

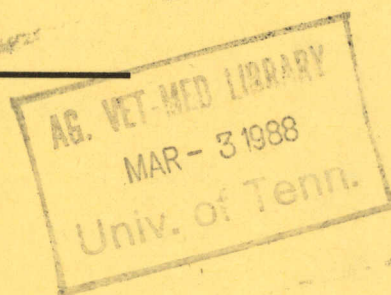
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Herbicide Evaluation for Weed Control, 1985



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and M. L. Thornton*

Department of Plant and Soil Science

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This report is a summary of herbicide evaluations conducted by the staff of The University of Tennessee, Department of Plant and Soil Science, in 1985. This publication contains results of individual experiments which are not summarized over time or location and therefore, data should not be taken out of context for use in any type of commercial publication. These data may be used in decision making as to future research and uses of individual herbicides. The use of any particular herbicide or formulation over another is not to be construed as an endorsement or recommendation of any specific product. These data are not to be used in any type of commercial activity or release without the express written approval of the Dean of the Agricultural Experiment Station.

Many of the uses of herbicides contained herein have not been authorized by Federal and State Environmental Protection Agencies and are not recommended by The University of Tennessee Institute of Agriculture.

We would like to acknowledge the technical support of the following individuals: Gordon Percell, Ernest Merriweather, and Jimmy Duncan at the West Tennessee Experiment Station; Marshall Smith at Ames Plantation; Don Gibson at the Milan Experiment Station; Roy Thompson at the Middle Tennessee Experiment Station; Ernest Neal, Plateau Experiment Station; Matt Thornton, Research Assistant, Department of Plant and Soil Science; and John Oakes, Graduate Student, Department of Plant and Soil Science. Last, but certainly not least, we would like to thank our secretaries, Mrs. Gloria Duncan and Miss Cheryl Broome.

In addition, we gratefully acknowledge the cooperation and partial financial support of the following commercial cooperators: American Cyanamid, BASF Corp., Chevron, Ciba-Geigy Corp., Dow Chemical, E. I. DuPont, Elanco, FMC Corp., Helena, Hoechst-Roussel, ICI Americas, Inc., MAAG Agrichemicals, Mobay Corp., Mycogen, PPG Industries, Rhone-Poulenc, Inc., Riverside-Terra, Rohm and Haas, Shell Chemical Co., Shell Development, Stauffer Chemical Co., Union Carbide, Uniroyal, Velsicol Chemical Co., and Zoecon.

Procedures and Techniques Used in Herbicide Trials

Experimental Design: Most experiments were arranged as randomized complete blocks with at least three replications of plots 3-4 rows wide by 30-60 feet long with one untreated border row in most instances.

Herbicide Application: Treatments were applied with CO₂ sprayers equipped with either 8002 or 8003 tee jet nozzles at 30 psi applying 20 gpa and operated at 3 or 4 mph except where otherwise indicated.

Weed and Crop Ratings: Weed control was rated on a scale of 0 to 100 percent with 100 representing complete control. A control rating of 70 is considered commercially acceptable. Crop injury, stand reduction, and vigor reduction were also rated on a scale of 0 to 100, where 0 represents no injury and 100 represents death. An injury rating of 30 or above is not considered commercially acceptable.

Cultivation: Plots were not cultivated unless otherwise indicated.

Organic Matter: Most studies were conducted on mineral soils with $1.0 \pm .5\%$ organic matter.

ABBREVIATIONS USED IN THIS REPORT

Weed Abbreviations

ABUTH = velvetleaf	GHEAL = common lambsquarters
AMACH = smooth pigweed	GLXMA = soybeans
ANTCO = mayweed	HORPU = little barley
BRAPP = broadleaf signalgrass	IPOHE = ivyleaf morningglory
BROSE = cheat	IPOHG = entireleaf morningglory
CASOB = sicklepod	IPOLA = pitted morningglory
CRINJ = crop injury	MOLVE = carpetweed
CYPES = yellow nutsedge	PANDI = fall panicum
DATST = jimsonweed	PHBBU = tall morningglory
DIGSA = large crabgrass	POROL = common purslane
ELEIN = goosegrass	SORHA = johnsongrass
EPHMA = spotted spurge	XANST = common cocklebur
ERICA = horseweed (maretail)	

Other Abbreviations

Bu/A = bushels per acre	O.M. = organic matter
C.O.C. = crop oil concentrate	P = probability
C.V. = coefficient of variation	POD = post-directed
DAT = days after treatment	POE = postemergence
DNMRT = Duncan's New Multiple Range Test	POT = Postemergence overtop
EP = early postemergence	PPI = preplant incorporated
fb = followed by	PE or PRE = Preemergence
GPA = gallons per acre	PSI = pounds per square inch
lb/A = pounds per acre	qt/A = quarts per acre
MOA = method of application	RCB = randomized complete block
MP = mid-postemergence	reps = replications
mph = miles per hour	RH = relative humidity
N.S. or NS = not significant	TM = tank mixture

AMES PLANTATION
ROUTE 1
GRAND JUNCTION, TENNESSEE 38039

Superintendent - Dr. James M. Anderson

Research at the Ames Plantation is made possible because the University of Tennessee is a beneficiary of a perpetual trust under the terms of the will of the late Julia C. Ames.

Ames Plantation Rainfall, 1985

Day of Month	May	June	July	August	Sept.	Oct.	
1	.86		.07			.68	
2	.04						
3	T				.27		
4			.47		.72		
5			T		.54		
6			.71	.64			
7	.03			T			
8	.88	.23					
9					.01		
10							
11		.37		.19			
12		.19		1.10			
13							
14	.25					.06	
15						1.24	
16				.15		T	
17				2.34			
18		1.78		T			
19						.03	
20						1.65	
21				.01		.02	
22	2.33	.10					
23	.33	.53	.84			1.24	
24			.44	.03	.63	.02	
25			T	1.32			
26		.07	.26		.57		
27		1.17	1.72				
28		2.80				.12	
29	.46		.02			.07	
30		.05	T		1.64	.12	
31						1.01	
Total	5.19	7.29	4.53	5.78	4.38	6.26	33.43 yr
Avg. 5.57							

Ames Plantation Max/Min Temperatures, F° 1985

Day of Month	June		July		August		Sept		Oct	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	87	69	80	61	92	72	92	65	68	44
2	94	72	84	59	92	67	91	67	62	41
3	92	70	87	61	84	66	89	67	67	40
4	92	68	87	66	84	68	86	70	73	46
5	93	71	86	66	87	70	83	71	77	44
6	93	72	87	62	78	70	88	70	77	36
7	90	70	86	63	80	70	91	69	72	36
8	85	64	90	67	88	67	93	68	74	39
9	83	63	90	69	91	67	93	66	78	52
10	92	69	93	71	92	67	91	68	82	57
11	89	67	94	66	93	69	90	67	84	59
12	85	57	92	67	92	68	83	64	87	61
13	74	48	94	69	93	71	84	56	86	62
14	74	49	95	71	91	73	78	55	87	66
15	81	55	94	74	93	71	78	55	82	66
16	87	62	94	70	87	71	77	51	75	54
17	88	71	87	64	74	69	82	53	76	51
18	90	65	86	58	85	66	85	58	83	53
19	79	60	91	62	91	67	87	56	76	67
20	79	55	95	68	92	69	86	53	79	66
21	83	58	95	69	76	63	87	52	77	63
22	85	65	94	68	84	63	89	62	74	57
23	85	67	89	69	87	63	88	69	76	58
24	91	70	90	70	82	69	82	48	73	65
25	93	69	85	70	77	68	72	45	82	60
26	93	66	89	73	79	58	81	45	75	49
27	92	68	87	69	82	58	70	41	77	49
28	90	67	79	66	87	62	70	42	73	60
29	74	61	89	71	90	63	76	46	68	61
30	80	60	84	70	92	66	80	50	74	55
31			91	71	91	67			60	55
Mean	86.4	64.3	88.9	67.1	86.6	67.0	84.1	58.3	75.9	53.9

H-692-85-A-SB-1 New Herbicides for Soybean Weed Control
Ames Plantation, 1985

Treatment	Rate lb ai/A	July 3 Percent Control or Injury				GLXMA YIELD, Bu/A ¹
		GLXMA	XANST	IPOHG	BRAPP	
1. Scepter (1.5S)	.125	0	89	41	65	43.5 abc
2. Scepter fb Scepter	.125; .125	8	72	73	44	47.7 a
3. Scepter	.25	0	74	71	93	45.4 abc
4. Canopy (75DF)	.25	0	94	51	98	49.8 a
5. Canopy (75DF)	.38	0	62	74	93	41.8 abc
6. Canopy fb Classic (25DF) + X-77	.38; .008 + .25%	0	73	50	71	44.9 abc
7. Command 6E	1.0	0	99	49	99	46.1 ab
8. Command + Sencor (75DF)	1.0 + .38	0	99	72	99	46.9 a
9. Zorial (80DF) + Sencor	1.0 + .38	0	25	45	71	38.0 bc
10. DFX R 8259 (60WP)	.75	9	99	97	92	46.9 a
11. Weedy check	---	0	50	20	47	37.6 c
12. Weed free check	---	0	99	99	99	49.1 a
LSD .05			NS	NS	NS	7.4
						CV = 11.5%

Variety :Asgrow A5474 Planted: May 30 Treated: PRE-5/30; POST-7/3 GPA: 18 MPH: 4 PSI: 32
Tips: 8003 Fertilization: 0-60-60 Plot size: 4-30" rows x 30' Design: RCB Reps: 4

¹Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

GLXMA = Soybean XANST = Common cocklebur IPOHG = Entireleaf morningglory
BRAPP = Broadleaf signalgrass

H-692-84-A-Cr-NT Evaluation of Some Programs for Johnsongrass Control in No-Till Corn
Ames Plantation, TN. 1985

Treatment	Rate lb ai/A	Percent Injury		Corn Yield ^a Bu/A
		6-30-85 Corn	7/3/85 ERICA SORHA	
1. Bronco + Aatrex	4 + 2	0	97	20 94.4 bcd
2. Bronco + Aatrex	5 + 2	0	100	53 93.2 bcd
3. Bronco + Aatrex + Prowl	4 + 2 + 1	0	99	45 103.1 abc
4. HOE 39866 + Dual + Aatrex	1 + 2 + 2	3	100	43 113.8 ab
5. HOE 39866 + Prowl + Aatrex	1 + 1 + 2	3	100	56 91.6 bcd
6. Bronco + Aatrex + SC0106/R29148	4 + 2 + 2 + 1	13	97	70 118.1 ab
7. Bronco + Aatrex + SC0106/R29148	4 + 2 + 3 + 1	10	99	70 123.4 a
8. Bronco + SC0774	4 + 0.5	3	100	43 105.8 ab
9. Bronco + SC0774	4 + 1	31	98	63 98.4 abc
10. Bronco + SC0551	4 + 0.5	0	99	8 69.7 d
11. Bronco + SC0551	4 + 1	4	100	28 93.9 bcd
(∞) 12. Paraquat* + Aatrex	0.5 + 2	0	85	5 77.6 cd

LSD .05 = 23.0

C.V. = 16.3%

*Contains 0.5% X-77

Bronco (Lasso + Roundup 2.6 + 1.4 qts/A); Aatrex 4L, Prowl 4EC, HOE 39866 (1.67 lb/gal);
Dual 8E; Lasso 4ME, SC 0224 4LC, Paraquat 2S; Roundup 4S.

ERICA = horseweed (marestail); SORHA = johnsongrass

Variety : Pioneer 3147 Planted: May 16 Treated: May 16 GPA: 18 MPH: 4 PSI: 30

Tips: 8002 Design: RCB Reps: 4 Plot size: 4-30" rows x 30' Soil type: Loring silt loam
Fertility: pH: O.M.: First rainfall: in hours/days.

^aValues within a column followed by the same small letter are not statistically distinguishable
at 5% level according to Duncan's New Multiple Range Test.

KNOXVILLE EXPERIMENT STATION
P. O. BOX 1071
KNOXVILLE, TENNESSEE 37901-1071

Superintendent - Dr. John Hodges III

Rainfall
Knoxville Experiment Station
Knoxville, TN 1985

Date	April	May	June	July	August	September
1	.64	0	0	.31	.85	0
2	0	.05	.08	.20	1.07	0
3	0	.40	0	0	0	0
4	0	0	0	0	0	0
5	0	0	.10	.01	0	0
6	.94	0	0	.11	.40	0
7	0	0	.51	0	.04	0
8	.03	.05	.30	0	.07	0
9	0	.05	0	0	0	0
10	0	.04	.01	0	0	0
11	0	.25	0	.88	0	0
12	0	.02	.76	0	0	0
13	0	.01	0	0	0	0
14	0	0	0	.07	0	0
15	.47	0	0	0	0	0
16	.38	0	0	.35	0	0
17	.01	.02	0	0	1.43	0
18	0	.11	1.02	0	.24	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0
21	0	.22	0	0	0	0
22	0	.14	0	0	0	0
23	0	.01	.07	.18	0	0
24	.07	.02	0	0	.07	.26
25	0	.09	.22	.06	1.18	0
26	0	0	0	0	.03	0
27	0	0	0	1.17	0	.17
28	0	0	0	0	1.05	0
29	.27	.09	0	.01	0	0
30	0	0	0	.16	0	0
31	---	0	---	.04	.37	---
Total	2.81	1.48	3.06	3.55	6.80	.43

Temperature
Knoxville Experiment Station
Knoxville, TN 1985

	<u>April</u>		<u>May</u>		<u>June</u>		<u>July</u>		<u>August</u>		<u>September</u>	
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	73	39	81	53	87	65	85	63	88	71	83	60
2	61	29	73	57	92	60	76	62	83	67	88	60
3	58	32	70	57	91	66	80	59	81	60	90	62
4	75	40	68	42	93	68	86	63	85	60	89	62
5	81	56	74	46	94	64	82	65	83	62	90	65
6	75	42	78	50	96	65	83	66	82	63	89	67
7	64	41	82	57	89	64	80	62	75	66	80	63
8	54	29	77	56	80	61	86	61	80	68	88	64
9	55	26	67	51	82	62	89	65	86	66	92	64
10	53	25	67	52	89	66	91	65	90	66	90	65
11	63	36	80	56	92	70	93	64	90	65	90	66
12	71	44	80	59	85	65	90	66	91	66	85	58
13	75	50	83	58	72	46	92	67	93	67	76	57
14	72	48	86	60	71	44	90	68	93	67	74	43
15	77	51	87	64	78	51	92	69	92	65	74	41
16	68	51	88	52	85	59	92	68	90	65	75	44
17	70	47	80	56	87	61	89	66	81	68	79	45
18	79	47	66	50	88	67	90	65	73	66	81	47
19	84	50	72	44	79	62	92	65	86	64	83	49
20	82	52	80	49	76	52	93	67	89	65	84	50
21	85	53	85	58	79	51	94	67	87	67	85	51
22	86	52	82	63	83	55	96	70	81	56	85	59
23	86	52	83	65	85	65	91	69	80	58	86	56
24	82	56	71	55	88	65	87	65	73	63	84	60
25	75	47	61	50	88	63	86	67	72	65	74	44
26	78	43	76	47	90	64	89	69	80	64	83	45
27	84	54	82	50	90	64	81	70	81	65	75	51
28	76	63	86	57	90	59	79	68	80	65	69	39
29	82	55	78	60	85	60	82	66	86	62	75	40
30	77	49	82	57	87	59	79	68	88	63	78	45
31	--	--	89	63	--	--	86	71	85	60	--	--

01-27-1986

The University of Tennessee

MANAGEMENT OF BROADLEAF WEEDS IN CORN

Conducted at KNOXVILLE, TN by NEIL RHODES

Project TN-692-85-KPS-3 with cooperator PLANT SCI FIELD LAB

01-27-1986

EXPERIMENT DESCRIPTION FORM

The University of Tennessee

MANAGEMENT OF BROADLEAF WEEDS IN CORN

Conducted at KNOXVILLE, TN by NEIL RHODES

Project TN-692-85-KPS-3 with cooperator PLANT SCI FIELD LAB

Experimental Management

Date Planted 5-13-85 Variety PIONEER 3147 Row Width 36 IN
 Design RCB No. Reps. 4 Plot Size 3 ROWS*35 FT
 Field Preparation and Plot Maintenance DISK AND FIELD CULTIVATOR

Site Description

Season Moisture SEE RAINFALL TABLES

Soil Texture LOAM

Soil Series STATLER

% OM 1.0

pH 6

Application Information

1	2	3	4	5	6
Date Treated	5-13-85	5-29-85	6-7-85		
Time Treated	PM	AM	AM		
Cloud Cover	0%	50%	100%	100.0	97.0
Air Temperature	85	79	75	100.0	97.5
Relative Humidity	87%	91%	86%	100.0	97.5
Wind Speed/Direction	CALM	2MPH-S	CALM	100.0	97.5
Soil Temperature	82	90	78	100.0	97.5
Soil/Leaf Surface Moisture	MOIST	MOIST	MOIST	100.0	97.5
Soil Subsurface Moisture	MOIST	MOIST	MOIST	100.0	97.5
Soil Tilth	FINE	N/A	N/A	100.0	97.5
Crop Stage	PRE	3-6 IN	8-10 IN	100.0	97.5
Pest Name, Stage & Density					
IPOLA 2/FT	PRE	COT-1 LF 3-4 LF			
IPOHG 2/FT	PRE	COT-1 LF 3-4 LF			

Application Equipment

Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	18	WATER	30
2. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
3. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40

Comments

IPOLA=PITTED MORNINGGLORY; IPOHG=ENTIRELEAF MORNINGGLORY. ENTIRE TEST WAS TREATED WITH LASSO PRE AT 2.0 LB AI/A FOR ANNUAL GRASS WEED CONTROL.

The University of Tennessee

MANAGEMENT OF BROADLEAF WEEDS IN CORN

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KPS-3 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A STAGE	CRINJ 6-17-85	IPOLA 6-17-85	IPOHG 6-17-85	CRINJ 7-3-85	IPOLA 7-3-85	IPOHG 7-3-85	IPOLA 8-9-85	IPOHG 8-9-85
1	ATRAZINE	4.0 L	1.5 PRE	0.0	93.0	93.0	0	96.8	96.8	93.8	93.8
2	ATRAZINE	4.0 L	3.0 PRE	2.0	97.5	97.4	0	99.0	99.0	94.3	94.3
3	EXTRAZIN	4.0 L	2.0 PRE	0.0	68.8	68.8	0	83.8	83.8	82.5	82.5
4	EXTRAZIN	4.0 L	3.0 PRE	0.0	87.0	87.0	0	92.5	92.5	91.3	91.3
5	EXTRAZIN	4.0 L	4.0 PRE	0.0	92.0	92.0	0	96.3	96.3	93.8	93.8
6	COBRA	2.0 E	.25 PRE	7.5	40.0	40.0	0	51.3	51.3	50.0	50.0
7	PPG-1013	.25 E	.15 PRE	10.0	52.5	52.5	0	56.3	56.3	55.0	55.0
8	PPG-1259	.5 E	.15 PRE	5.0	45.0	45.0	0	53.8	53.8	52.5	52.5
9	ATRAZINE	4.0 L	1.5 POT1	0.0	99.5	99.5	0	100.0	100.0	97.0	97.0
9	C.O.C.	P	1.0 POT1								
10	2,4-D	4.0 L	.5 POT2	1.3	76.3	71.3	0	100.0	100.0	97.5	97.5
10	X-77	P	.25 POT2								
11	2,4-D	4.0 L	.25 POT2	2.5	100.0	100.0	0	100.0	100.0	99.5	99.5
11	ATRAZINE	4.0 L	1.5 POT2								
11	X-77	P	.25 POT2								
12	2,4-D	4.0 L	.25 POT2	6.3	100.0	100.0	0	100.0	100.0	97.0	97.0
12	ATRAZINE	4.0 L	1.5 POT2								
12	C.O.C.	P	1.0 POT2								
13	BUCTRIL	2.0 E	.25 POT2	6.3	100.0	97.5	0	93.8	93.8	85.0	85.0
14	BUCTRIL	2.0 E	.38 POT2	6.3	100.0	99.5	0	95.0	95.0	93.8	93.8
15	BUCTRIL	2.0 E	.25 POT2	5.0	100.0	99.3	0	100.0	100.0	97.8	97.8
15	ATRAZINE	4.0 L	.75 POT2								
16	BUCTRIL	2.0 E	.25 POT2	5.0	100.0	100.0	0	100.0	100.0	97.8	97.8
16	2,4-D	4.0 L	.25 POT2								
17	BASAGRAN	4.0 L	.75 POT2	2.5	98.8	96.3	0	76.3	76.3	68.8	68.8
17	C.O.C.	P	1.0 POT2								
18	BASAGRAN	4.0 L	.5 POT2	1.3	100.0	100.0	0	100.0	100.0	95.8	95.8
18	ATRAZINE	4.0 L	.75 POT2								
18	C.O.C.	P	1.0 POT2								

01-27-1986

SUMMARY

The University of Tennessee MANAGEMENT OF BROADLEAF WEEDS IN CORN

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KPS-3 with cooperator PLANT SCI FIELD LAB

TRT.	PEST.	RATE	GROW.	CRINJ	IPOLA	IPONG	CRINJ	IPOLA	IPONG	IPOLA	IPONG
NUM.	NAME	FORM	#ai/A	STAGE	6-17-85	6-17-85	6-17-85	7-3-85	7-3-85	7-3-85	8-9-85
					6-17-85	6-17-85	6-17-85	7-3-85	7-3-85	7-3-85	8-9-85
19	WEEDFREE			0.0	100.0	100.0	0	100.0	100.0	100.0	100.0
20	WEEDY			0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=				4.393	7.277	6.985		10.99	10.99	10.00	10.00
STANDARD DEVIATION				=	3.106	5.146	4.939	7.773	7.773	7.075	7.075
COEFF. OF VARIABILITY				=	102.2	6.236	6.027	9.174	9.174	8.614	8.614

01-27-1986

The University of Tennessee

HERBICIDE COMBINATIONS FOR CORN WEED MANAGEMENT

Conducted at KNOXVILLE, TN by NEIL RHODES

Project TN-692-85-KPS-4

EXPERIMENT DESCRIPTION FORM

01-27-1986

The University of Tennessee

HERBICIDE COMBINATIONS FOR CORN WEED MANAGEMENT

Conducted at KNOXVILLE, TN by NEIL RHODES

Project TN-692-85-KPS-4 with cooperator PLANT SCI FIELD LAB

Experimental Management

Date Planted 5-13-85 Variety PIONEER 3147 Row Width 36 IN
 Design RCB No. Reps. 4 Plot Size 3 ROWS*35 FT
 Field Preparation and Plot Maintenance DISK AND FIELD CULTIVATOR

Site Description

Season Moisture SEE RAINFALL TABLES

Soil Texture LOAM

Soil Series STATLER

% OM 1.0 pH 6

Application Information

1	2	3	4	5	6
---	---	---	---	---	---

Date Treated	5-13-85	5-29-85	6-7-85
Time Treated	PM	AM	AM
Cloud Cover	0%	50%	100%
Air Temperature	85	79	75
Relative Humidity	87%	91%	86%
Wind Speed/Direction	CALM	2MPH-S	CALM
Soil Temperature	82	90	78
Soil/Leaf Surface Moisture	MOIST	MOIST	MOIST
Soil Subsurface Moisture	MOIST	MOIST	MOIST
Soil Tilth	FINE	N/A	N/A
Crop Stage	PFI&PRE	3-6 IN	8-10 IN
Pest Name, Stage & Density			
IPOLA 2/FT	PRE	COT-1 LF	3-4 LF
IPOHG 2/FT	PRE	COT-1 LF	3-4 LF
ELEIN 1/FT	PRE	1-2 LF	2-4 LF

Application Equipment

Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width GFA	Carrier	PSI
1. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT 18	WATER	30
2. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT 24	WATER	40
3. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT 24	WATER	40

Comments

IPOLA=PITTED MORNINGGLORY; IPOHG=ENTIRELEAF MORNINGGLORY; ELEIN=GOOSEGRASS.
 ALL PFI TMTS INCORPORATED WITH A POWER-DRIVEN TILLROVATOR, ONE PASS. GOOSEGRASS
 PRESSURE WAS VERY LIGHT. ALL POT TMTS EXCEPT FOR TMT#17 WERE APPLIED ON 6-7-85.
 TMT#17 WAS APPLIED ON 5-29-85.

