

LSU Northeast Research Station

HARVEST AID EVALUATION OF FINISH 6 PRO AND GINSTAR FOR COTTON DEFOLIATION AND BOLL OPENING

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

CROP AND WEED DESCRIPTION

Crop 1: GOSHI COTTON Variety: DP 164 B2RF
 Planting Date: 1/May/2007

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: 1 Texture: SILT LOAM
 % Silt: 28 pH: 6.5
 % Clay: 22 CEC: 12.8

APPLICATION DESCRIPTION

	A	B	C
Application Date:	30/Aug/2007	18/Sep/2007	1/Oct/2007
Time of Day:	9:05 AM	3:00 PM	4:30 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PREHAR	PREHAR	PREHAR
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	83 F	88 F	82 F
% Relative Humidity:	76	44	58
Wind Velocity, Unit:	4.1 MPH	4.3 MPH	2.8 MPH
Dew Presence (Y/N):	N	N	N
Water Hardness:	N	N	N
Soil Temp., Unit:	87 F	85 F	83 F
Soil Moisture:	DRY	MOIST	MOIST
% Cloud Cover:	80	40	100

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GOSHI 11-15%OB	GOSHI 65-70%OB	GOSHI 75-80%OB
Stage Scale:			
Height, Unit:			

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	HIBOY	HIBOY	CO2 BCPCCK
Operating Pressure:	42 PSI	42 PSI	37 PSI
Nozzle Type:	HC	HC	HC
Nozzle Size:	TXVS12	TXVS12	TXVS12
Nozzle Spacing, Unit:	20 "	20 "	20 "
Nozzles/Row:	2	2	2
Band Width, Unit:			
Boom Length, Unit:			
Boom Height, Unit:			
Ground Speed, Unit:	3.77 MPH	3.77 MPH	3.2 MPH
Incorporation Equip.:			
Hours to Incorp.:			
Incorp. Depth, Unit:			
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA
Spray pH:			
Propellant:			
Tank Mix (Y/N):			

