

LSU Northeast Research Station

EVALUATION OF WEED CONTROL WITH WISEUP AND WISEUP PLUS GLYPHOSATE FORMULATIONS IN ROUNDUP READY SOYBEAN

Trial ID: _____ Study Dir.: _____
 Location: _____ Investigator: Donnie Miller

SITE AND DESIGN

Plot Width, Unit: 6.67 FT Plot Length, Unit: 25 FT Reps: 4

Site Type: _____

Tillage Type: _____ Study Design: RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

APPLICATION DESCRIPTION

	A	B
Application Date:	1/Jul/2005	18/Jul/2005
Time of Day:	4:00 PM	4:30 PM
Application Method:	SPRAY	SPRAY
Application Timing:	POSPOS	POSPOS
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	85 F	92 F
% Relative Humidity:	75	58
Wind Velocity, Unit:	3 MPH	4.1 MPH
Dew Presence (Y/N):		
Water Hardness:		
Soil Temp., Unit:	93 F	100 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	100	40

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	ECHCG 3-4"	ECHCG 3-4"
Stage Scale:		
Density, Unit:		
Weed 2 Code, Stage:	SEBEX 6-8"	SEBEX 6-8"
Stage Scale:		
Density, Unit:		
Weed 3 Code, Stage:	CASOB 5-6"	CASOB 5-6"
Stage Scale:		
Density, Unit:		
Weed 4 Code, Stage:	AMARE 4-6"	AMARE 4-6"
Stage Scale:		
Density, Unit:		
Weed 5 Code, Stage:	IPOLA 4-6"	IPOLA 4-6"
Stage Scale:		
Density, Unit:		
Weed 6 Code, Stage:	IPOHG 4-6"	IPOHG 4-6"
Stage Scale:		
Density, Unit:		

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APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 BCPCCK	CO2 BCPCCK
Operating Pressure:	38 PSI	38 PSI
Nozzle Type:	AI	AI
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	2	2
Band Width, Unit:		
Boom Length, Unit:		
Boom Height, Unit:		
Ground Speed, Unit:	3.2 MPH	3.2 MPH
Incorporation Equip.:		
Hours to Incorp.:		
Incorp. Depth, Unit:		
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Spray pH:		
Propellant:		
Tank Mix (Y/N):		

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Trial ID:			Study Dir.:												
Location:			Investigator: Donnie Miller												
Weed Code	ECHCG	IPOLA	SEBEX	CASOB	GLXMA	GLXMA									
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA									
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CROP HTS	CROP HTS									
Rating Unit	%	%	%	%	CM	CM									
Rating Date	15/Jul/2005	15/Jul/2005	15/Jul/2005	15/Jul/2005	18/Jul/2005	18/Jul/2005									
Trt-Eval Interval	14 DAIT	14 DAIT	14 DAIT	14 DAIT	17 DAIT	17 DAIT									
ARM Action Codes															
# Subsamples, Dec.															
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6						
1	MON 3539	32	oz/a	68	a	61	a	78	a	95	a	57	a	53	a
	MON 3539	32	oz/a												
2	ROUNDUP WEATHERMAX	32	oz/a	63	a	59	a	65	b	95	a	51	a	53	a
	ROUNDUP WEATHERMAX	32	oz/a												
3	TOUCHDOWN TOTAL	35	oz/a	73	a	58	a	81	a	95	a	51	a	52	a
	TOUCHDOWN TOTAL	35	oz/a												
4	WISEUP 1	44	oz/a	70	a	55	a	71	ab	95	a	51	a	52	a
	WISEUP 1	44	oz/a												
5	WISEUP 2	44	oz/a	69	a	53	a	61	b	95	a	53	a	57	a
	WISEUP 2	44	oz/a												
6	WISEUP PLUS	44	oz/a	62	a	55	a	61	b	95	a	48	a	56	a
	WISEUP PLUS	44	oz/a												
LSD (P=.05)				8.3		13.6		10.0		0.0		7.1		5.2	
Standard Deviation				5.5		9.0		6.6		0.0		4.7		3.4	
CV				8.16		15.85		9.5		0.0		9.07		6.41	
Grand Mean				67.19		56.67		69.53		95.0		51.67		53.71	
Bartlett's X2				2.177		1.69		6.163		0.0		8.925		3.211	
P(Bartlett's X2)				0.824		0.89		0.291		.		0.112		0.667	
Replicate F				1.560		2.514		1.094		0.000		0.420		0.387	
Replicate Prob(F)				0.2432		0.1007		0.3843		1.0000		0.7413		0.7636	
Treatment F				2.355		0.486		6.725		0.000		1.697		1.436	
Treatment Prob(F)				0.0949		0.7815		0.0022		1.0000		0.1959		0.2679	

