Impact of strip-tillage on Valor's ability to injure cotton.

Trial ID: C27-08 Study Dir.: Stanley Culpepper
Location: Ponder Farm (5119) Investigator: Stanley Culpepper

Reps: 3 Plots: 6 by 25 feet

Spray vol: 14.8 gal/ac Mix size: 1 liters (min .57876)

CPIC	xy voi. 1 1.0 gc	,										
Trt	Treatment	Form	Form	Form		Rate	Grow	Appl	Amt Product	Plot N	lo. By l	Rep
No.	Name	Conc	Unit	Type	Rate	Unit	Stg	Code	to Measure	1	2	3
1	None Strip Tillage									101	205	306
2	None No-tillage									102	210	307
3	Valor Strip Tillage	51		DG	1	OZ/A	13DPREPL	A	0.506 g/mx	103	206	301
4	Valor No-tillage	51		DG	1	OZ/A	13DPREPL	Α	0.506 g/mx	104	207	302
5	Valor Strip Tillage	51		DG	2	OZ/A	13DPREPL	Α	1.012 g/mx	105	208	303
6	Valor No-tillage	51		DG	2	OZ/A	13DPREPL	Α	1.012 g/mx	110	209	304
7	Valor Strip Tillage	51		DG	3	OZ/A	13DPREPL	Α	1.518 g/mx	106	203	308
8	Valor No-tillage	51		DG	3	OZ/A	13DPREPL	Α	1.518 g/mx	107	204	309
9	Valor Strip Tillage	51		DG	4	OZ/A	13DPREPL	Α	2.024 g/mx	108	201	310
10	Valor No-tillage	51		DG	4	OZ/A	13DPREPL	Α	2.024 g/mx	109	202	305
11	Valor	51		DG	2	OZ/A	13DPREPL	Α	1.012 g/mx	111	211	311
	V-10126 No-tillage	85		WG	1	OZ/A	13DPREPL		0.506 g/mx			
12	Valor	51		DG	2	OZ/A	3DPREPLA	В	1.012 g/mx	112	212	312
	V-10126 No-tillage	85		WG	1	OZ/A	3DPREPLA	В	0.506 g/mx			

Sort Order: Treatment

Product quantities required for listed treatments and applications in one trial:

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
15.181	g	Valor	51	DG	
1.265	g	V-10126	85	WG	

^{* &#}x27;Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 1 liters (mix size basis).

Trial Comments

OBJECTIVE: Determine impact of strip tillage operation on cotton injury from Valor.

Cotton Injury:

- 1. At 9 d after planting, injury was less than 10% in strip till systems, regardless of Valor rate. Greater than 10% injury occurred in all plots without strip tillage.
- 2. By 14 d after planting, injury was less than 10% when 1 or 2 oz of Valor was applied in strip tillage systems. Injury was only 10% with 1 oz of Valor in no-tillage production but was greater than 70% with 2 oz in no-tillage production.

^{*} Product amount calculations increased 25 % for overage adjustment.

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3. Injury by combinations of Valor and V-10206 tended to be greater than those noted with Valor alone and these combinations applied 3 d prior to planting tended to cause more injury when compared to applications made 13 d before planting.

Seed Cotton Yield:

1. Valor applied in strip tillage production did not impact yield; however, in no-till production only Valor at 1 oz/A did not reduce yields significantly.

GENERAL COMMENTS:

- 1. Preplant applications were made 13 or 3 days before planting.
- 2. Strip tillage operation and planting occurred at the same time.
- 3. Irrigation was implemented 3 and 6 d after planting
- 4. May 27, June 20, and July 10 Oversprayed with 22 oz. of WMax.
- 5. Trials was maintained weed free.

Impact of strip-tillage on Valor's ability to injure cotton.

Trial ID: C27-08 Study Dir.: Stanley Culpepper Location: Ponder Farm (5119) Investigator: Stanley Culpepper

LOC	ation: Pond	ler ra	arıı (5119)	TIIV	estigator:	Stanley	carbebber
Wee	ed Code			INJURY	INJURY	INJURY	Seed Yld	Seed Yld
Cro	o Code			GOSH	GOSHI	GOSHI	GOSHI	GOSHI
Rati	ng Data Type			control	control	control	lb	lb
Rati	ng Unit			%	%	%	2 rows	acres
Rati	ng Date			May-27-08	Jun-01-08	Jun-17-08	Sep-15-08	Sep-15-08
Trt-l	Eval Interval			9 DA-B	14 DA-B	30 DA-B	120 DA-B	120 DA-B
ARN	Action Codes	S						TY1
# Sı	ubsamples, D	ec.						1
Trt	Treatment		Rate					
No.		Rate		1	2	3	4	5
	None			2 d	0 е	0 d	4 a	1214.8 a
	Strip Tillage			2 4	0 0	o a	ı u	1211.0 a
2	None			0 d	0 e	0 d	4 a	1302.0 a
_	No-tillage			U u	ОЕ	0 d	4 a	1302.0 a
_	-		07/4					1105.5
3	Valor	1	OZ/A	2 d	2 e	0 d	4 a	1195.5 a
	Strip Tillage							
4	Valor	1	OZ/A	12 d	10 de	3 d	4 a	1185.8 a
	No-tillage							
5	Valor	2	OZ/A	5 d	9 de	0 d	4 a	1302.0 a
	Strip Tillage							
6	Valor	2	OZ/A	52 c	72 c	53 c	2 bc	653.4 bc
	No-tillage							
7	Valor	3	OZ/A	10 d	13 d	0 d	5 a	1326.2 a
l '	Strip Tillage	J	02//	10 0	10 0	o a	5 a	1020.2 a
0	Valor	2	OZ/A	85 ab	93 a	73 ab	2 c	474.3 c
0	No-tillage	3	OZ/A	00 ab	93 a	73 ab	2 0	474.5 0
_	-		07/4		4- 1			10000
9	Valor	4	OZ/A	8 d	15 d	7 d	5 a	1326.2 a
	Strip Tillage							
10	Valor	4	OZ/A	93 a	93 a	80 a	1 c	421.1 c
	No-tillage							
11	Valor	2	OZ/A	75 b	78 bc	53 c	3 b	866.4 b
	V-10126	1	OZ/A					
	No-tillage							
12	Valor	2	OZ/A	85 ab	87 ab	67 b	2 bc	721.2 bc
	V-10126		OZ/A					
	No-tillage							
LSE	(P=.05)			13.7	9.5	8.2	1.0	303.72
	ndard Deviatio	ın		8.1	5.6		0.6	179.35
CV	.aara Doviatio			22.61			17.95	17.95
	lett's X2			10.513		5.708	9.929	9.929
	artlett's X2)			0.231	0.276		0.537	0.537
י (ט	ardoll o AZ			0.231	0.270	U. T UI	0.001	0.001

