

# LSU Northeast Research Station

## EFFECT OF DUAL AND STAPLE TIMING ON COTTON INJURY

### General Trial Information

Study Director: Daniel Stephenson  
Investigator: Donnie Miller  
Trial Location: ST JOSEPH, LA

### Crop Description

Crop 1: GOSHI *Gossypium hirsutum* Cotton, American upland  
Variety: DP164B2RF  
Planting Date: 6/May/2008

### Site and Design

Plot Width, Unit: 6.67 FT  
Plot Length, Unit: 25 FT  
Replications: 4  
Study Design: Factorial

### Soil Description

% Sand: 8 % OM: 0.75  
% Silt: 49 pH: 5.8  
% Clay: 43 CEC: 17.3  
Texture: SILTY CLAY LOAM

### Application Description

	A		B		C		D	
Application Date:	4/Jun/2008	5/Jun/2008	7/Jun/2008	9/Jun/2008				
Time of Day:	11:20 AM	10:00 AM	12:00 PM	4:30 PM				
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY				
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL				
Applied By:	DKM	MSM	DKM	DKM				
Air Temperature, Unit:	88 F	87 F	91 F	91 F				
% Relative Humidity:	60	56	52	41				
Wind Velocity, Unit:	12.4 MPH	13.5 MPH	7.5 MPH	9.1 MPH				
Dew Presence (Y/N):	N	N	N	N				
Water Hardness:	N	N	N	N				
Soil Temperature, Unit:	90 F	88 F	92 F	101 F				
Soil Moisture:	DRY	DRY						
% Cloud Cover:	30	60	30	30				

### Crop Stage At Each Application

	A		B		C		D	
Crop 1 Code, BBCH Scale:	GOSHI BCOT	GOSHI BCOT	GOSHI BCOT	GOSHI BCOT				
Stage Scale Used:	BBCH	BBCH	BBCH	BBCH				
Stage Majority, Percent:	6 LF	6 LF	7 LF	7-8 LF				

### Application Equipment

	A	B	C	D
Appl. Equipment:	CO2BCKPCK	CO2BCKPCK	CO2BCKPCK	CO2BCKPCK
Operating Pressure:	34	34	34	34
Pressure Unit:	PSI	PSI	PSI	PSI
Nozzle Type:	DG	DG	DG	DG
Nozzle Size:	11002	11002	11002	11002
Nozzle Spacing, Unit:	20 "	20 "	20 "	20 "
Nozzles/Row:	2	2	2	2
Ground Speed, Unit:	3.2 MPH	3.2 MPH	3.2 MPH	3.2 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume:	15	15	15	15
Volume Unit:	GPA	GPA	GPA	GPA





FACTORIAL/POOLED ERROR AOV For GOSHI BCOT 11/Jun/2008 INJURY % 2 7 DAT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	79	4754.687500				
R	3	317.537500	105.845833	4.178	0.0096	3.18
A	3	1417.937500	472.645833	18.654	0.0001	3.18
B	4	450.250000	112.562500	4.443	0.0034	3.56
AB	12	1124.750000	93.729167	3.699	0.0004	7.12
ERROR	57	1444.212500	25.337061			

FACTORIAL/POOLED ERROR AOV For GOSHI BCOT 18/Jun/2008 INJURY % 9 14 DAT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	79	577.187500				
R	3	2.537500	0.845833	0.181	0.9088	1.37
A	3	27.237500	9.079167	1.944	0.1328	1.37
B	4	166.625000	41.656250	8.919	0.0001	1.53
AB	12	114.575000	9.547917	2.044	0.0364	3.06
ERROR	57	266.212500	4.670395			

FACTORIAL/POOLED ERROR AOV For GOSHI BCOT 18/Jun/2008 AVG NODES /10PLANT 9 14 DAT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	79	107.172017				
R	3	14.229000	4.743000	4.107	0.0104	0.68
A	3	0.203000	0.067667	0.059	0.9812	0.68
B	4	2.302006	0.575501	0.498	0.7370	0.76
AB	12	24.607014	2.050584	1.776	0.0747	1.52
ERROR	57	65.830997	1.154930			

FACTORIAL/POOLED ERROR AOV For GOSHI BCOT 18/Jun/2008 AVG CROP HT CM 9 14 DAT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	79	1858.339527				
R	3	487.353513	162.451171	8.885	0.0001	2.70
A	3	102.884487	34.294829	1.876	0.1440	2.70
B	4	93.693287	23.423322	1.281	0.2881	3.02
AB	12	132.231703	11.019309	0.603	0.8309	6.05
ERROR	57	1042.176536	18.283799			

FACTORIAL/POOLED ERROR AOV For GOSHI BCOT 25/Jun/2008 INJURY % 16 21 DAT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	79	0.000000				
R	3	0.000000	0.000000	0.000	0.0000	0.00
A	3	0.000000	0.000000	0.000	0.0000	0.00
B	4	0.000000	0.000000	0.000	0.0000	0.00
AB	12	0.000000	0.000000	0.000	0.0000	0.00
ERROR	57	0.000000	0.000000			

FACTORIAL/POOLED ERROR AOV For GOSHI BCOT 2/Jul/2008 INJURY % 23 28 DAT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	79	0.000000				
R	3	0.000000	0.000000	0.000	0.0000	0.00
A	3	0.000000	0.000000	0.000	0.0000	0.00
B	4	0.000000	0.000000	0.000	0.0000	0.00
AB	12	0.000000	0.000000	0.000	0.0000	0.00
ERROR	57	0.000000	0.000000			

FACTORIAL/POOLED ERROR AOV For GOSHI BCOT 2/Jul/2008 AVG NODES /5 PLANT 23 28 DAT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	79	184.449838				
R	3	7.920376	2.640125	1.163	0.3317	0.95
A	3	0.168376	0.056125	0.025	0.9947	0.95
B	4	8.107979	2.026995	0.893	0.4741	1.07
AB	12	38.895993	3.241333	1.428	0.1802	2.13
ERROR	57	129.357114	2.269423			

FACTORIAL/POOLED ERROR AOV For GOSHI BCOT 2/Jul/2008 AVG CROP HT CM 23 28 DAT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	79	5091.776385				
R	3	967.728640	322.576213	5.976	0.0013	4.65
A	3	258.497692	86.165897	1.596	0.2003	4.65
B	4	85.154440	21.288610	0.394	0.8118	5.20
AB	12	703.713881	58.642823	1.086	0.3887	10.39
ERROR	57	3076.681732	53.976872			

FACTORIAL/POOLED ERROR AOV For GOSHI BCOT 16/Jul/2008 INJURY % 37 42 DAT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	Prob(F)	LSD (.05)
Total	79	0.000000				
R	3	0.000000	0.000000	0.000	0.0000	0.00
A	3	0.000000	0.000000	0.000	0.0000	0.00
B	4	0.000000	0.000000	0.000	0.0000	0.00
AB	12	0.000000	0.000000	0.000	0.0000	0.00
ERROR	57	0.000000	0.000000			