

LSU Northeast Research Station

IS REPLANTING CRUCIAL FOLLOWING AN OFF TARGET APPLICATION OF 2,4-D ?

GENERAL TRIAL INFORMATION

Investigator: Donnie Miller
TRIAL LOCATION: ST JOSEPH
Crop 1: GOSHI COTTON
Variety: DP164B2RF
Planting Date: 30/Apr/2008

SITE AND DESIGN

Plot Width, Unit: 6.67 FT
Plot Length, Unit: 25 FT
Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

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

APPLICATION DESCRIPTION

A
Application Date: 26/May/2008
Time of Day: 3:15 PM
Application Method: SPRAY
Application Timing: EAPOCR
Applic. Placement: BROFOL
Air Temp., Unit: 89 F
% Relative Humidity: 52
Wind Velocity, Unit: 8.7 MPH
Dew Presence (Y/N): N
Water Hardness: N
Soil Temp., Unit: 94 F
% Cloud Cover: 30

CROP STAGE AT EACH APPLICATION

A
Crop 1 Code, Stage: GOSHI 3-4 LF

APPLICATION EQUIPMENT

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

LSU Northeast Research Station

Crop Code	GOSHI		GOSHI		GOSHI		GOSHI		GOSHI		
Part Rated	GOSHI		GOSHI		GOSHI		GOSHI		GOSHI		
Rating Data Type	INJURY	AVG CROP HT	INJURY	AVG CROP HT	AVG CROP HT	AVG CROP HT	AVG NAWF	AVG CROP HT	AVG CROP HT	AVG CROP HT	
Rating Unit	%	CM	%	CM	CM	CM	10/PLOT	CM	CM	CM	
Rating Date	9/Jun/2008	9/Jun/2008	23/Jun/2008	23/Jun/2008	17/Jul/2008	31/Jul/2008	31/Jul/2008	21/Oct/2008	21/Oct/2008	21/Oct/2008	
Trt-Eval Interval	14 DA-A	14 DA-A	28 DA-A	28 DA-A	41 DAP	55 DAP	66 DA-A	148 DA-A	148 DA-A	148 DA-A	
ARM Action Codes											
# Subsamples, Dec.											
Trt Treatment											
No. Name	Rate	Unit	Appl Code	1	2	3	4	5	6	7	8
1 0			A					42.65	63.03		106.65 a
REPLANT			A								
2 0			A	0.00 e	29.65 a	0.00 d	53.93 a			2.90 c	105.90 a
NO REPLANT			A								
3 SALVO 1/4 X	3.2 oz/a		A	80.00 a	17.08 c	75.00 a	42.90 b			5.33 a	96.05 a
ROUNDUP POWERMAX	22 oz/a		A								
NO REPLANT			A								
4 SALVO 1/8 X	1.6 oz/a		A	63.75 b	21.78 bc	68.75 a	42.35 b			4.95 a	105.15 a
ROUNDUP POWERMAX	22 oz/a		A								
NO REPLANT			A								
5 SALVO 1/16 X	0.8 oz/a		A	33.75 c	25.68 ab	47.50 b	49.88 ab			4.28 ab	110.05 a
ROUNDUP POWERMAX	22 oz/a		A								
NO REPLANT			A								
6 SALVO 1/32 X	0.4 oz/a		A	30.00 cd	24.45 b	45.00 bc	54.08 a			3.48 bc	106.00 a
ROUNDUP POWERMAX	22 oz/a		A								
NO REPLANT			A								
7 SALVO 1/64 X	0.2 oz/a		A	21.25 d	23.83 b	37.50 c	53.38 a			3.68 bc	108.95 a
ROUNDUP POWERMAX	22 oz/a		A								
NO REPLANT			A								
LSD (P=.05)				10.194	4.827	9.185	8.119	.	.	1.120	13.231
Standard Deviation				6.765	3.204	6.095	5.388	.	.	0.743	8.906
CV				17.74	13.49	13.36	10.9	.	.	18.12	8.44
Grand Mean				38.13	23.74	45.63	49.42	42.65	63.03	4.1	105.54
Bartlett's X2				11.251	8.302	4.996	7.25	.	.	4.083	8.101
P(Bartlett's X2)				0.01*	0.14	0.288	0.203	.	.	0.538	0.231
Replicate F				1.601	2.950	0.551	1.352			1.809	3.038
Replicate Prob(F)				0.2310	0.0666	0.6549	0.2952			0.1888	0.0558
Treatment F				74.008	6.818	76.424	4.142			6.179	1.040
Treatment Prob(F)				0.0001	0.0017	0.0001	0.0146			0.0027	0.4323

