

# LSU Northeast Research Station

## EVALUATE IMPACT OF GLYPHOSATE FORMULATION ON SOYBEAN RESPONSE TO SYNCHRONY XP

Trial ID: \_\_\_\_\_ Study Dir.: \_\_\_\_\_  
 Location: \_\_\_\_\_ Investigator: Donnie Miller

### SITE AND DESIGN

Plot Width, Unit: 6.67 FT Plot Length, Unit: 30 FT Reps: 4

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

Tillage Type: \_\_\_\_\_ Study Design: FACTORIAL

### Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
I.			

### APPLICATION DESCRIPTION

	A
Application Date:	9/Jun/2006
Time of Day:	12:20 PM
Application Method:	SPRAY
Application Timing:	EAPOCR
Applic. Placement:	BROFOL
Air Temp., Unit:	84 F
% Relative Humidity:	47
Wind Velocity, Unit:	3.4 MPH
Dew Presence (Y/N):	N
Water Hardness:	
Soil Temp., Unit:	90 F
Soil Moisture:	DRY
% Cloud Cover:	30

### CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	GLXMA 1 TRIFOL
Stage Scale:	
Height, Unit:	

### WEED STAGE AT EACH APPLICATION

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

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## APPLICATION EQUIPMENT

	A
<b>Appl. Equipment:</b>	CO2 BCPCCK
<b>Operating Pressure:</b>	35 PSI
<b>Nozzle Type:</b>	A1
<b>Nozzle Size:</b>	11002
<b>Nozzle Spacing, Unit:</b>	20
<b>Nozzles/Row:</b>	2
<b>Band Width, Unit:</b>	
<b>Boom Length, Unit:</b>	
<b>Boom Height, Unit:</b>	
<b>Ground Speed, Unit:</b>	3.2 MPH
<b>Incorporation Equip.:</b>	
<b>Hours to Incorp.:</b>	
<b>Incorp. Depth, Unit:</b>	
<b>Carrier:</b>	WATER
<b>Spray Volume, Unit:</b>	15 GPA
<b>Spray pH:</b>	
<b>Propellant:</b>	
<b>Tank Mix (Y/N):</b>	

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Weed Code		GLXMA	ECHCG	IPOHG	IPOLA	SEBEX	AMARE	CASOB	
Crop Code		GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	
Rating Data Type		INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	
Rating Unit		%	%	%	%	%	%	%	
Rating Date		16/Jun/2006	27/Jun/2006	27/Jun/2006	27/Jun/2006	27/Jun/2006	27/Jun/2006	27/Jun/2006	
Trt-Eval Interval		7 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A	
ARM Action Codes									
# Subsamples, Dec.									
Trt	Treatment	Rate	Appl						
No.	Name	Unit	Code	1	2	3	4	5	
TABLE OF R MEANS									
Replicate 1		10.00	80.00	85.00	85.00	92.86	94.29	80.71	
Replicate 2		13.93	76.79	88.21	88.21	88.21	95.00	85.71	
Replicate 3		16.79	81.07	85.00	85.00	88.57	95.00	87.50	
Replicate 4		16.07	82.50	82.86	82.86	85.71	95.00	86.07	
TABLE OF A MEANS									
1	ROUNDUP ORIGINAL MAX	A	14.46	78.39	85.00	85.00	88.93	94.64	84.11
2	TOUCHDOWN TOTAL	A	13.93	81.79	85.54	85.54	88.75	95.00	85.89
TABLE OF B MEANS									
1	CLASSIC	A	20.63	76.88	83.13	83.13	87.50	95.00	83.13
1	HARMONY GT	A							
2	CLASSIC	A	20.63	81.88	83.13	83.13	90.63	95.00	81.88
2	HARMONY GT	A							
3	CLASSIC	A	17.50	77.50	85.63	85.63	91.88	95.00	84.38
4	CLASSIC	A	17.50	77.50	85.63	85.63	92.50	95.00	88.75
5	FIRSTRATE	A	5.00	81.88	81.25	81.25	86.25	95.00	85.63
6	RESOURCE	A	16.88	81.88	91.25	91.25	86.88	95.00	88.13
7	NONE	A	1.25	83.13	86.88	86.88	86.25	93.75	83.13
TABLE OF AB MEANS									
1	ROUNDUP ORIGINAL MAX	A	21.25	72.50	86.25	86.25	88.75	95.00	83.75
1	CLASSIC	A							
1	HARMONY GT	A							
2	TOUCHDOWN TOTAL	A	20.00	81.25	80.00	80.00	86.25	95.00	82.50
1	CLASSIC	A							
1	HARMONY GT	A							
1	ROUNDUP ORIGINAL MAX	A	22.50	78.75	85.00	85.00	91.25	95.00	87.50
2	CLASSIC	A							
2	HARMONY GT	A							
2	TOUCHDOWN TOTAL	A	18.75	85.00	81.25	81.25	90.00	95.00	76.25
2	CLASSIC	A							
2	HARMONY GT	A							
1	ROUNDUP ORIGINAL MAX	A	17.50	73.75	85.00	85.00	91.25	95.00	81.25
3	CLASSIC	A							
2	TOUCHDOWN TOTAL	A	17.50	81.25	86.25	86.25	92.50	95.00	87.50
3	CLASSIC	A							
1	ROUNDUP ORIGINAL MAX	A	17.50	76.25	81.25	81.25	92.50	95.00	87.50
4	CLASSIC	A							
2	TOUCHDOWN TOTAL	A	17.50	78.75	90.00	90.00	92.50	95.00	90.00
4	CLASSIC	A							
1	ROUNDUP ORIGINAL MAX	A	5.00	81.25	78.75	78.75	88.75	95.00	82.50
5	FIRSTRATE	A							
2	TOUCHDOWN TOTAL	A	5.00	82.50	83.75	83.75	83.75	95.00	88.75
5	FIRSTRATE	A							
1	ROUNDUP ORIGINAL MAX	A	16.25	82.50	92.50	92.50	86.25	95.00	88.75
6	RESOURCE	A							
2	TOUCHDOWN TOTAL	A	17.50	81.25	90.00	90.00	87.50	95.00	87.50
6	RESOURCE	A							



