	8	9
	Pest Type											W Weed
	Pest Code											AMAPA
	Crop Code			GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI		
	BBCH Scale			BCOT	BCOT	BCOT	BCOT	BCOT	BCOT	BCOT		
	Rating Date			6/2/2009	6/7/2009	6/12/2009	6/19/2009	6/26/2009	7/5/2009	7/24/2009		6/7/2009
	Rating Data Type			injury	injury	injury	injury	injury	injury	injury		control
	Rating Unit			%	%	%	%	%	%	%		%
	Days After Last Applic.			2	7	12	0	7	16	35		7
	Trt-Eval Interval			2 DA-C	7 DA-C	12 DA-C	19 DA-C	7 DA-D	16 DA-D			7 DA-C
	ARM Action Codes											
1	VALOR	0.062	lb ai/a	1.3 a	15.5 a	7.0 b	0.0 a	14.0 ab	9.8 b	0.0 a		90.0 c
	ROUNDUP POWERMAX	0.75	lb ai/a									
	COTORAN 4	1	lb ai/a									
	PARRLAY	1.33	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
	DIURON	0.75	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
2	VALOR	0.062	lb ai/a	2.8 a	16.3 a	7.0 b	0.0 a	13.0 b	11.0 ab	0.0 a		95.5 ab
	ROUNDUP POWERMAX	0.75	lb ai/a									
	COTORAN 4	1	lb ai/a									
	DUAL MAGNUM	0.95	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
	DIURON	0.75	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
3	VALOR	0.062	lb ai/a	3.3 a	18.0 a	12.0 a	0.0 a	14.3 ab	14.5 ab	0.0 a		97.8 a
	ROUNDUP POWERMAX	0.75	lb ai/a									
	COTORAN 4	1	lb ai/a									
	MON 63410	1.13	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
	DIURON	0.75	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
4	VALOR	0.062	lb ai/a	2.5 a	16.0 a	9.0 ab	0.0 a	0.0 c	0.0 c	0.0 a		99.0 a
	ROUNDUP POWERMAX	0.75	lb ai/a									
	COTORAN 4	1	lb ai/a									
	MON 63410	1.13	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
	MON 63410	1.13	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
5	VALOR	0.062	lb ai/a	3.0 a	16.3 a	8.8 ab	0.0 a	0.0 c	0.0 c	0.0 a		92.3 bc
	ROUNDUP POWERMAX	0.75	lb ai/a									
	COTORAN 4	1	lb ai/a									
	PARRLAY	1.33	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
	MON 63410	1.13	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
6	VALOR	0.062	lb ai/a	4.0 a	15.5 a	9.5 ab	0.0 a	0.0 c	0.0 c	0.0 a		94.5 abc
	ROUNDUP POWERMAX	0.75	lb ai/a									
	COTORAN 4	1	lb ai/a									
	PARRLAY	1.33	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									
	MON 63410	1.5	lb ai/a									
	ROUNDUP POWERMAX	0.75	lb ai/a									
	AMS PREM BLEND	2	% w/v									

