

LSU Northeast Research Station

Glufosinate and insecticide co-application effects on Liberty Link cotton

GENERAL TRIAL INFORMATION

Investigator: Donnie Miller
TRIAL LOCATION: ST JOSEPH, LA
Crop 1: GOSHI COTTON
Variety: FM1735LL
Planting Date: 19/May/2008

SITE AND DESIGN

Plot Width, Unit: 6.67 FT
Plot Length, Unit: 20 FT
Reps: 4
Study Design: FACTORIAL

SOIL DESCRIPTION

% Sand: 50 % OM: 0.5
% Silt: 28 pH: 6.8
% Clay: 22 CEC: 12.8
Texture: SILT LOAM

APPLICATION DESCRIPTION

	A	B	C
Application Date:	6/Jun/2008	16/Jun/2008	24/Jul/2008
Time of Day:	5:30 PM	12:00 PM	10:00 AM
Application Method:	SPRAY	SRPAY	SPRAY
Application Timing:	EAPOCR	EAPOCR	POSTBL
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	84 F	91 F	88 F
% Relative Humidity:	64	49	55
Wind Velocity, Unit:	6.1 MPH	3.1 MPH	7 MPH
Dew Presence (Y/N):	N	N	N
Water Hardness:	N	N	N
Soil Temp., Unit:	98 F	93 F	92 F
Soil Moisture:	DRY	DRY	DRY
% Cloud Cover:	40	40	0

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI 3 LF	GOSHI 8 LF	GOSHI BLOOM

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	CO2 BCPCCK	CO2 BCPCCK	TRACTOR
Operating Pressure:	34 psi	34 psi	38 psi
Nozzle Type:	DG	DG	DG
Nozzle Size:	11002	11002	11002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Nozzles/Row:	2	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

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 13/Jun/2008 7 DA-A						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	98	66.181818				
R	2	2.363636	1.181818	1.908	0.1567	0.39
A	10	12.181818	1.218182	1.967	0.0519	0.64
B	2	1.272727	0.636364	1.028	0.3637	0.34
AB	20	10.727273	0.536364	0.866	0.6277	1.11
ERROR	64	39.636364	0.619318			

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 20/Jun/2008 14 DA-A						
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 INJURY % 23/Jun/2008 7 DA-B						
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	3.636364	0.363636	1.969	0.0516	0.35
B	2	0.181818	0.090909	0.492	0.6135	0.18
AB	20	1.818182	0.090909	0.492	0.9604	0.61
ERROR	64	11.818182	0.184659			

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 30/Jun/2008 14 DA-B						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	98	238.227273				
R	2	3.651515	1.825758	0.893	0.4145	0.70
A	10	19.227273	1.922727	0.940	0.5031	1.17
B	2	51.651515	25.825758	12.632	0.0001	0.61
AB	20	32.848485	1.642424	0.803	0.7003	2.02
ERROR	64	130.848485	2.044508			

FACTORIAL/POOLED ERROR AOV For GOSHI INJURY % 31/Jul/2008 7 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 INJURY % 13/Aug/2008 20 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 YIELD LB 15/Oct/2008						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	98	135.956815				
R	2	9.275182	4.637591	3.319	0.0425	0.58
A	10	11.626587	1.162659	0.832	0.5995	0.97
B	2	0.942459	0.471229	0.337	0.7150	0.50
AB	20	24.697100	1.234855	0.884	0.6069	1.67
ERROR	64	89.415487	1.397117			

FACTORIAL/POOLED ERROR AOV For GOSHI YIELD LB/A 15/Oct/2008 TY1 1						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	98	14496561.867689				
R	2	988977.679230	494488.839615	3.319	0.0425	190.0
A	10	1239698.632100	123969.863210	0.832	0.5995	315.1
B	2	100490.688798	50245.344399	0.337	0.7150	164.6
AB	20	2633358.707205	131667.935360	0.884	0.6069	545.8
ERROR	64	9534036.160356	148969.315006			

FACTORIAL/POOLED ERROR AOV For GOSHI AVG CROP HT CM 21/Oct/2008						
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	98	5513.621798				
R	2	942.610830	471.305415	10.379	0.0001	3.32
A	10	336.511078	33.651108	0.741	0.6834	5.50
B	2	186.241966	93.120983	2.051	0.1370	2.87
AB	20	1142.015280	57.100764	1.257	0.2408	9.53
ERROR	64	2906.242644	45.410041			

Column 8: TY1 = 326.5367*7