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

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

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Weed Code		GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Code		CROP HTS	CROP HTS	CROP HTS	CROP HTS	CROP HTS	CROP HTS
Rating Data Type		CM	CM	CM	CM	CM	CM
Rating Unit		18/Jul/2005	18/Jul/2005	18/Jul/2005	18/Jul/2005	18/Jul/2005	18/Jul/2005
Rating Date		17 DAIT	17 DAIT	17 DAIT	17 DAIT	17 DAIT	17 DAIT
Trt-Eval Interval							
ARM Action Codes							
# Subsamples, Dec.							
Trt Treatment	Rate						
No. Name	Rate Unit	7	8	9	10	11	12
1 MON 3539	32 oz/a	59 a	56 a	62 a	52 a	55 a	61 a
MON 3539	32 oz/a						
2 ROUNDUP WEATHERMAX	32 oz/a	54 a	52 a	48 b	55 a	53 a	51 a
ROUNDUP WEATHERMAX	32 oz/a						
3 TOUCHDOWN TOTAL	35 oz/a	56 a	55 a	53 ab	56 a	57 a	58 a
TOUCHDOWN TOTAL	35 oz/a						
4 WISEUP 1	44 oz/a	52 a	55 a	56 ab	56 a	54 a	60 a
WISEUP 1	44 oz/a						
5 WISEUP 2	44 oz/a	56 a	54 a	53 ab	56 a	58 a	58 a
WISEUP 2	44 oz/a						
6 WISEUP PLUS	44 oz/a	49 a	49 a	49 b	47 a	48 a	54 a
WISEUP PLUS	44 oz/a						
LSD (P=.05)		10.0	8.0	7.5	10.1	8.3	12.6
Standard Deviation		6.7	5.3	5.0	6.7	5.5	8.3
CV		12.28	9.99	9.31	12.45	10.2	14.69
Grand Mean		54.21	53.33	53.33	53.67	53.96	56.75
Bartlett's X2		6.937	3.406	5.85	11.707	6.3	6.08
P(Bartlett's X2)		0.225	0.638	0.321	0.039*	0.278	0.299
Replicate F		0.997	0.285	0.911	0.448	1.337	0.637
Replicate Prob(F)		0.4211	0.8351	0.4592	0.7223	0.2997	0.6027
Treatment F		1.089	1.132	3.898	1.218	1.923	0.855
Treatment Prob(F)		0.4059	0.3857	0.0183	0.3482	0.1500	0.5331

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Weed Code		GLXMA	GLXMA	GLXMA	ECHCG	SEBEX	CASOB
Crop Code		GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Data Type		CROP HTS	CROP HTS	AVG HTS	CONTROL	CONTROL	CONTROL
Rating Unit		CM	CM	CM	%	%	%
Rating Date		18/Jul/2005	18/Jul/2005	18/Jul/2005	25/Jul/2005	25/Jul/2005	25/Jul/2005
Trt-Eval Interval		17 DAIT	17 DAIT	17 DAIT	7 DAT-B	7 DAT-B	7 DAT-B
ARM Action Codes				T1			
# Subsamples, Dec.				1			
Trt Treatment	Rate						
No. Name	Rate Unit	13	14	15	16	17	18
1 MON 3539	32 oz/a	62 a	54 a	57.1 a	85 a	81 ab	95 a
MON 3539	32 oz/a						
2 ROUNDUP WEATHERMAX	32 oz/a	50 b	50 a	51.4 a	85 a	80 ab	95 a
ROUNDUP WEATHERMAX	32 oz/a						
3 TOUCHDOWN TOTAL	35 oz/a	59 a	59 a	55.6 a	88 a	93 a	95 a
TOUCHDOWN TOTAL	35 oz/a						
4 WISEUP 1	44 oz/a	56 ab	52 a	54.2 a	85 a	78 b	95 a
WISEUP 1	44 oz/a						
5 WISEUP 2	44 oz/a	56 ab	56 a	55.7 a	83 a	71 b	94 a
WISEUP 2	44 oz/a						
6 WISEUP PLUS	44 oz/a	50 b	50 a	49.7 a	79 a	73 b	95 a
WISEUP PLUS	44 oz/a						
LSD (P=.05)		6.3	9.4	5.38	9.6	10.7	1.5
Standard Deviation		4.2	6.2	3.57	6.4	7.1	1.0
CV		7.59	11.67	6.62	7.58	8.96	1.08
Grand Mean		55.29	53.38	53.93	83.96	79.17	94.79
Bartlett's X2		6.88	8.592	9.098	2.682	8.034	0.0
P(Bartlett's X2)		0.23	0.126	0.105	0.749	0.154	.
Replicate F		0.886	1.998	0.802	0.506	0.387	1.000
Replicate Prob(F)		0.4706	0.1576	0.5118	0.6840	0.7642	0.4199
Treatment F		5.617	1.399	2.494	0.890	4.657	1.000
Treatment Prob(F)		0.0041	0.2801	0.0780	0.5119	0.0091	0.4509

