

# LSU Northeast Research Station

## EVALUATION OF WEED CONTROL PROGRAMS IN ROUNDUP READY SOYBEAN

Trial ID: 05SB05JG

Study Director:

Location: Ben Hur Research Farm

Investigator: Donnie Miller

Pest Type	W Weed	IPOLA	IPOHG	SEBEX	CASOB				
Pest Code	ECHCG	IPOLA	IPOHG	SEBEX	CASOB				
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA				
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY				
Crop Variety	DP5644RR	DP5644RR	DP5644RR	DP5644RR	DP5644RR				
Rating Date	10/Jun/2005	10/Jun/2005	10/Jun/2005	10/Jun/2005	10/Jun/2005				
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL				
Rating Unit	%	%	%	%	%				
Days After Last Applic.	0	0	0	0	0				
Trt-Eval Interval	14 DAT-A	14 DAT-A	14 DAT-A	14 DAT-A	14 DAT-A				
ARM Action Codes									
Number of Decimals									
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5
1	Valor	2	oz/a	A	90	85	95	94	90
	ROUNDUP WEATHERMAX	22	oz/a	AN					
2	ROUNDUP WEATHERMAX	22	oz/a	B					
3	Sequence	2.5	pt/a	B					
4	Sequence	3.0	pt/a	B					
5	Sequence	3.5	pt/a	B					
6	ROUNDUP WEATHERMAX	22	oz/a	B					
	Prowl H2O	2	pt/a	B					
7	ROUNDUP WEATHERMAX	22	oz/a	B					
	Prowl	2.3	pt/a	B					
8	ROUNDUP WEATHERMAX	22	oz/a	B					
	ROUNDUP WEATHERMAX	22	oz/a	C					
9	Nontreated								
LSD (P=.05)		.			.	.	.	.	.
Standard Deviation		.			.	.	.	.	.
CV		.			.	.	.	.	.
Grand Mean		90.0			85.0	95.0	93.75	90.0	
Bartlett's X2		.			.	.	.	.	.
P(Bartlett's X2)		.			.	.	.	.	.
Replicate F									
Replicate Prob(F)									
Treatment F									
Treatment Prob(F)									

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.

## LSU Northeast Research Station

Pest Type				W Weed				
Pest Code		AMARE		ECHCG		IPOLA		
Crop Code		GLXMA	GLXMA	GLXMA	SORHA	GLXMA		
BBCH Scale		BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Variety		DP5644RR	DP5644RR	DP5644RR	DP5644RR	DP5644RR		
Rating Date		10/Jun/2005	17/Jun/2005	24/Jun/2005	24/Jun/2005	24/Jun/2005		
Rating Data Type		CONTROL	INJURY	CONTROL	CONTROL	CONTROL		
Rating Unit		%	%	%	%	%		
Days After Last Applic.		0	7	14	14	14		
Trt-Eval Interval		14 DAT-A	7 DAT-B	2 WAA-B	2 WAA-B	2 WAA-B		
ARM Action Codes								
Number of Decimals								
Trt No.	Treatment Name	Rate	Appl Unit Code	6	7	8	9	10
1	Valor	2 oz/a	A	95	0 c	70 b	73 b	70 b
	ROUNDUP WEATHERMAX	22 oz/a	AN					
2	ROUNDUP WEATHERMAX	22 oz/a	B		0 c	94 a	95 a	80 ab
3	Sequence	2.5 pt/a	B		0 c	95 a	95 a	76 ab
4	Sequence	3.0 pt/a	B		0 c	95 a	95 a	84 a
5	Sequence	3.5 pt/a	B		0 c	94 a	95 a	85 a
6	ROUNDUP WEATHERMAX	22 oz/a	B		4 b	93 a	95 a	76 ab
	Prowl H2O	2 pt/a	B					
7	ROUNDUP WEATHERMAX	22 oz/a	B		18 a	94 a	95 a	79 ab
	Prowl	2.3 pt/a	B					
8	ROUNDUP WEATHERMAX	22 oz/a	B		0 c	93 a	95 a	80 ab
	ROUNDUP WEATHERMAX	22 oz/a	C					
9	Nontreated				0 c	0 c	0 c	0 c
LSD (P=.05)				.	1.8	7.5	3.1	7.6
Standard Deviation				.	1.2	5.1	2.2	5.2
CV				.	51.95	6.36	2.63	7.45
Grand Mean				95.0	2.36	80.69	81.94	70.0
Bartlett's X2				.	0.061	20.461	0.0	6.802
P(Bartlett's X2)				.	0.805	0.001*	.	0.34
Replicate F					1.692	1.574	1.000	3.336
Replicate Prob(F)					0.1953	0.2217	0.4098	0.0362
Treatment F					89.769	148.596	863.700	104.209
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001