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

LSU Northeast Research Station

Crop Code	GOSHI		GOSHI		GOSHI		GOSHI		GOSHI	
Part Rated	YIELD		YIELD		SEEDCOTTON		LINT		LINT	
Rating Data Type	LB		LB/A		GRAMS		GRAMS		FRACTION	
Rating Unit	10/Oct/2008		10/Oct/2008		17/Oct/2008		17/Oct/2008		17/Oct/2008	
Rating Date	137 DA-A		137 DA-A		144 DA-A		144 DA-A		144 DA-A	
Trt-Eval Interval	137 DA-A		137 DA-A		144 DA-A		144 DA-A		144 DA-A	
ARM Action Codes	TY1		TY1		T2		T2		T3	
# Subsamples, Dec.	1		1		1		1		1	
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	9	10	11	12	13	14	
1 0			A	1.15 d	300.4 d	276.00 c	96.25 c	37.61 a	109.24 c	
REPLANT			A							
2 0			A	4.12 b	1076.3 b	707.75 a	269.00 a	38.01 a	408.60 a	
NO REPLANT			A							
3 SALVO 1/4 X	3.2 oz/a		A	1.53 cd	398.4 cd	463.75 b	156.00 b	33.83 a	138.88 bc	
ROUNDUP POWERMAX	22 oz/a		A							
NO REPLANT			A							
4 SALVO 1/8 X	1.6 oz/a		A	2.76 c	719.7 c	646.00 a	234.25 a	36.10 a	261.97 b	
ROUNDUP POWERMAX	22 oz/a		A							
NO REPLANT			A							
5 SALVO 1/16 X	0.8 oz/a		A	4.43 ab	1155.9 ab	711.75 a	254.75 a	35.64 a	420.80 a	
ROUNDUP POWERMAX	22 oz/a		A							
NO REPLANT			A							
6 SALVO 1/32 X	0.4 oz/a		A	4.83 ab	1260.4 ab	778.00 a	284.25 a	36.42 a	460.97 a	
ROUNDUP POWERMAX	22 oz/a		A							
NO REPLANT			A							
7 SALVO 1/64 X	0.2 oz/a		A	5.48 a	1430.2 a	699.50 a	252.50 a	36.08 a	517.22 a	
ROUNDUP POWERMAX	22 oz/a		A							
NO REPLANT			A							
LSD (P=.05)				1.317	344.04	164.703	57.043	5.134	134.725	
Standard Deviation				0.886	231.58	110.864	38.396	3.456	90.685	
CV				25.56	25.56	18.12	17.37	9.54	27.39	
Grand Mean				3.47	905.91	611.82	221.0	36.24	331.1	
Bartlett's X2				8.416	8.416	5.856	4.504	28.219	8.582	
P(Bartlett's X2)				0.209	0.209	0.439	0.609	0.001*	0.198	
Replicate F				10.198	10.199	5.166	8.170	1.211	10.320	
Replicate Prob(F)				0.0004	0.0004	0.0095	0.0012	0.3343	0.0004	
Treatment F				14.309	14.309	10.325	12.842	0.627	12.687	
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.7066	0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

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

Column 10: TY1 = 261.2294*[9]

Column 13: T2 = (100-[13])

Column 14: T3 = (([10]*[13])/100)