

University of Georgia

V-10137 and V-10139 mixed with Valor at layby in RR cotton.

Trial ID: C21-05

Study Dir.: Culpepper

Location: Ponder (5115)

Investigator: Stanley Culpepper

Reps: 3

Plots: 12 by 25 feet

Spray vol: 14.8 gal/ac

Mix size: 1.5 liters (min 1.1575)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code	Amt to Measure	Plot No. By Rep		
									1	2	3
1	Non-treated								101	208	302
2	Valor SX	51	WDG	2 oz/a	9 in	A		1.518 g/mx	102	204	306
	Roundup OriginalMax	4.5	L	22 oz/a	9 in	A		17.42 ml/mx			
3	Valor SX	51	WDG	2 oz/a	9 in	A		1.518 g/mx	103	207	309
	Select (High Flash)	2	EC	8 oz/a	9 in	A		6.334 ml/mx			
	COC		L	1 pt/a	9 in	A		12.67 ml/mx			
4	Valor SX	51	WDG	2 oz/a	9 in	A		1.518 g/mx	104	206	304
	V-10137	1	EC	16 oz/a	9 in	A		12.67 ml/mx			
5	Valor SX	51	WDG	2 oz/a	9 in	A		1.518 g/mx	105	203	308
	V-10139	1.6	EC	8 oz/a	9 in	A		6.334 ml/mx			
	NIS		L	0.25 % v/v	9 in	A		3.75 ml/mx			
6	Valor SX	51	WDG	2 oz/a	15 in	B		1.518 g/mx	106	202	305
	Roundup OriginalMax	4.5	L	22 oz/a	15 in	B		17.42 ml/mx			
7	Valor SX	51	WDG	2 oz/a	15 in	B		1.518 g/mx	107	209	301
	Select (High Flash)	2	EC	8 oz/a	15 in	B		6.334 ml/mx			
	COC		L	1 pt/a	15 in	B		12.67 ml/mx			
8	Valor SX	51	WDG	2 oz/a	15 in	B		1.518 g/mx	108	201	303
	V-10137	1	EC	16 oz/a	15 in	B		12.67 ml/mx			
9	Valor SX	51	WDG	2 oz/a	15 in	B		1.518 g/mx	109	205	307
	V-10139	1.6	EC	8 oz/a	15 in	B		6.334 ml/mx			
	NIS		L	0.25 % v/v	15 in	B		3.75 ml/mx			

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Lot Code
15.181	g	Valor SX 51 WDG	
43.550	ml	Roundup OriginalMax 4.5 L	
15.836	ml	Select (High Flash) 2 EC	
31.669	ml	COC L	
31.672	ml	V-10137 1 EC	
15.836	ml	V-10139 1.6 EC	
9.374	ml	NIS L	

* 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 1.5 liters (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 14.8 gal/ac, mix size= 1.5 liters.

Trial Comments

OBJECTIVE: Determine crop and grass response to Valor mixed with glyphosate or several clethodim mixtures.

COTTON VISUAL RESPONSE:

- Cotton was fairly tough with some bark already showing at the 9 inch application timing.
- Cotton injury by Valor mixed with glyphosate was much less than by Valor mixed with clethodim mixtures; there was less injury by Valor plus V-10139 than by Valor plus V-10137 or Select + COC at two evaluation dates.
- Cotton was much more tolerant at the second application timing as cotton had 3 or more inches of bark. Injury at this timing was 10% or less by all treatments but again there were trends for less injury by glyphosate + Valor than with Valor plus clethodim mixtures.

University of Georgia

TEXAS PANICUM CONTROL:

1. Control by all mixtures within an application timing was essentially similar.
2. Grass was actually larger at the first application timing than the second because of the early POST herbicide selection (see general comments).

SEED COTTON YIELD:

1. Cotton yield followed trends noted with injury with lowest yields noted with clethodim/Valor mixtures applied to 9 inch cotton.