01-27-1986

The University of Tennessee

HERBICIDE COMBINATIONS FOR CORN WEED MANAGEMENT

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KPS-4 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A	STAGE	CRINJ 6-17-85	ELEIN 6-17-85	IPOLA 6-17-85	IPOHG 6-17-85	CRINJ 7-3-85	ELEIN 7-3-85	IPOLA 7-3-85	IPOHG 7-3-85
1	SUTAN+	6.7 E 4.0	PPI		0.0	92.5	98.5	98.5	0	100.0	100.0	100.0
1	ATRAZINE	4.0 L 1.5	PRE									
2	GENATE+	6.7 E 4.0	PPI		0.0	95.0	95.8	95.8	0	100.0	98.8	98.8
2	PPG-1259	.5 E .15	PRE									
3	GENATE+	6.7 E 4.0	PPI		3.8	92.5	92.0	92.0	0	97.5	97.5	97.5
3	PPG-1013	.25 E .15	PRE									
4	GENATE+	6.7 E 4.0	PPI		5.0	95.0	96.5	96.5	0	99.5	98.8	98.8
4	COBRA	2.0 E .25	PRE									
5	LASSO MT	4.0 L 2.0	PRE		1.3	93.8	95.3	95.3	0	99.5	90.0	89.5
5	ATRAZINE	4.0 L 1.5	PRE									
6	DUAL	8.0 E 1.5	PRE		0.0	93.8	87.5	87.5	0	98.8	88.8	88.8
6	ATRAZINE	4.0 E 1.5	PRE									
7	LASSO MT	4.0 L 2.0	PRE		5.0	93.8	77.5	77.5	0	100.0	83.8	83.8
7	PPG-1013	.25 E .15	PRE									
8	LASSO MT	4.0 L 2.0	PRE		6.3	93.8	65.0	65.0	0	98.5	77.5	77.5
8	COBRA	2.0 E .25	PRE									
9	PROWL	4.0 E 1.0	PRE		1.3	95.8	73.8	73.8	0	98.8	80.0	80.0
9	ATRAZINE	4.0 L 1.5	PRE									
10	SC-5676	8.0 E .75	PRE		0.0	93.8	92.5	92.5	0	99.5	91.8	91.8
10	R-25788	6.0 E .13	PRE									
10	ATRAZINE	4.0 L 1.5	PRE									
11	SC-0774	1.0 E .5	PRE		1.5	93.0	79.4	79.4	0	98.0	84.2	84.3
11	ATRAZINE	4.0 L 1.5	PRE									
12	SC-0774	1.0 E 1.0	PRE		0.0	92.5	85.0	85.0	0	99.0	85.0	85.0
12	ATRAZINE	4.0 L 1.5	PRE									
13	ATRAZINE	4.0 L 1.5	PRE		1.3	90.0	92.5	92.5	0	92.5	98.3	98.3
13	SC-0051	.55 E .5	POT									
14	ATRAZINE	4.0 L 1.5	PRE		7.5	91.3	95.8	95.8	0	98.8	95.8	95.8
14	SC-0051	.55 E 1.0	POT									
15	TANDEM	4.0 E .5	POT		1.3	88.8	94.5	94.5	0	89.5	99.5	99.5
15	ATRAZINE	.90 D 1.5	POT									
15	C.O.C.	P 1.0	POT									

01-27-1986

SL

The University of Tennessee

HERBICIDE COMBINATIONS FOR CORN WEED MANAGEMENT

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KPS-4 with cooperator PLANT SCI FIELD LAB

TRT. PEST.	RATE	GROW.	CRINJ	ELEIN	IPOLA	IPOHG	CRINJ	ELEIN	IPOLA	IPOHG
NUM. NAME FORM #ai/A	STAGE	6-17-85	6-17-85	6-17-85	6-17-85	7-3-85	7-3-85	7-3-85	7-3-85	7-3-85
16 TANDEM 4.0 E .75 PDT		1.3	90.0	97.0	97.0	0	98.8	97.5	97.5	
16 ATRAZINE .90 D 1.5 PDT										
16 C.O.C. P 1.0 PDT										
17 PROWL 4.0 E 1.0 PDT		1.3	92.0	97.8	97.8	0	100.0	99.5	99.5	
17 ATRAZINE 4.0 L 1.5 PDT										
17 C.O.C. P 1.0 PDT										
18 ATRAZINE .90 W 1.5 PDT		0.0	93.3	97.8	97.8	0	98.3	99.0	99.0	
18 C.O.C. P 1.0 PDT										
19 WEEDFREE		0.0	100.0	100.0	100.0	0	100.0	100.0	100.0	
20 WEEDY		0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	
LEAST SIGNIFICANT DIFF. (.05)=		2.910	4.783	13.75	13.75		5.951	11.80	11.74	
STANDARD DEVIATION =		2.057	3.382	9.726	9.726		4.208	8.349	8.303	
COEFF. OF VARIABILITY =		112.7	3.821	11.35	11.35		4.508	9.458	9.408	

01-27-1986

SUF

The University of Tennessee **HERBICIDE COMBINATIONS FOR CORN WEED MANAGEMENT**

Conducted at KNOXVILLE, TN by NEIL RHODES
 Project TN-692-85-KPS-4 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A	STAGE	ELEIN 8-9-85	IPOLA 8-9-85	IPOHG 8-9-85
1	SUTAN+	6.7 E	4.0	PPI	99.3	94.5	94.5
1	ATRAZINE	4.0 L	1.5	PRE			
2	GENATE+	6.7 E	4.0	PPI	98.8	95.0	95.0
2	PPG-1259	.5 E	.15	PRE			
3	GENATE+	6.7 E	4.0	PPI	98.8	94.5	94.5
3	PPG-1013	.25 E	.15	PRE			
4	GENATE+	6.7 E	4.0	PPI	100.0	97.0	97.0
4	COBRA	2.0 E	.25	PRE			
5	LASSO MT	4.0 L	2.0	PRE	98.8	88.8	88.8
5	ATRAZINE	4.0 L	1.5	PRE			
6	DUAL	8.0 E	1.5	PRE	99.5	90.8	90.8
6	ATRAZINE	4.0 E	1.5	PRE			
7	LASSO MT	4.0 L	2.0	PRE	98.8	60.0	60.0
7	PPG-1013	.25 E	.15	PRE			
8	LASSO MT	4.0 L	2.0	PRE	99.5	56.3	56.3
8	COBRA	2.0 E	.25	PRE			
9	PROWL	4.0 E	1.0	PRE	99.5	76.3	76.3
9	ATRAZINE	4.0 L	1.5	PRE			
10	SC-5676	8.0 E	.75	PRE	98.8	82.5	82.5
10	R-25788	6.0 E	.13	PRE			
10	ATRAZINE	4.0 L	1.5	PRE			
11	SC-0774	1.0 E	.5	PRE	99.6	81.4	81.4
11	ATRAZINE	4.0 L	1.5	PRE			
12	SC-0774	1.0 E	1.0	PRE	98.8	81.3	81.3
12	ATRAZINE	4.0 L	1.5	PRE			
13	ATRAZINE	4.0 L	1.5	PRE	97.0	91.3	91.3
13	SC-0051	.55 E	.5	POT			
14	ATRAZINE	4.0 L	1.5	PRE	98.8	92.5	92.5
14	SC-0051	.55 E	1.0	POT			
15	TANDEM	4.0 E	.5	POT	98.0	78.3	78.3
15	ATRAZINE	.90 D	1.5	POT			
15	C.O.C.	P	1.0	POT			

01-27-1986

SU

The University of Tennessee **HERBICIDE COMBINATIONS FOR CORN WEED MANAGEMENT**

Conducted at KNOXVILLE, TN by NEIL RHODES
 Project TN-692-85-KPS-4 with cooperators PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	ELEIN 8-9-85	IPOLA 8-9-85	IPONG 8-9-85
16	TANDEM	4.0 E	.75	POT	100.0	92.5	92.5
16	ATRAZINE	.90 D	1.5	POT			
16	C.O.C.	P	1.0	POT			
17	PROWL	4.0 E	1.0	POT	100.0	97.5	97.5
17	ATRAZINE	4.0 L	1.5	POT			
17	C.O.C.	P	1.0	POT			
18	ATRAZINE	.90 W	1.5	POT	98.8	95.8	95.8
18	C.O.C.	P	1.0	POT			
19	WEEDFREE				98.8	100.0	100.0
20	WEEDY				0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					2.221	17.98	17.98
STANDARD DEVIATION					= 1.570	12.71	12.71
COEFF. OF VARIABILITY					= 1.669	15.45	15.45

01-13-1986

EXPERIMENT DESCRIPTION FORM

The University of Tennessee

MANAGEMENT OF JOHNSONGRASS IN CORN

Conducted at KNOXVILLE, TN by NEIL RHODES
 Project TN-692-85-KH-1 with cooperators HOLSTON UNIT

Experimental Management

Date Planted 5-20-85 Variety PIONEER 3160 Row Width 36 IN
 Design RCB No. Reps. 4 Plot Size 3 ROWS*35FT
 Field Preparation and Plot Maintenance CHISEL, DISK, FIELD CULTIVATOR

Site Description

Season Moisture SEE RAINFALL TABLES

Soil Texture LOAM

Soil Series ALTAVISTA

% OM .5

pH 6

Application Information

	1	2	3	4	5	6
Date Treated	5-20-85	5-22-85				
Time Treated	PM	PM				
Cloud Cover	0%	0%				
Air Temperature	75	80				
Relative Humidity	60%	60%				
Wind Speed/Direction	4MPH-W	3MPH-W				
Soil Temperature	80	82				
Soil/Leaf Surface Moisture	MOIST	DRY				
Soil Subsurface Moisture	MOIST	MOIST				
Soil Tilth	FINE	FINE				
Crop Stage	PFI	PRE				
Pest Name, Stage & Density						
SORHA 4/FT	PRE	PRE				

Application Equipment

Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
2. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	18	WATER	30

Comments

SORHA=JOHNSONGRASS. ALL PFI TMTS INCORPORATED WITH A POWER-DRIVEN TILLROVATOR, ONE PASS. ENTIRE TEST CULTIVATED ON 6-26-85.

01-28-1986

SUMM

The University of Tennessee **MANAGEMENT OF JOHNSONGRASS IN CORN**

Conducted at KNOXVILLE, TN by NEIL RHODES
 Project TN-692-85-KH-1 with cooperators HOLSTON UNIT

TRT. NUM.	PEST. NAME	RATE FORM	GROW. STAGE	CRINJ 6-20-85	SORHA 6-20-85	CRINJ 7-15-85	SORHA 7-15-85	SORHA 8-29-85
01	ERADXTA	6.0 E 4.0	PPI	0.0	71.3 0		82.5	70.0
02	SUTAN+	6.7 E 4.0	PPI	0.0	65.0 0		72.5	67.5
03	SUTAN+	6.7 E 6.0	PPI	0.0	70.0 0		80.5	62.5
04	RO-NEET	6.0 E 4.0	PPI	1.3	72.5 0		71.3	67.5
05	RO-NEET	6.0 E 6.0	PPI	2.3	77.5 0		86.3	71.3
06	LASSO MT	4.0 L 2.0	PRE	1.3	58.8 0		56.3	48.8
07	DUAL	8.0 E 1.5	PRE	0.0	41.3 0		52.5	48.8
08	SC-5676	8.0 E 0.75	PRE	0.0	60.0 0		62.5	51.3
08	R-25788	6.0 E 0.13	PRE					
09	SC-5676	8.0 E 1.5	PRE	0.0	77.5 0		78.3	66.3
09	R-25788	6.0 E 0.25	PRE					
10	SC-5676	8.0 E 3.0	PRE	0.0	77.5 0		76.3	67.5
10	R-25788	6.0 E 0.5	PRE					
11	SC-0106	2.0 L 2.0	PRE	1.3	75.0 0		67.5	61.3
11	R-29148	2.0 E 1.0	PRE					
12	SC-0774	1.0 E 0.5	PRE	0.0	65.0 0		70.0	63.8
13	SC-0051	0.55E 1.0	PRE	1.3	55.0 0		65.0	52.5
14	SC-0051	0.55E 1.5	PRE	2.0	70.0 0		73.3	50.0
15	WEEDFREE			0.0	100.0 0		100.0	100.0
16	WEEDY			0.0	0.0 0		0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=				2.496	20.56		17.40	20.28
STANDARD DEVIATION				= 1.746	14.38		12.18	14.19
COEFF. OF VARIABILITY				= 302.1	22.21		17.80	23.94

01-27-1986

The University of Tennessee

EXPERIMENT DESCRIPTION FORM

WEED MANAGEMENT IN GRAIN SORGHUM

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KFS-12 with cooperators PLANT SCI FIELD LAB

Experimental Management

Date Planted 7-3-85 Variety DEKALB DK-64 Row Width 30 IN
Design RCB No. Reps. 4 Plot Size 4 ROWS*35 FT
Field Preparation and Plot Maintenance DISK AND FIELD CULTIVATOR

Site Description

Season Moisture SEE RAINFALL TABLES

Soil Texture LOAM

Soil Series STATLER

% OM 1.0 pH 6

Application Information

	1	2	3	4	5	6
Date Treated	7-3-85	7-15-85	7-30-85			
Time Treated	PM	PM	PM			
Cloud Cover	50%	0%	100%			
Air Temperature	81	89	76			
Relative Humidity	65%	65%	90%			
Wind Speed/Direction	CALM	3MPH-S	CALM			
Soil Temperature	81	105	80			
Soil/Leaf Surface Moisture	MOIST	DRY	WET			
Soil Subsurface Moisture	MOIST	MOIST	WET			
Soil Tilth	FINE	N/A	N/A			
Crop Stage	PRE	3-4 IN	4-10 IN			
Fest Name, Stage & Density						
ELEIN 1/FT	PRE	1-2LF	N/A			
IFOLA 2/FT	PRE	COT-2 LF	4-5 LF			

Application Equipment

Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
2. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
3. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40

Comments

ELEIN=GOOSEGRASS; IFOLA=PITTED MORNINGGLORY. PRIOR TO PLANTING, GRAIN SORGHUM SEED WERE TREATED WITH SCREEN WP SEED PROTECTANT AT THE RATE OF 3 OZ/50 LB OF SEED. GOOSEGRASS PRESSURE WAS VERY LIGHT.

01-28-1986

SUMMARY

The University of Tennessee
WEED MANAGEMENT IN GRAIN SORGHUM

Conducted at KNOXVILLE, TN by NEIL RHODES
 Project TN-692-85-KPS-12 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-9-85	ELEIN 8-9-85	IPOLA 8-9-85	CRINJ 8-29-85	ELEIN 8-29-85	IPOLA 8-29-85
1	LASSO MT	4.0 L	2.0	PRE	0.0	100.0	12.5	0.0	100.0	5.0
2	DUAL	8.0 E	1.5	PRE	0.0	100.0	17.5	0.0	100.0	5.0
3	LASSO/AT	4.0 L	3.0	PRE	0.0	100.0	99.5	0.0	100.0	99.0
4	BICEP	4.5 L	2.7	PRE	0.0	100.0	100.0	0.0	100.0	100.0
5	ATRAZINE	4.0 L	2.0	PRE	0.0	96.3	100.0	0.0	99.3	98.8
6	SC-5676	8.0 E	1.5	PRE	0.0	100.0	37.5	1.3	100.0	25.0
6	R-25788	6.0 E	.25	PRE						
7	SC-5676	8.0 E	3.0	PRE	5.0	100.0	45.0	12.5	100.0	28.8
7	R-25788	6.0 E	.5	PRE						
8	RACER	2.0 E	.5	PRE	0.0	100.0	22.5	0.0	100.0	11.3
9	ATRAZINE	4.0 L	2.0	POT1	0.0	95.0	100.0	0.0	100.0	100.0
9	C.O.C.	P	1.0	POT1						
10	PROWL	4.0 E	1.0	POT1	0.0	98.8	97.0	0.0	100.0	95.0
10	ATRAZINE	4.0 L	1.0	POT1						
10	C.O.C.	P	1.0	POT1						
11	LASSO MT	4.0 L	2.0	PRE	3.8	100.0	100.0	0.0	100.0	98.0
11	2,4-D	4.0 L	.5	POT2						
11	X-77	4.0 L	.5	POT2						
12	LASSO MT	4.0 L	2.0	PRE	1.3	100.0	100.0	0.0	100.0	99.5
12	BUCTRIL	2.0 E	.25	POT2						
13	LASSO MT	4.0 L	2.0	PRE	10.0	100.0	100.0	0.0	100.0	97.5
13	BUCTRIL	2.0 E	.38	POT2						
14	LASSO MT	4.0 L	2.0	PRE	3.8	100.0	100.0	0.0	99.3	99.5
14	BUCTRIL	2.0 E	.25	POT2						
14	ATRAZINE	4.0 L	1.0	POT2						
15	LASSO MT	4.0 L	2.0	PRE	1.3	100.0	100.0	0.0	100.0	100.0
15	BUCTRIL	2.0 E	.25	POT2						
15	2,4-D	4.0 L	.25	POT2						
16	LASSO MT	4.0 L	2.0	PRE	0.0	97.5	73.8	0.0	100.0	72.5
16	BASAGRAN	4.0 L	.75	POT2						
16	C.O.C.	P	1.0	POT2						

01-28-1986

SUMMARY

The University of Tennessee
WEED MANAGEMENT IN GRAIN SORGHUM

Conducted at KNOXVILLE, TN by NEIL RHODES
 Project TN-692-85-KPS-12 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-9-85	ELEIN 8-9-85	IFOLA 8-9-85	CRINJ 8-29-85	ELEIN 8-29-85	IFOLA 8-29-85
17	LASSO MT	4.0 L	2.0	PRE	2.5	100.0	100.0	0.0	100.0	93.8
17	BASACRAN	4.0 L	.5	POT2						
17	ATRAZINE	4.0 L	1.0	POT2						
17	C.O.C.	F	1.0	POT2						
18	LASSO MT	4.0 L	2.0	PRE	1.3	100.0	100.0	0.0	100.0	97.5
18	BASAGRAN	4.0 L	.5	POT2						
18	ATRAZINE	4.0 L	.5	POT2						
18	C.O.C.	F	1.0	POT2						
19	WEEDFREE				0.0	100.0	100.0	0.0	100.0	100.0
20	WEEDY				0.0	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					3.747	2.969	14.08	2.178	.6763	9.551
STANDARD DEVIATION					= 2.650	2.099	9.958	1.540	.4782	6.753
COEFF. OF VARIABILITY					= 184.3	2.224	13.23	224.1	.5038	9.472

01-27-1986

EXPERIMENT DESCRIPTION FORM

The University of Tennessee

MANAGEMENT OF ANNUAL GRASSES IN SOYBEANS

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KPS-7 with cooperators PLANT SCI FIELD LAB

Experimental Management

Date Planted 6-21-85 Variety FORREST Row Width 36 IN
Design RCB No. Reps. 3 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK AND FIELD CULTIVATOR

Site Description

Season Moisture SEE RAINFALL TABLES

Soil Texture LOAM

Soil Series STATLER

% OM 1.0 pH 6

Application Information

	1	2	3	4	5	6
Date Treated	7-17-85					
Time Treated	AM					
Cloud Cover	0%					
Air Temperature	77					
Relative Humidity	63%					
Wind Speed/Direction	4MPH-W					
Soil Temperature	81					
Soil/Leaf Surface Moisture	WET					
Soil Subsurface Moisture	MOIST					
Soil Tilth	N/A					
Crop Stage	V4					
Pest Name, Stage & Density						
DIGSA 3/FT	4-5 LF					
DIGSA 1/FT	2-3 TILL					

Application Equipment

Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40

Comments

DIGSA=LARGE CRABGRASS. ALL GRASS HERBICIDES WERE APPLIED WITH CROP OIL CONC. AT 1 QT/A. TREATMENTS 13 AND 14 ARE SEQUENTIAL APPLICATIONS---BLAZER+AG-98 WAS APPLIED 1 HOUR AFTER TROPHY APPLICATION. ON DATA TABLE ON FOLLOWING PAGE,THE FIRST DIGSA MEAN ON EACH EVALUATION DATE IS FOR 4-5 LF STAGE; THE SECOND IS FOR 2-3 TILLER STAGE.

Experimental Management

Planted 3-17-85 Variety PIONEER 5492 Row width 76 IN
No. Reps. 3 Plot Size 3 ROWS X 35 FT
Preparation and Plot Maintenance CHISEL, DISK, FIELD CULTIVATOR

Site Description

SUMMARY

01-28-1986

The University of Tennessee
MANAGEMENT OF ANNUAL GRASSES IN SOYBEANS

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KPS-7 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-30-85	DIGSA 7-30-85	DIGSA 7-30-85	CRINJ 8-9-85	DIGSA 8-9-85	DIGSA 8-9-85
1	POAST	1.5 E	.19	POT	0.0	86.7	56.7	0	92.7	73.3
2	FUS 2000	1.0 E	.15	POT	0.0	88.0	60.1	0	85.3	65.5
3	FUS 2000	1.0 E	.19	POT	0.0	86.7	61.7	0	91.7	71.7
4	ASSURE	.8 E	.063	POT	0.0	86.7	63.3	0	91.7	73.3
5	ASSURE	.8 E	.13	POT	0.0	90.0	63.3	0	95.0	80.0
6	ASSURE	.8 E	.13	POT	3.3	86.7	68.3	0	83.3	66.7
6	TACKLE	2.0 L	.5	POT						
7	VERDICT	2.0 E	.063	POT	0.0	90.5	70.1	0	92.8	83.0
8	VERDICT	2.0 E	.13	POT	0.0	93.3	71.7	0	93.3	80.0
9	VERDICT	2.0 E	.13	POT	5.0	90.0	70.0	0	96.0	85.0
9	TACKLE	2.0 L	.5	POT						
10	TROPHY	4.0 E	.25	POT	0.0	76.7	50.0	0	85.0	68.3
11	TROPHY	4.0 E	.38	POT	0.0	88.3	65.0	0	90.0	75.0
12	TROPHY	4.0 E	.38	POT	5.0	83.0	57.6	0	80.3	50.5
12	TACKLE	2.0 L	.5	POT						
13	TROPHY	4.0 E	.25	POT	6.7	80.0	58.3	0	80.0	50.0
13	BLAZER	2.0 L	.5	POT						
13	AG-98	P	.13	POT						
14	TROPHY	4.0 E	.38	POT	6.7	85.0	60.0	0	83.3	56.7
14	BLAZER	2.0 L	.5	POT						
14	AG-98	P	.13	POT						
LEAST SIGNIFICANT DIFF. (.05)=					2.300	8.175	11.81		9.842	14.93
STANDARD DEVIATION					= 1.370	4.839	6.994		5.826	8.841
COEFF. OF VARIABILITY					= 71.93	5.593	11.17		6.576	12.64

01-14-1986

EXPERIMENT DESCRIPTION FORM

The University of Tennessee

MANAGEMENT OF JOHNSONGRASS IN SOYBEANS

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KH-2 with cooperators HOLSTON UNIT

Experimental Management

Date Planted 5-17-85 Variety PIONEER 5482 Row Width 36 IN
Design RCB No. Reps. 3 Plot Size 3 ROWS*35 FT
Field Preparation and Plot Maintenance CHISEL, DISK, FIELD CULTIVATOR.

Site Description

Season Moisture SEE RAINFALL TABLES

Soil Texture LOAM

Soil Series ALTAVISTA

% OM .5

pH 6

Application Information

1	2	3	4	5	6
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Date Treated 6-25-85
Time Treated AM
Cloud Cover 0%
Air Temperature 77
Relative Humidity 64%
Wind Speed/Direction 4MPH-W
Soil Temperature 82
Soil/Leaf Surface Moisture MOIST
Soil Subsurface Moisture MOIST
Soil Tilth N/A
Crop Stage V6
Pest Name, Stage & Density
SORHA=JOHNSONGRASS 4/FT 12-18 IN

Application Equipment

Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40

Comments

SORHA=JOHNSONGRASS. TMT#2 APPLIED WITH 8001 NOZZLES AT 10 GPA. NO PPI OR PRE HERBICIDES WERE APPLIED TO TRIAL. CONDITIONS WERE EXCELLENT FOR HERBICIDE PERFORMANCE AND SOYBEAN CANOPY DEVELOPMENT. ALL TREATMENTS WERE APPLIED WITH CROP OIL CONCENTRATE AT 1 QUART/AC.

The University of Tennessee
MANAGEMENT OF JOHNSONGRASS IN SOYBEANS

Conducted at KNOXVILLE, TN by NEIL RHODES
 Project TN-692-85-KH-2 with cooperators HOLSTON UNIT

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-2-85	SORHA 7-2-85	CRINJ 7-15-85	SORHA 7-15-85	SORHA 7-31-85	SORHA 8-29-85
1	POAST	1.5 E	.29	POT	0	94.0 0		99.0	100.0	100.0
2	POAST*	1.5 E	.29	POT	0	95.7 0		100.0	98.3	100.0
3	FUS 2000	1.0 E	.15	POT	0	95.7 0		100.0	100.0	100.0
4	FUS 2000	1.0 E	.19	POT	0	96.0 0		100.0	100.0	100.0
5	ASSURE	0.8 E	.063	POT	3	98.7 0		100.0	99.0	100.0
6	ASSURE	0.8 E	.13	POT	5	98.0 0		100.0	100.0	100.0
7	ASSURE	0.8 E	.25	POT	5	98.7 0		100.0	100.0	98.3
8	VERDICT	2.0 E	.063	POT	0	96.7 0		100.0	100.0	100.0
9	VERDICT	2.0 E	.13	POT	0	96.3 0		100.0	100.0	98.3
10	VERDICT	2.0 E	.25	POT	0	98.3 0		100.0	99.3	100.0
11	TROPHY	4.0 E	.25	POT	0	97.3 0		97.7	100.0	97.3
12	TROPHY	4.0 E	.38	POT	0	95.3 0		100.0	100.0	96.7
13	BAS-517	1.7 E	.1	POT	0	95.0 0		99.3	100.0	98.3
14	BAS-517	1.7 E	.2	POT	0	96.3 0		100.0	100.0	98.3
15	WEEDY				0	0.0 0		0.0	0.0	0.0
16	WEEDFREE				0	100.0 0		100.0	100.0	100.0
LEAST SIGNIFICANT DIFF. (.05)=						3.366		1.376	1.500	3.473
STANDARD DEVIATION						2.019		.8257	.9000	2.083
COEFF. OF VARIABILITY						2.224		.8832	.9621	2.241

The University of Tennessee

SICKLEPOD MANAGEMENT IN SOYBEANS

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-K-9 with cooperator SMALL GRAINS FARM

Experimental Management

Date Planted 7-3-85 Variety FORREST Row Width 30 IN
Design RCB No. Reps. 3 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance CHISEL AND DISK

Site Description

Season Moisture SEE RAINFALL TABLES

Soil Texture SILT LOAM

Soil Series EMORY

% OM .5

pH 6

Application Information

	1	2	3	4	5	6
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Date Treated	7-3-85	8-2-85	8-21-85			
Time Treated	AM	PM	PM			
Cloud Cover	0%	100%	50%			
Air Temperature	80	72	86			
Relative Humidity	74%	82%	48%			
Wind Speed/Direction	5MPH-S	5MPH-E	3MPH-W			
Soil Temperature	85	72	88			
Soil/Leaf Surface Moisture	MOIST	WET	DRY			
Soil Subsurface Moisture	MOIST	WET	MOIST			
Soil Tilth	MED	N/A	N/A			
Crop Stage	PRE	V4	12" DIR			
Pest Name, Stage & Density						
CASOB 4/FT	PRE	COT-3LF	4-5 LF			

Application Equipment

	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1.	C02 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
2.	C02 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
3.	C02 BACKPACK	3	FLAT FAN	8002	8	18	2 FT	20	WATER	30

Comments

CASOB=SICKLEPOD. SOYBEAN EMERGENCE AND GROWTH WAS SLOW AND UNEVEN.