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

			GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI
Crop Code									
Part Rated									
Rating Data Type			OPEN BOLL	DEFOLIATION	DESSICATION	DEFOLIATION	DESSICATION	RG CONTROL	RG CONTROL
Rating Unit			%	%	%	%	%	%	%
Rating Date			26/Sep/2007	28/Sep/2007	28/Sep/2007	5/Oct/2007	5/Oct/2007	5/Oct/2007	5/Oct/2007
Trt-Eval Interval			8 DA-B	10 DA-B	10 DA-B	17 DA-B	17 DA-B	17 DA-B	17 DA-B
ARM Action Codes									
Trt Treatment	Rate	Appl							
No. Name	Rate	Unit Code	1	2	3	4	5	6	7
1 STANCE	5 oz/a	A	85.28 ab	70.00 ab	0.00 a	67.50 cd	0.00 a	88.75 ab	6.25 cde
FINISH 6 PRO	21.3 oz/a	B							
DROPP SC	1.6 oz/a	B							
2 STANCE	8 oz/a	A	81.58 abc	80.00 a	0.00 a	80.00 b	0.00 a	88.75 ab	12.50 b-e
FINISH 6 PRO	21.3 oz/a	B							
DROPP SC	1.6 oz/a	B							
3 FINISH 6 PRO	21.3 oz/a	B	84.58 ab	68.75 ab	0.00 a	75.00 bcd	0.00 a	75.00 bc	3.75 de
4 FINISH 6 PRO	32 oz/a	B	85.93 a	62.50 b	0.00 a	66.25 d	0.00 a	81.25 abc	6.25 cde
5 FINISH 6 PRO	21.3 oz/a	B	82.35 ab	70.00 ab	0.00 a	72.50 bcd	0.00 a	87.50 ab	20.00 bc
DROPP SC	1.6 oz/a	B							
6 FINISH 6 PRO	21.3 oz/a	B	77.25 abc	80.00 a	0.00 a	80.00 b	0.00 a	90.00 ab	15.00 bcd
DROPP SC	2 oz/a	B							
7 FINISH 6 PRO	32 oz/a	B	79.08 abc	71.25 ab	0.00 a	78.75 bc	0.00 a	88.75 ab	10.00 b-e
DROPP SC	1.6 oz/a	B							
8 FINISH 6 PRO	21.3 oz/a	B	82.13 ab	75.00 a	0.00 a	77.50 bcd	0.00 a	77.50 bc	15.00 bcd
GINSTAR	4 oz/a	B							
9 FINISH 6 PRO	21.3 oz/a	B	75.58 abc	72.50 ab	0.00 a	76.25 bcd	0.00 a	63.75 c	15.00 bcd
GINSTAR	5.33 oz/a	B							
10 FINISH 6 PRO	21.3 oz/a	B	74.95 a-d	80.00 a	0.00 a	83.75 b	0.00 a	93.75 ab	21.25 b
GINSTAR	3 oz/a	B							
DROPP SC	1.6 oz/a	B							
11 FINISH 6 PRO	21.3 oz/a	B	79.90 abc	75.00 a	0.00 a	76.25 bcd	1.25 a	67.50 c	2.50 de
DROPP SC	1.6 oz/a	B							
DEF 6	4 oz/a	B							
12 FINISH 6 PRO	5.33 oz/a	B	72.83 bcd	71.25 ab	0.00 a	98.75 a	0.00 a	100.00 a	50.00 a
DROPP SC	1.6 oz/a	B							
FINISH 6 PRO	21.3 oz/a	C							
DEF 6	5.33 oz/a	C							
13 FINISH 6 PRO	5.33 oz/a	B	69.05 cd	72.50 ab	0.00 a	96.25 a	0.00 a	100.00 a	41.25 a
GINSTAR	5.33 oz/a	B							
FINISH 6 PRO	21.3 oz/a	C							
DEF 6	5.33 oz/a	C							
14 DEF 6	13 oz/a	B	77.40 abc	78.75 a	0.00 a	81.25 b	0.00 a	92.50 ab	21.25 b
PREP	21 oz/a	B							
DROPP SC	1.6 oz/a	B							
15 NONTREATED			62.45 d	0.00 c	0.00 a	0.00 e	0.00 a	0.00 d	0.00 e
LSD (P=.05)			12.740	11.606	0.000	11.584	0.945	19.869	14.343
Standard Deviation			8.915	8.121	0.000	8.106	0.661	13.904	10.036
CV			11.43	11.86	0.0	10.95	793.73	17.45	62.73
Grand Mean			78.02	68.5	0.0	74.0	0.08	79.67	16.0
Bartlett's X2			14.37	16.147	0.0	17.044	0.0	38.67	32.356
P(Bartlett's X2)			0.423	0.241	.	0.197	.	0.001*	0.002*
Replicate F			1.923	1.575	0.000	0.744	0.952	1.948	0.938
Replicate Prob(F)			0.1413	0.2104	1.0000	0.5322	0.4245	0.1373	0.4315
Treatment F			2.075	23.245	0.000	30.236	0.952	12.390	7.642
Treatment Prob(F)			0.0359	0.0001	1.0000	0.0001	0.5154	0.0001	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.

