

## Growth Regulator Injury on Soybean.

00-20A-E70

**OBJECTIVE:** Determine safening potential of PCC 972 for soybean injury from growth regulator herbicides.

**SUMMARY:** Soybean injury was 62 to 77% from Clarity treatments at 28 days after treatment (DAT). Tank mixing PCC 972 at 3 pt/A with Clarity at 9.5 ml/A decreased soybean injury by 8%. Soybean injury was reduced by 4 to 7% when PCC 972 was tank mixed with Clarity at 19 ml/A. No reduction in soybean injury was observed when PCC 972 was tank mixed with Clarity at 38 ml/A. Soybean yield was reduced by 15 to 19 bu/A in Clarity treated plots. Soybean yield was not increased by the addition of PCC 972 to Clarity.

**HERBICIDES**

CLARITY 4 EC  
PCC 972 100 LIQ

**WEEDS**

CROP TOLERANCE ONLY

**CROP**

SOYBEAN

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SOUTHERN ILLINOIS UNIVERSITY

Growth Regulator Injury on Soybean.

Project Code: 00-20A-E70 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

Weed Code	Common Name	Scientific Name		
1. NA	CROP TOLERANCE ONLY			
Crop 1:	GLXMA SOYBEAN	Variety:	AG3701 RR	
Planting Method:	SEEDED	Planting Date:	May-15-00	
Rate:	75 LB/A	Depth:	1.0 IN	
Row Spacing:	30 IN			
Plot Width, Unit:	10 FT	Plot Length, Unit:	35 FT	Reps: 3
Tillage Type:	REDUCED-TILL	Study Design:	RCB	
Previous Crop, Year:	TRZAW, 1999	Fertilizer applied:	N 0 LB/A,	P <sub>2</sub> O <sub>5</sub> 0 LB/A, K <sub>2</sub> O 0 LB/A
Soil Name:	EBBERT	% OM: 2.1	pH: 6.3	CEC: 12
Texture:	SILT LOAM	P <sub>1</sub> : 65 LB/A,	K: 270 LB/A	

#### APPLICATION DESCRIPTION

A  
 Application Date: Jun-13-00  
 Time of Day: 5:30  
 Application Method: SPRAY  
 Application Timing: V2  
 Applic. Placement: BROFOL  
 Air Temp., Unit: 75 F  
 % Relative Humidity: 85  
 Wind Velocity, Unit: 0-2 MPH  
 Soil Moisture: WET  
 % Cloud Cover: 50

#### CROP STAGE AT EACH APPLICATION

A  
 Crop 1 Code, Stage: GLXMA V2-V3  
 Height, Unit: 6-8 IN

#### WEED STAGE AT EACH APPLICATION

A  
 Weed 1 Code: NA

#### APPLICATION EQUIPMENT

A  
 Appl. Equipment: CO<sub>2</sub> SPRAY  
 Operating Pressure: 40 PSI  
 Nozzle Type: FLAT FAN  
 Nozzle Size: 8002  
 Boom Length, Unit: 7.33 FT  
 Spray Volume, Unit: 20 GPA

#### NOTES:

Harvested Oct-3-00, (2) 30 inch rows by 32 ft.

TABLE. GROWTH REGULATOR INJURY ON SOYBEAN. PROJECT CODE:00-20A-E70

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	YIELD	GLXMA INJURY DA V2-3		
								7	14	28
							BU/A	%	%	%
1	NONTREATED						59	0	0	0
2	HANDWEED						62	0	0	0
3	CLARITY	4 EC	0.01 LB A/A	9.5 ML/A	V2-3	A	43	22	45	62
4	CLARITY	4 EC	0.02 LB A/A	19.0 ML/A	V2-3	A	46	32	47	67
5	CLARITY	4 EC	0.04 LB A/A	38.0 ML/A	V2-3	A	44	43	58	77
6	PCC 972	100 LIQ	2.25 PT/A	36.0 OZ/A	V2-3	A	60	0	0	0
7	PCC 972	100 LIQ	3.0 PT/A	48.0 OZ/A	V2-3	A	56	0	0	0
8	PCC 972	100 LIQ	3.75 PT/A	60.0 OZ/A	V2-3	A	58	0	0	0
9	CLARITY	4 EC	0.01 LB A/A	9.5 ML/A	V2-3	A	44	22	37	45
9	PCC 972	100 LIQ	3.0 PT/A	48.0 OZ/A	V2-3	A				
10	CLARITY	4 EC	0.02 LB A/A	19.0 ML/A	V2-3	A	44	27	45	62
10	PCC 972	100 LIQ	2.25 PT/A	36.0 OZ/A	V2-3	A				
11	CLARITY	4 EC	0.02 LB A/A	19.0 ML/A	V2-3	A	47	23	48	63
11	PCC 972	100 LIQ	3.0 PT/A	48.0 OZ/A	V2-3	A				
12	CLARITY	4 EC	0.02 LB A/A	19.0 ML/A	V2-3	A	43	28	45	60
12	PCC 972	100 LIQ	3.75 PT/A	60.0 OZ/A	V2-3	A				
13	CLARITY	4 EC	0.04 LB A/A	38.0 ML/A	V2-3	A	47	43	58	77
13	PCC 972	100 LIQ	3.0 PT/A	48.0 OZ/A	V2-3	A				
LSD							9	4	5	4
P							0.01	0.01	0.01	0.01

1. PROTOCOL: SIU-BGY.

2. BLANKET PREEMERGENCE APPLICATION OF DUAL II MAGNUM, 1.27 LBAI/A ON 5-15-00.

3. RATING DATES:

7 DAYS AFTER V2-3, 14 DAYS AFTER V2-3, AND 28 DAYS AFTER V2-3  
ON JUN-20-00, JUN-27-00, AND JUL-11-00, RESPECTIVELY.