01-31-1986

SL-

The University of Tennessee

SICKLEPOD MANAGEMENT IN SOYBEANS

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-K-9 with cooperator SMALL GRAINS FARM

TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A STAGE	CRINJ 7-29-85	CASOB 7-29-85	CRINJ 8-9-85	CASOB 8-9-85	CRINJ 8-29-85	CASOB 8-29-85	CRINJ 9-25-85	CASOB 9-25-85
1	SCEPTER	1.5 L .125	PRE	6.7	86.7	15.0	81.7	3.3	86.7	3.3	86.7
1	SCEPTER	1.5 L .125	POT								
2	SCEPTER	1.5 L .094	PRE	6.7	83.3	16.7	81.7	3.3	88.3	8.3	89.3
2	SCEPTER	1.5 L .156	POT								
3	SCEPTER	1.5 L .156	PRE	10.0	90.0	15.0	85.0	5.0	88.3	6.7	76.7
3	SCEPTER	1.5 L .094	POT								
4	LEXONE	.75 D .5	PRE	11.7	81.7	21.7	81.7	8.3	88.3	11.7	93.7
4	CLASSIC	.25 D .008	POT								
4	X-77	P .25	POT								
5	CANOPY	.75 D .5	PRE	6.7	85.0	21.7	81.7	5.0	90.0	6.7	88.3
5	CLASSIC	.25 D .008	POT								
5	X-77	P .25	POT								
6	LEXONE	.75 D .5	PRE	6.7	81.7	10.0	56.7	0.0	35.0	1.7	15.0
6	MYX-104	.25 W .25	POT								
7	LEXONE	.75 D .5	PRE	8.3	78.3	13.3	56.7	3.3	36.7	0.0	18.3
7	MYX-104	.25 W .5	POT								
8	LEXONE	.75 D .5	PRE	6.7	80.0	13.3	63.3	5.0	76.7	10.0	76.7
8	GOAL	1.6 E .25	PDIR								
8	AG-98	P .25	PDIR								
9	LEXONE	.75 D .5	PRE	8.3	71.7	11.7	50.0	10.0	76.7	5.0	76.7
9	GOAL	1.6 E .25	PDIR								
9	2,4-DB	2.0 L .2	PDIR								
9	AG-98	P .25	PDIR								
10	LEXONE	.75 D .5	PRE	8.3	71.7	11.7	50.0	6.7	73.3	5.0	71.7
10	LOROX	4.0 L .5	PDIR								
10	2,4-DB	2.0 L .2	PDIR								
10	AG-98	P .25	PDIR								
11	WEEDFREE			0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0
12	WEEDY			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LEAST SIGNIFICANT DIFF. (.05) = 5.052 8.688 6.632 13.15 7.694 13.82 15.22 19.17
 STANDARD DEVIATION = 2.983 5.130 3.916 7.768 4.543 8.164 8.989 11.32
 COEFF. OF VARIABILITY = 44.75 6.765 31.33 11.82 109.0 11.66 184.9 17.13

01-13-1986

EXPERIMENT DESCRIPTION FORM

The University of Tennessee**UTILITY OF COMMAND IN SOYBEAN WEED MANAGEMENT SYSTEMS**

Conducted at KNOXVILLE, TN by NEIL RHODES
 Project TN-692-85-KPS-6 with cooperator PLANT SCI FIELD LAB

Experimental Management

Date Planted 6-21-85 Variety FORREST Row Width 36 IN
 Design RCB No. Reps. 4 Plot Size 3 ROWS*30FT
 Field Preparation and Plot Maintenance DISK AND FIELD CULTIVATOR

Site Description

Season Moisture SEE RAINFALL TABLES

Soil Texture LOAM

Soil Series STATLER

% OM .75 pH 6

Application Information

	1	2	3	4	5	6
Date Treated	6-21-85	7-17-85				
Time Treated	PM	PM				
Cloud Cover	0%	0%				
Air Temperature	86	90				
Relative Humidity	60	60				
Wind Speed/Direction	CALM	CALM				
Soil Temperature	84	86				
Soil/Leaf Surface Moisture	MOIST	DRY				
Soil Subsurface Moisture	MOIST	MOIST				
Soil Tilth	FINE	N/A				
Crop Stage	PRE	V3				
Pest Name, Stage & Density						
PHFBU 4/FT	PRE	4-6 LF				

Application Equipment

	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1.	CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
2.	CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40

Comments

PHFBU=TALL MORNINGGLORY. ANNUAL GRASS POPULATION DID NOT DEVELOP.

01-28-1986

SUMM

The University of Tennessee **UTILITY OF COMMAND IN SOYBEAN WEED MANAGEMENT SYSTEMS**

Conducted at KNOXVILLE, TN by NEIL RHODES
 Project TN-692-85-KPS-6 with cooperator PALNT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-29-85	PHB8U 7-29-85	CRINJ 8-9-85	PHB8U 8-9-85
=====								
1	COMMAND	6.0 E	.75	PRE	0.2	25.2 0		30.9
2	LASSO MT	4.0 L	2.0	PRE	0.0	15.0 0		15.0
3	COMMAND	6.0 E	.75	PRE	0.0	52.5 0		61.3
3	SENCOR	.75 D	.38	PRE				
4	LASSO	4.0 L	2.0	PRE	0.0	52.5 0		51.3
4	SENCOR	.75 D	.38	PRE				
5	COMMAND	6.0 D	.75	PRE	1.3	61.3 0		63.8
5	CANOPY	.75 D	.38	PRE				
6	LASSO MT	2.0 L	2.0	PRE	1.3	55.0 0		52.5
6	CANOPY	.75 D	.38	PRE				
7	COMMAND	6.0E	.75	PRE	1.3	73.8 0		66.3
7	SCEPTER	1.5 L	.25	PRE				
8	LASSO MT	4.0 L	2.0	PRE	1.3	78.8 0		70.0
8	SCEPTER	1.5 L	.25	PRE				
9	COMMAND	6.0 E	.75	PRE	3.8	92.5 0		83.8
9	TACKLE	2.0 L	.5	POT				
9	X-77		P .25	POT				
10	LASSO MT	4.0 L	2.0	PRE	5.0	89.5 0		81.3
10	TACKLE	2.0 L	.5	POT				
10	X-77		P .25	POT				
11	COMMAND	6.0 E	.75	PRE	5.0	83.0 0		72.5
11	COBRA	2.0 E	.2	POT				
11	X-77		P .25	POT				
12	LASSO MT	4.0 L	2.0	PRE	5.0	88.8 0		81.3
12	COBRA	2.0 E	.2	POT				
12	X-77		P .25	POT				
13	COMMAND	6.0 E	.75	PRE	3.8	70.0 0		60.0
13	PPG-1013	.25 E	.02	POT				
13	X-77		P .25	POT				
14	LASSO MT	4.0 L	2.0	PRE	3.8	78.8 0		62.5
14	PPG-1013	.25 E	.02	POT				
14	X-77		P .25	POT				

01-28-1986

SUM

The University of Tennessee

UTILITY OF COMMAND IN SOYBEAN WEED MANAGEMENT SYSTEMS

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KPS-6 with cooperator PALNT SCI FIELD LAB

TRT. FEST.		RATE	GROW.	CRINJ	PHEBU	CRINJ	PHEBU
NUM. NAME	FORM	#ai/A	STAGE	7-29-85	7-29-85	8-9-85	8-9-85
15 COMMAND	6.0 E	.75	PRE	1.3	67.5 0		71.3
15 CLASSIC	.25 D	.008	POT				
15 X-77	P	.25	POT				
16 LASSO MT	4.0 L	2.0	PRE	2.5	62.5 0		68.8
16 CLASSIC	.25 D	.008	POT				
16 X-77	P	.25	POT				
17 COMMAND	6.0 E	.75	PRE	2.5	76.3 0		66.3
17 SCEPTER	1.5 L	.25	POT				
18 LASSO MT	4.0 L	2.0	PRE	0.0	75.0 0		75.0
18 SCEPTER	1.5 L	.25	POT				
19 WEEDFREE				0.0	100.0 0		100.0
20 WEEDY				0.0	0.0 0		0.0
LEAST SIGNIFICANT DIFF. (.05)=				2.505	19.61		18.78
STANDARD DEVIATION				= 1.771	13.87		13.28
COEFF. OF VARIABILITY				= 93.92	21.37		21.53

01-25-1986

The University of Tennessee

DUNCAN'S

UTILITY OF COMMAND IN SOYBEAN WEED MANAGEMENT SYSTEMS

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KPS-6 with cooperators PALNT SCI FIELD LAB

TRT. NUH.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	YIELD BU/A
1	COMMAND	6.0 E	.75	PRE	26.2a-d
2	LASSO MT	4.0 L	2.0	PRE	22.8d
3	COMMAND	6.0 E	.75	PRE	30.0a-d
3	SENCOR	.75 D	.38	PRE	
4	LASSO	4.0 L	2.0	PRE	26.5a-d
4	SENCOR	.75 D	.38	PRE	
5	COMMAND	6.0 D	.75	PRE	32.5abc
5	CANOPY	.75 D	.38	PRE	
6	LASSO MT	2.0 L	2.0	PRE	27.5a-d
6	CANOPY	.75 D	.38	PRE	
7	COMMAND	6.0E	.75	PRE	29.5a-d
7	SCEPTER	1.5 L	.25	PRE	
8	LASSO MT	4.0 L	2.0	PRE	29.0a-d
8	SCEPTER	1.5 L	.25	PRE	
9	COMMAND	6.0 E	.75	PRE	31.5a-d
9	TACKLE	2.0 L	.5	POT	
9	X-77	P	.25	POT	
10	LASSO MT	4.0 L	2.0	PRE	29.5a-d
10	TACKLE	2.0 L	.5	POT	
10	X-77	P	.25	POT	
11	COMMAND	6.0 E	.75	PRE	29.8a-d
11	COBRA	2.0 E	.2	POT	
11	X-77	P	.25	POT	
12	LASSO MT	4.0 L	2.0	PRE	31.0a-d
12	COBRA	2.0 E	.2	POT	
12	X-77	P	.25	POT	
13	COMMAND	6.0 E	.75	PRE	27.3a-d
13	PPG-1013	.25 E	.02	POT	
13	X-77	P	.25	POT	
14	LASSO MT	4.0 L	2.0	PRE	26.5a-d
14	PPG-1013	.25 E	.02	POT	
14	X-77	P	.25	POT	

01-25-1986

DUNCAN'S

The University of Tennessee

UTILITY OF COMMAND IN SOYBEAN WEED MANAGEMENT SYSTEMS

Conducted at KNOXVILLE, TN by NEIL RHODES
Project TN-692-85-KPS-6 with cooperators FALNT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	YIELD BU/A
15	COMMAND	6.0 E	.75	PRE	33.5ab
15	CLASSIC	.25 D	.008	POT	
15	X-77	P	.25	POT	
16	LASSO MT	4.0 L	2.0	PRE	34.3a
16	CLASSIC	.25 D	.008	POT	
16	X-77	P	.25	POT	
17	COMMAND	6.0 E	.75	PRE	25.0bcd
17	SCEPTER	1.5 L	.25	POT	
18	LASSO MT	4.0 L	2.0	PRE	29.5a-d
18	SCEPTER	1.5 L	.25	POT	
19	WEEDFREE				31.5a-d
20	WEEDY				24.0cd

MIDDLE TENNESSEE EXPERIMENT STAION
BOX 160
SPRING HILL, TENNESSEE 37174

Superintendent - Dr. Joe W. High, Jr.

RAINFALL
Middle Tennessee Experiment Station
Spring Hill, TN 1985

Date	April	May	June	July	August	September
1	0	.16	.50	.67	0	0
2	0	.40	0	.03	.10	0
3	0	0	0	0	0	0
4	0	0	0	0	0	0
5	0	0	0	0	0	0
6	.47	0	0	.09	.20	0
7	0	0	.72	0	.28	0
8	0	.25	.37	0	1.22	0
9	0	.09	0	0	0	.25
10	0	0	0	0	0	0
11	0	0	.43	.20	0	.33
12	0	0	.47	0	0	0
13	.12	.01	0	0	0	0
14	0	0	0	0	0	0
15	.63	0	0	0	0	0
16	.02	0	0	0	0	0
17	0	0	0	0	2.94	0
18	0	0	1.21	0	0	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0
21	0	0	0	0	0	0
22	0	1.00	0	0	0	0
23	0	.18	.47	.78	0	0
24	1.13	0	0	0	0	1.19
25	0	0	0	.03	.79	0
26	0	0	.02	0	.07	1.07
27	.10	0	0	.59	0	0
28	.32	.30	0	1.10	0	0
29	0	0	0	.12	0	0
30	0	0	0	0	0	0
31	-	0	-	0	.62	-
Total	2.79	2.39	4.19	3.61	6.22	2.84

TEMPERATURE
Middle Tennessee Experiment Station
Spring Hill, TN 1985

	<u>April</u>		<u>May</u>		<u>June</u>		<u>July</u>		<u>August</u>		<u>Sept</u>	
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	63	32	80	52	83	63	82	61	91	68	86	60
2	58	29	69	60	90	64	80	56	88	69	88	62
3	59	33	73	54	91	67	83	58	83	67	88	67
4	78	48	63	46	91	67	88	62	84	66	88	64
5	80	60	74	50	93	69	84	63	86	61	88	65
6	69	38	79	54	95	69	87	61	77	62	81	69
7	65	45	83	56	90	63	84	61	84	68	91	65
8	62	30	80	59	86	60	88	62	85	64	93	66
9	58	24	66	53	84	64	90	62	86	62	93	64
10	55	25	66	55	88	65	93	64	90	63	90	66
11	65	32	75	55	87	59	95	65	93	69	92	60
12	74	45	80	60	86	58	91	65	93	68	82	60
13	76	51	85	61	74	46	94	64	93	68	78	55
14	74	52	87	63	72	46	92	68	92	68	73	47
15	70	55	87	65	79	52	96	72	91	69	72	43
16	69	45	76	49	85	64	94	70	88	69	75	46
17	71	47	80	51	88	63	90	60	75	68	79	48
18	81	50	69	49	89	55	88	59	85	66	84	50
19	83	50	72	41	81	59	93	63	90	67	84	50
20	82	50	79	48	77	51	95	65	91	67	85	49
21	84	50	82	50	81	54	95	67	82	62	85	50
22	84	53	85	51	84	57	95	67	81	58	87	54
23	82	61	74	53	79	65	93	64	85	59	87	56
24	78	59	68	46	90	66	89	69	80	64	73	52
25	77	43	76	48	93	61	85	66	77	60	70	40
26	78	41	79	49	90	62	87	68	80	56	80	40
27	83	58	85	57	89	63	81	68	83	56	69	47
28	72	61	85	59	87	68	79	69	86	57	66	37
29	79	58	81	63	79	64	86	69	87	59	75	40
30	78	52	86	64	80	64	87	70	91	64	77	49
31	--	--	88	66	--	--	90	68	91	62	--	--

01-13-1986

The University of Tennessee

EXPERIMENT DESCRIPTION FORM

MANAGEMENT OF BROADLEAF WEEDS IN CORN

Conducted at SPRING HILL, TN by NEIL RHODES
Project TN-692-85-M-1 with cooperator MIDDLE TN EXPT STA

Experimental Management

Date Planted 4-30-85 Variety PIONEER 3147 Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*35 FT
Field Preparation and Plot Maintenance CHISEL AND DISK

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture SILT LOAM
Soil Series MAURY

% OM 1 pH 5.9

Application Information

	1	2	3	4	5	6
Date Treated	4-30-85	5-15-85	5-27-85			
Time Treated	PM	AM	PM			
Cloud Cover	0%	0%	100%			
Air Temperature	76	71	74			
Relative Humidity	75%	79%	79%			
Wind Speed/Direction	3MPH-W	3MPH-W	4MPH-W			
Soil Temperature	74	76	81			
Soil/Leaf Surface Moisture	MOIST	MOIST	DRY			
Soil Subsurface Moisture	MOIST	MOIST	MOIST			
Soil Tilth	FINE	N/A	N/A			
Crop Stage	PRE	4 IN	7-10 IN			
Pest Name, Stage & Density						
PHPBU 10/FT	PRE	COT-1 LF	3-7 LF			

Application Equipment

	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1.	CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	19	WATER	25
2.	CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
3.	CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40

Comments

PHPBU=TALL MORNINGGLORY. ENTIRE TEST WAS TREATED WITH LASSO PRE AT 2.0 LB AI/A FOR GRASS CONTROL. RAINFALL (0.30 IN) OCCURRED WITHIN 1 HOUR OF APPLICATION OF 3RD APPLICATION TIMING RESULTING IN REDUCED EFFICACY OF SOME TREATMENTS.

01-28-1986

SUMMA

The University of Tennessee **MANAGEMENT OF BROADLEAF WEEDS IN CORN**

Conducted at SPRING HILL, TN by NEIL RHODES
 Project TN-692-85-M-1 with cooperators MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 6-5-85	PHPBU 6-5-85	PHPBU 6-18-85	PHPBU 7-8-85	PHPBU 8-8-85
1	ATRAZINE	4.0 L	1.5	PRE	0.0	97.8	97.0	95.5	88.8
2	ATRAZINE	4.0 L	3.0	PRE	0.0	98.0	98.8	98.0	90.5
3	EXTRAZIN	4.0 L	2.0	PRE	0.0	90.5	88.0	91.3	85.0
4	EXTRAZIN	4.0 L	3.0	PRE	0.0	95.3	93.8	87.5	83.8
5	EXTRAZIN	4.0 L	4.0	PRE	2.5	98.5	100.0	97.8	92.5
6	COBRA	2.0 E	.25	PRE	2.5	30.0	22.5	30.0	5.0
7	PPG-1013	.25 E	.15	PRE	10.0	36.3	47.5	42.5	22.5
8	PPG-1259	.5 E	.15	PRE	6.3	27.5	40.0	45.0	30.0
9	ATRAZINE	4.0 L	1.5	POT1	0.0	96.8	97.5	97.5	91.3
9	C.O.C.	P	1.0	POT1					
10	2,4-D	4.0 L	.5	POT2	2.5	92.0	94.3	91.8	77.5
10	X-77	P	.25	POT2					
11	BANVEL	4.0 L	.25	POT2	5.0	66.3	71.3	70.0	53.8
11	X-77	P	.25	POT2					
12	2,4-D	4.0 L	.25	POT2	6.3	86.3	94.3	87.5	75.0
12	BANVEL	4.0 L	.13	POT2					
12	X-77	P	.25	POT2					
13	BUCTRIL	2.0 E	.25	POT2	1.3	32.5	38.8	52.5	35.0
14	BUCTRIL	2.0 E	.38	POT2	1.3	47.5	38.8	50.0	33.8
15	BUCTRIL	2.0 E	.25	POT2	1.3	93.8	92.5	94.5	86.3
15	ATRAZINE	4.0 L	.75	POT2					
16	BUCTRIL	2.0 E	.25	POT2	1.3	88.8	85.0	81.3	72.5
16	2,4-D	4.0 L	.25	POT2					
17	BASAGRAN	4.0 L	.75	POT2	2.5	51.3	47.5	43.8	25.0
17	C.O.C.	P	1.0	POT2					
18	BASAGRAN	4.0 L	.5	POT2	0.0	95.8	91.3	95.5	86.3
18	ATRAZINE	4.0 L	.75	POT2					
18	C.O.C.	P	1.0	POT2					

01-28-1986

SUMI

The University of Tennessee **MANAGEMENT OF BROADLEAF WEEDS IN CORN**

Conducted at SPRING HILL, TN by NEIL RHODES
Project TN-692-85-M-1 with cooperator MIDDLE TN EXPT STA

TRT.	PEST.	RATE	GROW.	CRINJ	PHPBU	PHPBU	PHPBU	PHPBU	
NUM.	NAME	FORM	#ai/A	STAGE	6-5-85	6-5-85	6-18-85	7-8-85	8-8-85
=====									
19	WEEDFREE				0.0	100.0	100.0	100.0	.100.0
20	WEEDY				0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					5.860	14.48	14.89	9.791	15.18
STANDARD DEVIATION					= 4.143	10.24	10.53	6.923	10.73
COEFF. OF VARIABILITY					= 195.0	14.38	14.64	9.537	17.39

01-15-1986

DUNCAN'S F

The University of Tennessee

MANAGEMENT OF BROADLEAF WEEDS IN CORN

Conducted at SPRING HILL, TN by NEIL RHODES
 Project TN-692-85-M-1 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	YIELD BU/A
1	ATRAZINE	4.0 L	1.5	PRE	81.3a-e
2	ATRAZINE	4.0 L	3.0	PRE	72.5a-f
3	EXTRAZIN	4.0 L	2.0	PRE	90.8abc
4	EXTRAZIN	4.0 L	3.0	PRE	82.0a-e
5	EXTRAZIN	4.0 L	4.0	PRE	67.0b-f
6	COBRA	2.0 E	.25	PRE	53.8ef
7	PPG-1013	.25 E	.15	PRE	57.3def
8	PPG-1259	.5 E	.15	PRE	56.5def
9	ATRAZINE	4.0 L	1.5	POT1	87.3abc
9	C.O.C.	P	1.0	POT1	
10	2,4-D	4.0 L	.5	POT2	88.0abc
10	X-77	P	.25	POT2	
11	BANVEL	4.0 L	.25	POT2	63.3c-f
11	X-77	P	.25	POT2	
12	2,4-D	4.0 L	.25	POT2	85.5a-d
12	BANVEL	4.0 L	.13	POT2	
12	X-77	P	.25	POT2	
13	BUCTRIL	2.0 E	.25	POT2	61.0c-f
14	BUCTRIL	2.0 E	.38	POT2	66.8b-f
15	BUCTRIL	2.0 E	.25	POT2	90.3abc
15	ATRAZINE	4.0 L	.75	POT2	
16	BUCTRIL	2.0 E	.25	POT2	93.5ab
16	2,4-D	4.0 L	.25	POT2	
17	BASAGRAN	4.0 L	.75	POT2	51.5f
17	C.O.C.	P	1.0	POT2	
18	BASAGRAN	4.0 L	.5	POT2	88.5abc
18	ATRAZINE	4.0 L	.75	POT2	
18	C.O.C.	P	1.0	POT2	

01-15-1986

DUNCAN'S

The University of Tennessee

MANAGEMENT OF BROADLEAF WEEDS IN CORN

Conducted at SPRING HILL, TN by NEIL RHODES
Project TN-692-85-M-1 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	YIELD BU/A
--------------	---------------	------	---------------	----------------	---------------

19	WEEDFREE				99.0a
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20	WEEDY				54.8ef
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01-13-1986

EXPERIMENT DESCRIPTION FORM

The University of Tennessee

MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS

Conducted at SPRING HILL, TN by NEIL RHODES
Project TN-692-85-M-3 with cooperator MIDDLE TN EXPT STA

Experimental Management

Date Planted 6-3-85 Variety ESSEX Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*35 FT
Field Preparation and Plot Maintenance CHISEL AND DISK

Site Description

Season Moisture SEE RAINFALL TABLES

Soil Texture SILT LOAM

Soil Series MAURY

% OM 1

pH 5.9

Application Information

	1	2	3	4	5	6
Date Treated	6-3-85	6-24-85				
Time Treated	PM	PM				
Cloud Cover	50%	30%				
Air Temperature	80	83				
Relative Humidity	65%	74%				
Wind Speed/Direction	4MPH-N	2MPH-W				
Soil Temperature	83	90				
Soil/Leaf Surface Moisture	MOIST	DRY				
Soil Subsurface Moisture	MOIST	MOIST				
Soil Tilth	FINE	N/A				
Crop Stage	PRE	V3				
Pest Name, Stage & Density						
PHPBU 5/FT	PRE	2-4 LF				

Application Equipment

Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
2. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40

Comments

PHPBU=TALL MORNINGGLORY. ENTIRE TEST WAS TREATED WITH TREFLAN PFI AT 0.75
LB AI/A FOR GRASS WEED CONTROL.