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Crop Code	GOSHI		GOSHI		GOSHI		GOSHI		GOSHI		GOSHI	
Part Rated	GOSHI		GOSHI		GOSHI		GOSHI		GOSHI		GOSHI	
Rating Data Type	OPEN BOLL	DEFOLIATION	DESSICATION	OPEN BOLL	DEFOLIATION	DESSICATION	OPEN BOLL	DEFOLIATION	DESSICATION	OPEN BOLL	DEFOLIATION	DESSICATION
Rating Unit	%	%	%	%	%	%	%	%	%	%	%	%
Rating Date	5/Oct/2007	9/Oct/2007	9/Oct/2007	8/Oct/2007	22/Oct/2007	22/Oct/2007	22/Oct/2007	22/Oct/2007	22/Oct/2007	22/Oct/2007	22/Oct/2007	22/Oct/2007
Trt-Eval Interval	17 DA-B	8 DA-C	8 DA-C	7 DA-C	23 DA-C	23 DA-C	23 DA-C	23 DA-C	23 DA-C	23 DA-C	23 DA-C	23 DA-C
ARM Action Codes					34 DA-B	34 DA-B	34 DA-B	34 DA-B	34 DA-B	34 DA-B	34 DA-B	34 DA-B
Trt Treatment	Rate	Appl										
No. Name	Rate Unit	Code	8	9	10	11	12	13	14			
1 STANCE	5 oz/a	A	97.70 a				80.00 cd	0.00 a	86.25 bc			
FINISH 6 PRO	21.3 oz/a	B										
DROPP SC	1.6 oz/a	B										
2 STANCE	8 oz/a	A	94.00 a				85.00 bc	0.00 a	87.50 b			
FINISH 6 PRO	21.3 oz/a	B										
DROPP SC	1.6 oz/a	B										
3 FINISH 6 PRO	21.3 oz/a	B	94.43 a				68.75 d	0.00 a	78.75 d			
4 FINISH 6 PRO	32 oz/a	B	96.45 a				77.50 cd	0.00 a	86.25 bc			
5 FINISH 6 PRO	21.3 oz/a	B	96.25 a				77.50 cd	0.00 a	83.75 bcd			
DROPP SC	1.6 oz/a	B										
6 FINISH 6 PRO	21.3 oz/a	B	92.55 a				81.25 cd	0.00 a	83.75 bcd			
DROPP SC	2 oz/a	B										
7 FINISH 6 PRO	32 oz/a	B	92.28 a				80.00 cd	0.00 a	86.25 bc			
DROPP SC	1.6 oz/a	B										
8 FINISH 6 PRO	21.3 oz/a	B	94.90 a				80.00 cd	0.00 a	86.25 bc			
GINSTAR	4 oz/a	B										
9 FINISH 6 PRO	21.3 oz/a	B	92.83 a				75.00 cd	0.00 a	85.00 bc			
GINSTAR	5.33 oz/a	B										
10 FINISH 6 PRO	21.3 oz/a	B	95.55 a				87.50 abc	0.00 a	88.75 b			
GINSTAR	3 oz/a	B										
DROPP SC	1.6 oz/a	B										
11 FINISH 6 PRO	21.3 oz/a	B	93.30 a				75.00 cd	0.00 a	81.25 cd			
DROPP SC	1.6 oz/a	B										
DEF 6	4 oz/a	B										
12 FINISH 6 PRO	5.33 oz/a	B	92.03 a	100.00 a	0.00 a	100.00 a	97.50 ab	0.00 a	95.00 a			
DROPP SC	1.6 oz/a	B										
FINISH 6 PRO	21.3 oz/a	C										
DEF 6	5.33 oz/a	C										
13 FINISH 6 PRO	5.33 oz/a	B	91.23 a	100.00 a	0.00 a	99.30 a	100.00 a	0.00 a	95.00 a			
GINSTAR	5.33 oz/a	B										
FINISH 6 PRO	21.3 oz/a	C										
DEF 6	5.33 oz/a	C										
14 DEF 6	13 oz/a	B	92.48 a				83.75 bc	0.00 a	87.50 b			
PREP	21 oz/a	B										
DROPP SC	1.6 oz/a	B										
15 NONTREATED			77.70 b				0.00 e	0.00 a	0.00 e			
LSD (P=.05)			7.132	0.000	0.000	1.293	13.772	0.000	5.414			
Standard Deviation			4.990	0.000	0.000	0.574	9.637	0.000	3.789			
CV			5.37	0.0	0.0	0.58	12.58	0.0	4.69			
Grand Mean			92.91	100.0	0.0	99.65	76.58	0.0	80.75			
Bartlett's X2			10.918	0.0	0.0	0.0	22.95	0.0	6.357			
P(Bartlett's X2)			0.692	.	.	.	0.028*	.	0.849			
Replicate F			1.656	0.000	0.000	0.997	2.301	0.000	5.680			
Replicate Prob(F)			0.1919	1.0000	1.0000	0.5010	0.0918	1.0000	0.0024			
Treatment F			3.406	0.000	0.000	2.970	22.202	0.000	144.172			
Treatment Prob(F)			0.0012	1.0000	1.0000	0.1833	0.0001	1.0000	0.0001			