GENERAL COMMENTS:

1. Telone II was applied preplant over the trial area.
2. April 28: Applied Staple plus Reflex over the trial area.
3. May 24: Treatments 2-5 were treated with Staple + NIS while treatments 6-10 were treated with WeatherMax.

University of Georgia

V-10137 and V-10139 mixed with Valor at layby in RR cotton.

Trial ID: C21-05

Study Dir.: Culpepper

Location: Ponder (5115)

Investigator: Stanley Culpepper

Weed Code		GOSHI	GOSHI	GOSHI	PANTE	PANTE	PANTE	PANTE	SEED YLD	
Crop Code		injury	injury	injury	control	control	control	control	GOSHI	
Rating Data Type		percent	percent	percent	percent	percent	percent	percent	wt	
Rating Unit									lb/plot	
Rating Date		Jun-14-05	Jun-22-05	Jul-11-05	Jun-14-05	Jun-22-05	Jul-11-05	Sep-06-05	Sep-21-05	
Trt-Eval Interval		8 DA-A	16 DA-A	35 DA-A	8 DA-A	16 DA-A	35 DA-A	92 DA-A	107 DA-A	
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit								
			1	2	3	4	5	6	7	
			8							
1	Non-treated		0	0	0	0	0	0	0	
2	Valor SX	2 oz/a	9	6	2	90	97	94	89	
	Roundup OriginalMax	22 oz/a								
3	Valor SX	2 oz/a	33	32	40	96	97	92	79	
	Select (High Flash)	8 oz/a								
	COC	1 pt/a								
4	Valor SX	2 oz/a	27	27	31	93	97	97	85	
	V-10137	16 oz/a								
5	Valor SX	2 oz/a	24	23	23	95	98	87	80	
	V-10139	8 oz/a								
	NIS	0.25 % v/v								
6	Valor SX	2 oz/a	0	1	1	75	96	93	97	
	Roundup OriginalMax	22 oz/a								
7	Valor SX	2 oz/a	0	11	9	77	97	99	99	
	Select (High Flash)	8 oz/a								
	COC	1 pt/a								
8	Valor SX	2 oz/a	0	8	10	75	95	99	99	
	V-10137	16 oz/a								
9	Valor SX	2 oz/a	0	4	4	75	98	99	99	
	V-10139	8 oz/a								
	NIS	0.25 % v/v								
LSD (P=.05)			7.3	9.1	7.1	5.3	2.9	10.6	14.2	2.4
Standard Deviation			4.2	5.3	4.1	3.1	1.7	6.1	8.2	1.4
CV			40.73	42.67	30.84	4.08	1.97	7.22	10.13	15.89

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

University of Georgia

Weed Code			SEED YLD
Crop Code			GOSHI
Rating Data Type			wt
Rating Unit			lb/A
Rating Date			Sep-21-05
Trt-Eval Interval			107 DA-A
ARM Action Codes			TY1
# Subsamples, Dec.			1
Trt No.	Treatment Name	Rate	9
		Rate Unit	
1	Non-treated		0.0
2	Valor SX	2 oz/a	3153.7
	Roundup OriginalMax	22 oz/a	
3	Valor SX	2 oz/a	2162.5
	Select (High Flash)	8 oz/a	
	COC	1 pt/a	
4	Valor SX	2 oz/a	2389.0
	V-10137	16 oz/a	
5	Valor SX	2 oz/a	2476.1
	V-10139	8 oz/a	
	NIS	0.25 % v/v	
6	Valor SX	2 oz/a	3269.9
	Roundup OriginalMax	22 oz/a	
7	Valor SX	2 oz/a	2658.1
	Select (High Flash)	8 oz/a	
	COC	1 pt/a	
8	Valor SX	2 oz/a	3289.3
	V-10137	16 oz/a	
9	Valor SX	2 oz/a	3434.5
	V-10139	8 oz/a	
	NIS	0.25 % v/v	
LSD (P=.05)			697.92
Standard Deviation			403.19
CV			15.89

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

Column 9: TY1 = 290.4*[C8]

University of Georgia

V-10137 and V-10139 mixed with Valor at layby in RR cotton.