The University of Tennessee
MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS

Conducted at SPRING HILL, TN by NEIL RHODES
 Project TN-692-B5-M-3 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-8-85	PHBPU 7-8-85	CRINJ 7-18-85	PHBPU 7-18-85	CRINJ 8-8-85	PHBPU 8-8-85
01	LEXONE	0.75D	.38	PRE	0.0	53.8	0.0	46.3	0.0	45.0
02	LOROX	4 L	.5	PRE	0.0	42.5	0.0	30.0	0.0	45.0
03	CANOPY	0.75D	.38	PRE	1.3	92.8	1.3	85.5	0.0	81.3
04	GEMINI	0.60W	.5	PRE	7.5	83.8	3.8	71.3	2.0	76.3
05	LEXONE	0.75D	.38	PRE	30.0	70.0	11.3	70.0	5.0	67.5
05	CLASSIC	0.25D	.016	POT						
05	X-77	P	.25	POT						
06	CANOPY	0.75D	.38	PRE	30.0	97.3	12.5	97.8	3.5	93.8
06	CLASSIC	0.25D	.016	POT						
06	X-77	P	.25	POT						
07	CLASSIC	0.25D	.016	POT	26.3	71.3	10.0	66.3	4.5	75.0
07	X-77	P	.25	POT						
08	SCEPTER	1.5 L	.25	PRE	32.5	95.8	25.0	95.8	10.8	88.8
09	SCEPTER	1.5 L	.25	POT	15.0	70.0	5.0	61.3	0.8	73.8
10	SCEPTER	1.5 L	.125	PRE	27.5	95.5	18.8	97.3	7.5	90.0
10	SCEPTER	1.5 L	.125	POT						
11	SCEPTER	1.5 L	.094	PRE	21.3	92.5	13.8	94.3	4.5	91.3
11	SCEPTER	1.5 L	.156	POT						
12	SCEPTER	1.5 L	.156	PRE	27.5	95.8	20.0	97.3	8.8	92.5
12	SCEPTER	1.5 L	.094	POT						
13	AC263499	1.95L	.063	PRE	6.3	91.3	3.8	96.0	0.0	91.3
14	AC263499	1.95L	.125	PRE	13.8	95.3	11.3	97.3	4.0	91.3
15	AC263499	1.95L	.063	POT	2.5	80.0	1.3	80.0	0.0	87.5
15	TWEEN 20	P	.25	POT						
16	AC263499	1.95L	.125	POT	16.3	71.3	6.3	83.8	2.0	90.5
16	TWEEN 20	P	.25	POT						
17	BLAZER	2.0 L	.5	POT	6.3	90.0	0.0	86.3	0.0	83.8
17	AG-98	P	.13	POT						
18	BLAZER	2.0 L	.5	POT	25.0	95.5	8.3	90.0	0.0	78.3
18	2,4-DB	2.0 L	.03	POT						
18	AG-98	P	.13	POT						

01-15-1986

SUMMARY

The University of Tennessee
MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS

Conducted at SPRING HILL, TN by NEIL RHODES
 Project TN-692-85-M-3 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-8-85	PHBPU 7-8-85	CRINJ 7-18-85	PHBPU 7-18-85	CRINJ 8-8-85	PHBPU 8-8-85
19	BASAGRAN	4 L	.75	POT	13.8	85.0	5.0	85.0	0.5	81.3
19	2,4-DB	2.0 L	.03	POT						
20	BLAZER	2.0 L	.25	POT	5.0	88.8	0.0	84.5	0.0	78.8
20	BASAGRAN	4 L	.5	POT						
20	AG-98	P	.13	POT						
21	RH-0265	2 E	.18	POT	6.3	73.8	0.0	62.5	0.0	63.8
21	AG-98	P	.13	POT						
22	RH-0265	2 E	.12	POT	22.5	91.8	6.3	83.8	1.3	82.5
22	AG-98	P	.13	POT						
22	2,4-DB	2.0 L	.03	POT						
23	RH-0265	2 E	.18	POT	23.8	92.5	7.5	81.3	0.0	82.5
23	2,4-DB	2 L	.03	POT						
23	AG-98	P	.13	POT						
24	REFLEX	2 E	.38	POT	5.0	94.3	0.0	80.5	0.0	88.8
24	C.O.C.	P	1	POT						
25	COBRA	2 E	.2	POT	6.3	78.0	0.0	68.8	0.0	71.3
26	COBRA	2 E	.2	POT	11.3	85.0	0.0	71.3	0.0	75.0
26	X-77	P	.25	POT						
27	PPG-1013	.25 E	.02	POT	3.8	81.3	1.3	78.8	0.0	71.3
28	PPG-1013	.25 E	.02	POT	12.5	83.8	3.8	72.5	0.0	65.0
28	X-77	P	.25	POT						
29	WD. FREE	.5 L	.094	POT	0.0	100.0	0.0	100.0	0.0	100.0
30	WEEDY	1.5 L	.136	POT	0.0	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					5.542	11.66	4.069	17.77	2.087	16.86
STANDARD DEVIATION					3.919	8.245	2.877	12.57	1.475	11.92
COEFF. OF VARIABILITY					29.48	10.14	49.12	16.29	80.50	15.54

MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS

Conducted at SPRING HILL, TN by NEIL RHODES
Project TN-692-85-M-3 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	YIELD BU/A
01	LEXONE	0.75D	.38	PRE	34.38d
02	LOROX	4 L	.5	PRE	36.43cd
03	CANDPY	0.75D	.38	PRE	45.63a-d
04	GEMINI	0.60W	.5	PRE	43.35a-d
05	LEXONE	0.75D	.38	PRE	43.98a-d
05	CLASSIC	0.25D	.016	POT	
05	X-77	P	.25	POT	
06	CANDPY	0.75D	.38	PRE	50.15a
06	CLASSIC	0.25D	.016	POT	
06	X-77	P	.25	POT	
07	CLASSIC	0.25D	.016	POT	43.80a-d
07	X-77	P	.25	POT	
08	SCEPTER	1.5 L	.25	PRE	42.75a-d
09	SCEPTER	1.5 L	.25	POT	41.95a-d
10	SCEPTER	1.5 L	.125	PRE	44.40a-d
10	SCEPTER	1.5 L	.125	POT	
11	SCEPTER	1.5 L	.094	PRE	44.80a-d
11	SCEPTER	1.5 L	.156	POT	
12	SCEPTER	1.5 L	.156	PRE	42.78a-d
12	SCEPTER	1.5 L	.094	POT	
13	AC263499	1.95L	.063	PRE	48.90ab
14	AC263499	1.95L	.125	PRE	47.90abc
15	AC263499	1.95L	.063	POT	50.55a
15	TWEEN 20	P	.25	POT	
16	AC263499	1.95L	.125	POT	43.98a-d
16	TWEEN 20	P	.25	POT	
17	BLAZER	2.0 L	.5	POT	49.53a
17	AG-98	P	.13	POT	
18	BLAZER	2.0 L	.5	POT	44.22a-d
18	2,4-DB	2.0 L	.03	POT	
18	AG-98	P	.13	POT	

01-15-1986

DUNCAN'S

The University of Tennessee

MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS

Conducted at SPRING HILL, TN by NEIL RHODES
Project TN-692-B5-M-3 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	YIELD BU/A
19	BASAGRAN	4 L	.75	POT	47.05abc
19	2,4-DB	2.0 L	.03	POT	
20	BLAZER	2.0 L	.25	POT	45.82a-d
20	BASAGRAN	4 L	.5	POT	
20	AG-98	P	.13	POT	
21	RH-0265	2 E	.18	POT	37.25bcd
21	AG-98	P	.13	POT	
22	RH-0265	2 E	.12	POT	47.23abc
22	AG-98	P	.13	POT	
22	2,4-DB	2.0 L	.03	POT	
23	RH-0265	2 E	.18	POT	44.80a-d
23	2,4-DB	2 L	.03	POT	
23	AG-98	P	.13	POT	
24	REFLEX	2 E	.38	POT	53.40a
24	C.O.C.	P	1	POT	
25	COBRA	2 E	.2	POT	43.98a-d
26	COBRA	2 E	.2	POT	46.25a-d
26	X-77	P	.25	POT	
27	PPG-1013	.25 E	.02	POT	46.03a-d
28	PPG-1013	.25 E	.02	POT	41.52a-d
28	X-77	P	.25	POT	
29	WD. FREE				50.73a
30	WEEDY				24.33e

H-692-85-M-S-CASOB Sicklepod Control in Soybeans
Middle Tennessee Experiment Station. 1985

Treatment ¹	Rate lb ai/A	MOA	Percent Control or Injury				7-11-85		GLXMA Yield Bu/A ³	
			6-5-85		6-19-85		6-28	CASOB		
			CASOB	DIGSA	CASOB	GLXMA	CASOB	%		Ht (cm)
1. Scepter	.125	PRE	78	75	86	4	73	49	39	33.5 e-g
2. Scepter	.25	PRE	80	99	90	15	88	76	32	33.1 e-f
3. Scepter	.125	Post	0	0	78	0	51	14	57	26.8 g
4. Scepter fb Scepter	.125; .125	PRE; Post	78	99	91	8	89	68	31	39.1 c-f
5. Scepter	.25	Post	15	0	86	4	79	44	34	33.5 e-g
6. Scepter + Sencor	.125 + .38	PRE	91	99	91	4	86	72	33	37.7 d-f
7. Scepter + Sencor fb Scepter	.125 + .38; .125	PRE; Post	89	75	97	11	96	94	17	48.3 a-d
8. Canopy fb Scepter	.38; .125	PRE; Post	83	99	95	4	96	93	18	46.7 a-d
9. Canopy	.38	PRE	84	75	81	0	64	45	55	29.9 fg
10. Canopy fb Classic + X-77	.38; .015 + .25%	PRE; Post	94	99	96	15	96	93	21	48.5 abc
11. Classic + X-77	.0078 + .25%	Post;								
fb Classic + X-77	.015 + .25%	Post	0	0	89	11	75	46	34	41.5 b-e
12. Sencor fb Scepter	.5; .125	PRE; Post	93	75	97	0	97	97	22	46.7 a-d
13. MYX 104 25WP	0.5	Post	0	0	13	0	10	0	74	12.7 h
14. Lasso + Sencor fb;	2.5 + .38;	PRE;								
Sencor + 2,4-DB	.25 + .2	Post Dir.	94	99	91	4	87	95	20	50.7 ab
15. Weedy check	---	---	0	0	13	0	0	0	72	13.0 h
16. Weed free check	---	---	99	99	99	0	99	98	0	55.1 a
		LSD .05	20	32	13	N.S.	15	22	14	9.4

Variety : Essex Planted: May 21 Treated: PRE May 21; E POST-Jun 5, soybean V2 stage, sicklepod 2 true leaves, and <2" in untreated; cotyledon stage and <1" in previously treated; L POST POD-July 10 GPA: 18 MPH: 4 PSI: 32 Tips: 8002
Design: RCB Reps: 4 Plot size: 3-38" rows x 25' Soil type: silty clay loam
Fertility: high P pH: 0.M.: First rainfall: in hours/days.

¹Entire experiment sprayed with Poast (0.3 lb ai/A) plus Agridex (1 qt/A) on 6-7-85 for annual grass control.

²CASOB = sicklepod; DIGSA = large crabgrass; GLXMA = soybeans

³Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-M-Jg-Post Postemergence Johnsongrass Control in Soybeans
Middle Tennessee Experiment Station, Springhill. 1985

Treatment ¹	Rate lb ai/A	Percent Control 6-28-85		GLXMA Yield ² Bu/A	
		DIGSA	SORHA		
1. Assure + COC	.06 + 1 qt/A	92	97	47.2	bcd
2. Assure + COC	.125 + 1 qt/A	92	96	48.3	abcd
3. Fusilade 2000 + COC	.188 + 1 qt/A	91	95	48.2	abcd
4. Fusilade 2000 + COC	.25 + 1 qt/A	93	97	53.2	a
5. Poast + COC	.2 + 1 qt/A	94	95	47.2	bcd
6. Poast + Coc	.3 + 1 qt/A	94	97	48.7	abc
7. Selectone + COC	.25 + 1 qt/A	93	98	49.7	abc
8. Selectone + COC	.38 + 1 qt/A	93	95	46.3	cd
9. Trophy + COC	.25 + 1 qt/A	90	95	42.8	d
10. Trophy + COC	.5 + 1 qt/A	94	97	52.2	ab
11. Verdict + COC	.06 + 1 qt/A	90	97	48.8	abc
12. Verdict + COC	.125 + 1 qt/A	94	97	46.8	bcd
13. Whip	.15	95	97	45.6	cd
14. Whip fb Whip	.15; .01	93	97	49.4	abc
15. Weedy check	---	0	0	23.1	e
16. Weed free check	---	99	99	50.5	abc
	LSD .05	5	4	4.9	

Variety : Essex Planted: 5/21 Treated: 6/19 GPA: 18 MPH: 4 PSI: 32
 Tips: 8002 Design: RCB Reps: 4 Plot size: 3 - 38" rows x 30'
 Soil type: Maury silt loam Fertility: pH: O.M.:
 First rainfall: in hours/days. Soybeans: V4 - V5
 Johnsongrass: 12 - 24"
 Large crabgrass: 2 - 3"
 Smooth crabgrass: 2 - 3"

¹Entire experiment sprayed with Basagran plus 2,4-DB for broadleaf weed control on June 6, 1985.

²Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

DIGSA = large crabgrass; SORHA = johnsongrass

MILAN EXPERIMENT STATION
205 ELLINGTON DRIVE
MILAN, TENNESSEE 38358

Superintendent - Mr. John F. Bradley

Rainfall 1985
Milan Experiment Station

Date	South Tract	North Tract
4-6	.60	.60
4-14	.80	.85
4-23	1.80	1.85
4-26	.10	.15
4-30	.30	.40
5-1	.08	.15
5-7	.55	.37
5-21-22	1.65	1.70
6-6	.30	.42
6-7	.35	.50
6-11	.60	.50
6-17	1.20	.88
6-22	2.05	1.75
6-27	.75	.75
6-30	.25	.25
6-31	.20	.20
7-1	.35	.08
7-6	1.40	1.55
7-22	.10	.65
7-26	.70	1.75
8-5	1.00	1.10
8-14	.15	.10
8-16	2.50	1.85
8-23	.04	.04
8-24	1.00	1.00
9-3	.04	.58
9-6	.70	.70

H-692-85-MES-CASOB Evaluation of Alternaria Cassiae for Sicklepod Control
Milan Experiment Station, Milan

Treatment	Rate lb ai/A	Percent Control or Injury					GLXMA Yield ² Bu/A
		6-31-85 ¹ GLXMA	6-14-85 GLXMA	6-25-85 CASOB	11-3-85 CASOB	11-3-85 CASOB	
1. MYX 104 (25WP)	.125	0	0	20	30	30	18.9 b
2. MYX 104	.25	0	3	26	23	25	18.3 b
3. MYX 104	.5	0	0	0	40	41	19.4 b
4. MYX 104 + Basagran	.125 + .75	1	5	18	23	16	16.7 b
5. MYX 104 + Basagran	.25 + .75	1	8	50	25	25	19.2 b
6. MYX 104 + Basagran	.5 + .75	1	5	25	5	5	15.7 b
7. Scepter	.125	4	3	91	99	96	28.4 a
8. Scepter; Scepter	.125; .125	1	4	86	96	94	27.9 a
9. Scepter	.25	18	13	96	96	95	32.5 a
10. MYX 104 + Scepter	.125 + .125	3	3	91	97	94	33.0 a
11. MYX 104 + Scepter	.25 + .125	1	4	91	97	94	28.1 a
12. MYX 104 + Scepter	.25 + .25	11	9	96	98	94	31.7 a
13. MYX 104 + Classic	.125 + .015	35	40	96	92	71	27.0 a
14. MYX 104 + Classic	.25 + .015	38	35	95	89	88	29.9 a
15. Weedy check	---	0	0	0	0	0	17.0 b
16. Weed free check	---	0	0	99	99	97	32.2 a
LSD .05		7	6	20	27	26	6.0

Variety : Coker 425 Planted: May 9 Treated: May 28; Jun 18 (sequential) GPA: 18 MPH: 4
PSI: 32 Tips: 8002 Design: RCB Reps: 4 Plot size: 4-30" rows x 30' Soil type:
silt loam Fertility: High P; High K pH: O.M.: First rainfall: in hours/days.

Sicklepod - 6/ft² most cotyledon - largest 2 true leaves; a few with only 1 true leaves
Soybeans - V2

Weather conditions at application -9:46 a.m.; partly cloudy; wind N, 1-2 mph; ground moist

¹GLXMA = soybean; CASOB = sicklepod

²Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-MES-POST II Postemergence Herbicide Evaluation
Milan Experiment Station, Milan. 1985

Treatment	Rate lb ai/A	Percent Control or Injury						GLXMA Yield, Bu/A
		June 3, 1985			June 25, 1985			
		GLXMA	XANST	IPOHG	GLXMA	XANST	IPOHG	
1. Reflex + AG98	.25 + .125%	3	96	95	0	96	57	38.8 ab
2. Reflex + AG98	.38 + .125%	9	92	90	0	99	80	35.6 ab
3. Cobra	.2	21	97	93	3	99	61	37.3 ab
4. Cobra + Basagran + COC	.15 + .5 + 1 pt/A	25	96	92	23	97	74	38.3 ab
5. PPG 1013	.02	10	95	95	0	77	53	35.5 ab
6. PPG 1013 + Basagran + COC	.015 + .5 + 1 pt/A	19	94	97	4	99	96	37.3 ab
7. Blazer + 2,4-DB + AG98	.5 + .03 + .125%	21	77	85	29	95	96	37.6 ab
8. RH 0265 + AG98	.18 + .125%	8	91	83	0	98	94	39.2 ab
9. RH 0265 + AG98	.25 + .125%	15	95	90	5	99	86	39.9 ab
10. RH 0265 + 2,4-DB + AG98	.18 + .03 + .125%	16	95	85	16	97	96	36.7 ab
11. Blazer - Scepter	.38 + .06	9	94	93	0	82	99	34.1 ab
12. Blazer + Scepter	.38 + .125	11	96	84	0	99	82	41.4 ab
13. Blazer - Classic + AG98	.38 + .004 + .125%	9	90	86	3	98	74	35.5 ab
14. Blazer + Classic + AG98	.38 + .008 + .125%	13	93	88	3	99	81	42.5 ab
15. Tackle + X-77	.5 + .125%	18	97	98	0	97	97	39.0 ab
16. Tackle + Basagran + X-77	.38 + .5 + .125%	14	99	96	1	98	99	37.8 ab
17. Scepter	.125	6	65	50	0	99	20	38.6 ab
18. Classic + X-77	.008 + .125%	13	64	58	0	98	81	44.0 a
19. Weedy check	--	10	0	0	0	0	0	27.7 c
20. Weed free check	--	1	99	99	0	99	99	37.7 ab
LSD .05		N.S.	38	20	6	14	30	7.8

Variety : Coker 425 Planted: 5/19/85 Treated: 5/31/85 GPA: 16 MPH: 4 PSI: 32
 Tips: 8002 Design: RCB Reps: 4 Plot size: 6- 20" rows x 30' Soil type:
 Grenada silt loam Fertility: pH: 0.M.: Air temperature: 93°F
 Relative humidity: 90%
 Soybeans: V2 - V3 Cockleburs: 41/M² 4 leaves 3-5"
 Entireleaf morningglory: 1 true leaf - 11 per M²
 Ivy leaf morningglory: 1 true leaf - 11 per M²

H-692-85-MES-Post I Postemergence Broadleaf Herbicide Evaluation.
Milan Experiment Station, Milan. 1985

Treatment		Rate lb ai/A	Percent Control or Injury						GLXMA ¹ Yield, Bu/A
			June 3, 1985			June 27, 1985			
			GLXMA	IPOHG	XANST	GLXMA	IPOHG	XANST	
1.	AC 263,499 + X-77	.063 + .25%	0	10	40	0	99	99	36.7 abc
2.	AC 263,499 - X-77	.125 + .25%	3	0	36	10	99	99	40.2 ab
3.	Scepter	.094	0	5	24	0	33	99	37.7 abc
4.	Scepter	.125	3	0	56	0	33	99	35.9 abc
5.	Scepter	.156	3	0	48	0	33	99	37.3 abc
6.	Scepter + 2,4-DB	.094 + .03	15	56	44	12	99	99	30.9 c
7.	Blazer + Basagran + X-77	.25 + .5 + .25%	20	100	100	7	98	96	39.6 abc
8.	Classic + X-77	.0078 + .25%	15	0	29	2	99	98	40.2 ab
9.	Classic + X-77	.015 + .25%	18	13	39	35	99	98	38.9 abc
10.	Classic + 2,4-DB + X-77	.015 + .03 + .25%	33	48	58	60	99	99	31.9 bc
11.	Weedy check	---	0	0	0	0	0	0	22.7 d
12.	Weed free check	---	0	100	100	0	99	99	43.6 a
		LSD .05	7	20	36	8	45	2	7.7

Variety : Coker 425 Planted: May 9 Treated: May 31 GPA: 16 MPH: 4 PSI: 32
 Tips: 8002 Design: RCB Reps: 4 Plot size: 6 - 20" rows x 30'
 Soil type: Grenada silt loam Fertility: pH: 0.M.:
 Air temperature: 93° Relative humidity: 90%
 Soybean stage: V2-V3 Cocklebur - 4 leaves 3-4" 41 per M²

Entireleaf morningglory: 1 true leaf 11 per M²
 Ivyleaf morningglory: 1 true leaf 11 per M²

¹Values followed by the same letter are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-MES-NTCT
Weed Control Systems for No-Till Cotton. Milan Experiment Station. 1985

Treatment ^a	Lint Yield			Lint Quality			% Weed Control		
	Total	First	Harvest	Grade	Staple	Micro- naire	Gin Turnout	6-26-86 ERICA ^b	EPHMA ^b
	Lbs/A	Lbs/A	%		32's		%		
1. Paraquat + Prowl + Cotoran	637	517	81	52	36	4.5	36.7	80	0
2. Roundup + Prowl + Cotoran	655	551	84	52	36	4.3	36.8	99	30
3. Roundup + Prowl + Cotoran fb Bladex + MSMA	775	683	88	52	36	4.6	37.6	85	30
4. Roundup + Dual + Cotoran fb Bladex + MSMA	928	739	80	51	37	4.6	37.5	85	80
5. Roundup + Zorial + Cotoran fb Bladex + MSMA	933	730	78	50	37	4.6	38.9	85	90
6. Conv. ck-Prowl + Cotoran fb cultivation	738	527	71	51	36	4.3	34.6	95	95
7. Paraquat + Prowl + Cotoran fb Bladex + MSMA	760	616	81	52	36	4.4	36.5	25	50
8. Paraquat + Dual + Cotoran fb Bladex + MSMA	605	462	76	52	36	4.4	35.6	0	75
9. Paraquat + Zorial + Cotoran fb Bladex + MSMA	365	199	55	61	36	4.8	34.9	0	90
10. Conv. ck-Prowl + Cotoran fb Bladex + MSMA	731	486	67	52	36	4.7	33.6	95	90
LSD .05	249	195	-	-	-	-	-	22	30
C.V.%	24	24	-	-	-	-	-	31	36

^aHerbicide rates in lbs ai/A are as follows: Paraquat-0.25; Roundup-1.0; Cotoran-1.5; Dual 1.5; Prowl-0.75; Zorial-1.5; Bladex-1.0; and MSMA-2.0.

^bERICA = horseweed (marestail); EPHMA = spotted spurge

Planted: May 8, 1985 Treated: PRE - May 8, 1985; POD - Jun 14, 1985 Soil type: Memphis silt loam O.M.:
1% Variety: Stoneville 825 TSX-Temik IF at planting Fertility: 60-60-60 + 0.5B.

Treatment	lb ai/A	Percent Control 4-29-85			Soybean Yield Bu/A
		HORPU	BROSE	WEEDS ¹	
1. Bladex 4L	2.0	75	92	78	42.8
2. Bladex 4L + Cinch 7EC	2 + 1	93	89	81	42.0
3. Bladex 4L + Prowl 4EC	2 + 1	62	55	74	43.2
4. Bladex 4L + Surflan 4AS	2 + 1.25	84	72	96	42.7
5. Surflan 4AS	1.25	0	0	0	43.9
6. Surflan 4AS + 2,4-D	1.25 + 1.0	0	0	39	42.7
7. Surflan 4AS + Buctril 2EC	1.25 + .38	0	0	70	43.9
8. Command 6EC	1.0	54	53	92	42.7
9. Poast 1.5EC + 2,4-D	0.1 + 1	0	0	48	39.8
10. Verdict 2EC + 2,4-D	0.125 + 1	20	23	46	40.9
11. Canopy 75DF	.38	55	34	94	42.0
12. Lexone/Sencor 75DF	.38	11	33	68	42.1
13. Check	---	20	13	0	43.2
	LSD .05	28	35	46	N.S. C.V. = 10.5%

X-77 @ 0.5% v/v in each treatment. For Canopy 75DF used Classic 75DF .89g and Lexone DF 5.36g.

Variety : Asgrow 5474 Planted: May 14 Treated: 4-2-85 GPA: 18 MPH: 4 PSI: 30 Tips: 8003
 Design: RCB Reps: 4 Plot size: 10' x 30' Soil type: Grenada silt loam
 Fertility: 0-60-60 on 4/17 pH: 6.1 O.M.: 1% First rainfall: in hours/days.
 Air temp: 62 degrees F Soil temp: 63 degrees F @ 2" Windy - SW 5-12mph; sunny.

¹Weeds = winter annual broadleaf weeds such as vetch, chickweed, Virginia pepperweed, Carolina geranium, and cutleaf eveningprimrose.

HORPU = Little barley
 BROSE = Cheat

H-692-85-MES-Nt-Cr Herbicide Evaluation for No-till Corn
Milan Experiment Station, Milan. 1985

Treatment	Rate lb ai/A	Percent Control		Corn Yield	
		4/29/85	7/19/85	DIGSA	AMACH
		DIGSA	AMACH	DIGSA	AMACH
					Bu/A
1. Lasso 4ME + Aatrex 4L + Paraquat 2S + X-77	2 + 1.6 + 0.5 + 0.5%	99	99	99	99
2. Bicep 4.5F + Paraquat + X-77	3.6 + 0.5 + 0.5%	99	99	99	99
3. Bronco 4E + Aatrex 4L	4 + 1.6	99	99	99	99
4. Prowl 4E + Aatrex 4L + Paraquat 2S + X-77	1 + 1.6 + 0.5 + 0.5%	99	98	99	99
5. Aatrex 4L + Paraquat 2S + X-77	2 + 0.5 + 0.5%	70	99	89	99
6. Extrazine 4L + Paraquat 2S + X-77	2.7 + 0.5 + 0.5%	99	97	98	99
7. Extrazine 4L + Agridex in H ₂ O	2.7 + 1	99	98	97	99
8. Extrazine 4L + 2,4-D + 32% N	2.7 + 1	99	98	98	98
9. SC0224 4L + Lasso 4ME + Aatrex 4L	1.4 + 2.6 + 1.6	99	99	99	99
10. HOE 39866 1.6E + Bicep 4.5L	.75 + 3.6	99	99	99	99
11. Buctril 2E + Lasso 4ME + Aatrex 4L + X-77	.38 + 2 + 1.6 + 0.5%	99	96	98	99
12. Paraquat 2S + X-77	0.5 + 0.5%	0	50	0	0
LSD .05		20	1	5	1

Variety : Pioneer 3147 Planted: 4/8/85 Treated: 4/9/85 (3-4 pm) 62 degrees F air temp;
56 degrees F 2" soil temp; sunny, clear; wind NW 3-5 mph gpa: 16 MPH: 4
PSI: 30 Tips: 8003 Design: RCB Reps: 4 Plot size: 13.3 x 30' Soil type: silt loam
Fertility: 150-60-60 (4-8-85) Lime 2 T/A (3-8-85)

AMACH = smooth pigweed
DIGSA = large crabgrass

H-692-85-MES-S-NT Burndown Herbicides for No-till Soybeans.
Milan Experiment Station, 1985

Treatment	Rate lb ai/A	GLXMA Yield, Bu/A ¹
1. Paraquat + Lasso	0.25 + 2.5	51.6
2. Paraquat + Lasso	0.38 + 2.5	50.5
3. Paraquat + Lasso	0.5 + 2.5	50.3
4. Roundup + Lasso	0.5 + 2.5	52.0
5. Roundup + Lasso	1.0 + 2.5	51.0
6. Roundup + Lasso	2.0 + 2.5	53.5
7. HOE 39866 + Lasso	0.5 + 2.5	50.1
8. HOE 39866 + Lasso	0.75 + 2.5	54.7
9. HOE 39866 + Lasso	1.0 + 2.5	49.4
10. SC 0224 + Lasso	0.5 + 2.5	49.3
11. SC 0224 + Lasso	1.0 + 2.5	52.5
12. SC 0224 + Lasso	2.0 + 2.5	51.0
13. Lasso	2.5	53.9
	LSD .05	N.S.
	C.V. =	6.4%

*All treatments contained 0.5% v/v Ortho X-77.

Variety :Asgrow A5474 Planted:May 13, 1985 Treated:May 14, 1985
PSI: 30 Tips:8003 MPH: 4 Design:RCB Reps: 4 Plot size:
6 - 20" rows x 30' long

¹There was no difference in yield since test was no-tilled into grain sorghum stubble heavily infested with cheat which matured and formed a dense mulch. This mulch plus the Lasso was adequate to control all weeds except a few cocklebur which were controlled with Basagran at 1 qt/A on June 2, 1985.