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## LSU Northeast Research Station

Pest Type					W Weed			
Pest Code	IPOHG	SEBEX	CASOB	AMARE	ECHCG			
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Variety	DP5644RR	DP5644RR	DP5644RR	DP5644RR	DP5644RR			
Rating Date	24/Jun/2005	24/Jun/2005	24/Jun/2005	24/Jun/2005	8/Jul/2005			
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	%	%	%	%	%			
Days After Last Applic.	14	14	14	14	28			
Trt-Eval Interval	2 WAA-B	2 WAA-B	2 WAA-B	2 WAA-B	4 WAA-B			
ARM Action Codes								
Number of Decimals								
Trt No.	Treatment Name	Rate	Appl Unit Code	11	12	13	14	15
1	Valor	2 oz/a	A	88 a	71 a	75 b	95 a	66 b
	ROUNDUP WEATHERMAX	22 oz/a	AN					
2	ROUNDUP WEATHERMAX	22 oz/a	B	88 a	75 a	94 a	86 a	86 a
3	Sequence	2.5 pt/a	B	89 a	73 a	95 a	95 a	90 a
4	Sequence	3.0 pt/a	B	91 a	85 a	95 a	95 a	89 a
5	Sequence	3.5 pt/a	B	91 a	79 a	95 a	95 a	91 a
6	ROUNDUP WEATHERMAX	22 oz/a	B	88 a	79 a	95 a	95 a	86 a
	Prowl H2O	2 pt/a	B					
7	ROUNDUP WEATHERMAX	22 oz/a	B	89 a	75 a	95 a	95 a	89 a
	Prowl	2.3 pt/a	B					
8	ROUNDUP WEATHERMAX	22 oz/a	B	88 a	79 a	95 a	95 a	85 a
	ROUNDUP WEATHERMAX	22 oz/a	C					
9	Nontreated			0 b	0 b	0 c	0 b	0 c
LSD (P=.05)				6.6	9.9	6.4	8.8	6.6
Standard Deviation				4.5	6.8	4.4	6.0	4.5
CV				5.7	9.88	5.37	7.19	5.98
Grand Mean				78.89	68.33	82.08	83.44	75.83
Bartlett's X2				8.14	6.333	5.805	0.0	1.57
P(Bartlett's X2)				0.32	0.501	0.016*	.	0.98
Replicate F				0.640	2.234	0.893	1.000	7.617
Replicate Prob(F)				0.5967	0.1103	0.4591	0.4098	0.0010
Treatment F				173.297	59.071	203.786	109.781	168.313
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001

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## LSU Northeast Research Station

