

LSU Northeast Research Station

GLUFOSINATE AND INSECTICIDE CO-APPLICATION EFFECTS ON LIBERTY LINK COTTON

GENERAL TRIAL INFORMATION

Investigator: Donnie Miller
TRIAL LOCATION: ALEXANDRIA, LA
Crop 1: GOSHI/COTTON
Variety: FM1735LL
Planting Date: 7/May/2008

SITE AND DESIGN

Plot Width, Unit: 6.67 FT
Plot Length, Unit: 40 FT
Reps: 4
Study Design: FACTORIAL

APPLICATION DESCRIPTION

	A	B	C
Application Date:	27/May/2008	10/Jun/2008	10/Jul/2008
Time of Day:	12:50 PM	2:00 PM	4:30 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	EAPOCR	EAPOCR	POSTBL
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	87 F	89 F	82 F
% Relative Humidity:	58	53	80
Wind Velocity, Unit:	3.2 MPH	0.6 MPH	0.9 MPH
Dew Presence (Y/N):	N	N	N
Water Hardness:	N	N	N
Soil Temp., Unit:	93 F	94 F	93 F
Soil Moisture:			DRY
% Cloud Cover:	80	30	100

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI 3 LF	GOSHI 7 LF	GOSHI

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	CO2 BCPCCK	CO2 BCPCCK	TRACTOR
Operating Pressure:	34 psi	34 psi	30 PSI
Nozzle Type:	DG	DG	FF
Nozzle Size:	11002	11002	11003
Nozzle Spacing, Unit:	20 IN	20 IN	20
Nozzles/Row:	2	2	
Ground Speed, Unit:	3.2 MPH	3.2 MPH	3.2 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

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Crop Code	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI
Rating Data Type	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	AVG CROP HT	YIELD	YIELD
Rating Unit	%	%	%	%	%	%	%	CM	LB	LB/A
Rating Date	3/Jun/2008	10/Jun/2008	17/Jun/2008	24/Jun/2008	17/Jul/2008	24/Jul/2008	18/Sep/2008	26/Sep/2008	26/Sep/2008	26/Sep/2008
Trt-Eval Interval	7 DA-A	14 DA-A	7 DA-B	14 DA-B	7 DA-C	14 DA-C				
ARM Action Codes										TY1
# Subsamples, Dec.										1

Trt Treatment	Rate	Appl										
No. Name	Rate	Unit	Code	1	2	3	4	5	6	7	8	9

TABLE OF R MEANS

Replicate 1	0.85	1.85	0.13	1.86	0.27	0.00	108.14	10.99	1794.6
Replicate 2	1.39	1.79	0.61	1.91	0.27	0.00	109.18	10.25	1673.4
Replicate 3	1.18	1.88	0.26	0.95	0.00	0.00	117.25	10.19	1664.3
Replicate 4

TABLE OF A MEANS

1 IGNITE	22 oz/a	A	0.33	0.00	0.00	1.00	0.00	0.00	112.40	9.69	1581.4
2 IGNITE	22 oz/a	A	0.00	0.00	0.00	0.50	1.00	0.00	112.13	10.53	1719.8
2 ACEPHATE	0.2 lb ai/a	A									
3 IGNITE	22 oz/a	A	0.00	0.33	0.00	1.50	0.00	0.00	113.42	9.74	1589.5
3 BAYTHROID XL	0.015 lb ai/a	A									
4 IGNITE	22 oz/a	A	0.33	0.67	0.00	2.00	0.00	0.00	108.80	10.94	1785.8
4 BIDRIN	0.2 lb ai/a	A									
5 IGNITE	22 oz/a	A	0.00	0.00	0.00	2.00	0.00	0.00	108.54	10.66	1740.6
5 CENTRIC	0.047 lb ai/a	A									
6 IGNITE	22 oz/a	A	0.00	1.00	1.33	4.00	0.00	0.00	108.00	10.69	1745.3
6 DIMETHOATE	0.25 lb ai/a	A									
7 IGNITE	22 oz/a	A	0.00	0.00	1.33	1.50	1.00	0.00	109.78	11.10	1812.8
7 DIAMOND	9 oz/a	A									
8 IGNITE	22 oz/a	A	0.00	0.00	0.00	1.00	0.00	0.00	112.69	10.64	1737.0
8 CARBINE	0.088 lb ai/a	A									
9 IGNITE	22 oz/a	A	7.67	14.44	0.00	1.83	0.00	0.00	112.96	9.90	1616.5
9 ZEPHYR	5 oz/a	A									
10 IGNITE	22 oz/a	A	4.22	3.78	0.50	2.00	0.00	0.00	117.82	10.85	1771.8
10 OBERON	5 oz/a	A									
11 IGNITE	22 oz/a	A	0.00	0.00	0.00	0.00	0.00	0.00	110.22	10.52	1717.9
11 VYDATE C-LV	0.4 lb ai/a	A									

TABLE OF B MEANS

1 2-3 LF (1 APP)	A	0.94	1.52	3.00	.	.	.	113.64	10.14	1655.8
2 2-3 LF FB 6-8 LF (2 APP)	AB	1.30	2.24	0.18	1.48	.	.	112.31	10.22	1668.8
3 2-3 FB 6-8 FB 1 WAF(3APP)	ABC	1.18	1.76	0.24	1.67	0.18	0.00	108.62	11.07	1807.8