CV 10.2%

¹SORHA = johnsongrass; ELEIN = goosegrass; EPHMA = spotted spurge; XANST = cocklebur; GLXMA = soybeans

²Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-MES-HOE Evaluation of HOE 39866 for Weed Control in No-till Soybeans

Treatment	Rate lb ai/A	Percent Control 10-24-85		GLXMA Yield ¹ Bu/A
		DIGSA	XANST	
1. HOE 39866 + Dual + Sencor	.75 + 1.5 + .38	56	30	31.5 bc
2. HOE 39866 + Sencor fb Basagran	.75 + .38 fb .75	40	98	34.9 b
3. HOE 39866 fb Whip + Basagran	.75 fb .2 + .75	54	97	35.9 ab
4. HOE 39866 + Dual + Sencor fb + Basagran	.75 + 1.5 + .38 fb .75	50	97	34.9 b
5. HOE 39866 + Sencor fb Whip + Basagran + Blazer	0.5 + .38 fb .2 + .5 + .25	25	98	25.7 c
6. HOE 39866 + Sencor fb Whip + Basagran + Blazer	1.0 + .38 fb .2 + .5 + .25	80	99	39.7 ab
7. Bronco + Sencor fb Basagran fb Poast + COC	4.0 + .38 fb .5 + .3 + 1 pt/A	96	99	44.4 a
8. Check	---	0	0	7.6 d
	LSD .05	43	9	8.2

Variety : Asgrow A5474 Planted: 6/17 Treated: Pre -6/18; POST July 12 GPA: 18
 MPH: 4 PSI: 40 Tips: 8002 Design: RCB Reps: 4 Plot size: 6 - 20" rows x 30'
 Soil type: Loring silt loam Fertility: 0-60-60 pH: 6.0 (2 T/A lime) O.M.:
 First rainfall: 0.4" in 10 days.

DIGSA = Large crabgrass; XANST = Common cocklebur; GLXMA = Soybeans

¹Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-MES-PRE II Herbicide Evaluation for No-till Soybeans. Milan Exp. Sta. 1985

Treatment	Rate lb ai/A	Percent Control or Injury			GLXMA Yield ¹ Bu/A
		7/12/85 GLXMA	10/24/85 DIGSA	XANST	
1. Dual + Roundup	1.5 + 2	9	81	51	39.6 ab
2. CGA 24704 + Roundup	1.5 + 2	11	89	86	41.3 ab
3. Harness + Roundup	1.5 + 2	0	86	89	41.7 ab
4. Lasso + Roundup	2.5 + 2	13	59	60	38.7 b
5. Surflan + Roundup	1.0 + 2	13	85	65	39.9 ab
6. Prowl + Roundup	1.0 + 2	6	94	88	43.1 ab
7. Cinch + Roundup	1.0 + 2	5	75	80	39.3 ab
8. EL 107 + Roundup	.088 + 2	14	61	68	37.9 b
9. EL 107 + Roundup	.132 + 2	30	63	84	38.1 b
10. Command + Roundup	1.0 + 2	5	97	91	45.5 a
11. Zorial + Roundup	1.0 + 2	29	84	87	40.1 ab
12. Scepter + Roundup	0.125 + 2	23	88	84	42.2 ab
13. RE39571 + Roundup	2.0 + 2	14	83	55	41.0 ab
14. Roundup	2.0	3	72	70	40.8 ab
LSD .05			N.S.	N.S.	5.6

Variety : Asgrow A5474 Planted: 6/17 Treated: 6/18 GPA: 18 MPH: 4 PSI: 32
 Tips: 8002 Design: RCB Reps: 4 Plot size: 6-20" rows x 30' Soil type: Loring silt loam
 Fertility: 0-60-60 pH: 6.0 + 2 T/A lime O.M.: 1.2 First rainfall: 1.75" in 4 days.

¹Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-MES-JG-Post Postemergence Johnsongrass Control in No-Till Soybeans
Milan Experiment Station, Milan. 1985

Treatment ¹	Rate lb ai/A	Percent Control				GLXMA Yield Bu/A ³
		8-9-85		10-24-85		
		SORHA ²	DIGSA	SORHA	DIGSA	
1. Assure + COC	.06 + 1 qt/A	91	95	82	98	45.6 ab
2. Assure + COC	.125 + 1 qt/A	91	96	85	98	42.6 b
3. Fusilade 2000 + COC	.188 + 1 qt/A	94	96	89	98	45.3 ab
4. Fusilade 2000 + COC	.25 + 1 qt/A	96	98	87	99	45.0 ab
5. Poast + COC	.2 + 1 qt/A	86	94	88	99	41.9 b
6. Poast + Coc	.3 + 1 qt/A	78	95	65	98	41.9 b
7. Selectone + COC	.25 + 1 qt/A	76	95	65	96	44.3 ab
8. Selectone + COC	.38 + 1 qt/A	75	96	73	98	41.7 b
9. Trophy + COC	.25 + 1 qt/A	71	81	71	96	41.8 b
10. Trophy + COC	.5 + 1 qt/A	95	96	98	99	45.4 ab
11. Verdict + COC	.06 + 1 qt/A	86	95	79	98	46.5 ab
12. Verdict + COC	.125 + 1 qt/A	92	97	91	98	45.9 ab
13. Whip	.15	86	88	86	91	44.1 ab
14. Whip fb Whip	.15; 0.1	80	96	97	99	48.0 a
15. Weedy check	---	0	0	0	0	31.1 c
16. Weed free check	---	99	99	97	96	42.3 b
	LSD .05	16	10	29	6	4.6

Variety : Asgrow A5474 Planted: 6/17 Treated: July 12; Aug 9 GPA: 18 MPH: 4 PSI: 32
 Tips: 8002 Design: RCB Reps: 4 Plot size: 6 - 20" rows x 30'
 Soil type: Henry silt loam Fertility: 0-60-60 pH: 6.0 + 2 T/A lime O.M.: 1.2
 First rainfall: 0.4" in 10 days.

¹Entire experiment sprayed with Roundup at 2 qts/A on June 19, 1985 and Basagran at 2 pts/A on July 2.

²SORHA = johnsongrass, DIGSA = large crabgrass, GLXMA = soybeans

³Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-MES-NT-SB-POST Postemergence Broadleaf Weed Control in No-Till Soybeans
Milan Experiment Station, Milan. 1985

Treatment ¹	Rate lb ai/A	Weed Control or Injury ²	GLXMA Yield Bu/A
1. AC 263,499	.063		47.7
2. AC 263,499	.125		50.7
3. Scepter	.094		48.8
4. Scepter	.125		45.1
5. Classic	.0078		47.5
6. Classic	.015		47.6
7. Reflex	.25		47.3
8. Reflex + Basagran	.25 + .5		47.1
9. Cobra	.2		45.8
10. Cobra + Basagran	.15 + .5		47.4
11. PPG 1013	.02		45.5
12. PPG 1013 + Basagran	.015 + .5		46.5
13. RH 0265	.25		45.6
14. Tackle	.5		47.3
15. Blazer + Basagran	.25 + .5		46.7
16. Blazer + Scepter	.25 + .125		48.3
17. Blazer + Classic	.25 + .0078		45.4
18. Scepter + 2,4-DB	.125 + .03		49.6
19. Classic + 2,4-DB	.0078 + .03		45.5
20. Weedy check	---		43.6
		LSD .05	N.S.
		C.V. %	6.3

Variety: Asgrow A5474 Planted: 6/17 Treated: July 12 GPA: 18 MPH: 4 PSI: 32
Tips: 8002 Design: RCB Reps: 4 Plot size: 6 - 20" rows x 30' Soil type: Grenada
silt loam Fertility: 0-60-60 pH: 6.0 + 2 T/A lime O.M.: 1.2 First rainfall: in

¹Entire experiment treated with Roundup (1 lb ai/A) at planting and with Poast (0.3 lb ai/A). All herbicide treatments included 0.5% X-77.

²There was only a few common lambsquarters in the weedy check plots in this test which may be why the weedy check is slightly lower than some of the other treatments. Nevertheless, there was not sufficient pressure to adequately rate, nor was there any appreciable crop injury.

PLATEAU EXPERIMENT STATION
CROSSVILLE, TENNESSEE
38555

Superintendent - Dr. Robert D. Freeland

Rainfall
Plateau Experiment Station
Crossville, TN 1985

Date	April	May	June	July	August	September
1	.49	0	0	1.10	.16	0
2	0	.07	.34	.40	.24	0
3	0	.22	0	0	0	0
4	0	0	.80	.04	0	0
5	0	0	0	0	0	.27
6	.71	0	0	.18	.46	.12
7	0	0	.35	0	.31	.07
8	.24	.03	1.07	0	.28	0
9	.07	0	0	0	0	0
10	0	0	0	0	0	0
11	0	0	0	.15	0	0
12	0	0	.46	0	0	0
13	.12	.35	0	0	0	0
14	.01	.07	0	.02	0	0
15	.93	0	0	.47	0	0
16	.34	0	.03	0	.03	0
17	0	.17	.12	0	2.91	0
18	0	.21	.82	0	.25	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0
21	0	1.16	0	0	.05	0
22	0	.17	0	.17	0	0
23	0	.12	.07	.22	.12	0
24	.05	.11	0	0	.02	.25
25	0	0	0	0	.34	0
26	0	0	0	.05	.45	.79
27	0	0	0	1.16	0	.48
28	.22	.32	0	.04	0	0
29	.22	.03	0	.01	0	0
30	0	0	0	0	0	0
31	---	0	---	.04	.37	---
Total	3.40	3.03	4.06	4.05	5.99	1.98

Temperature
Plateau Experiment Station
Crossville, TN 1985

	<u>April</u>		<u>May</u>		<u>June</u>		<u>July</u>		<u>August</u>		<u>September</u>	
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	60	33	75	59	80	64	80	57	86	67	81	60
2	53	28	62	57	85	61	70	58	82	61	81	60
3	50	30	71	50	86	60	77	55	76	60	82	62
4	70	41	63	41	86	61	81	60	80	60	81	63
5	75	52	71	49	87	64	79	60	79	58	84	58
6	65	35	75	50	88	64	81	58	74	61	82	66
7	58	39	77	54	86	62	77	59	70	63	80	63
8	50	29	73	54	74	58	81	57	71	65	85	63
9	50	22	62	51	81	59	85	65	82	63	87	63
10	48	25	67	53	85	65	87	66	85	62	85	62
11	61	36	71	55	85	64	88	62	86	62	85	65
12	70	49	75	61	80	57	86	64	88	64	80	55
13	71	50	78	55	67	41	89	67	87	68	72	48
14	66	51	81	57	66	44	89	65	85	65	68	42
15	67	51	82	61	72	49	90	66	84	67	65	42
16	63	47	79	46	77	57	89	63	81	65	71	42
17	68	51	74	53	80	57	83	56	75	66	73	45
18	79	49	59	46	82	60	85	60	71	65	75	47
19	80	53	67	40	75	55	85	65	82	60	78	47
20	80	55	74	46	71	47	89	65	86	64	78	50
21	80	53	75	58	75	50	90	65	80	65	80	50
22	80	55	80	61	77	56	90	65	77	55	80	54
23	80	60	71	53	80	62	85	65	76	59	79	56
24	68	55	55	51	83	62	80	65	71	60	69	53
25	72	45	70	44	86	62	79	64	71	61	66	45
26	77	46	73	45	87	61	83	67	76	61	75	49
27	80	61	78	52	85	63	76	67	75	58	65	44
28	69	60	81	60	84	59	72	65	79	59	62	38
29	73	54	73	57	76	58	79	63	82	59	68	41
30	77	51	79	57	80	52	80	65	85	63	30	47
31	--	--	81	66	--	--	83	65	81	55	--	--

01-28-1986

EXPERIMENT DESCRIPTION FORM

The University of Tennessee

MANAGEMENT OF ANNUAL GRASSES IN CORN

Conducted at CROSSVILLE, TN by NEIL RHODES
Project TN-692-85-P-1 with cooperator PLATEAU EXPT STA

Experimental Management

Date Planted 6-3-85 Variety PIONEER 3320 Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*35 FT
Field Preparation and Plot Maintenance DISK AND ROTERRA

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture SILT LOAM
Soil Series HARTSELLS

% OM 0.5 pH 6

Application Information

	1	2	3	4	5	6
Date Treated	6-3-85	6-19-85	6-25-85	7-5-85		
Time Treated	PM	PM	PM	PM		
Cloud Cover	100%	100%	0%	100%		
Air Temperature	78	69	80	79		
Relative Humidity	70%	64%	68%	72%		
Wind Speed/Direction	4MPH-W	3MPH-W	4MPH-W	5MPH-W		
Soil Temperature	78	75	90	91		
Soil/Leaf Surface Moisture	MOIST	DRY	DRY	DRY		
Soil Subsurface Moisture	MOIST	MOIST	MOIST	MOIST		
Soil Tilth	FINE	N/A	N/A	N/A		
Crop Stage	PPI&PRE	4-6 IN	5-8 IN	18" DIR.		
Pest Name, Stage & Density						
PANDI 2/FT	PRE	3-4 LF	4-5 LF	4-6 LF		
ELEIN 2/FT	PRE	2-4 LF	4-5 LF	4-7 LF		
POROL 1/FT	PRE	3-4 IN	5-6 IN	5-6 IN		

Application Equipment

	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1.	CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	18	WATER	30
2.	CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
3.	CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
4.	CO2 BACKPACK	3	FLAT FAN	8002	10	18	2 FT	20	WATER	30

Comments

PANDI=FAH PANICUM; ELEIN=GOOSEGRASS; POROL=COMMON PURSLANE. ALL PPI TMTS INCORPORATED WITH A LELY ROTERRA, ONE PASS, IMMEDIATELY FOLLOWING APPLICATION. INITIAL GROWTH OF CORN SLOW DUE TO COLD TEMPERATURES. POST DIRECTED TREATMENT (LOROX,TMT#9) APPLIED WITH DROP NOZZLES, 2/ROW.

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TRT.	PEST.	RATE	GROW.	CRINJ	PANDI	ELEIN	POROL	CRINJ	PANDI	ELEIN	POROL
NUM.	NAME	FORM	#ai/A	STAGE	7-5-85	7-5-85	7-5-85	7-5-85	7-19-85	7-19-85	7-19-85
1	ERADXTTRA	6.0 E	4.0	PPI	0.0	98.8	100.0	100.0	0.0	98.3	100.0
1	ATRAZINE	4.0 L	1.5	PRE							
2	SUTAN+	6.7 E	4.0	PPI	1.3	96.3	100.0	100.0	0.0	92.5	99.5
2	ATRAZINE	4.0 L	1.5	PRE							
3	ATRAZINE	4.0 L	2.0	PRE	0.0	75.0	97.5	100.0	0.0	58.8	96.3
4	LASSO MT	4.0 L	2.0	PRE	1.8	96.8	99.0	100.0	0.0	96.8	100.0
4	ATRAZINE	4.0 L	1.5	PRE							
5	DUAL	8.0 E	1.5	PRE	2.5	86.3	100.0	100.0	0.0	85.0	99.5
5	ATRAZINE	4.0 L	1.5	PRE							
6	ATRAZINE	4.0 L	1.5	PRE	0.0	63.8	100.0	100.0	0.0	37.5	93.8
7	PRINCEP	.80 W	1.5	PRE	0.0	67.5	95.0	100.0	0.0	60.0	96.3
7	ATRAZINE	4.0 L	1.5	PRE							
8	PROWL	4.0 E	1.0	PRE	0.0	92.5	99.3	100.0	0.0	81.3	96.8
8	ATRAZINE	4.0 L	1.5	PRE							
9	LASSO MT	4.0 L	2.0	PRE	0.0	98.3	100.0	100.0	0.0	91.3	100.0
9	ATRAZINE	4.0 L	1.5	PRE							
9	LOROX	4.0 L	1.0	PDIR							
10	SC-5676	8.0 E	.75	PRE	0.0	94.0	100.0	99.0	0.0	88.3	100.0
10	R-25788	6.0 E	.13	PRE							96.8
11	SC-5676	8.0 E	1.5	PRE	1.3	95.0	100.0	98.8	2.5	92.5	100.0
11	R-25788	6.0 E	.25	PRE							
12	SC-5676	8.0 E	.75	PRE	3.8	97.3	100.0	100.0	0.0	95.0	97.5
12	R-25788	6.0 E	.13	PRE							100.0
12	ATRAZINE	4.0 L	1.5	PRE							
13	PRINCEP	.80 W	1.5	PRE	0.0	82.5	96.3	96.3	0.0	57.5	78.8
14	PRINCEP	.80 W	2.0	PRE	0.0	84.3	95.8	100.0	0.0	71.3	92.5
15	SC-0051	.55 E	1.5	PRE	0.0	91.3	97.5	95.0	0.0	81.3	95.8
16	SC-0106	2.0 L	2.0	PRE	2.5	98.8	100.0	91.3	3.8	95.0	100.0
16	R-29148	2.0 E	1.0	PRE							
17	PROWL	4.0 E	1.0	POT1	1.3	88.3	100.0	100.0	0.0	85.0	99.5
17	ATRAZINE	4.0 L	1.5	POT1							100.0
17	C.O.C.	P	1.0	POT1							

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TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A	STAGE	CRINJ 7-5-85	PANDI 7-5-85	ELEIN 7-5-85	POROL 7-5-85	CRINJ 7-19-85	PANDI 7-19-85	ELEIN 7-19-85	POROL 7-19-85
18	TANDEM	4.0 E	.5	POT1	2.5	90.0	100.0	100.0	0.0	86.3	100.0	100.0
18	ATRAZINE	.90 D	1.5	POT1								
18	C.O.C.	P	1.0	POT1								
19	TANDEM	4.0 E	.75	POT1	0.0	86.3	100.0	100.0	0.0	88.8	100.0	100.0
19	ATRAZINE	.90 D	1.5	POT1								
19	C.O.C.	P	1.0	POT1								
20	ATRAZINE	.90 D	1.5	POT1	0.0	65.0	97.5	100.0	0.0	57.5	90.0	100.0
20	C.O.C.	P	1.0	POT1								
21	TANDEM	4.0 E	.5	POT2	0.0	68.8	100.0	98.8	0.0	62.5	92.5	100.0
21	ATRAZINE	.90 D	1.5	POT2								
21	C.O.C.	P	1.0	POT2								
22	TANDEM	4.0 E	.75	POT2	0.0	86.8	100.0	100.0	0.0	85.0	100.0	100.0
22	ATRAZINE	.90 D	1.5	POT2								
22	C.O.C.	P	1.0	POT2								
23	SC-0051	.55 E	.5	POT2	15.0	70.0	88.8	97.5	8.8	60.0	80.0	91.3
24	SC-0051	.55 E	1.0	POT2	40.0	90.0	100.0	100.0	16.3	87.5	99.5	100.0
25	WEEDFREE				0.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
26	WEEDY				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05) =					2.869	15.80	4.415	3.009	2.146	17.35	7.830	3.479
STANDARD DEVIATION =					2.029	11.17	3.122	2.128	1.518	12.27	5.537	2.460
COEFF. OF VARIABILITY =					73.52	13.43	3.291	2.234	126.3	16.00	5.978	2.571

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MANAGEMENT OF ANNUAL GRASSES IN CORN

Conducted at CROSSVILLE, TN by NEIL RHODES
Project TN-692-85-P-1 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A	STAGE	PANDI 8-8-85	ELEIN 8-8-85	POROL 8-8-85
=====							
1	ERADXTA	6.0 E	4.0	PPI	98.8	100.0	100.0
1	ATRAZINE	4.0 L	1.5	PRE			
2	SUTAN+	6.7 E	4.0	PPI	91.3	100.0	100.0
2	ATRAZINE	4.0 L	1.5	PRE			
3	ATRAZINE	4.0 L	2.0	PRE	66.3	100.0	100.0
4	LASSO MT	4.0 L	2.0	PRE	98.3	100.0	100.0
4	ATRAZINE	4.0 L	1.5	PRE			
5	DUAL	8.0 E	1.5	PRE	79.5	100.0	100.0
5	ATRAZINE	4.0 L	1.5	PRE			
6	ATRAZINE	4.0 L	1.5	PRE	46.3	95.8	100.0
7	PRINCEP	.80 W	1.5	PRE	55.0	97.5	100.0
7	ATRAZINE	4.0 L	1.5	PRE			
8	PROWL	4.0 E	1.0	PRE	78.8	96.3	100.0
8	ATRAZINE	4.0 L	1.5	PRE			
9	LASSO MT	4.0 L	2.0	PRE	93.8	100.0	100.0
9	ATRAZINE	4.0 L	1.5	PRE			
9	LOROX	4.0 L	1.0	PDIR			
10	SC-5676	8.0 E	.75	PRE	86.8	98.3	100.0
10	R-25788	6.0 E	.13	PRE			
11	SC-5676	8.0 E	1.5	PRE	91.3	100.0	98.8
11	R-25788	6.0 E	.25	PRE			
12	SC-5676	8.0 E	.75	PRE	88.3	100.0	100.0
12	R-25788	6.0 E	.13	PRE			
12	ATRAZINE	4.0 L	1.5	PRE			
13	PRINCEP	.80 W	1.5	PRE	67.5	88.8	100.0
14	PRINCEP	.80 W	2.0	PRE	68.8	92.5	100.0
15	SC-0051	.55 E	1.5	PRE	83.8	96.3	98.8
16	SC-0106	2.0 L	2.0	PRE	92.5	100.0	95.0
16	R-29148	2.0 E	1.0	PRE			
17	PROWL	4.0 E	1.0	POT1	86.3	98.8	100.0
17	ATRAZINE	4.0 L	1.5	POT1			
17	C.O.C.	P	1.0	POT1			

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MANAGEMENT OF ANNUAL GRASSES IN CORN

Conducted at CROSSVILLE, TN by NEIL RHODES
Project TN-692-85-P-1 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A	POT1 STAGE	PANDI 8-8-85	ELEIN 8-8-85	POROL 8-8-85
18	TANDEM	4.0 E .5	POT1	85.0	100.0	100.0	
18	ATRAZINE	.90 D 1.5	POT1				
18	C.O.C.	P 1.0	POT1				
19	TANDEM	4.0 E .75	POT1	82.5	98.8	100.0	
19	ATRAZINE	.90 D 1.5	POT1				
19	C.O.C.	P 1.0	POT1				
20	ATRAZINE	.90 D 1.5	POT1	57.5	95.0	100.0	
20	C.O.C.	P 1.0	POT1				
21	TANDEM	4.0 E .5	POT2	52.5	92.5	100.0	
21	ATRAZINE	.90 D 1.5	POT2				
21	C.O.C.	P 1.0	POT2				
22	TANDEM	4.0 E .75	POT2	81.8	96.8	100.0	
22	ATRAZINE	.90 D 1.5	POT2				
22	C.O.C.	P 1.0	POT2				
23	SC-0051	.55 E .5	POT2	62.5	87.5	97.5	
24	SC-0051	.55 E 1.0	POT2	80.0	96.3	98.8	
25	WEEDFREE			100.0	100.0	100.0	
26	WEEDY			0.0	0.0	0.0	
LEAST SIGNIFICANT DIFF. (.05)=				19.26	6.845	2.458	
STANDARD DEVIATION =				13.62	4.840	1.738	
COEFF. OF VARIABILITY =				17.94	5.177	1.816	

The University of Tennessee

MANAGEMENT OF ANNUAL GRASSES IN CORN

Conducted at CROSSVILLE, TN by NEIL RHODES
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MANAGEMENT OF ANNUAL GRASSES IN CORN

TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A STAGE	YIELD BU/A
1	ERADXTTRA	6.0 E 4.0	PPI	114.5a
1	ATRAZINE	4.0 L 1.5	PRE	
2	SUTAN+	6.7 E 4.0	PPI	102.0abc
2	ATRAZINE	4.0 L 1.5	PRE	
3	ATRAZINE	4.0 L 2.0	PRE	95.5abc
4	LASSO MT	4.0 L 2.0	PRE	81.0c
4	ATRAZINE	4.0 L 1.5	PRE	
5	DUAL	8.0 E 1.5	PRE	80.3c
5	ATRAZINE	4.0 L 1.5	PRE	
6	ATRAZINE	4.0 L 1.5	PRE	82.8bc
7	PRINCEP	.80 W 1.5	PRE	91.0abc
7	ATRAZINE	4.0 L 1.5	PRE	
8	PROWL	4.0 E 1.0	PRE	98.3abc
8	ATRAZINE	4.0 L 1.5	PRE	
9	LASSO MT	4.0 L 2.0	PRE	100.3abc
9	ATRAZINE	4.0 L 1.5	PRE	
9	LOROX	4.0 L 1.0	PDIR	109.3abc
10	SC-5676	8.0 E .75	PRE	102.0abc
10	R-25788	6.0 E .13	PRE	
11	SC-5676	8.0 E 1.5	PRE	90.8abc
11	R-25788	6.0 E .25	PRE	
12	SC-5676	8.0 E .75	PRE	93.5abc
12	R-25788	6.0 E .13	PRE	
12	ATRAZINE	4.0 L 1.5	PRE	
13	PRINCEP	.80 W 1.5	PRE	104.3abc
14	PRINCEP	.80 W 2.0	PRE	107.0abc
15	SC-0051	.55 E 1.5	PRE	102.5abc
16	SC-0106	2.0 L 2.0	PRE	92.5abc
16	R-29148	2.0 E 1.0	PRE	
17	PROWL	4.0 E 1.0	POT1	98.3abc
17	ATRAZINE	4.0 L 1.5	POT1 (74)	
17	C.O.C.	P 1.0	POT1	

02-01-1986

DUNCAN'S I.