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Pest Type															W Weed
Pest Code															AMAPA
Crop Code				GOSHI		GOSHI		GOSHI		GOSHI		GOSHI		GOSHI	
BBCH Scale				BCOT		BCOT		BCOT		BCOT		BCOT		BCOT	
Rating Date				6/2/2009		6/7/2009		6/12/2009		6/19/2009		6/26/2009		7/5/2009	7/24/2009	6/7/2009
Rating Data Type				injury		injury		injury		injury		injury		injury	injury	control
Rating Unit				%		%		%		%		%		%	%	%
Days After Last Applic.				2		7		12		0		7		16	35	7
Trt-Eval Interval				2 DA-C		7 DA-C		12 DA-C		19 DA-C		7 DA-D		16 DA-D		7 DA-C
ARM Action Codes																
Trt No.	Treatment Name	Rate	Rate Unit	1		2		3		4		5		6	7	8	9
7	VALOR	0.062	lb ai/a	0.5	a	0.0	b	0.0	c	0.0	a	15.0	a	15.0 a	0.0 a		83.3 d
	ROUNDUP POWERMAX	0.75	lb ai/a														
	COTORAN 4	1	lb ai/a														
	ROUNDUP POWERMAX	0.75	lb ai/a														
	AMS PREM BLEND	2	% w/v														
	DIURON	0.75	lb ai/a														
	ROUNDUP POWERMAX	0.75	lb ai/a														
	AMS PREM BLEND	2	% w/v														
8	Non-treated Control			0.0	a	0.0	b	0.0	c	0.0	a	0.0	c	0.0 c	0.0 a		0.0 e
LSD (P=.05)				2.65		3.53		3.53		0.00		1.96		4.99	0.00	.	4.60
Standard Deviation				1.80		2.40		2.40		0.00		1.33		3.40	0.00	.	3.13
CV				83.7		19.71		36.05		0.0		18.98		54.06	0.0	.	3.84
Bartlett's X2				3.689		9.664		4.136		0.0		0.81		7.997	0.0	.	10.387
P(Bartlett's X2)				0.719		0.085		0.53		.		0.667		0.018*	.	.	0.034*
Replicate F				4.487		0.137		0.396		0.000		1.000		2.070	0.000		0.438
Replicate Prob(F)				0.0139		0.9366		0.7571		1.0000		0.4123		0.1349	1.0000		0.7284
Treatment F				2.455		39.663		13.435		0.000		127.536		16.635	0.000		453.838
Treatment Prob(F)				0.0525		0.0001		0.0001		1.0000		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.

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Pest Type				W Weed		W Weed		W Weed		W Weed		W Weed		W Weed		W Weed		
Pest Code				AMAPA		AMAPA		AMAPA		AMAPA		AMAPA		AMAPA		AMAPA		
Crop Code																		
BBCH Scale																		
Rating Date				6/12/2009		6/19/2009		6/26/2009		7/5/2009		7/24/2009		9/17/2009		6/19/2009		
Rating Data Type				control		control		control		control		control		control		QUAD1-4		
Rating Unit				%		%		%		%		%		%		#/plants		
Days After Last Applic.				12		0		7		16		35		90		0		
Trt-Eval Interval				12 DA-C		19 DA-C		7 DA-D		16 DA-D		35 DA-D		90 DA-D		19 DA-C		
ARM Action Codes																T1		
Trt No.	Treatment Name	Rate	Rate Unit	10		11		12		13		14		15		21		
1	VALOR	0.062	lb ai/a	88.8	c	60.0	bc	90.3	a	79.5	c	76.3	c	48.8	b	54.8	b	
	ROUNDUP POWERMAX	0.75	lb ai/a															
	COTORAN 4	1	lb ai/a															
	PARRLAY	1.33	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
	DIURON	0.75	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
2	VALOR	0.062	lb ai/a	89.5	c	72.3	b	95.3	a	89.5	ab	90.3	ab	82.3	a	36.0	bc	
	ROUNDUP POWERMAX	0.75	lb ai/a															
	COTORAN 4	1	lb ai/a															
	DUAL MAGNUM	0.95	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
	DIURON	0.75	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
3	VALOR	0.062	lb ai/a	95.8	ab	87.3	a	93.8	a	91.0	a	92.8	a	85.0	a	13.8	c	
	ROUNDUP POWERMAX	0.75	lb ai/a															
	COTORAN 4	1	lb ai/a															
	MON 63410	1.13	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
	DIURON	0.75	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
4	VALOR	0.062	lb ai/a	96.5	a	88.0	a	81.0	b	80.8	bc	80.5	bc	51.3	b	13.5	c	
	ROUNDUP POWERMAX	0.75	lb ai/a															
	COTORAN 4	1	lb ai/a															
	MON 63410	1.13	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
	MON 63410	1.13	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
5	VALOR	0.062	lb ai/a	87.5	c	57.0	c	58.8	c	51.5	e	22.5	f	15.0	d	62.8	b	
	ROUNDUP POWERMAX	0.75	lb ai/a															
	COTORAN 4	1	lb ai/a															
	PARRLAY	1.33	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
	MON 63410	1.13	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
6	VALOR	0.062	lb ai/a	91.3	bc	60.8	bc	66.3	c	62.8	d	48.5	e	26.3	c	46.8	bc	
	ROUNDUP POWERMAX	0.75	lb ai/a															
	COTORAN 4	1	lb ai/a															
	PARRLAY	1.33	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															
	MON 63410	1.5	lb ai/a															
	ROUNDUP POWERMAX	0.75	lb ai/a															
	AMS PREM BLEND	2	% w/v															