Pest Type					
Pest Code	SORHA	IPOLA	IPOHG	CASOB	SEBEX
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY
Crop Variety	DP5644RR	DP5644RR	DP5644RR	DP5644RR	DP5644RR
Rating Date	8/Jul/2005	8/Jul/2005	8/Jul/2005	8/Jul/2005	8/Jul/2005
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Days After Last Applic.	28	28	28	28	28
Trt-Eval Interval	4 WAA-B	4 WAA-B	4 WAA-B	4 WAA-B	4 WAA-B
ARM Action Codes					
Number of Decimals					
Trt Treatment	Rate	Appl			
No. Name	Rate	Unit Code	16	17	18
1 Valor	2 oz/a	A	64 b	55 c	81 b
ROUNDUP WEATHERMAX	22 oz/a	AN			64 b
2 ROUNDUP WEATHERMAX	22 oz/a	B	94 a	84 ab	95 a
3 Sequence	2.5 pt/a	B	95 a	78 ab	94 a
4 Sequence	3.0 pt/a	B	93 a	85 ab	95 a
5 Sequence	3.5 pt/a	B	94 a	86 a	95 a
6 ROUNDUP WEATHERMAX	22 oz/a	B	94 a	75 b	93 a
Prowl H2O	2 pt/a	B			94 a
7 ROUNDUP WEATHERMAX	22 oz/a	B	94 a	80 ab	91 a
Prowl	2.3 pt/a	B			95 a
8 ROUNDUP WEATHERMAX	22 oz/a	B	93 a	84 ab	94 a
ROUNDUP WEATHERMAX	22 oz/a	C			94 a
9 Nontreated			0 c	0 d	0 c
LSD (P=.05)			10.9	7.0	4.4
Standard Deviation			7.5	4.8	3.0
CV			9.36	6.92	3.64
Grand Mean			79.86	69.58	81.94
Bartlett's X2			29.787	1.36	4.167
P(Bartlett's X2)			0.001*	0.987	0.384
Replicate F			2.099	1.067	1.351
Replicate Prob(F)			0.1269	0.3815	0.2816
Treatment F			71.174	132.980	432.195
Treatment Prob(F)			0.0001	0.0001	0.0001

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## LSU Northeast Research Station

Pest Type				W Weed				
Pest Code	AMARE	CYPES	ECHCG	SORHA	IPOLA			
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Variety	DP5644RR	DP5644RR	DP5644RR	DP5644RR	DP5644RR			
Rating Date	8/Jul/2005	8/Jul/2005	25/Jul/2005	25/Jul/2005	25/Jul/2005			
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	%	%	%	%	%			
Days After Last Applic.	28	28	14	14	14			
Trt-Eval Interval	4 WAA-B	4 WAA-B	2 WAA-C	2 WAA-C	2 WAA-C			
ARM Action Codes								
Number of Decimals								
Trt No.	Treatment Name	Rate	Appl Unit Code	21	22	23	24	25
1	Valor	2 oz/a	A	91 a	95 a			
	ROUNDUP WEATHERMAX	22 oz/a	AN					
2	ROUNDUP WEATHERMAX	22 oz/a	B	95 a	94 a			
3	Sequence	2.5 pt/a	B	95 a	94 a			
4	Sequence	3.0 pt/a	B	93 a	93 a			
5	Sequence	3.5 pt/a	B	94 a	95 a			
6	ROUNDUP WEATHERMAX	22 oz/a	B	95 a	95 a			
	Prowl H2O	2 pt/a	B					
7	ROUNDUP WEATHERMAX	22 oz/a	B	95 a	95 a			
	Prowl	2.3 pt/a	B					
8	ROUNDUP WEATHERMAX	22 oz/a	B	95 a	91 a	93	95	89
	ROUNDUP WEATHERMAX	22 oz/a	C					
9	Nontreated			0 b	0 b			
LSD (P=.05)				4.6	4.3	.	.	.
Standard Deviation				3.1	3.0	.	.	.
CV				3.76	3.56	.	.	.
Grand Mean				83.61	83.47	92.5	95.0	88.75
Bartlett's X2				3.014	4.884	.	.	.
P(Bartlett's X2)				0.222	0.18	.	.	.
Replicate F				0.842	2.588			
Replicate Prob(F)				0.4843	0.0764			
Treatment F				398.123	443.431			
Treatment Prob(F)				0.0001	0.0001			

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## LSU Northeast Research Station