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 5: TY1 = 290.4*[4]

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		oniversity or occurgia	
	Impact of str	ip-tillage on Valor's ability to injure cotton.	
Trial ID: C27	7-08	Study Dir.: Stanley Culpepper	
		Investigator: Stanley Culpepper	
	GENERAL 7	TRIAL INFORMATION	
Study Directo	or: Stanley Culpepper	Title: Ext. Weed Science	
	Univ. of Georgia		
Postal Code:	_		
Investigator	Stanley Culpepper	Title: Ext. Weed Science	
Affiliation:	Univ. of Georgia		
Postal Code:			
a'.		IAL LOCATION	
City:	= =	Trial Status: completed	
State/Prov.:		Trial Reliability: good	
Postal Code:		Initiation Date: May-07-08	
Country:	USA	Planned Completion Date: N-Latitude of LL Corner °:	
E-Longitude of	of LL Corner :	N-Latitude of LL Corner *:	
Altitude of I	LL Corner: Uni	it: Angle y-axis to North °:	
Directions.			
	COOPER	RATOR/LANDOWNER	
Cooperator:		Country:	
Org:		Phone No:	
Address 1:		Fax No:	
Address 2:			
City:			
State/Prov:			
Postal Code:			
	(()		
		Conducted Under GEP (Y/N): N	
Guidelines:	Guideline	Description:	
Objective:			
Conclusions:			
	CROP AND	WEED DESCRIPTION	=
Weed Code	Common Name	Scientific Name	_
1			J
_	HI COTTON, SHORT STAP		
_	: May-20-08		
Rate: 2	8 in Depth:		
		Within Row: 8.5 in Seed Bed: flat	
Soil Temperat	cure: 88 F Soil Moi	sture: fair Emergence Date: May-25-08	
	CITT	AND DECTOR	
Diet Width "		E AND DESIGN	
_		ot Length, Unit: 25 FT Reps: 3	
Site Type:		Study Design. CDITT DIOT	
iiiiaye iype:	covencional/scriptiii	Study Design: SPLIT-PLOT	
Trial Initiat	ion Comments:		

MAINTENANCE

Previous Pesticides

Year

Previous Crops

		Maintenance	Form	Form	Form		Rate
No.	Date	Treatment Name	Conc	Unit	Type	Rate	Unit
1.							

SOIL DESCRIPTION

% San	d: 94	% OM:	1.3	Texture: sand
% Sil	.t: 2	pH:	5.8	Soil Name:
د ای ی	TT - /	CEC.		Fort I aval.

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Туре	Interval	Unit
1.							

Overall	MOISCUI	Conditions	Dry	(Other	CIIdII	at	prancing)	
Closest	Weather	Station:					Distance:	Unit:

APPLICATION DESCRIPTION

	A	В
Application Date:	May-07-08	May-18-08
Time of Day:	7:00 pm	7:00 am
Application Method:	broadcast	broadcast
Application Timing:	preplant	3d pred
Applic. Placement:	on soil	on soil
Air Temp., Unit:	87 F	70 F
<pre>% Relative Humidity:</pre>	47	68
Wind Velocity, Unit:	3 mph	0 mph
Dew Presence (Y/N):	N	N
Water Hardness:		
Soil Temp., Unit:	91 F	70 F
Soil Moisture:	fair	moist
% Cloud Cover:	0	15

CROP STAGE AT EACH APPLICATION

	A	В
Crop 1 Code, Stage:	GOSHI A	GOSHI B
Stage Scale:	13d prepl	2d prepla
Height, Unit:	0 inch	0 inch

WEED STAGE AT EACH APPLICATION

	A	В
Weed 1 Code, Stage:		
Stage Scale:		
Density, Unit:		

APPLICATION EQUIPMENT

		TITON DOUTIND
	A	В
Appl. Equipment:	backpack	backpack
Operating Pressure:	24	24
Nozzle Type:	flat fan	flat fan
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	18 in	18 in
Nozzles/Row:	2	2
Band Width, Unit:		
Boom Length, Unit:	4.5 ft	4.5 ft
Boom Height, Unit:	15 in	15 in
Ground Speed, Unit:	3 mph	3 mph
Incorporation Equip.:		
Hours to Incorp.:		
Incorp. Depth, Unit:		
Carrier:	water	water
Spray Volume, Unit:	15 GPA	15 GPA
Spray pH:		
Propellant:	CO2	CO2
Tank Mix (Y/N):	У	У

Trt No	Treatment Application Comment