TABLE OF AB MEANS

1 IGNITE	22 oz/a	A	0.00	0.00	.	.	.	115.67	10.05	1640.0
1 2-3 LF (1 APP)		A								
2 IGNITE	22 oz/a	A	0.00	0.00	.	.	.	117.60	9.63	1572.8
2 ACEPHATE	0.2 lb ai/a	A								
1 2-3 LF (1 APP)		A								
3 IGNITE	22 oz/a	A	0.00	0.00	.	.	.	118.80	9.24	1508.6
3 BAYTHROID XL	0.015 lb ai/a	A								
1 2-3 LF (1 APP)		A								
4 IGNITE	22 oz/a	A	0.00	0.00	.	.	.	109.13	11.46	1871.1
4 BIDRIN	0.2 lb ai/a	A								
1 2-3 LF (1 APP)		A								
5 IGNITE	22 oz/a	A	0.00	0.00	.	.	.	109.73	10.51	1716.0
5 CENTRIC	0.047 lb ai/a	A								
1 2-3 LF (1 APP)		A								
6 IGNITE	22 oz/a	A	0.00	0.00	.	.	.	109.07	11.75	1917.9
6 DIMETHOATE	0.25 lb ai/a	A								
1 2-3 LF (1 APP)		A								
7 IGNITE	22 oz/a	A	0.00	0.00	3.00	.	.	104.67	9.64	1573.4
7 DIAMOND	9 oz/a	A								
1 2-3 LF (1 APP)		A								
8 IGNITE	22 oz/a	A	0.00	0.00	.	.	.	113.20	10.28	1677.9
8 CARBINE	0.088 lb ai/a	A								
1 2-3 LF (1 APP)		A								
9 IGNITE	22 oz/a	A	7.00	15.00	.	.	.	118.40	8.73	1425.9
9 ZEPHYR	5 oz/a	A								
1 2-3 LF (1 APP)		A								
10 IGNITE	22 oz/a	A	3.33	1.67	.	.	.	118.07	10.35	1689.8
10 OBERON	5 oz/a	A								
1 2-3 LF (1 APP)		A								

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 3/Jun/2008 7 DA-A							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)	
Total	98	640.020202					
R	2	4.989899	2.494949	2.589	0.0829	0.48	
A	10	562.464646	56.246465	58.365	0.0001	0.80	
B	2	2.262626	1.131313	1.174	0.3157	0.42	
AB	20	8.626263	0.431313	0.448	0.9762	1.39	
ERROR	64	61.676768	0.963699				

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 10/Jun/2008 14 DA-A							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)	
Total	98	1859.414141					
R	2	0.141414	0.070707	0.047	0.9542	0.60	
A	10	1685.636364	168.563636	111.764	0.0001	1.00	
B	2	9.050505	4.525253	3.000	0.0568	0.52	
AB	20	68.060606	3.403030	2.256	0.0074	1.74	
ERROR	64	96.525253	1.508207				

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 17/Jun/2008 7 DA-B							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)	
Total	98	73.656566					
R	2	1.959596	0.979798	1.917	0.1554	0.35	
A	10	18.767677	1.876768	3.672	0.0006	0.58	
B	2	0.141414	0.070707	0.138	0.8710	0.30	
AB	20	20.080808	1.004040	1.965	0.0220	1.01	
ERROR	64	32.707071	0.511048				

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 24/Jun/2008 14 DA-B							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)	
Total	98	292.747475					
R	2	8.505051	4.252525	1.897	0.1584	0.74	
A	10	43.191919	4.319192	1.926	0.0575	1.22	
B	2	55.171717	27.585859	12.304	0.0001	0.64	
AB	20	42.383838	2.119192	0.945	0.5360	2.12	
ERROR	64	143.494949	2.242109				

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 17/Jul/2008 7 DA-C							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)	
Total	98	17.636364					
R	2	0.181818	0.090909	0.492	0.6135	0.21	
A	10	1.636364	0.163636	0.886	0.5507	0.35	
B	2	0.727273	0.363636	1.969	0.1479	0.18	
AB	20	3.272727	0.163636	0.886	0.6042	0.61	
ERROR	64	11.818182	0.184659				

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 24/Jul/2008 14 DA-C							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)	
Total	98	0.000000					
R	2	0.000000	0.000000	0.000	0.0000	0.00	
A	10	0.000000	0.000000	0.000	0.0000	0.00	
B	2	0.000000	0.000000	0.000	0.0000	0.00	
AB	20	0.000000	0.000000	0.000	0.0000	0.00	
ERROR	64	0.000000	0.000000				

FACTORIAL/POOLED ERROR AOV For GOSHI AVG CROP HT CM 18/Sep/2008							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)	
Total	98	10186.561962					
R	2	1643.434359	821.717179	9.765	0.0002	4.52	
A	10	731.486660	73.148666	0.869	0.5659	7.49	
B	2	445.230624	222.615312	2.645	0.0787	3.91	
AB	20	1980.731506	99.036575	1.177	0.3028	12.97	
ERROR	64	5385.678814	84.151231				

FACTORIAL/POOLED ERROR AOV For GOSHI YIELD LB 26/Sep/2008							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)	
Total	98	221.406638					
R	2	13.094542	6.547271	3.434	0.0383	0.68	
A	10	21.266709	2.126671	1.115	0.3649	1.13	
B	2	17.592962	8.796481	4.613	0.0134	0.59	
AB	20	47.420988	2.371049	1.244	0.2508	1.95	
ERROR	64	122.031437	1.906741				

FACTORIAL/POOLED ERROR AOV For GOSHI YIELD LB/A 26/Sep/2008 TY1 1							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)	
Total	98	5901943.939185					
R	2	349055.690569	174527.845284	3.434	0.0383	111.0	
A	10	566897.894809	56689.789481	1.115	0.3649	184.1	
B	2	468968.481624	234484.240812	4.613	0.0134	96.1	
AB	20	1264081.773039	63204.088652	1.244	0.2508	318.8	
ERROR	64	3252940.099145	50827.189049				

Column 9: TY1 = 163.2684*[8]