Trial ID: C21-05 Study Dir.: Culpepper
Location: Ponder (5115) Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: Univ. of Georgia
Postal Code: 31794
Investigator: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: Univ. of Georgia
Postal Code: 31794

TRIAL LOCATION

City: TyTy **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** excellent
Postal Code: 31794 **Initiation Date:** Apr-28-05
Country: USA **Planned Completion Date:** _____
E-Longitude of LL Corner °: _____ **N-Latitude of LL Corner °:** _____
Altitude of LL Corner: _____ **Unit:** _____ **Angle y-axis to North °:** _____
Directions:

COOPERATOR/LANDOWNER

Cooperator: _____ **Country:** _____
Org: _____ **Phone No:** _____
Address 1: _____ **Fax No:** _____
Address 2: _____
City: _____
State/Prov: _____
Postal Code: _____

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N
Guidelines: _____ **Guideline Description:** _____

Objective:

Conclusions:

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	PANTE	Texas panicum	

Crop 1: GOSHI cotton **Variety:** DP 555 B/RR
Planting Date: Apr-28-05 **Planting Method:** conventional
Rate: 2 8 inch **Depth:** 0.5 in **Perennial Age:** _____
Row Spacing: 36 inch **Spacing Within Row:** 0. . **Seed Bed:** bedded
Soil Temperature: 78 F **Soil Moisture:** moist **Emergence Date:** May-04-05

SITE AND DESIGN

Plot Width, Unit: 12 FT **Plot Length, Unit:** 25 FT **Reps:** 3
Site Type: research station
Tillage Type: conventional **Study Design:** RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments:

University of Georgia

	Previous Crops	Previous Pesticides	Year
1.			

MAINTENANCE

Field Prep./Maintenance:

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

SOIL DESCRIPTION

% Sand: 94 % OM: 1.3 Texture: sand
 % Silt: 2 pH: 5.9 Soil Name: Tifton sandy loam
 % Clay: 4 CEC: _____ Fert. Level: _____

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: excellent conditions throughout the crop

Closest Weather Station: _____ Distance: _____ Unit: ____

APPLICATION DESCRIPTION

	A	B
Application Date:	Jun-07-05	Jun-16-05
Time of Day:	1 pm	6 pm
Application Method:	broadcast	broadcast
Application Timing:	8 in PD	16 in PD
Applic. Placement:	directed	directed
Air Temp., Unit:	88 F	96 F
% Relative Humidity:	59	64
Wind Velocity, Unit:	2 mph	3 mph
Dew Presence (Y/N):	n	n
Water Hardness:		
Soil Temp., Unit:	91 F	92 F
Soil Moisture:	moist	moist
% Cloud Cover:	0	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GOSHI 9 in PD	GOSHI 16 in PD
Stage Scale:	8 leaf	11 leaf
Height, Unit:	9.5 inch	16 inch

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	PANTE 9 in PD	PANTE 15 in PD
Stage Scale:	5-8 inch	2-6 inch
Density, Unit:	12 ydsq	8 ydsq

University of Georgia

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	backpack	backpack
Operating Pressure:	18	18
Nozzle Type:	flat fan	flat fan
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	12 inch	12 inch
Nozzles/Row:	3	3
Band Width, Unit:		
Boom Length, Unit:	24 inch	24 inch
Boom Height, Unit:	12 inch	12 inch
Ground Speed, Unit:	3 mph	3 mph
Incorporation Equip.:		
Hours to Incorp.:		
Incorp. Depth, Unit:		
Carrier:	water	water
Spray Volume, Unit:	14.8 GPA	14.8 GPA
Spray pH:		
Propellant:	CO2	CO2
Tank Mix (Y/N):	Y	Y

Trt No	Treatment Application Comment