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MANAGEMENT OF ANNUAL GRASSES IN CORN

Conducted at CROSSVILLE, TN by NEIL RHODES
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TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	YIELD BU/A
18	TANDEM	4.0 E	.5	POT1	112.0ab
18	ATRAZINE	.90 D	1.5	POT1	
18	C.O.C.	P	1.0	POT1	
19	TANDEM	4.0 E	.75	POT1	103.8abc
19	ATRAZINE	.90 D	1.5	POT1	
19	C.O.C.	P	1.0	POT1	
20	ATRAZINE	.90 D	1.5	POT1	107.3abc
20	C.O.C.	P	1.0	POT1	
21	TANDEM	4.0 E	.5	POT2	93.3abc
21	ATRAZINE	.90 D	1.5	POT2	
21	C.O.C.	P	1.0	POT2	
22	TANDEM	4.0 E	.75	POT2	91.5abc
22	ATRAZINE	.90 D	1.5	POT2	
22	C.O.C.	P	1.0	POT2	
23	SC-0051	.55 E	.5	POT2	106.5abc
24	SC-0051	.55 E	1.0	POT2	109.3abc
25	WEEDFREE				120.8a
26	WEEDY				94.3abc

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MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS

Conducted at CROSSVILLE, TN by NEIL RHODES
Project TN-692-85-P-2 with cooperators PLATEAU EXPT STA

PEST. NAME	RATE	GROW. STAGE	CRINJ	AMACH	MOLVE	ANTCO	PANDI
FORM	#ai/A	7-11-85	7-11-85	7-11-85	7-11-85	7-11-85	7-11-85

LEXONE 02-01-1986 PRE 0.0 98.8 EXPERIMENT DESCRIPTION FORM
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LOROX 4 L .5 98.8 72.5
MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS

CANDPY 0.75D .38 92.5
Conducted at CROSSVILLE, TN by NEIL RHODES
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GEMINI 0.60W .5 PRE 100.0 97.5
Experimental Management

LEXONE Date Planted 6-6-85 Variety ESSEX Row Width 36 IN
CLASSIC Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
X-77 Field Preparation and Plot Maintenance DISK AND ROTERRA

CANDPY 0.75D .38 PRE 100.0 98.8
Site Description

CLASSIC Season Moisture SEE RAINFALL TABLES
X-77 Soil Texture SILT LOAM
Soil Series HARTSELLS % OM .75 pH 6

CLASSIC 0.25D .016 POT 61.3 22.5
X-77 F .25 POT
Application Information

	1	2	3	4	5	6
SCEPTER Date Treated	6-6-85	7-5-85				
Time Treated	AM	AM				
Cloud Cover	100%	100%				
SCEPTER Air Temperature	85	79	68.8	56.3	40.0	
Relative Humidity	64%	72%				
SCEPTER Wind Speed/Direction	2MPH-S	5MPH-N				
Soil Temperature	88	91	100.0	100.0	91.3	
SCEPTER Soil/Leaf Surface Moisture	MOIST	DRY				
Soil Subsurface Moisture	MOIST	MOIST				
SCEPTER Soil Tilth	FINE	N/A	100.0	100.0	82.5	
SCEPTER Crop Stage	PRE	V4				
Pest Name, Stage & Density						
AMACH 2/FT	PRE	7-8 LF				
SCEPTER MOLVE 5/FT	PRE	2-3 IN	100.0	100.0	93.5	
SCEPTER ANTCO 1/FT	PRE	1-3 IN				
PANDI 2/FT	PRE	4-7 LF				

AC263499 1.95L .063 PRE 72.5 82.5
Application Equipment

	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
AC263499	1.95L	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
TWEEN 20	2.0L	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40

AC263499 1.95L .125 POT 18.8 78.8 63.8 61.3 70.0
TWEEN 20 F .25 POT

BLAZER 2.0 L .5 POT 18.8 100.0 88.8 46.3
AG-98

AMACH=SMOOTH PIGWEED; MOLVE=CARPETWEED; ANTCO=MAYWEED; PANDI=FALL PANICUM.
ENTIRE TEST WAS TREATED ON 7-22-85 WITH POAST AT 0.28 LB AI/A FOR ANNUAL
BLAZER GRASS CONTROL. YIELD DATA ARE AVERAGES OF REPS II, III, AND IV ONLY. HARVESTER
2,4-DB BREAKDOWN CAUSED REP I YIELDS TO BE DELETED.
AG-98

SUMMARY

The University of Tennessee
MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS

Conducted at CROSSVILLE, TN by NEIL RHODES
 Project TN-692-85-P-2 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A	CRINJ STAGE	AMACH 7-11-85	MOLVE 7-11-85	ANTCO 7-11-85	PANDI 7-11-85
01	LEXONE	0.75D .38	PRE	0.0	98.8	100.0	97.5	96.8
02	LOROX	4 L .5	PRE	0.0	93.8	96.3	98.8	72.5
03	CANOPY	0.75D .38	PRE	3.8	100.0	100.0	100.0	92.5
04	GEMINI	0.60W .5	PRE	5.0	100.0	100.0	100.0	97.5
05	LEXONE	0.75D .38	PRE	17.5	100.0	100.0	100.0	81.3
05	CLASSIC	0.25D .016	POT					
05	X-77	P .25	POT					
06	CANOPY	0.75D .38	PRE	20.0	100.0	100.0	100.0	98.8
06	CLASSIC	0.25D .016	POT					
06	X-77	P .25	POT					
07	CLASSIC	0.25D .016	POT	15.0	82.5	53.8	61.3	22.5
07	X-77	P .25	POT					
08	SCEPTER	1.5 L .25	PRE	20.0	100.0	100.0	100.0	97.0
09	SCEPTER	1.5 L .25	POT	10.0	72.5	68.8	56.3	40.0
10	SCEPTER	1.5 L .125	PRE	11.3	100.0	100.0	100.0	91.3
10	SCEPTER	1.5 L .125	POT					
11	SCEPTER	1.5 L .094	PRE	10.0	100.0	100.0	100.0	82.5
11	SCEPTER	1.5 L .156	POT					
12	SCEPTER	1.5 L .156	PRE	15.0	100.0	100.0	100.0	93.5
12	SCEPTER	1.5 L .094	POT					
13	AC263499	1.95L .063	PRE	3.8	100.0	100.0	72.5	82.5
14	AC263499	1.95L .125	PRE	11.3	100.0	100.0	92.5	99.3
15	AC263499	1.95L .063	POT	8.8	75.0	51.3	42.5	63.8
15	TWEEN 20	P .25	POT					
16	AC263499	1.95L .125	POT	18.8	78.8	63.8	61.3	70.0
16	TWEEN 20	P .25	POT					
17	BLAZER	2.0 L .5	POT	18.8	100.0	100.0	88.8	46.3
17	AG-98	P .13	POT					
18	BLAZER	2.0 L .5	POT	23.8	100.0	100.0	86.3	46.3
18	2,4-DB	2.0 L .03	POT					
18	AG-98	P .13	POT					

The University of Tennessee **MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS**

Conducted at CROSSVILLE, TN by NEIL RHODES
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TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-11-85	AMACH 7-11-85	MOLVE 7-11-85	ANTCO 7-11-85	PANDI 7-11-85
19	BASAGRAN	4	L .75	POT	2.5	57.5	33.8	96.3	0.0
19	2,4-DB	2.0	L .03	POT					
20	BLAZER	2.0	L .25	POT	22.5	96.3	98.8	98.8	45.0
20	BASAGRAN	4	L .5	POT					
20	AG-98		P .13	POT					
21	RH-0265	2	E .18	POT	30.0	100.0	100.0	98.8	32.5
21	AG-98		P .13	POT					
22	RH-0265	2	E .12	POT	28.8	100.0	100.0	95.0	30.0
22	AG-98		P .13	POT					
22	2,4-DB	2.0	L .03	POT					
23	RH-0265	2	E .18	POT	35.0	100.0	98.8	97.5	32.5
23	2,4-DB	2	L .03	POT					
23	AG-98		P .13	POT					
24	REFLEX	2	E .38	POT	22.5	100.0	100.0	95.0	38.8
24	C.O.C.		P 1	POT					
25	COBRA	2	E .2	POT	28.8	98.8	100.0	96.3	35.0
26	COBRA	2	E .2	POT	35.0	100.0	100.0	98.8	38.8
26	X-77		P .25	POT					
27	PPG-1013	.25	E .02	POT	22.5	100.0	100.0	88.8	22.5
28	PPG-1013	.25	E .02	POT	33.8	100.0	100.0	95.0	40.0
28	X-77		P .25	POT					
29	WEEDFREE				0.0	100.0	100.0	100.0	100.0
30	WEEDY				0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					4.906	8.627	6.889	9.620	14.66
STANDARD DEVIATION					= 3.469	6.100	4.871	6.802	10.37
COEFF. OF VARIABILITY					= 21.97	6.646	5.484	7.796	17.38

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MANAGEMENT OF BROADLEAF WEEDS IN SOYBEANS

Conducted at CROSSVILLE, TN by NEIL RHODES
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TRT. UM.	PEST. NAME	RATE FORM	GROW. #ai/A STAGE	CRINJ 7-19-85	AMACH 7-19-85	MOLVE 7-19-85	ANTCO 7-19-85	PANDI 7-19-85
01	LEXONE	0.75D .38	PRE	0.0	95.0	100.0	97.5	95.8
02	LOROX	4 L .5	PRE	0.0	83.8	95.0	97.5	60.0
03	CANOPY	0.75D .38	PRE	0.0	100.0	100.0	100.0	83.8
04	GEMINI	0.60W .5	PRE	1.3	100.0	100.0	100.0	94.5
05	LEXONE	0.75D .38	PRE	5.0	100.0	100.0	100.0	77.5
05	CLASSIC	0.25D .016	POT					
05	X-77	P .25	POT	10.0	99.5	98.8	86.3	7.5
06	CANOPY	0.75D .38	PRE	6.3	100.0	100.0	100.0	99.5
06	CLASSIC	0.25D .016	POT					
06	X-77	P .25	POT	13.8	98.8	91.3	86.3	0.0
07	CLASSIC	0.25D .016	POT	5.0	90.5	55.0	92.5	20.0
07	X-77	P .25	POT	0.0	99.5	100.0	88.8	20.0
08	SCEPTER	1.5 L .25	PRE	12.5	100.0	100.0	100.0	96.3
09	SCEPTER	1.5 L .25	POT	2.5	95.0	70.0	81.3	15.0
10	SCEPTER	1.5 L .125	PRE	6.3	100.0	100.0	100.0	82.5
10	SCEPTER	1.5 L .125	POT					
11	SCEPTER	1.5 L .094	PRE	2.5	100.0	99.3	100.0	76.3
11	SCEPTER	1.5 L .156	POT	10.0	100.0	93.8	78.8	17.5
12	SCEPTER	1.5 L .156	PRE	6.3	100.0	100.0	100.0	87.5
12	SCEPTER	1.5 L .094	POT	0.0	100.0	100.0	100.0	100.0
13	AC263499	1.95L .063	PRE	0.8	100.0	100.0	72.5	78.8
14	AC263499	1.95L .125	PRE	5.0	100.0	100.0	88.8	98.8
15	AC263499	1.95L .063	POT	2.5	91.3	40.0	63.8	88.8
15	TWEEN 20	P .25	POT					
16	AC263499	1.95L .125	POT	8.8	95.0	62.5	81.3	87.5
16	TWEEN 20	P .25	POT					
17	BLAZER	2.0 L .5	POT	1.3	95.8	97.5	85.0	25.0
17	AG-98	P .13	POT					
18	BLAZER	2.0 L .5	POT	5.0	100.0	100.0	83.8	10.0
18	2,4-DB	2.0 L .03	POT					
18	AG-98	P .13	POT					

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RT. UM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-19-85	AMACH 7-19-85	MOLVE 7-19-85	ANTCO 7-19-85	PANDI 7-19-85
19	BASAGRAN	4 L	.75	POT	3.3	47.5	16.3	100.0	0.0
19	2,4-DB	2.0 L	.03	POT					
20	BLAZER	2.0 L	.25	POT	2.5	80.0	90.0	100.0	7.5
20	BASAGRAN	4 L	.5	POT					
20	AG-98	P	.13	POT					
21	RH-0265	2 E	.18	POT	8.8	100.0	98.8	85.0	12.5
21	AG-98	P	.13	POT					
22	RH-0265	2 E	.12	POT	10.0	99.5	98.8	86.3	7.5
22	AG-98	P	.13	POT					
22	2,4-DB	2.0 L	.03	POT					
23	RH-0265	2 E	.18	POT	13.8	98.8	91.3	86.3	0.0
23	2,4-DB	2 L	.03	POT					
23	AG-98	P	.13	POT					
24	REFLEX	2 E	.38	POT	0.0	99.5	100.0	88.8	20.0
24	C.O.C.	P 1		POT					
25	COBRA	2 E	.2	POT	11.3	100.0	100.0	92.5	6.3
26	COBRA	2 E	.2	POT	12.5	100.0	100.0	100.0	11.3
26	X-77	P	.25	POT					
27	PPG-1013	.25 E	.02	POT	3.8	92.5	97.5	75.0	0.0
28	PPG-1013	.25 E	.02	POT	10.0	100.0	93.8	78.8	17.5
28	X-77	P	.25	POT					
29	WEEDFREE	1.5 L	.156	PRE	0.0	100.0	100.0	100.0	100.0
30	WEEDY	1.5 L	.094	POT	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					3.659	9.792	13.79	12.16	20.81
STANDARD DEVIATION					2.587	6.924	9.756	8.604	14.72
COEFF. OF VARIABILITY					52.99	7.515	11.23	9.791	30.25
16	AC263499	1.95L	.125	POT	28.7d-g				
17	BLAZER	2.0 L	.5	POT	28.0efg				
18	AG-98	P	.13	POT					
19	BLAZER	2.0 L	.5	POT	26.0fg				
20	2,4-DB	2.0 L	.03	POT					
21	AG-98	P	.13	POT					

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Conducted at CROSSVILLE, TN by NEIL RHODES
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TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	YIELD BU/A
01	LEXONE	0.75D	.38	PRE	36.3a-d
02	LOROX	4 L	.5	PRE	32.7b-g
03	CANOPY	0.75D	.38	PRE	35.7a-e
04	GEMINI	0.60W	.5	PRE	38.7ab
05	LEXONE	0.75D	.38	PRE	35.0a-e
05	CLASSIC	0.25D	.016	POT	
05	X-77	P	.25	POT	
06	CANOPY	0.75D	.38	PRE	33.7a-f
06	CLASSIC	0.25D	.016	POT	
06	X-77	P	.25	POT	
07	CLASSIC	0.25D	.016	POT	38.3ab
07	X-77	P	.25	POT	
08	SCEPTER	1.5 L	.25	PRE	32.7b-g
09	SCEPTER	1.5 L	.25	POT	34.3a-e
10	SCEPTER	1.5 L	.125	PRE	34.3a-e
10	SCEPTER	1.5 L	.125	POT	
11	SCEPTER	1.5 L	.094	PRE	33.7a-f
11	SCEPTER	1.5 L	.156	POT	
12	SCEPTER	1.5 L	.156	PRE	34.0a-e
12	SCEPTER	1.5 L	.094	POT	
13	AC263499	1.95L	.063	PRE	41.0a
14	AC263499	1.95L	.125	PRE	37.3abc
15	AC263499	1.95L	.063	POT	38.3ab
15	TWEEN 20	P	.25	POT	
16	AC263499	1.95L	.125	POT	28.7d-g
16	TWEEN 20	P	.25	POT	
17	BLAZER	2.0 L	.5	POT	28.0efg
17	AG-98	P	.13	POT	
18	BLAZER	2.0 L	.5	POT	26.0fg
18	2,4-DB	2.0 L	.03	POT	
18	AG-98	P	.13	POT	

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TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	YIELD BU/A
19	BASAGRAN	4 L	.75	POT	34.7a-e
19	2,4-DB	2.0 L	.03	POT	
20	BLAZER	2.0 L	.25	POT	32.0b-g
20	BASAGRAN	4 L	.5	POT	
20	AG-98	P	.13	POT	
21	RH-0265	2 E	.18	POT	34.3a-e
21	AG-98	P	.13	POT	
22	RH-0265	2 E	.12	POT	31.7b-g
22	AG-98	P	.13	POT	
22	2,4-DB	2.0 L	.03	POT	
23	RH-0265	2 E	.18	POT	29.7c-g
23	2,4-DB	2 L	.03	POT	
23	AG-98	P	.13	POT	
24	REFLEX	2 E	.38	POT	31.7b-g
24	C.O.C.	P 1		POT	
25	COBRA	2 E	.2	POT	35.0a-e
26	COBRA	2 E	.2	POT	34.3a-e
26	X-77	P	.25	POT	
27	PPG-1013	.25 E	.02	POT	33.0a-g
28	PPG-1013	.25 E	.02	POT	31.3b-g
28	X-77	P	.25	POT	
29	WEEDFREE				38.7ab
30	WEEDY				25.7g

TOBACCO EXPERIMENT STATION
ROUTE 5
GREENVILLE, TENNESSEE 37743

Superintendent - Dr. Phillip Hunter

Rainfall
Tobacco Experiment Station
Greeneville, TN 1985

DATE	MAY	JUNE	JULY	AUGUST
1	0	0	.18	.24
2	.02	0	.32	.47
3	.50	1.27	0	0
4	0	0	.32	0
5	0	0	0	0
6	0	.71	.83	0
7	0	.23	T	.20
8	0	.25	0	.04
9	0	0	0	0
10	.08	0	0	0
11	T	0	.55	0
12	.30	.10	0	0
13	.03	.33	0	0
14	0	0	0	0
15	0	0	0	0
16	.04	.31	.19	0
17	.07	0	0	0
18	.26	.91	0	1.60
19	0	0	0	0
20	0	0	0	0
21	0	0	0	0
22	0	0	1.35	0
23	.16	0	1.30	0
24	.13	0	0	0
25	.12	.46	.07	1.06
26	0	0	.14	0
27	0	0	.28	T
28	0	0	.66	.05
29	.11	0	.04	0
30	0	0	0	0
31	0	---	.08	.08
Total	1.82	4.57	6.31	3.74

Temperature
Tobacco Experiment Station
Greeneville, TN 1985

Date	May		June		July		August	
	Max	Min	Max	Min	Max	Min	Max	Min
1	81	42	90	68	78	62	87	74
2	78	60	90	58	80	60	78	67
3	70	57	86	60	77	56	82	56
4	66	39	88	61	83	56	83	56
5	73	39	90	65	82	57	82	56
6	72	46	91	68	84	59	81	57
7	80	42	91	63	78	60	81	67
8	76	52	80	60	83	58	81	67
9	63	47	80	59	86	58	88	64
10	62	52	87	60	88	67	89	64
11	72	55	91	62	91	61	90	64
12	83	52	85	65	88	62	90	63
13	83	55	73	46	91	66	93	64
14	86	55	70	45	89	65	91	65
15	86	57	77	51	92	75	91	65
16	87	56	84	54	91	65	92	68
17	78	55	83	54	88	63	85	62
18	62	50	87	60	91	63	75	62
19	69	42	80	63	89	63	85	61
20	78	43	75	50	90	68	89	62
21	82	50	77	51	93	66	89	62
22	82	58	83	50	94	67	82	55
23	85	64	85	68	89	66	82	55
24	72	55	87	64	85	65	82	66
25	58	55	85	61	81	65	76	66
26	75	41	88	61	83	67	82	63
27	81	47	86	58	85	70	80	64
28	85	50	86	58	77	67	80	62
29	75	52	83	67	77	66	85	62
30	82	59	84	62	87	66	88	61
31	88	67	--	--	85	68	87	71

TRT. PEST. RATE GROW. CRINJ. ELEIN. POROL. AMACH
NUM. NAME FORM 441/A STAGE 7-1-85 7-1-85 7-1-85 7-1-85

01-31-1986

EXPERIMENT DESCRIPTION FORM

The University of Tennessee

WEED CONTROL IN BURLEY TOBACCO

Conducted at GREENEVILLE, TN by NEIL RHODES
Project TN-692-85-T-1 with cooperator TOBACCO EXPT STA

Experimental Management

Date Planted 5-28-85 Variety GREENEVILLE 136 Row Width 42 IN
Design RCB No. Reps. 4 Plot Size 4 ROWS*36 FT
Field Preparation and Plot Maintenance CHISEL AND DISK

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture SILT LOAM
Soil Series HERMITAGE

% OM .75 pH 6.6

Application Information

	1	2	3	4	5	6
Date Treated	5-20-85	5-31-85	6-17-85			
Time Treated	PM	PM	PM			
Cloud Cover	60%	0%	75%			
Air Temperature	74	94	74			
Relative Humidity	66%	49%	86%			
Wind Speed/Direction	5MPH-W	5MPH-W	CALM			
Soil Temperature	85	89	82			
Soil/Leaf Surface Moisture	MOIST	DRY	WET			
Soil Subsurface Moisture	MOIST	DRY	MOIST			
Soil Tilth	FINE	FINE	N/A			
Crop Stage	PPI&PRE	3 IN	3-6 IN			
Pest Name, Stage & Density						
ELEIN 4/FT	PRE	PRE	5-8 LF			
AMACH 4/FT	PRE	PRE	4-5 LF			
POROL 3/FT	PRE	PRE	1-3 IN			

Application Equipment

Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
1. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	19	WATER	30
2. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40
3. CO2 BACKPACK	3	FLAT FAN	8003	19	20	6.3FT	24	WATER	40

Comments

ELEIN=GOOSEGRASS; AMACH=SMOOTH PIGWEED; POROL=COMMON PURSLANE. HOT, DRY WEATHER AT TRANSPLANTING RESULTED IN RESETTING OF MANY PLANTS. PLANTS TOPPED AND SUCKER CONTROL (PRIME+ AND MH-30) APPLIED 8-5-85, AND 8-13-85. TOBACCO CUT ON 9-13-85, AND BARNED ON 9-16-85.

The University of Tennessee

WEED CONTROL IN BURLEY TOBACCO

Conducted at GREENEVILLE, TN by NEIL RHODES
Project TN-692-85-T-1 with cooperators TOBACCO EXPT STA

TRT. NUM.	PEST. NAME	RATE FORM	GROW. #ai/A	CRINJ STAGE	ELEIN 7-1-85	POROL 7-1-85	AMACH 7-1-85
01	PROWL	4.0 E 1.0	PPI	36.3	100.0	100.0	100.0
01	SCEPTER	1.5 L 0.15	POT1				
02	PROWL	4.0 E 1.0	PP1	20.0	100.0	100.0	100.0
02	SCEPTER	1.5 L 0.15	POT2				
03	PROWL	1.0 E 1.0	PPI	37.2	99.5	100	100
03	SCEPTER	1.5 L .125	PRE				
03	SCEPTER	1.5 L .125	POT2				
04	PROWL	4.0 E 1.0	PPI	6.3	99.5	100.0	98.3
05	SCEPTER	1.5 L 0.15	POT1	22.2	99.5	93.6	100.7
05	ENIDE	.90 W 6.0	POT1				
06	ENIDE	.90 W 6.0	POT1	2.5	100.0	93.3	93.3
07	SCEPTER	1.5 L 0.15	POT1	23.8	83.8	88.8	100.0
08	COMMAND	6.0 E 1.0	PPI	6.3	100.0	98.3	77.5
09	DEVIRINOL	0.50W 1.5	PPI	5.0	98.8	95.8	98.8
10	PROWL	4.0 E 1.0	PPI	6.3	98.8	100.0	100.0
10	COBRA	2.0 E 0.25	PRE				
11	PROWL	4.0 E 1.0	PPI	8.8	100.0	100.0	99.8
11	COBRA	2.0 E 0.5	PRE				
12	PROWL	4.0 E 1.0	PP1	95.8	100.0	100.0	100.0
12	COBRA	2.0 E 0.2	POT2				
13	PAARLAN	6.0 E 1.5	PPI	3.9	89.5	80.3	92.4
14	AMIBEN	0.75D 2.25	PRE	7.5	93.8	76.3	91.3
15	AMIBEN	0.75D 2.25	POT2	11.3	42.5	32.5	41.3
16	POAST	1.5 E 0.2	POT2	2.2	99.5	0.3	0.7
16	C.O.C.	P 1.0	POT2				
17	WEEDY			0.0	0.0	0.0	0.0
18	WEEDFREE			0.0	100.0	100.0	100.0
LEAST SIGNIFICANT DIFF. (.05)=				6.251	21.13	10.04	11.23
STANDARD DEVIATION				= 4.374	14.78	7.027	7.858
COEFF. OF VARIABILITY				= 26.68	16.58	8.667	9.464

The University of Tennessee

WEED CONTROL IN BURLEY TOBACCO

Conducted at GREENEVILLE, TN by NEIL RHODES
Project TN-692-85-T-1 with cooperator TOBACCO EXPT STA

TRT. PEST.	RATE	GROW.	CRINJ	ELEIN	POROL	AMACH	CRINJ	ELEIN	POROL	AMACH
NUM. NAME	FORM	#ai/A STAGE	7-23-85	7-23-85	7-23-85	7-23-85	8-15-85	8-15-85	8-15-85	8-15-85
01 PROWL	4.0 E 1.0	PPI	32.5	99.3	97.5	100.0	28.8	100.0	96.3	100.0
01 SCEPTER	1.5 L 0.15	POT1								
02 PROWL	4.0 E 1.0	PPI	13.8	100.0	100.0	100.0	13.8	100.0	98.8	100.0
02 SCEPTER	1.5 L 0.15	POT2								
03 PROWL	1.0 E 1.0	PPI	31.1	100.0	98.5	99.6	27.2	99.7	99.7	99.6
03 SCEPTER	1.5 L .125	PRE								
03 SCEPTER	1.5 L .125	POT2								
04 PROWL	4.0 E 1.0	PPI	2.5	100.0	97.5	98.0	0.0	99.5	97.5	99.5
05 SCEPTER	1.5 L 0.15	POT1	19.4	100.0	88.5	99.6	12.2	99.1	84.7	99.6
05 ENIDE	.90 W 6.0	POT1								
06 ENIDE	.90 W 6.0	POT1	0.0	100.0	87.5	93.8	0.0	100.0	87.5	95.9
07 SCEPTER	1.5 L 0.15	POT1	17.0	87.5	85.0	99.5	17.5	81.3	80.0	100.0
08 COMMAND	6.0 E 1.0	PPI	3.8	100.0	91.3	88.8	0.0	100.0	92.5	85.0
09 DEVRINOL	0.50W 1.5	PPI	2.5	100.0	95.0	96.3	0.0	100.0	92.5	96.3
10 PROWL	4.0 E 1.0	PPI	5.0	99.3	96.3	100.0	0.0	99.0	97.5	95.8
10 COBRA	2.0 E 0.25	PRE								
11 PROWL	4.0 E 1.0	PPI	3.8	100.0	100.0	100.0	0.0	100.0	99.3	100.0
11 COBRA	2.0 E 0.5	PRE								
12 PROWL	4.0 E 1.0	PPI	95.8	100.0	98.0	100.0	92.0	98.8	95.0	98.8
12 COBRA	2.0 E 0.2	POT2								
13 PAARLAN	6.0 E 1.5	PPI	2.7	96.0	78.5	90.6	0.5	93.1	81.4	89.6
14 AMIBEN	0.75D 2.25	PRE	8.8	93.3	61.3	96.8	2.5	95.0	63.8	93.8
15 AMIBEN	0.75D 2.25	POT2	17.5	58.8	27.5	66.3	11.3	73.0	35.0	55.0
16 POAST	1.5 E 0.2	POT2	1.1	100.0	0.2	0.4	0.5	99.7	0.3	0.4
16 C.O.C.	P 1.0	POT2								
17 WEEDY			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 WEEDFREE			0.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0
LEAST SIGNIFICANT DIFF. (.05)=			6.400	12.41	7.445	10.50	5.429	10.23	8.448	9.376
STANDARD DEVIATION			= 4.479	8.685	5.210	7.351	3.799	7.164	5.912	6.561
COEFF. OF VARIABILITY			= 31.36	9.567	6.686	8.657	33.16	7.873	7.595	7.829