Pest Type				IPOHG	SEBEX	CASOB	AMARE	CYPES
Pest Code				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Code				BSOY	BSOY	BSOY	BSOY	BSOY
BBCH Scale								
Crop Variety				DP5644RR	DP5644RR	DP5644RR	DP5644RR	DP5644RR
Rating Date				25/Jul/2005	25/Jul/2005	25/Jul/2005	25/Jul/2005	25/Jul/2005
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%
Days After Last Applic.				14	14	14	14	14
Trt-Eval Interval				2 WAA-C	2 WAA-C	2 WAA-C	2 WAA-C	2 WAA-C
ARM Action Codes								
Number of Decimals								
Trt No.	Treatment Name	Rate	Appl Unit Code	26	27	28	29	30
1	Valor	2 oz/a	A					
	ROUNDUP WEATHERMAX	22 oz/a	AN					
2	ROUNDUP WEATHERMAX	22 oz/a	B					
3	Sequence	2.5 pt/a	B					
4	Sequence	3.0 pt/a	B					
5	Sequence	3.5 pt/a	B					
6	ROUNDUP WEATHERMAX	22 oz/a	B					
	Prowl H2O	2 pt/a	B					
7	ROUNDUP WEATHERMAX	22 oz/a	B					
	Prowl	2.3 pt/a	B					
8	ROUNDUP WEATHERMAX	22 oz/a	B	95	94	95	95	95
	ROUNDUP WEATHERMAX	22 oz/a	C					
9	Nontreated							
LSD (P=.05)				.	.	.	.	.
Standard Deviation				.	.	.	.	.
CV				.	.	.	.	.
Grand Mean				95.0	93.75	95.0	95.0	95.0
Bartlett's X2				.	.	.	.	.
P(Bartlett's X2)				.	.	.	.	.
Replicate F								
Replicate Prob(F)								
Treatment F								
Treatment Prob(F)								

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## LSU Northeast Research Station

Pest Type	W Weed				
Pest Code	ECHCG	SORHA	IPOLA	IPOHG	SEBEX
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY
Crop Variety	DP5644RR	DP5644RR	DP5644RR	DP5644RR	DP5644RR
Rating Date	8/Aug/2005	8/Aug/2005	8/Aug/2005	8/Aug/2005	8/Aug/2005
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Days After Last Applic.	28	28	28	28	28
Trt-Eval Interval	4 WAA-C	4 WAA-C	4 WAA-C	4 WAA-C	4 WAA-C
ARM Action Codes					
Number of Decimals					
Trt No.	Treatment Name	Rate	Appl Unit	Code	
					31 32 33 34 35
1	Valor	2 oz/a	A		
	ROUNDUP WEATHERMAX	22 oz/a	AN		
2	ROUNDUP WEATHERMAX	22 oz/a	B		
3	Sequence	2.5 pt/a	B		
4	Sequence	3.0 pt/a	B		
5	Sequence	3.5 pt/a	B		
6	ROUNDUP WEATHERMAX	22 oz/a	B		
	Prowl H2O	2 pt/a	B		
7	ROUNDUP WEATHERMAX	22 oz/a	B		
	Prowl	2.3 pt/a	B		
8	ROUNDUP WEATHERMAX	22 oz/a	B	95	95 95 95 91
	ROUNDUP WEATHERMAX	22 oz/a	C		
9	Nontreated				
LSD (P=.05)		.	.	.	.
Standard Deviation		.	.	.	.
CV		.	.	.	.
Grand Mean		95.0	95.0	95.0	91.25
Bartlett's X2		.	.	.	.
P(Bartlett's X2)		.	.	.	.
Replicate F					
Replicate Prob(F)					
Treatment F					
Treatment Prob(F)					

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.