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Trial ID:	Study Dir.:					
Location:	Investigator: Donnie Miller					
FACTORIAL/POOLED ERROR AOV For GLXMA INJURY % 16/Jun/2006 7 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	3938.839286				
R	3	390.625000	130.208333	8.420	0.0002	3.00
A	1	4.017857	4.017857	0.260	0.6131	2.12
B	6	2910.714286	485.119048	31.369	0.0001	3.97
AB	6	30.357143	5.059524	0.327	0.9186	5.62
ERROR	39	603.125000	15.464744			
FACTORIAL/POOLED ERROR AOV For ECHCG GLXMA CONTROL % 27/Jun/2006 18 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	5174.553571				
R	3	247.767857	82.589286	0.763	0.5216	7.95
A	1	161.160714	161.160714	1.489	0.2297	5.62
B	6	340.178571	56.696429	0.524	0.7867	10.51
AB	6	204.464286	34.077381	0.315	0.9254	14.87
ERROR	39	4220.982143	108.230311			
FACTORIAL/POOLED ERROR AOV For IPOHG GLXMA CONTROL % 27/Jun/2006 18 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	4170.982143				
R	3	204.910714	68.303571	0.852	0.4740	6.84
A	1	4.017857	4.017857	0.050	0.8240	4.84
B	6	511.607143	85.267857	1.064	0.4006	9.05
AB	6	324.107143	54.017857	0.674	0.6713	12.79
ERROR	39	3126.339286	80.162546			
FACTORIAL/POOLED ERROR AOV For IPOLA GLXMA CONTROL % 27/Jun/2006 18 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	4170.982143				
R	3	204.910714	68.303571	0.852	0.4740	6.84
A	1	4.017857	4.017857	0.050	0.8240	4.84
B	6	511.607143	85.267857	1.064	0.4006	9.05
AB	6	324.107143	54.017857	0.674	0.6713	12.79
ERROR	39	3126.339286	80.162546			
FACTORIAL/POOLED ERROR AOV For SEBEX GLXMA CONTROL % 27/Jun/2006 18 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	2749.553571				
R	3	369.196429	123.065476	2.527	0.0715	5.33
A	1	0.446429	0.446429	0.009	0.9242	3.77
B	6	358.928571	59.821429	1.228	0.3130	7.05
AB	6	121.428571	20.238095	0.416	0.8642	9.97
ERROR	39	1899.553571	48.706502			
FACTORIAL/POOLED ERROR AOV For AMARE GLXMA CONTROL % 27/Jun/2006 18 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	98.214286				
R	3	5.357143	1.785714	1.000	0.4031	1.02
A	1	1.785714	1.785714	1.000	0.3235	0.72
B	6	10.714286	1.785714	1.000	0.4392	1.35
AB	6	10.714286	1.785714	1.000	0.4392	1.91
ERROR	39	69.642857	1.785714			
FACTORIAL/POOLED ERROR AOV For CASOB GLXMA CONTROL % 27/Jun/2006 18 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	4000.000000				
R	3	367.857143	122.619048	1.825	0.1585	6.26
A	1	44.642857	44.642857	0.665	0.4199	4.43
B	6	331.250000	55.208333	0.822	0.5599	8.28
AB	6	636.607143	106.101190	1.580	0.1790	11.71
ERROR	39	2619.642857	67.170330			