WEST TENNESSEE EXPERIMENT STATION

JACKSON, TENNESSEE

38301

Superintendent - Dr. James F. Brown

Rainfall Data for West Tennessee Experiment Station, Jackson, TN for 1985.
(inches)

Day	April	May	June	July	August	September	October
1		0.79					0.85
2		0.04		T			
3		T					
4				0.62		0.29	
5	T			T		0.13	
	0.13		T	1.11	0.43	0.05	
7		T	0.12		1.53		
8		0.43	0.22				
9						0.29	
10							
11			0.15	0.29	0.02		
12			0.42		T		
13	T						
14	0.01	T					
15	0.79	0.07			T		0.70
16	0.03			0.90	0.21		
17					1.47		
18		T	1.45				
19							0.27
20					0.16		0.30
21							2.36
22		1.55	0.09				
23	0.26	0.04	0.33	0.38	T		0.80
24	1.81			T	0.42	0.91	0.28
25				T	0.23		
26			0.81	0.17		1.93	
27	0.14			0.88			
28	0.07	T	1.03	T			T
29		0.13	T	0.06			T
30		T		T		0.97	0.54
31							0.39
Total	3.24	3.05	4.62	4.41	4.47	4.57	6.49

Temperature Data for West Tennessee Experiment Station, Jackson, TN for 1985.
(maximum/minimum)

Day	April	May	June	July	August	September	October
1	57/35	83/64	86/63	79/60	91/75	88/60	67/45
2	54/33	77/61	91/70	83/60	89/67	89/65	60/40
3	60/44	63/52	91/71	85/66	83/68	89/70	65/45
4	79/49	70/45	91/71	88/65	84/69	87/70	72/48
5	82/64	83/52	93/73	85/70	86/69	84/73	75/42
6	71/43	85/52	92/72	87/62	77/68	85/70	64/37
7	64/47	83/61	90/69	84/65	83/72	91/71	67/40
8	59/32	82/60	84/70	88/68	87/69	92/70	74/44
9	60/29	76/56	85/71	90/70	89/69	92/68	76/43
10	57/35	71/58	91/64	91/73	91/69	89/69	80/56
11	71/48	73/59	90/70	93/68	91/71	90/66	84/61
12	73/56	82/67	85/58	91/70	91/73	80/63	85/61
13	70/54	86/65	73/49	92/74	93/73	81/56	85/64
14	76/58	88/68	74/51	93/75	92/69	75/54	87/69
15	75/50	88/56	79/61	93/75	90/73	73/57	82/66
16	65/46	76/56	82/63	94/70	84/71	75/50	74/48
17	69/48	80/58	88/60	86/66	73/70	80/57	75/47
18	82/54	66/45	87/68	85/62	85/67	84/57	81/54
19	85/58	74/46	80/60	91/70	90/70	85/56	79/67
20	85/57	79/55	78/56	93/71	91/69	85/52	72/68
21	86/58	83/60	82/62	94/70	74/63	85/59	75/61
22	85/61	84/65	85/68	93/71	82/63	86/64	69/56
23	84/58	73/54	80/67	89/71	86/69	87/69	71/58
24	75/51	72/48	90/72	88/71	82/70	81/46	72/65
25	72/49	78/49	92/71	87/72	76/68	70/44	80/61
26	79/59	80/58	91/68	90/72	79/59	79/44	73/45
27	82/65	85/66	91/70	78/70	80/59	67/43	75/57
28	75/63	86/62	90/66	79/68	85/64	68/43	71/62
29	78/58	85/63	72/64	80/70	88/67	73/48	69/58
30	82/63	85/68	81/63	88/72	91/69	78/51	74/54
31		85/71		90/73	90/70		61/55

H-692-85-W-Co-Prowl Effects of Prowl on Cotton Yield and Quality
West Tennessee Experiment Station, 1985

Tmts ¹	Herbicide	MOA	Lint Yield			Gin Turnout	First Harvest			Second Harvest		
			Total	1st Harvest	%		Grade	Staple	Micro- naire	Grade	Staple	Micro- naire
			Lb/A	Lb/A	%							
1. Prowl	0.75	PPI	1097	848	77	34.7	51	35	4.5	52	34	3.5
2. Prowl	1.5	PPI	1175	873	74	36.8	50	35	4.5	52	34	3.6
3. Treflan	0.75	PPI	1058	727	69	34.2	51	36	4.7	52	35	3.4
4. Treflan	1.5	PPI	1165	845	73	35.3	52	35	4.5	52	35	3.4
5. Prowl	0.75	PRE	1059	761	72	34.1	51	35	4.3	62	34	3.6
6. Prowl	.38 + .38	PPI + PRE	1131	817	72	35.0	52	35	4.4	52	34	3.4
7. Dual	1.5	PRE	1112	779	70	35.4	51	36	4.4	52	35	3.5
		LSD .05	NS	NS								
		CV %	8.8	13.2								

¹Cotoran 80W at 1.5 lb ai/A was applied preemergence over the entire experiment.

Variety : Stoneville 825 Planted: 5/10 Treated: 5/10 GPA: 18 MPH: 4 PSI: 32 Tips: 8002
Design: RCB Reps: 4 Plot size: 4 - 40" rows x 30' Soil type: Dexter silt loam
Fertility: 60-60-60 + .5B pH: 6.5 O.M.: 1.2% Harvested Oct. 11 and Oct. 28.

Temik-Terraclor Super X in-furrow at planting. Incorporation: Do-all with Vibra-shank, 1 pass.

Treatment ^a	Rate lb ai/A	MOA	Sorghum Injury	% Control			% Moisture at harvest	Sorghum Yield ^b Bu/A @ 14%
				DIGSA	PANDI	BRAPP		
1. Bicep	2.7	PRE	28	98	91	91	15.2 b-e	106.3 ab
2. Bicep	3.6	PRE	35	98	93	97	15.4 b-e	115.3 a
3. Milocep	1.88	PRE	25	85	78	93	16.1 bcd	115.9 a
4. Milocep	2.5	PRE	33	93	88	96	15.4 b-e	120.1 a
5. Milocep	3.12	PRE	13	99	99	99	16.1 bcd	119.6 a
6. Dual + Extrazine	1.5 + 2.4	PRE	35	95	96	72	16.8 cd	112.0 ab
7. Lasso + Atrazine	1.5 + 1.2	PRE	30	89	91	91	16.3 bcd	115.6 a
8. Lasso + Atrazine	2 + 1.6	PRE	25	95	97	97	15.7 b-c	105.7 ab
9. Aatrex	2	PRE	39	77	80	84	16.2 bcd	114.2 ab
10. Racer + Aatrex	.38 + 1.25	PRE	34	90	92	95	17.4 b	118.0 a
11. Bicep	2.7	Post	48	85	43	93	17.1 bc	107.8 ab
12. Lasso + Atrazine	1.5 + 1.2	Post	38	86	70	95	17.0 bc	115.4 a
13. Prowl + Aatrex	1.0 + 1.2	Post	35	88	94	94	16.2 bcd	110.4 ab
14. Prowl + Aatrex	1.5 + 1.5	Post	40	90	96	93	17.6 b	110.0 ab
15. Atrazine + Tandem + COC	2.0 + .5 + 1 qt	Post	60	64	99	99	22.4 a	99.1 b
16. Conv-till Bicep	2.7	PRE	9.5	99	98	98	13.5 e	110.8 ab
17. Conv-till Lasso + Atrazine	1.5 + 1.2	PRE	4.5	97	99	99	14.7 cde	108.0 ab
18. Weed Free Check (conv.)	-		8.5	99	99	99	14.4 de	113.0 ab
	LSD .05		5	N.S.	23	19		

^aAll no-till treatments treated with Roundup 2 qt/A.

Bicep 4.5L, Milocep 5L, Dual 8E, Extrazine 4L (Bladex + Atrazine 2.67 + 1.33 lb/gal), Lasso 4ME, Aatrex 4L, Racer 2E, Prowl 4E, Tandem 4E, COC = Agridex Crop oil Concentrate, DIGSA = large crabgrass; PANDI = fall panicum, BRAPP = broadleaf signalgrass.

Variety : Funks 522 DR Planted: 5/6 Treated: PRE-5/7, Post-5/17 GPA: 18 MPH: 4

PSI: 32 Tips: 8002 Design: RCB Reps: 4 Plot size: 4-40" rows 30' long

Soil type: silt loam Fertility: 120 lb N/A, H-P; H-K pH: 6.7 O.M.: 1% First rainfall: .43 in 2 days.

^bYields followed by the same letter(s) are not statistically distinguishable at the 5% level of probability.

H-692-W-Cr-2 Weed Control in No-Till Corn, WTES 1985

Treatment	Rate lb ai/A	5-27-85			Corn Yield Bu/A
		SORHA ^a	DIGSA	AMACH	
1. Dual + HOE 39866 + Aatrex	1.68 + .75 + 1.6	0	74	100	121.8
2. Dual + HOE 39866 + Aatrex	2.25 + 1.0 + 1.6	46	100	100	117.6
3. Dual + HOE 39866 + Aatrex	1.88 + .75 + 1.6	24	75	75	106.6
4. Dual + HOE 39866 + Aatrex	2.5 + 1.0 + 1.6	46	100	100	120.9
5. Dual + HOE 39866 + Aatrex	2.06 + .75 + 1.6	41	100	100	116.7
6. Dual + HOE 39866 + Aatrex	2.75 + 1.0 + 1.6	23	100	100	128.5
7. Bicep + HOE 39866	2.7 + .5	67	100	100	124.0
8. Bicep + HOE 39866	2.7 + .75	38	100	100	112.0
9. Bicep + HOE 39866	2.7 + 1.0	52	100	100	118.5
10. Dual + HOE 39866 + Aatrex	2.0 + .5 + 1.6	24	100	100	117.5
11. Dual + HOE 39866 + Aatrex	2.0 + .75 + 1.6	48	100	100	117.6
12. Dual + HOE 39866 + Aatrex	2.0 + 1.0 + 1.6	23	100	100	122.1
13. HOE 39866 + Aatrex	.75 + 1.6	65	91	100	120.5
14. HOE 39866 + Aatrex	1.0 + 1.6	29	99	100	122.0
15. Bronco + Aatrex	4 + 1.6	24	75	75	130.4

LSD .05 = N.S.

C.V. = 13.4%

Dual (8E), HOE 39866 (1.67E), Bicep (4.5L), Bronco (4L), Aatrex (4L)

Borders treated with Bronco + Aatrex 4 qts + 1.5.

Variety: Pioneer 3147 Planted: 4/17 Treated: 4/17 GPA: 18 MPH: 4 PSI: 32
 Tips: 8002 Design: RCB Reps: 4 Plot size: 4 - 30" rows x 30' Soil type: Loring
 silt loam Fertility: 150# N, H-P; H-K

^aSORHA = johnsongrass; DIGSA = large crabgrass; AMACH = smooth pigweed

H-692-85-W-Co-1 No-Till Cotton Herbicide Evaluation, WTES. 1985

Treatment ¹	Rate lb ai/A	% Weed Control (9/10/85) ²		Lint Yield (lb/A) ³		First Harvest	
		Without	With	Without	With	Without	With
1. Paraquat + Prowl - Cotoran	0.5 + 1 - 1.5	13	60	598 bcd	633 abc	71	72
2. Paraquat + Dual - Cotoran	0.5 + 1.5 + 1.5	13	69	492 d	541 cd	77	75
3. Paraquat + Zorial + Cotoran	0.5 + 1.0 + 1.0	29	79	598 bcd	622 a-d	69	65
4. Paraquat + Bladex - Cotoran	0.5 + .6 + 1.25	48	80	721 abc	835 a	65	70
5. Roundup + Prowl - Cotoran	0.5 + 1.0 + 1.5	50	84	688 a-d	542 cd	73	69
6. Roundup + Prowl - Cotoran	1.0 + 1.0 + 1.5	58	88	719 abc	697 a-d	72	74
7. Roundup + Dual - Cotoran	1.0 + 1.5 + 1.5	58	90	657 a-d	795 ab	64	70
8. Roundup + Zorial - Cotoran	1.0 + 1.0 + 1.0	63	91	701 a-d	737 a-d	72	77
9. Roundup + Bladex - Cotoran	1.0 + .6 + 1.25	65	92	764 abc	746 abc	66	76
10. Conventional + Prowl + Cotoran	1.0 + 1.5	92	98	799 ab	793 ab	77	75
Average				674	698		
		LSD .05 =		283 lb lint for any two means			

¹Treatments 1-9 contain 0.5% X-77

²Rating reflects mainly a composite of horseweed (ERICA) and palmer (AMAPA) amaranth.

³Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

Variety : Stoneville 825 Planted: 5/8 Treated: Pre - 5/9 GPA: 18 MPH: 4 PSI: 32
 Tips: 8002 Design: RCB split plot Reps: 4 Plot size: 4 - 40" rows x 30'
 Soil type: Memphis silt loam Fertility: H-P; H-K; 80 lb N/A topdress as ammonium
 nitrate on 5/24 pH: 0.M.: First rainfall: in hours/days.

Cultivation: 2 rows of each plot on 6/21 and 6/24.

PROJECT NUMBER:
FILE NAME: NTCRPE85

INTERIM DATA
WESTERN TENNESSEE AG. EXP. STN.

UNITS: ENGLISH
PRINTED: 07/31/86

NO-TILL CORN PREEMERGENCE-WTES

PROJECT NO.:
RESEARCH BY: R.M. HAYES
COOPERATOR :
REPORTED BY: R. M. HAYES

COUNTY: MADISON ST: TN COUNTRY: USA
LAST UPDATE: 07/31/86 INITIATED: 04/17/85
EXPT. STATUS: COMPLETED: 09/15/85
RELATED FILE: **NONE** SOURCE:

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PREVIOUS CROP: SOYBEANS	PLOT SIZE(LxW): 10.0x 30.0	SOIL pH :6.8
PREVIOUS TILL: CONVENTIONAL	SOIL TEXTURE: LORING SIL	SOIL OM%: 01.1
FERTILITY: 150-80-80	ROW WIDTH: 030	EXPERIMENTAL DESIGN: RCB
MISC. 1: FURADAN AT 2 LB AI/A IN FURROW	NUMBER OF REPS: 4	
MISC. 2:	REPORT TYPE: INTERIM	

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PLANTING DATE: 04/17/85	CROP CULTIVAR: PIONEER 3147
HARVEST DATE : 09/15/85	SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N	EARLY: MOD MID: WET LATE: DRY

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APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	04/17/85	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J107/85	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	PRE				
AIR/SOIL TEMP(F)	069/	/	/	/	/
% REL. HUMIDITY		/	/	/	/
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	EXC/DRY	/	/	/	/
INCRP. EQUIP.					
INCRP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK				
SPRAYER GPA/PSI	018.0/032	. /	. /	. /	. /
NOZZLE TYPE	FF8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	. / .	. / .	. / .	. / .	. / .
3rd / 4th week	. / .	. / .	. / .	. / .	. / .

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SPEC. CODE	SPECIES	DEN-SITY	APPLIC. 1 HTin/STG.	APPLIC. 2 HTin/STG.	APPLIC. 3 HTin/STG.	APPLIC. 4 HTin/STG.	APPLIC. 5 HTin/STG.
***** CROP							
ZEAMA	CORN		/	/	/	/	/
***** PEST							
AMAPA	PALAMER		/	/	/	/	/
	AMARANTH		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

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PROJECT NUMBER:
FILE NAME: NTCRPE85

INTERIM DATA
WESTERN TENNESSEE AG. EXP. STN.

UNITS: ENGLISH
PRINTED: 07/31/85

NO-TILL CORN PREEMERGENCE-WTES

PROJECT NO.:
RESEARCH BY: R.M. HAYES
COOPERATOR :

COUNTY: MADISON
LAST UPDATE: 07/31/86
EXPT. STATUS:

ST: TN COUNTRY: USA
INITIATED: 04/17/85
COMPLETED: 09/15/85

APPLICATION STAGES/J. DATE: PRE = J107/85

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TRT.	PESTICIDE	RATE	APPLIC	%CRINJU	%AMACH	BU/ACRE
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NO.	CHEMICAL FORMU.	LBai/A	TYPE	J142/86	J142/85	J258/86
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01	LASSO	FL 4	2.5	PRE	12.5	100.0	156.8
	AATREX	FL 4	1.5	PRE			
	BUCTRIL	EC 2	0.38	PRE			
02	LASSO	FL 4.0	2.5	PRE	12.5	100.0	149.8
	AATREX	FL 4	1.5	PRE			
	ROUNDUP	SC 4	0.5	PRE			
03	LASSO	FL 4	2.5	PRE	21.3	100.0	136.8
	AATREX	FL 4	1.5	PRE			
	BUCTRIL	EC 2	0.38	PRE			
	ROUNDUP	SC 4	0.5	PRE			
04	LASSO	FL 4	2.5	PRE	17.5	100.0	137.3
	AATREX	FL 4	1.5	PRE			
	BUCTRIL	EC 2	0.5	PRE			
	ROUNDUP	SC 4	0.5	PRE			
05	BRONCO	EC 4	4	PRE	2.5	100.0	116.0
	AATREX	FL 4	1.5	PRE			
06	SC5676/ R25788	EC 7/ EC 1.18	2	PRE	15.0	25.0	143.5
	SC0224	SC 4	1	PRE			
07	SC5676/ R25788	EC 7/ EC 1.18	2	PRE	27.5	100.0	146.8
	AATREX	FL 4	1.5	PRE			
	SC0224	SC 4	1	PRE			
08	SC0051	EC 0.55	2	PRE	15.0	97.0	139.3
	SC0224	SC 4	1	PRE			
09	SC0051	EC 0.55	1.5	PRE	17.5	95.0	149.3
	AATREX	FL 4	1.5	PRE			
	SC0224	SC 4	1	PRE			
10	SC0051	EC 0.55	1.5	PRE	17.5	96.0	127.5
	DUAL	EC 8	1.5	PRE			
	SC0224	SC 4	1	PRE			

LSD(0.05) = 20.1 22.9 33.8
STANDARD DEVIATION = 13.9 15.8 23.3
COEFF. OF VARIABILITY = 87.4 17.3 16.6

PROJECT NUMBER:
FILE NAME: CRPOST85

INTERIM DATA
WESTERN TENNESSEE AG. EXP. STN.

UNITS: ENGLISH
PRINTED: 07/30/86

POST HERBICIDES FOR NO-TILL CORN

PROJECT NO.:
RESEARCH BY: R. M. HAYES
COOPERATOR :
REPORTED BY:

COUNTY: MADISON
LAST UPDATE: 07/30/86
EXPT. STATUS:
RELATED FILE: **NONE**
ST: TN COUNTRY: USA
INITIATED: 04/17/85
COMPLETED: 09/15/86
SOURCE:

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PREVIOUS CROP: SOYBEANS	PLOT SIZE(LxW): 10.0x 20.0	SOIL pH :6.8
PREVIOUS TILL: CONVENTIONAL	SOIL TEXTURE: MEMPHIS SIL	SOIL OM%: 01.0
FERTILITY: HIGH-P;HIGH-K;150#N	ROW WIDTH: 030	EXPERIMENTAL DESIGN: RCB
MISC. 1: BRONCO 4 QTS/A AT PLANTING	NUMBER OF REPS: 4	
MISC. 2: FURADAN 2 LBS AI/A IN FURROW	REPORT TYPE: INTERIM	

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PLANTING DATE: 04/17/85
HARVEST DATE : 09/15/85
RESIDUE TAKEN: N

CROP CULTIVAR: PIONEER 3147
SEASONAL RAINFALL DURING EXPERIMENT
EARLY: MOD MID: EXC LATE: MOD

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APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/08/85	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J128/85	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	POST				
AIR/SOIL TEMP(F)	080/	/	/	/	/
% REL. HUMIDITY		/	/	/	/
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	MOD/DRY	/	/	/	/
INCorp. EQUIP.		.	.	.	.
INCorp. DEPTH in		.	.	.	.
SPRAYER TYPE	C02BACKPACK	.	.	.	.
SPRAYER GPA/PSI	018.0/032	.	.	.	.
NOZZLE TYPE	FF8002	.	.	.	.
RAIN / IRRIG. in		.	.	.	.
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	00.1/00.1	. / .	. / .	. / .	. / .
3rd / 4th week	00.2/ .	. / .	. / .	. / .	. / .

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SPEC.	DEN-	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
CODE	SPECIES	SITY	HTin/STG.	HTin/STG.	HTin/STG.	HTin/STG.
*****	CROP	*****	*****	*****	*****	*****
ZEAMX	CORN	/	/	/	/	/
*****	PEST	*****	*****	*****	*****	*****
AMAPA	PALMER AMARANTH	/	/	/	/	/
IPOHE	IVYLEAF MG	/	/	/	/	/
		/	/	/	/	/
		/	/	/	/	/
		/	/	/	/	/
		/	/	/	/	/
		/	/	/	/	/
		/	/	/	/	/
		/	/	/	/	/

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PROJECT NUMBER:
FILE NAME: CRPOST85

INTERIM DATA
WESTERN TENNESSEE AG. EXP. STN.

UNITS: ENGLISH
PRINTED: 07/30/86

POST HERBICIDES FOR NO-TILL CORN

PROJECT NO.:
RESEARCH BY: R. M. HAYES
COOPERATOR :
APPLICATION STAGES/J. DATE: POST = J128/85

COUNTY: MADISON
LAST UPDATE: 07/30/86
EXPT. STATUS:

ST: TN COUNTRY: USA
INITIATED: 04/17/85
COMPLETED: 09/15/86

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TRT.	PESTICIDE	RATE	APPLIC	\$CRINJU	\$AMAPA	\$IPOHE	BU/ACRE
NO.	CHEMICAL FORMU.	LBai/A	TYPE	J144/85	J144/85	J	0/00 J258/85

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01	AATREX	FL 4.0	1.5	POST	5.0	10.0	100.0	147.5
	AGRIDEX	EC 4.0	1.0	POST				

02	TANDEM	EC 4.0	0.5	POST	5.0	10.0	100.0	145.9
	AATREX	FL 4.0	1.0	POST				
	AGRIDEX	EC 4.0	1.0	POST				

03	BANVEL	SC 4.0	0.25	POST	11.3	68.8	78.8	133.7
----	--------	--------	------	------	------	------	------	-------

LSD(0.05) =	4.8	6.3	2.5	48.5
STANDARD DEVIATION =	2.8	3.6	1.4	28.1
COEFF. OF VARIABILITY =	39.0	12.3	1.6	19.7

H-692-85-W-Sb-PPI Soybean Preplant Incorporated Herbicide Trial
West Tenn. Exp. Station. 1985

Treatment	Rate lb ai/A	Percent Control or Injury June 30, 1985			GLXMA ²	
		GLXMA ¹	AMACH	IPOHG	Yield, Bu/A	
1. RE 39571 (3EC)	1.5	0	54	24	30.5	bc
2. RE 39571	2.0	0	67	45	30.5	bc
3. Sonalan (3EC) + Sencor	.75 + .38	3	95	89	37.8	ab
4. EL 107 (75DF) + Treflan (4E)	.088 + .75	0	93	96	34.0	ab
5. EL 107 + Treflan	.132 + .75	6	84	71	30.9	bc
6. Treflan	.75	3	96	70	31.4	b
7. AC 263,499 (1.95S)	.063	3	97	82	34.8	ab
8. AC 263,499	.125	14	99	74	36.3	ab
9. Scepter (1.5S)	.125	19	99	88	36.9	ab
10. Scepter	.156	11	99	95	39.0	a
11. Reward (6E)	2.6	0	96	45	33.6	ab
12. Vernam 7E + SC0058 (6E)	2.6 + .86	0	80	36	32.4	ab
13. Treflan + Sencor (75DF)	.75 + .38	5	95	73	31.3	b
14. Prodiamine (65DG) + Sencor	.38 + .38	0	98	78	36.1	ab
15. Weedy check	---	3	37	12	24.0	c
16. Weed free check	---	0	99	99	37.1	ab
	LSD .05	9	24	45	6.4	

Variety: Asgrow A5474 Planted: 5/29 Treated: 5/29 GPA: 18 MPH: 4 PSI: 32
Tips: 8002 Design: RCB Reps: 4 Plot size: 4-30" rows x 30' Soil type:
Fertility: high P; high K pH: 6.3 O.M.: 0.8% First rainfall: .34" in 10 days.

Incorporation: Do-all with vibrashank - 1 pass.

¹GLXMA = Soybeans; AMACH = Smooth pigweed; IPOHG = Entireleaf morningglory

²Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

Treatment*	Rate lb ai/A	MOA	Percent Control or Injury				GLXMA		
			6-30-85				Height	GLXMA	
			GLXMA	AMACH	IPOHG	ABUTH	8-1-85	Yield, bu/A	
							in.		
1. Command	1.0	PRE	0	97	0	98	47	41.4	ab
2. Command + Lexone	1.0 + .38	PRE	0	99	8	99	45	43.6	a
3. Canopy	.25	PRE	0	95	70	44	48	39.3	ab
4. Canopy	.38	PRE	0	96	71	83	46	44.2	a
5. Scepter	.125	PRE	0	99	82	55	45	41.1	ab
6. AC263,499	.125	PRE	0	99	96	76	44	44.0	a
7. Sencor/Lexone	.38	PRE	0	97	91	40	44	41.0	ab
8. Zorial	1.5	PRE	0	18	30	28	47	33.7	bc
9. AC263,499	.125	POST	14	98	98	99	42	45.4	a
10. Basagran	.75	POST	0	89	89	99	45	39.3	ab
11. Scepter	.125	POST	21	98	90	79	41	36.5	abc
12. Weedy check	-	-	0	0	0	0	44	28.0	c
13. Weed Free Check	-	-	0	98	97	99	46	43.6	a
		LSD .05	4	11	34	33	3.6	8.1	

*Annual grass control with Poast + Agridex 1 1/2 pt + 2 pts/A.