## LSU Northeast Research Station

Pest Type				CASOB	AMARE		GLXMA	GLXMA	GLXMA
Pest Code				GLXMA	GLXMA		GLXMA	GLXMA	GLXMA
Crop Code				BSOY	BSOY		BSOY	BSOY	BSOY
BBCH Scale									
Crop Variety				DP5644RR	DP5644RR				
Rating Date				8/Aug/2005	8/Aug/2005		13/Oct/2005	13/Oct/2005	13/Oct/2005
Rating Data Type				CONTROL	CONTROL		YIELD	MOISTURE	YIELD
Rating Unit				%	%		LBS	%	BU/A
Days After Last Applic.				28	28		94	94	94
Trt-Eval Interval				4 WAA-C	4 WAA-C		140 DA-A	140 DA-A	140 DA-A
ARM Action Codes									TY1
Number of Decimals									1
Trt No.	Treatment Name	Rate	Appl Unit Code	36	37	38	39	40	41
1	Valor	2 oz/a	A				3 ab	10 a	12.5 ab
	ROUNDUP WEATHERMAX	22 oz/a	AN						
2	ROUNDUP WEATHERMAX	22 oz/a	B				5 a	11 a	23.4 a
3	Sequence	2.5 pt/a	B				5 a	11 a	23.7 a
4	Sequence	3.0 pt/a	B				6 a	12 a	27.1 a
5	Sequence	3.5 pt/a	B				6 a	13 a	25.5 a
6	ROUNDUP WEATHERMAX	22 oz/a	B				6 a	13 a	25.9 a
	Prowl H2O	2 pt/a	B						
7	ROUNDUP WEATHERMAX	22 oz/a	B				6 a	13 a	26.3 a
	Prowl	2.3 pt/a	B						
8	ROUNDUP WEATHERMAX	22 oz/a	B	95	95		6 a	13 a	26.3 a
	ROUNDUP WEATHERMAX	22 oz/a	C						
9	Nontreated						1 b	5 b	4.8 b
LSD (P=.05)				.	.	.	2.2	3.0	9.47
Standard Deviation				.	.	.	1.5	2.1	6.49
CV				.	.	.	30.47	18.18	29.86
Grand Mean				95.0	95.0	.	4.97	11.32	21.74
Bartlett's X2				.	.	.	11.657	33.914	11.164
P(Bartlett's X2)				.	.	.	0.167	0.001*	0.193
Replicate F							11.286	3.175	11.523
Replicate Prob(F)							0.0001	0.0424	0.0001
Treatment F							5.655	6.358	5.679
Treatment Prob(F)							0.0004	0.0002	0.0004

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.

Column 41: TY1 = 4.353823\*[39]\*(100-[40])/87

# LSU Northeast Research Station

## Roundup Programs Test #1

Trial ID: 05SB05JG

Study Director:

Location: Ben Hur Research Farm

Investigator: Donnie Miller

### Site and Design

Plot Width, Unit: 6.67 FT

Site Type: \_\_\_\_\_

Plot Length, Unit: 25 FT

Tillage Type: \_\_\_\_\_

Replications: 4

Study Design: Randomized Complete Block

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

### Application Description

	A	B	C
Application Date:	26/May/2005	10/Jun/2005	11/Jul/2005
Time of Day:	6:10 PM	5:00 PM	3:10 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PREPRE	POSPOS	POSPOS
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	DKM	DKM	MSM
Air Temperature, Unit:	88 F	89 F	91 F
% Relative Humidity:	44	56	65
Wind Velocity, Unit:			
Dew Presence (Y/N):			
Water Hardness:			
Soil Temperature, Unit:	93 F	93 F	96 F
Soil Moisture:	MOIST	DRY	MOIST
% Cloud Cover:	0	20	80

### Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:			
Stage Minimum, Percent:			
Stage Maximum, Percent:			
Diameter, Unit:			
Height, Unit:			
Height Minimum, Maximum:			

# LSU Northeast Research Station

## Application Equipment

	A	B	C
<b>Appl. Equipment:</b>	CO2 BCPCK	CO2 BCPCK	CO2 BCPCK
<b>Operating Pressure:</b>	35	32	32
<b>Pressure Unit:</b>	PSI	PSI	PSI
<b>Nozzle Type:</b>	AI	AI	AI
<b>Nozzle Size:</b>	11002	11002	11002
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>Nozzles/Row:</b>	2	2	2
<b>Band Width, Unit:</b>			
<b>Boom Length, Unit:</b>			
<b>Boom Height, Unit:</b>			
<b>Ground Speed, Unit:</b>	3.2 MPH	3.2 MPH	3.2 MPH
<b>Incorporation Equip.:</b>			
<b>Hours to Incorp.:</b>			
<b>Incorp. Depth, Unit:</b>			
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume:</b>	15	15	15
<b>Volume Unit:</b>	GPA	GPA	GPA
<b>Spray pH:</b>			
<b>Propellant:</b>			
<b>Tank Mix (Y/N):</b>			

**Equipment Comment:**