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Pest Type				W Weed		W Weed		W Weed		W Weed		W Weed		W Weed	
Pest Code				AMAPA		AMAPA		AMAPA		AMAPA		AMAPA		AMAPA	
Crop Code															
BBCH Scale															
Rating Date				6/12/2009		6/19/2009		6/26/2009		7/5/2009		7/24/2009		9/17/2009	6/19/2009
Rating Data Type				control		control		control		control		control		control	QUAD1-4
Rating Unit				%		%		%		%		%		%	#/plants
Days After Last Applic.				12		0		7		16		35		90	0
Trt-Eval Interval				12 DA-C		19 DA-C		7 DA-D		16 DA-D		35 DA-D		90 DA-D	19 DA-C
ARM Action Codes															T1
Trt No.	Treatment Name	Rate	Rate Unit	10		11		12		13		14		15	21
7	VALOR	0.062	lb ai/a	71.3	d	30.0	d	82.5	b	73.0	c	65.3	d	27.5 c	186.0 a
	ROUNDUP POWERMAX	0.75	lb ai/a												
	COTORAN 4	1	lb ai/a												
	ROUNDUP POWERMAX	0.75	lb ai/a												
	AMS PREM BLEND	2	% w/v												
	DIURON	0.75	lb ai/a												
	ROUNDUP POWERMAX	0.75	lb ai/a												
	AMS PREM BLEND	2	% w/v												
8	Non-treated Control			0.0	e	0.0	e	0.0	d	0.0	f	0.0	g	0.0 e	
LSD (P=.05)				5.20		12.60		7.69		9.57		9.97		8.29	34.14
Standard Deviation				3.54		8.56		5.23		6.51		6.78		5.64	22.98
CV				4.56		15.05		7.36		9.86		11.39		13.43	38.9
Bartlett's X2				5.823		15.686		10.556		11.599		6.336		3.486	20.718
P(Bartlett's X2)				0.443		0.016*		0.103		0.072		0.387		0.746	0.002*
Replicate F				5.888		0.490		0.700		0.471		0.339		0.254	0.220
Replicate Prob(F)				0.0044		0.6929		0.5625		0.7060		0.7973		0.8574	0.8809
Treatment F				333.191		47.595		144.862		83.752		97.417		117.736	26.460
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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GR Palmer amaranth and cotton response to acetochlor progams.

Trial ID: C7-2009 Study Director: Stanley Culpepper
Location: Macon County Investigator: Stanley Culpepper

General Trial Information

Study Director: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: Univ. of Georgia
Postal Code: 31794
Investigator: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: Univ. of Georgia
Postal Code: 31794

Trial Location

City: Macon Co. **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** good
Initiation Date: 4/12/2009
Country: USA
Directions:

Objectives:

Conclusions:

Crop Description

Crop 1: GOSHI Gossypium hirsutum Cotton, American upland
Variety: DP 0935
BBCH Scale: BCOT **Planting Date:** 4/30/2009
Planting Method: seeded **Rate, Unit:** 4 foot
Depth, Unit: 0.5 in
Row Spacing, Unit: 36 in **Spacing Within Row, Unit:** 4 in
Seed Bed: flat **Soil Temperature, Unit:** 70 F
Soil Moisture: moist **Emergence Date:** 5/5/2009

