University of Georgia

Soybean and cotton planted after sweet corn treated with Acuron or Lumax.

Trial ID: Veg16-B Study Dir.: Stanley Culpepper
Location: TVP Investigator: Stanley Culpepper

Use 1.5 liters(s) per treatment mixture to spray 14.8 gal/ac
Plots: 6 by 18 feet

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep 1	2	3	4
1	Dual II Magnum	7.64	L	2.1	qt/a	PRE	A	53.2 ml/mx	101	203	302	404
2	Acuron	3.44	L	2.5	qt/a	PRE	A	63.34 ml/mx	102	202	303	405
3	Acuron	3.44	L	5	qt/a	PRE	A	126.7 ml/mx	103	204	301	402
4	Lumax EZ	3.67	L	2.7	qt/a	PRE	A	68.4 ml/mx	104	205	305	401
5	Lumax	3.67	L	5.4	qt/a	PRE	A	136.8 ml/mx	105	201	304	403

Sort Order: Treatment

Trial Comments

OBJECTIVE: Determine the potential carryover of Acuron or Lumax applied PRE in spring sweet corn to a fall soybean or cotton crop.

VISUAL INJURY:
1. Maximum injury noted with Acuron at 2.5 and 5 qt/A for soybeans was 18 and 24%, respectively.
2. Maximum injury noted with Acuron at 2.5 and 5 qt/A for cotton was 9 and 13%, respectively.

3. Maximum injury noted with Lumax at 2.7 and 5.4 qt/A for soybeans was 16 and 13%, respectively.
4. Maximuminjury noted with Lumax at 2.7 and 5.4 qt/A for cotton was 9%, respectively.

GENERAL COMMENTS:
1. Heavy amounts of rainfall occurred right after planting and treating sweet corn in April; data is available from UGA's local weather sites.

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Crop Code				GLXMA		GLXMA		GLXMA			GOSHI		GOSHI		GOSHI	
Rating Data Type				INJURY		INJURY		INJURY			INJURY		INJURY		INJURY	
Rating Unit				%		%		%			%		%		%	
Rating Date				8/20/2014		9/1/2014		9/15/2014			8/20/2014		9/1/2014		9/15/2014	
Assessed By				SC		SC		JS			SC		SC		JS	
Trt-Eval Interval				141 DA-A		153 DA-A		167 DA-A			141 DA-A		153 DA-A		167 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit	1		2		3	4	5	6		7		8	
1	Dual II Magnum	2.1	qt/a	0.0	b	0.0	c	0.0	c		0.0	b	0.0	b	1.3	b
2	Acuron	2.5	qt/a	13.5	a	18.0	ab	13.8	b		5.0	a	6.8	a	8.8	a
3	Acuron	5	qt/a	18.0	a	24.0	a	17.5	a		7.5	a	5.0	a	12.5	a
4	Lumax EZ	2.7	qt/a	11.3	a	16.3	ab	11.3	b		7.0	a	5.3	a	8.8	a
5	Lumax	5.4	qt/a	12.5	a	13.0	b	12.5	b		6.0	a	5.5	a	8.8	a
LSD (P=.05)				7.42		10.48		3.65	.	.	4.77		4.37		5.07	
Standard Deviation				4.82		6.80		2.37	.	.	3.09		2.84		3.29	
CV				43.61		47.74		21.56	.	.	60.65		63.08		41.14	
Bartlett's X2				2.165		3.386		1.523	.	.	0.508		1.105		5.044	
P(Bartlett's X2)				0.539		0.336		0.677	.	.	0.917		0.776		0.283	
Replicate F				1.007		2.329		4.148			0.704		4.211		8.308	
Replicate Prob(F)				0.4233		0.1261		0.0312			0.5678		0.0299		0.0029	
Treatment F				7.691		6.865		30.778			3.784		3.366		6.231	
Treatment Prob(F)				0.0026		0.0041		0.0001			0.0325		0.0457		0.0060	

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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Location: TVP Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Stanley Culpepper **Title:** EXT. WEED SCIENCE
Affiliation: University of Georgia
Postal Code: 31794
Investigator: Stanley Culpepper **Title:** EXT. WEED SCIENCE
Affiliation: University of Georgia
Postal Code: 31794

TRIAL LOCATION

City: TIFTON **Trial Status:** COMPLETED
State/Prov.: GEORGIA **Trial Reliability:** GOOD
Postal Code: 31795 **Initiation Date:** 4/1/2014
Country: USA

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N

Crop 1: GLXMA SOY BEAN **Variety:** NK A-1026857
Planting Date: 8/4/2014 **Planting Method:** SEEDED
Rate: 6 foot **Depth:** 0.75 IN
Row Spacing: 36 IN **Spacing Within Row:** 1.5 IN **Seed Bed:** no-till flat
Soil Temperature: 80 F **Soil Moisture:** MOIST **Emergence Date:** 8/8/2014

Crop 2: GOSHI COTTON **Variety:** PHY 499 WRF
Planting Date: 8/4/2014 **Planting Method:** SEEDED
Rate: 4 foot **Depth:** 0.5 IN
Row Spacing: 36 IN **Spacing Within Row:** 1.5 IN **Seed Bed:** no till flat
Soil Temperature: 80 F **Soil Moisture:** MOIST **Emergence Date:** 8/8/2014

SITE AND DESIGN

Plot Width, Unit: 6 FT **Plot Length, Unit:** 18 FT **Reps:** 4
Site Type: TIFTON VEGETABLE PARK
Tillage Type: BARE GROUND **Study Design:** RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 84 **% OM:** 0.5 **Texture:** LOAMY SAND
% Silt: 11 **pH:** 6.5
% Clay: 5 **CEC:** 4

Overall Moisture Conditions: MOIST
Closest Weather Station: www.griffin.uga.edu/aemn/ **Distance:** 100 **Unit:** yd

APPLICATION DESCRIPTION

	A
Application Date:	4/1/2014
Time of Day:	6 PM
Application Method:	BROADCAST
Application Timing:	PRE
Applic. Placement:	ON SOIL
Air Temp., Unit:	80 F
% Relative Humidity:	45
Wind Velocity, Unit:	1 MPH
Dew Presence (Y/N):	N
Soil Temp., Unit:	77 F
Soil Moisture:	MOIST
% Cloud Cover:	10

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	GLXMA
Stage Scale:	preplant
Height, Unit:	0 IN
Crop 2 Code, Stage:	GOSHI
Stage Scale:	preplant

Height, Unit: 0 IN

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APPLICATION EQUIPMENT

	A
Appl. Equipment:	BACKPACK
Operating Pressure:	26
Nozzle Type:	AIXR
Nozzle Size:	11002
Nozzle Spacing, Unit:	18 IN
Nozzles/Row:	2
Boom Length, Unit:	4.5 FT
Boom Height, Unit:	18 IN
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume, Unit:	14.8 GPA
Propellant:	CO2
Tank Mix (Y/N):	Y