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Column 15: T1 = @AVG([5].[14])

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Weed Code	AMARE GLXMA CONTROL	IPOLA GLXMA CONTROL	IPOHG GLXMA CONTROL		GLXMA YIELD LBS	GLXMA MOISTURE %
Crop Code						
Rating Data Type						
Rating Unit	%	%	%			
Rating Date	25/Jul/2005	25/Jul/2005	25/Jul/2005		13/Oct/2005	13/Oct/2005
Trt-Eval Interval	7 DAT-B	7 DAT-B	7 DAT-B		104 DA-A	104 DA-A
ARM Action Codes						
# Subsamples, Dec.						
Trt Treatment						
No. Name	Rate	Rate	Rate	Rate	Rate	Rate
	Unit					
19	20	21	22	23	24	
1 MON 3539	32 oz/a	95 a	66 a	91 a	1 a	3 a
MON 3539	32 oz/a					
2 ROUNDUP WEATHERMAX	32 oz/a	95 a	66 a	90 a	1 a	3 a
ROUNDUP WEATHERMAX	32 oz/a					
3 TOUCHDOWN TOTAL	35 oz/a	95 a	56 a	86 a	0 a	3 a
TOUCHDOWN TOTAL	35 oz/a					
4 WISEUP 1	44 oz/a	95 a	56 a	88 a	0 a	3 a
WISEUP 1	44 oz/a					
5 WISEUP 2	44 oz/a	95 a	60 a	89 a	0 a	3 a
WISEUP 2	44 oz/a					
6 WISEUP PLUS	44 oz/a	95 a	56 a	86 a	0 a	3 a
WISEUP PLUS	44 oz/a					
LSD (P=.05)	0.0	17.2	7.9	.	0.4	0.2
Standard Deviation	0.0	11.4	5.2	.	0.2	0.1
CV	0.0	18.97	5.91	.	52.31	5.08
Grand Mean	95.0	60.21	88.33	.	0.46	2.73
Bartlett's X2	0.0	3.712	3.524	.	6.331	13.254
P(Bartlett's X2)	.	0.592	0.62	.	0.275	0.01*
Replicate F	0.000	0.732	1.735		4.127	2.164
Replicate Prob(F)	1.0000	0.5490	0.2028		0.0255	0.1349
Treatment F	0.000	0.736	0.612		1.551	1.220
Treatment Prob(F)	1.0000	0.6079	0.6923		0.2335	0.3474

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Weed Code			
Crop Code			GLXMA
Rating Data Type			YIELD
Rating Unit			BU/A
Rating Date			13/Oct/2005
Trt-Eval Interval			104 DA-A
ARM Action Codes			TY2
# Subsamples, Dec.			1
Trt No.	Treatment Name	Rate	25
		Unit	
1	MON 3539	32 oz/a	2.7 a
	MON 3539	32 oz/a	
2	ROUNDUP WEATHERMAX	32 oz/a	3.4 a
	ROUNDUP WEATHERMAX	32 oz/a	
3	TOUCHDOWN TOTAL	35 oz/a	2.1 a
	TOUCHDOWN TOTAL	35 oz/a	
4	WISEUP 1	44 oz/a	1.3 a
	WISEUP 1	44 oz/a	
5	WISEUP 2	44 oz/a	1.7 a
	WISEUP 2	44 oz/a	
6	WISEUP PLUS	44 oz/a	2.3 a
	WISEUP PLUS	44 oz/a	
LSD (P=.05)			1.77
Standard Deviation			1.17
CV			52.13
Grand Mean			2.25
Bartlett's X2			6.245
P(Bartlett's X2)			0.283
Replicate F			4.124
Replicate Prob(F)			0.0256
Treatment F			1.552
Treatment Prob(F)			0.2330

Means followed by same letter do not significantly differ
(P=.05, Student-Newman-Keuls)

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P(F) is significant at mean comparison OSL.

Column 25: TY2 = 4.353823*[23]*(100-[24])/87