Pest Description

Pest 1 Type: W **Code:** AMAPA Amaranthus palmeri
Common Name: Palmer amaranth

Site and Design

Plot Width, Unit: 12 FT **Site Type:** On Farm
Plot Length, Unit: 25 FT **Tillage Type:** Strip tillage
Replications: 4 **Study Design:** Randomized Complete Block

Trial Initiation Comments:

Field Prep./Maintenance:

Soil Description

% Sand: 82 **% OM:** 6.1 **Texture:** loamy sand
% Silt: 14 **pH:** 2
% Clay: 4

Moisture Conditions

Overall Moisture Conditions: moist
Closest Weather Station: rainfall taken on site **Distance:** 0 **Unit:** mi

Application Description

	A	B	C	D
Application Date:	4/12/2009	4/30/2009	5/31/2009	6/19/2009
Time of Day:	7:30 am	8:00 am	3:00 pm	10:00 am
Application Method:	broadcast	broadcast	broadcast	broadcast
Application Timing:	BD	PRE	POST	PD
Application Placement:	overtop	on soil	overtop	directed
Applied By:	Culpepper	Culpepper	Culpepper	Culpepper
Air Temperature, Unit:	55 F	70 F	92 F	87.8 F
% Relative Humidity:	75	60	40	71.4
Wind Velocity, Unit:	3 mph	0 mph	4 mph	3.0 mph
Dew Presence (Y/N):	N	Y	N	N
Soil Temperature, Unit:	63 F	68 F	94 F	91.6 F
Soil Moisture:	moist	moist	moist	fair
% Cloud Cover:	0	0	5	0

University of Georgia

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GOSHI BCOT	GOSHI BCOT	GOSHI BCOT	GOSHI BCOT
Stage Scale Used:	BBCH	BBCH	BBCH	BBCH
Stage Majority, Percent:	preplant 100	PRE 100	5 lf 100	12 lf 100
Stage Minimum, Percent:	preplant 100	PRE 100	5 lf 100	12 lf 100
Stage Maximum, Percent:	preplant 100	PRE 100	5 lf 100	12 lf 100
Height, Unit:	0 in	0 in	6 in	12.5 in
Height Minimum, Maximum:	0 0	0 0	5 6	11 14

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	AMAPA W .	AMAPA W .	AMAPA W .	AMAPA W .
Stage Majority, Percent:	prepla 100	PRE 100	plowed 100	7 inch 40
Stage Minimum, Percent:	prepla 100	PRE 100	plowed 100	3 inch 40
Stage Maximum, Percent:	prepla 100	PRE 100	plowed 100	10 inc 20
Height, Unit:	0 in	0 in	0 in	7 in
Height Minimum, Maximum:	0 0	0 0	0 0	3 10
Density, Unit:	0. .	0. .	0. .	15 ydsq
Coverage, Unit:				100 %

Application Equipment

	A	B	C	D
Appl. Equipment:	backpack	backpack	backpack	backpack
Operating Pressure:	24	24	24	28
Pressure Unit:	psi	psi	psi	psi
Nozzle Type:	flat fan	flat fan	flat fan	floodjet
Nozzle Size:	11002	11002	11002	TK 2
Nozzle Spacing, Unit:	18 in	18 in	18 in	36 in
Nozzles/Row:	2	2	2	1
Boom Length, Unit:	4.5 ft	4.5 ft	4.5 ft	4.5 ft
Boom Height, Unit:	15 in	15 in	15 in	18 in
Ground Speed, Unit:	3 mph	3 mph	3 mph	3 mph
Spray Volume:	15	15	15	15
Volume Unit:	GAL/AC	GAL/AC	GAL/AC	GAL/AC
Propellant:	CO2	CO2	CO2	CO2
Tank Mix (Y/N):	Y	Y	Y	Y