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FACTORIAL/POOLED ERROR AOV For GLXMA INJURY % 27/Jun/2006 18 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	288.839286				
R	3	15.625000	5.208333	1.226	0.3130	1.57
A	1	4.017857	4.017857	0.946	0.3367	1.11
B	6	85.714286	14.285714	3.364	0.0091	2.08
AB	6	17.857143	2.976190	0.701	0.6506	2.94
ERROR	39	165.625000	4.246795			
FACTORIAL/POOLED ERROR AOV For ECHCG GLXMA CONTROL % 7/Jul/2006 28 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	7221.428571				
R	3	132.142857	44.047619	0.298	0.8263	9.28
A	1	87.500000	87.500000	0.593	0.4459	6.56
B	6	827.678571	137.946429	0.935	0.4813	12.28
AB	6	418.750000	69.791667	0.473	0.8242	17.36
ERROR	39	5755.357143	147.573260			
FACTORIAL/POOLED ERROR AOV For CASOB GLXMA CONTROL % 7/Jul/2006 28 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	9205.357143				
R	3	662.500000	220.833333	1.514	0.2260	9.22
A	1	787.500000	787.500000	5.400	0.0254	6.52
B	6	880.357143	146.726190	1.006	0.4353	12.20
AB	6	1187.500000	197.916667	1.357	0.2560	17.26
ERROR	39	5687.500000	145.833333			
FACTORIAL/POOLED ERROR AOV For IPOHG GLXMA CONTROL % 7/Jul/2006 28 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	1699.553571				
R	3	65.625000	21.875000	0.724	0.5437	4.20
A	1	0.446429	0.446429	0.015	0.9039	2.97
B	6	246.428571	41.071429	1.360	0.2550	5.55
AB	6	208.928571	34.821429	1.153	0.3511	7.85
ERROR	39	1178.125000	30.208333			
FACTORIAL/POOLED ERROR AOV For IPOLA GLXMA CONTROL % 7/Jul/2006 28 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	1699.553571				
R	3	65.625000	21.875000	0.724	0.5437	4.20
A	1	0.446429	0.446429	0.015	0.9039	2.97
B	6	246.428571	41.071429	1.360	0.2550	5.55
AB	6	208.928571	34.821429	1.153	0.3511	7.85
ERROR	39	1178.125000	30.208333			
FACTORIAL/POOLED ERROR AOV For SEBEX GLXMA CONTROL % 7/Jul/2006 28 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	8650.000000				
R	3	582.142857	194.047619	1.172	0.3327	9.83
A	1	28.571429	28.571429	0.173	0.6801	6.95
B	6	1043.750000	173.958333	1.051	0.4081	13.00
AB	6	540.178571	90.029762	0.544	0.7715	18.39
ERROR	39	6455.357143	165.521978			
FACTORIAL/POOLED ERROR AOV For AMARE GLXMA CONTROL % 7/Jul/2006 28 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	0.000000				
R	3	0.000000	0.000000	0.000	0.0000	0.00
A	1	0.000000	0.000000	0.000	0.0000	0.00
B	6	0.000000	0.000000	0.000	0.0000	0.00
AB	6	0.000000	0.000000	0.000	0.0000	0.00
ERROR	39	0.000000	0.000000			