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Crop Code	GOSHI	GOSHI	GOSHI	GOSHI
Part Rated	BASAL		TERMIN	BASAL
Rating Data Type	RG CONTROL	OPEN BOLL	RG CONTROL	RG CONTROL
Rating Unit	%	%	%	%
Rating Date	22/Oct/2007	22/Oct/2007	2/Nov/2007	2/Nov/2007
Trt-Eval Interval	23 DA-C	23 DA-C	32 DA-C	32 DA-C
ARM Action Codes	34 DA-B	34 DA-B		

Trt Treatment	Rate	Appl				
No. Name	Unit	Code	15	16	17	18
1 STANCE	5 oz/a	A	13.75 bc			
FINISH 6 PRO	21.3 oz/a	B				
DROPP SC	1.6 oz/a	B				
2 STANCE	8 oz/a	A	11.25 bcd			
FINISH 6 PRO	21.3 oz/a	B				
DROPP SC	1.6 oz/a	B				
3 FINISH 6 PRO	21.3 oz/a	B	5.00 cd			
4 FINISH 6 PRO	32 oz/a	B	10.00 cd			
5 FINISH 6 PRO	21.3 oz/a	B	8.75 cd			
DROPP SC	1.6 oz/a	B				
6 FINISH 6 PRO	21.3 oz/a	B	7.50 cd			
DROPP SC	2 oz/a	B				
7 FINISH 6 PRO	32 oz/a	B	8.75 cd			
DROPP SC	1.6 oz/a	B				
8 FINISH 6 PRO	21.3 oz/a	B	6.25 cd			
GINSTAR	4 oz/a	B				
9 FINISH 6 PRO	21.3 oz/a	B	7.50 cd			
GINSTAR	5.33 oz/a	B				
10 FINISH 6 PRO	21.3 oz/a	B	7.50 cd			
GINSTAR	3 oz/a	B				
DROPP SC	1.6 oz/a	B				
11 FINISH 6 PRO	21.3 oz/a	B	7.50 cd			
DROPP SC	1.6 oz/a	B				
DEF 6	4 oz/a	B				
12 FINISH 6 PRO	5.33 oz/a	B	33.75 a	99.23 a	95.00 a	18.75 a
DROPP SC	1.6 oz/a	B				
FINISH 6 PRO	21.3 oz/a	C				
DEF 6	5.33 oz/a	C				
13 FINISH 6 PRO	5.33 oz/a	B	22.50 ab	99.65 a	95.00 a	23.75 a
GINSTAR	5.33 oz/a	B				
FINISH 6 PRO	21.3 oz/a	C				
DEF 6	5.33 oz/a	C				
14 DEF 6	13 oz/a	B	13.75 bc			
PREP	21 oz/a	B				
DROPP SC	1.6 oz/a	B				
15 NONTREATED			0.00 d			
LSD (P=.05)			11.946	3.025	0.000	17.185
Standard Deviation			8.359	1.345	0.000	7.638
CV			76.57	1.35	0.0	35.94
Grand Mean			10.92	99.44	95.0	21.25
Bartlett's X2			22.359	1.708	0.0	5.02
P(Bartlett's X2)			0.034*	0.191	.	0.025*
Replicate F			1.485	0.600	0.000	1.214
Replicate Prob(F)			0.2332	0.6575	1.0000	0.4385
Treatment F			3.699	0.200	0.000	0.857
Treatment Prob(F)			0.0006	0.6852	1.0000	0.4228

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

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