## LSU Northeast Research Station

Weed Code					
Crop Code		GLXMA	GLXMA	GLXMA	GLXMA
Rating Data Type		INJURY	YIELD	MOISTURE	YIELD
Rating Unit		%	LB/PLOT	%	BU/A
Rating Date		7/Jul/2006	11/Sep/2006	11/Sep/2006	11/Sep/2006
Trt-Eval Interval		28 DA-A	94 DA-A	94 DA-A	94 DA-A
ARM Action Codes					TY1
# Subsamples, Dec.					1
Trt Treatment	Rate	Appl			
No. Name	Unit	Code	15	16	17
					18
TABLE OF R MEANS					
Replicate 1			0.00	3.84	12.44
Replicate 2			0.00	7.52	13.26
Replicate 3			0.00	7.26	13.57
Replicate 4			0.00	7.39	17.13
TABLE OF A MEANS					
1 ROUNDUP ORIGINAL MAX	A		0.00	6.34	14.17
2 TOUCHDOWN TOTAL	A		0.00	6.68	14.03
TABLE OF B MEANS					
1 CLASSIC	A		0.00	5.15	15.43
1 HARMONY GT	A				18.3
2 CLASSIC	A		0.00	7.16	14.28
2 HARMONY GT	A				25.6
3 CLASSIC	A		0.00	6.36	13.65
4 CLASSIC	A		0.00	7.13	13.65
5 FIRSTRATE	A		0.00	6.83	13.26
6 RESOURCE	A		0.00	6.16	13.81
7 NONE			0.00	6.75	14.61
TABLE OF AB MEANS					
1 ROUNDUP ORIGINAL MAX	A		0.00	4.65	14.93
1 CLASSIC	A				16.6
1 HARMONY GT	A				
2 TOUCHDOWN TOTAL	A		0.00	5.65	15.93
1 CLASSIC	A				19.9
1 HARMONY GT	A				
1 ROUNDUP ORIGINAL MAX	A		0.00	7.73	14.53
2 CLASSIC	A				27.5
2 HARMONY GT	A				
2 TOUCHDOWN TOTAL	A		0.00	6.60	14.03
2 CLASSIC	A				23.6
2 HARMONY GT	A				
1 ROUNDUP ORIGINAL MAX	A		0.00	5.68	13.70
3 CLASSIC	A				20.3
2 TOUCHDOWN TOTAL	A		0.00	7.05	13.60
3 CLASSIC	A				25.4
1 ROUNDUP ORIGINAL MAX	A		0.00	6.40	13.85
4 CLASSIC	A				23.1
2 TOUCHDOWN TOTAL	A		0.00	7.85	13.45
4 CLASSIC	A				28.3
1 ROUNDUP ORIGINAL MAX	A		0.00	6.80	12.48
5 FIRSTRATE	A				24.7
2 TOUCHDOWN TOTAL	A		0.00	6.85	14.05
5 FIRSTRATE	A				24.5
1 ROUNDUP ORIGINAL MAX	A		0.00	6.23	14.25
6 RESOURCE	A				22.2
2 TOUCHDOWN TOTAL	A		0.00	6.10	13.38
6 RESOURCE	A				22.0
1 ROUNDUP ORIGINAL MAX	A		0.00	6.88	15.48
7 NONE					24.0
2 TOUCHDOWN TOTAL	A		0.00	6.63	13.75
7 NONE					23.8

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FACTORIAL/POOLED ERROR AOV For GLXMA INJURY % 7/Jul/2006 28 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	0.000000				
R	3	0.000000	0.000000	0.000	0.0000	0.00
A	1	0.000000	0.000000	0.000	0.0000	0.00
B	6	0.000000	0.000000	0.000	0.0000	0.00
AB	6	0.000000	0.000000	0.000	0.0000	0.00
ERROR	39	0.000000	0.000000			
FACTORIAL/POOLED ERROR AOV For GLXMA YIELD LB/PLOT 11/Sep/2006 94 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	297.608374				
R	3	132.789096	44.263032	13.432	0.0001	1.39
A	1	1.611609	1.611609	0.489	0.4885	0.98
B	6	23.622137	3.937023	1.195	0.3295	1.83
AB	6	11.067135	1.844522	0.560	0.7595	2.59
ERROR	39	128.518397	3.295344			
FACTORIAL/POOLED ERROR AOV For GLXMA MOISTURE % 11/Sep/2006 94 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	343.549819				
R	3	181.046237	60.348746	19.401	0.0001	1.35
A	1	0.300178	0.300178	0.096	0.7577	0.95
B	6	25.903597	4.317266	1.388	0.2439	1.78
AB	6	14.983572	2.497262	0.803	0.5738	2.52
ERROR	39	121.316235	3.110673			
FACTORIAL/POOLED ERROR AOV For GLXMA YIELD BU/A 11/Sep/2006 94 DA-A TY1 1						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	55	3782.600841				
R	3	1623.013615	541.004538	12.564	0.0001	5.0
A	1	24.246807	24.246807	0.563	0.4575	3.5
B	6	319.004268	53.167378	1.235	0.3099	6.6
AB	6	137.009896	22.834983	0.530	0.7818	9.4
ERROR	39	1679.326255	43.059648			
Column 18: TY1 = 3.628186*[16]*(100-[17])/87						