Command 6EC, Canopy 75DF, Scepter 1.5S, AC263,499-1.95S, Sencor/Lexone 75DF, Zorial 80DF, Basagran 4L.

Variety: Asgrow A5474 Planted: 5/29 Treated: PRE-5/29; Post-6/12 GPA: 18 MPH: 4
 PSI: 40 Tips: 8002 Design: RCB Reps: 4 Plot size: 4-30" rows x 30'
 Soil type: Dexter silt loam Fertility: H-P; H-K pH: 6.8 O.M.: 1%
 Rainfall: .34" in 10 days
 Post treatment applied.

Soybeans: V2

Velvetleaf: 3" and 3-4 leaves

GLXMA = Soybean

AMACH = Smooth pigweed

IPOGH = Entireleaf morningglory

ABUTH = Velvetleaf

Treatment	Rate lb ai/A	Percent Control					Total
		-----5-27-85-----			--7-17-85---		Lint Yield
		AMACH	IPOHG	CYPES	AMACH	IPOHG	Lb/A
1. Cotoran + Dual	1.25 + 0.8	99	71	0	70	24	781 a ¹
2. Cotoran + Dual	1.25 + 1.0	99	49	0	86	25	763 ab
3. Cotoran + Dual	1.5 + 1.0	99	92	0	98	35	781 a
4. Cotoran + Verdict	1.25 + .38	98	51	0	69	25	519 bc
5. Cotoran fb Verdict	1.25 fb .125	99	70	0	79	47	732 abc
6. Cotoran fb Poast	1.5 fb .25	99	71	0	90	47	674 abc
7. Cotoran fb Poast	1.5 fb .3	99	68	0	90	25	625 abc
8. Cotoran + Bladex	1.28 + .67	73	46	6	78	25	656 abc
9. Cotoran + Bladex	1.5 + .75	99	97	18	97	52	775 a
10. Cotoran + Zorial	1.0 + 1.0	97	96	80	73	8	536 abc
11. Prowl + Cotoran + Bladex	.75 + 1.25 + .67	98	72	18	99	49	744 ab
12. Cotoran 4L	1.5	98	94	0	88	25	678 abc
13. MBR 22359 + Cotoran	1.5 + 1.5	98	60	0	94	25	650 abc
14. MBR 23559 + Cotoran	2.0 + 1.5	98	80	0	89	15	488 c
15. Weedy check	-	0	0	0	0	0	111 d
16. Weed free check	-	100	100	100	99	98	604 abc
LSD .05		18	50	18	23	30	209

Cotoran 4L, Dual 8E, Verdict 2E; Poast 1.5E, Bladex 4L, Zorial 80DF, Prowl 4E, MBR 22359 (2E)

Variety: Stoneville 825 Planted: 5/9 Treated: 5/9 GPA: 18 MPH: 4 PSI: 32 Tips: 8002

Design: RCB Reps: 4 Plot size: 3-40" rows x 30' Soil type:

Fertility: 80-0-0 pH: O.M.: First rainfall: .07" in 6 days; 1.66" in 14 days.

There was no detectable cotton injury in this test.

AMACH = smooth pigweed, IPOHG = entireleaf morningglory, CYPES = yellow nutsedge

¹Values within a column followed by the same letters are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

Treatment ¹	Rate lb ai/A	MOA	Percent Control or Injury					Total Lint Yield Lbs/A
			-----5-27-85-----			--7-17-85--		
			Cotton	IPOHG	AMACH	AMCAH	IPOHG	
1. Sonalan fb Cotoran	0.56; 1.5	PPI; PRE	8	74	98	100	97	945 a ²
2. Sonalan fb Cotoran	0.75; 1.5	PPI; PRE	10	97	100	100	73	902 ab
3. EL107 + Treflan	0.88 + .75	PPI TM	4	95	98	90	72	767 ab
4. EL107 + Treflan	.132 + .75	PPI TM	4	94	98	85	25	830 ab
5. Treflan + Cotoran	.75 + 1.5	PPI; PRE	4	88	99	100	83	784 ab
6. Cinch	1.0	PPI	18	68	85	32	25	195 c
7. Cinch fb Cinch	0.5; 0.5	PPI; PRE	11	23	71	37	25	186 c
8. Cinch + Cotoran	1.0 + 1.5	PRE	14	68	100	87	72	669 b
9. Cinch	1.0	PRE	18	0	30	0	0	93 c
10. Cinch fb Cinch + Cotoran	0.5; 0.5 + 1.5	PPI; PRE TM	14	64	99	95	25	767 ab
11. Weedy check	-	-	4	28	25	0	0	84 c
12. Weed free check	-	-	0	100	100	100	97	821 ab
LSD .05								220

¹Incorporation with do-all with vibra-shank.

²Values followed by the same letter are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

Sonalan 3EC, Cotoran 4L, EL107-75%WP, Treflan 4EC, Cinch 7EC

Variety: Stoneville 825 Planted: 5/9 Treated: 5/9 GPA: 18 MPH: 4 PSI: 32 Tips: 8002

Design: RCB Reps: 4 Plot size: 3-40" rows x 30' Soil type: Loring silt loam

Fertility: 80-0-0 pH: 0.M.: First rainfall: .07" in 6 days; 1.66" in 14 days.

Incorporation: Disc and section harrow two times.

IPOHG = entireleaf morningglory, AMACH = smooth pigweed

H-692-85-W-Cr-4 Evaluation of New Herbicides for Corn. WTES, Jackson, TN

Treatment		Rate lb ai/A	% Control or Injury			CORN YIELD BU/A
			DIGSA	SORHA	CORN	
			---8-26-85--		5-2-85	
1.	E82005	.89	58	28	70	82
2.	E82005	1.16	76	38	70	92
3.	Lasso	2.5	95	23	0	81
4.	Aatrex	1.5	97	28	0	106
5.	Bladex	2.0	96	25	0	79
6.	Lasso/Atrazine	2.5 + 1.5	95	10	10	103
7.	Lasso + Bladex	2.0 + 1.5	96	48	0	84
8.	E82005 + Lasso	.89 + 1.78	96	31	60	68
9.	E82005 + Lasso	.89 + .89	93	67	80	86
10.	E82005 + Lasso	.67 + 1.78	95	22	60	84
11.	E82005 + Lasso	.45 + 1.78	97	38	50	83
12.	E82005 + Aatrex	.89 + 1.34	98	48	80	65
13.	E82005 + Aatrex	.89 + .67	98	57	50	99
14.	E82005 + Aatrex	.67 + 1.34	98	55	50	91
15.	E82005 + Aatrex	.45 + 1.34	98	57	50	77
16.	E82005 + Bladex	.89 + 1.34	95	43	50	87
17.	E82005 + Bladex	.89 + .67	96	27	40	76
18.	E82005 + Bladex	.67 + 1.34	98	43	40	74
19.	E82005 + Bladex	.45 + 1.34	96	13	0	84
20.	Untreated check	---	48	0	0	67
LSD .05			26	N.S.	25	N.S.

Variety: Pioneer 3147 Planted: 4/19 Treated: 4/19 GPA: 18 MPH: 4
PSI:30 Tips: 8003 Design: RCB Reps: 3 Plot size: 3-30" x 30' rows
Soil type: Grenada Fertility: 150-0-0 pH: O.M.:
Soil dry on surface but good moisture.

Rainfall of 2.07" in 5 days.

H-692-85-W-Cr-5 Evaluation of New Herbicides for Corn. WTES, Jackson, TN.

Treatment	Rate lb ai/A	% SORHA Control		C
		5-27-85	8-26-85	
1. Dual 8E + Aatrex	1.5 + 2.0	60	67	
2. Lasso 4E + Aatrex	2.0 + 2.0	60	53	
3. GCA 172764 + Aatrex	1.5 + 2.0	85	73	
4. CGA 174104 + Aatrex	1.5 + 2.0	77	73	
5. Sencor	.38	20	17	
6. Sencor	.25	17	23	
7. SC 5676/R25788 (7:1.18EC)	1.5	37	37	7
8. SC 5676/R25788 + Aatrex	1.5 + 2.0	40	40	8
9. SC 0774 (1E)	0.5	52	33	59
10. SC 0774 (1E)	1.0	54	40	64
11. SC 0774 (1E) + Aatrex	0.5 + 1.5	65	75	86
12. SC 0774 (1E) + Aatrex	1 + 1.5	77	70	103
13. SC 0551 (0.55E)	1.0	27	13	54
14. SC 0551 (0.55E)	1.5	30	17	66
15. SC 0551 + Aatrex	1.5 + 1.5	57	47	94
16. Weedy check	---	0	7	80
				N
				C.V.

Variety: Pioneer 3147 Planted: 4/19 Treated: 4/19 GPA: 18 MPH: 4 PSI: 32 Tips
 Design: RCB Reps: 3 Plot size: 3-30" rows x 30' Soil type: Grenada silt loam
 Fertility: 150-0-0 pH: O.M.: First rainfall: in hours/days.

SORHA = Johnsongrass

H-692-85-W-SP-SYS Comparison of Sicklepod Control Practices in Three Major Crops
West Tennessee Experiment Station, Jackson. 1985

Treatments ¹	% Injury or Control June 9, 1985		Crop yield ³		
	GLXMA ²	CASOB	Corn Bu/A	Cotton lbs lint/A	Soybeans Bu/A
1. Corn - Aatrex 4L (2 lb ai/A PE)	0	97	129.7 b	-	-
2. Corn - Aatrex 4L (3 lb ai/A PE)	0	99	137.3 ab	-	-
3. Corn - Weedy check	0	0	124.5 b	-	-
4. Corn - Weed free check	0	100	158.4 a	-	-
5. Cotton - Cotoran 80W (1.5 lb ai/A PE)	0	94	-	635	-
6. Cotton - Cotoran 80W (1.5 lb ai/A PE; Cotoran 80W 1.0 lb ai/A POT)	0	95	-	726	-
7. Cotton - Weedy check	0	0	-	513	-
8. Cotton - Weed free check	0	100	-	631	-
9. Soybean - Lasso 4ME (2.0 lb ai/A PE) + Lexone 75DF (0.38 lb ai/A PE); followed by Lexone 75DF (.25 lb ai/A POD) + Butyrac 2002E (.2 lb ai/A POD)	28	93	-	-	38.5 ab
10. Soybean - Scepter 1.5S (.125 lb ai/A PE); Scepter (.125 lb ai/A POST)	16	95	-	-	37.9 ab
11. Soybean - Weedy check	0	0	-	-	34.2 b
12. Soybean - Weed free check	0	100	-	-	41.5 a
LSD .05	3	2	20.9	N.S.	6.8

¹Entire experimental area treated with Prowl 4E (1 qt/A) for annual grass and other broadleaf weeds.

Variety: Corn - Pioneer 3147; Cotton - Stoneville 825; Soybean - Asgrow A5474
Planted: 5/13 Treated: PRE-5/13; Post and POD-6/20 GPA: 18 MPH: 4 PSI: 30 Tips: 8002
Design: RCB Reps: 4 Plot size: 4-40" rows x 30' (3 rows treated)
Soil type: Collins silt loam Fertilization: Corn - 150-0-0; soybean - 0-0-0; cotton - 60-0-0 pH: 6.2 Fertility: P-VH; K-VH O.M.: First rainfall: .07" in 2 days; 1.66" in 14 days.

²GLXMA = Soybean; CASOB = Sicklepod

³Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-W-S Total postemergence weed control in soybeans

Treatment ¹	Rate lb/A	Percent Control or Injury 7-15-85					GLXMA Yield ³ Bu/A
		GLXMA ²	SORHA	AMACH	CHEAL	IPOHG	
1. Basagran + Blazer + Poast + COC	.5 + .5 + .2 + 1 qt	20	91	98	89	97	37.6 c-f
2. Basagran + Blazer + Poast + COC		23	56	94	80	96	30.2 i
3. Basagran + Blazer + Poast + COC	.5 + .5 + .3 + 1 qt	35	98	95	96	99	39.5 b-f
4. Basagran + Blazer + Poast + COC		35	84	97	48	93	30.1 i
5. Poast + COC fb Basagran + Blazer + AG98	.1 + 1 qt; .5 + .5 + .13%	5	99	99	98	99	45.0 ab
6. Poast + COC fb Basagran + Blazer + AG98		5	90	99	51	98	36.6 e-g
7. Poast + Basagran + Blazer + COC	.3 + .75 + .25 + 1 qt.	20	88	97	98	98	42.0 a-e
8. Poast + Basagran + Blazer + COC		25	46	92	65	97	30.6 hi
9. Basagran + Poast + COC	.75 + .3 + 1 qt	0	67	79	87	95	32.0 g-i
10. Basagran + Poast + COC		0	38	61	53	56	27.3 i
11. Poast + COC fb Basagran	.2 + 1 qt; .75	0	97	67	64	98	40.4 b-f
12. Poast + COC fb Basagran		0	87	15	20	90	29.6 i
13. Basagran + Blazer fb Poast + COC	.5 + .25; .3 + 1 qt	0	99	98	98	99	44.9 ab
14. Basagran + Blazer fb Poast + COC		3	97	85	65	65	35.8 f-h
15. Poast + COC fb Blazer + AG98	.2 + 1 qt; .5 + .13%	5	99	99	49	99	45.1 ab
16. Poast + COC fb Blazer + AG98		11	99	99	37	99	36.3 fg
17. Verdict + Scepter + COC	.06 + .25 + 1 qt	20	97	99	97	99	43.9 a-c
18. Verdict + Scepter + COC		25	94	99	84	99	38.6 c-f
19. Assure + Classic + COC	.06 + .007 + 1 qt	18	99	99	50	96	42.2 a-d
20. Assure + Classic + COC		20	98	99	0	98	30.7 hi
21. Prowl + Scepter, PRE	1.0 + .25	0	94	99	99	99	43.3 a-c
22. Prowl + Scepter, PRE		5	96	99	98	97	42.4 a-d
23. MBR 22359 + Scepter, PRE	2.0 + .25	0	98	99	99	99	47.7 a
24. MBR 22359 + Scepter, PRE		0	99	99	98	99	46.4 a
25. Weedy check	---	0	0	0	0	0	19.4 j
26. Weedy check	---	0	0	0	0	0	14.7 j
27. Weed free check	---	0	98	99	99	99	44.1 a-c
28. Weed free check	---	0	99	99	99	99	42.4 a-d
	LSD .05	12	18	13	35	18	4.8

Variety : Asgrow A5474 Planted: 5/28 Treated: Pre-5/28 GPA: 18 MPH: 4 PSI: 32ips: 8002 Design: RCB Reps: 4
 Plot size: 10' x 30' Soil type: Collins silt loam Fertility: P - high, K - high pH: 6.8 O.M.: 1.1 First rainfall:
 .13" in 1 day. Ep. June 12 - V2 Sequential post June 20 - V4

¹Sprayed entire test with Roundup 2 qt/A on 5/6 and with 1 qt/A on 5/28.

2GLXMA = soybeans; SORHA = johnsongrass; AMACH = smooth pigweed; CHEAL = lambsquarters; IPOHG = entireleaf morningglory

³Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

Main Plots GLXMA Yield (Bu/A)
 10" rows 40.5 a
 30" rows 33.7 b

Odd number treatments are 10" row spacing; even number treatments are 30" spacing.

LSD .05 = 2.1 bu/A

H-692-85-W-S Total postemergence weed control in soybeans

Treatment ¹	Rate lb/A	Percent Control or Injury 7-15-85					GLXMA Yield ³ Bu/A
		GLXMA ²	SORHA	AMACH	CHEAL	IPOHG	
1. MBR 22359 - Scepter, PRE	2.0 - .25	0	97	99	99	99	47.0 a
2. Weed free check	---	0	99	99	99	99	43.3 b
3. Prowl + Scepter, PRE	1.0 - .25	3	95	99	99	98	42.8 bc
4. Verdict - Scepter - COC	.06 - .25 - 1 qt	23	96	99	91	99	41.2 cd
5. Poast - COC fb Basagran - Blazer - AG98	.1 - 1 qt; .5 - .5 - .13%	5	95	99	75	99	40.8 cd
6. Poast - COC fb Blazer - AG98	.2 - 1 qt; .5 - .13%	8	99	99	43	99	40.7 cd
7. Basagran - Blazer fb Poast - COC	.5 - .25; .3 - 1 qt	2	98	92	82	82	40.3 d
8. Assure - Classic - COC	.06 + .007 - 1 qt	19	99	99	25	97	36.5 e
9. Poast - Basagran - Blazer - COC	.3 - .75 - .25 - 1 qt.	23	67	95	82	98	36.3 e
10. Poast - COC fb Basagran	.2 - 1 qt; .75	0	92	41	42	94	35.0 ef
11. Basagran - Blazer - Poast + COC	.5 - .5 - .3 - 1 qt	35	91	96	72	96	34.8 ef
12. Basagran - Blazer - Poast - COC	.5 - .5 - .2 - 1 qt	22	74	96	85	97	33.9 f
13. Basagran - Poast - COC	.75 - .3 - 1 qt	0	53	70	70	76	29.6 g
14. Weedy check	---	0	0	0	0	0	17.0 h
LSD .05 = 3.4							
CV = 9.2%							

Variety : Asgrow A5474 Planted: 5/28 Treated: Pre-5/28 GPA: 18 MPH: 4 PSI: 32 Tips: 8002
 Design: RCB Reps: 4 Plot size: 10' x 30' Soil type: Collins silt loam
 Fertility: P - high, K - high pH: 6.8 O.M.: 1.1 First rainfall: .13" in 1 day.
 Ep. June 12 - V2
 Sequential post June 20 - V4

¹Sprayed entire test with Roundup 2 qt/A on 5/6 and with 1 qt/A on 5/28.

²GLXMA = soybeans; SORHA = johnsongrass; AMACH = smooth pigweed; CHEAL = lambsquarters; IPOHG = entireleaf morningglory

³Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

Row spacing effect on GLXMA Yield (bu/A)
 10" rows 40.5 a
 30" rows 33.7 b
 LSD .05 = 2.1 bu/A

H-692-85-W-Sb-3 Evaluation of Postemergence Grass Herbicides for Soybeans

Treatment	lb ai/A	Percent Control	GLXMA Yield ²
		SORHA ¹	Bu/A
1. BAS 517 (1.67EC) + COC	.05 + 1 qt	86	39.1 b
2. BAS 517 (1.67EC) + COC	.075 + 1 qt	95	43.5 a
3. BAS 517 (1.67EC) + COC	0.1 + 1 qt	97	40.3 ab
4. BAS 517 (1.67EC) + COC	0.2 + 1 qt	99	41.9 ab
5. BAS 517 (1.67EC) + COC	0.3 + 1 qt	99	42.1 ab
6. BAS 517 (1.67EC) + COC	0.4 + 1 qt	99	41.2 ab
7. BAS 517 (1.67EC) + COC fb; BAS 517 + COC	0.1; 0.1	97	40.6 ab
8. BAS 517 (1.67EC) + COC fb; BAS 517 + COC	0.2, 0.2	97	38.7 b
9. Poast + COC	0.2	84	40.1 ab
10. RO17-3664 (2E) + X-77	.06 + .25%	71	40.1 ab
11. RO17-3664 (2E) + X-77	.125 + .25%	99	41.2 ab
12. RO17-3664 (2E) + X-77	.25 + .25%	99	41.1 ab
13. RO17-3664 (2E) + X-77 fb	.06 + .25%		
RO17-3664 + X-77	.06 + .25%	96	39.6 ab
14. RO17-3664 (2E) + X-77 fb	.125 + .25%;		
RO17-3664 + X-77	.125 + .25%	96	39.4 ab
15. Weedy check	---	0	31.6 c
16. Weed free check	---	98	41.4 ab
		24	3.5

Variety: Asgrow A5474 Planted: 5/29 Treated: 6/20; 7/17 GPA: 18 MPH: 4 PSI: 32
 Tips: 8002 Design: RCB Reps: 4 Plot size: 3-30" rows x 30' Soil type: Collins silt
 loam Fertility: H-P; H-K pH: O.M.: First rainfall: in hours/days.

Sprayed June 13 with Reflex + Basagran (.38 + .5) for broadleaf weeds.

¹SORHA = johnsongrass GLXMA = soybeans

²Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-W-JG-Post Postemergence Johnsongrass Control in Soybeans
West Tennessee Experiment Station, Jackson. 1985

Treatment ¹	Rate lb ai/A	Percent Control	GLXMA Yield ³
		SORHA ²	Bu/A
1. Assure + COC	.06 + 1 qt/A	97	39.9 ab
2. Assure + COC	.125 + 1 qt/A	99	38.1 ab
3. Fusilade 2000 + COC	.188 + 1 qt/A	99	41.1 a
4. Fusilade 2000 + COC	.25 + 1 qt/A	99	39.3 ab
5. Poast + COC	.2 + 1 qt/A	85	38.9 ab
6. Poast + Coc	.3 + 1 qt/A	93	39.5 ab
7. Trophy + COC	.25 + 1 qt/A	97	40.2 ab
8. Trophy + COC	.5 + 1 qt/A	99	37.2 ab
9. Verdict + COC	.06 + 1 qt/A	90	41.9 a
10. Verdict + COC	.125 + 1 qt/A	98	40.0 ab
11. Whip	.15	89	37.4 ab
12. Whip fb Whip	.15; .01	91	38.1 ab
13. Weedy check	---	0	26.8 c
14. Weed free check	---	99	36.4 ab
	LSD .05	11	5.5

Variety : Asgrow A5474 Planted: 5/29 Treated: 6/20; Whip 7/17 GPA: 18 MPH: 4
PSI: 32 Tips: 8002 Design: RCB Reps: 4 Plot size: 3 - 30" rows x 30'
Soil type: Collins silt loam Fertility: pH: O.M.:
First rainfall: in hours/days.

¹Spayed June 13 with Reflex + Basagran (.38 +.5) for broadleaf weeds.

²SORHA = johnsongrass GLXMA = soybean

³Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-W-S-Pre-II Soybean Preemergence Herbicide Evaluation II
West Tennessee Experiment Station. 1985

Treatment ¹	Rate lb ai/A	Percent Control or Injury								GLXMA Yield, Bu/A ²	
		-----June 30, 1985-----				-----Oct 25, 1985-----					
		AMACH	EPHMA	IPOHG	SORHA	XANST	AMACH	EPHMA	IPOHG	XANST	
1. AC 263,499 (1.95S)	.063	97	46	59	35	50	98	63	91	88	42.0 a-e
2. AC 263,499	.125	99	90	79	63	87	99	87	86	91	44.0 a-d
3. Scepter fb Scepter (1.5S)	.125; .125	99	23	94	58	96	98	0	68	98	43.9 a-d
4. Scepter fb Scepter	.094; .156	99	18	96	59	98	99	0	92	99	43.3 a-d
5. Scepter fb Scepter	.156; .094	98	23	69	55	99	99	0	90	98	46.1 a
6. Scepter fb Scepter	.125; .25	99	48	93	73	99	99	0	94	99	45.9 ab
7. RE 39571 (3EC)	1.5	45	0	0	0	0	13	0	0	13	36.0 ef
8. RE 39571	2.0	43	0	0	0	0	14	0	0	8	34.1 f
9. RE 39571 + Sencor (75DF)	1.5 + .38	94	24	0	0	35	93	30	0	80	39.9 a-f
10. RE 39571 + Sencor	2.0 + .38	57	0	0	0	0	86	46	48	58	34.9 f
11. Cinch (7E)	1.0	13	0	0	5	0	6	0	0	6	38.5 c-f
12. Cinch + Sencor	1.0 + .38	99	48	0	3	53	95	66	35	91	40.2 a-e
13. Dual 8E + Lexone 75DF	1.5 + .38	74	48	0	0	23	95	79	48	59	34.2 f
14. CGA 24704 (2.5EC) + Lexone	1.5 + .38	99	50	23	8	40	98	94	43	85	38.9 c-f
15. Command (6E) + Canopy	1.0 + .38	99	95	46	39	98	95	94	81	98	42.3 a-d
16. Command + Scepter	1.0 + .125	99	97	24	55	97	97	95	41	98	43.9 a-d
17. Command + Sencor	1.0 + .38	99	97	0	26	96	99	97	55	99	42.9 a-d
18. Sencor + BAY MZH 2091 (4.17EC)	.38 + .38	94	23	0	0	0	91	66	20	56	38.5 c-f
19. Sencor + BAY MZH 2091	.28 + .28	74	23	0	0	0	44	24	24	46	35.4 f
20. Zorial (80DF) + Sencor	1.0 + .25	94	0	0	0	35	80	40	45	75	37.9 d-f
21. Zorial + Sencor	1.2 + .38	94	48	0	0	70	95	65	43	76	39.7 b-f
22. Weed free check	1.0 + .125	100	100	100	100	100	99	99	99	99	44.6 abc
	LSD .05	32	51	33	21	36	20	35	44	26	5.2

CV = 9.1%

CV = 9.1%

Variety: Essex Planted: May 29 Treated: Pre-5/30; Post 6/21 GPA: 18 MPH: 4 PSI: 32
Tips: 8002 Design: RCB Reps: 4 Plot size: 4-30" rows x 30' Soil type: Collins silt
loam Fertility: high P; high K pH: 6.6 O.M.: 1.2% First rainfall: .34" in 8 days.
Insecticide/Nematicide: Temik - 1.0 lb ai in furrow

¹Verdict (.125 lbs ai/A) plus 1 qt/A Agridex over entire test on July 1, 1985 for johnsongrass and other annual grasses.

²Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

AMACH = Smooth pigweed EPHMA = Spotted spurge IPOHG = Entireleaf morningglory SORHA = Johnsongrass
XANST = Common cocklebur

H-692-85-W-S-PRE-I Soybean Preemergence Herbicide Evaluation I

Treatment ¹	Rate lb ai/A	Percent Control								GLXMA ²	
		-----June 30, 1985-----					-----October 25, 1985-----			Yield, Bu/A	
		XANST	AMACH	IPOHE	EPHMA	SORHA	XANST	AMACH	IPOHE	EPHMA	
1. Lexone (75DF)	.38	24	97	0	0	0	86	93	36	78	36.5 cd
2. Canopy (75DF)	.285	50	90	0	0	8	66	81	46	51	41.1 c
3. Canopy	.38	65	99	24	0	0	75	99	45	85	38.9 cd
4. Canopy	.475	85	99	70	24	0	73	98	53	43	40.1 c
5. DPX R 8259 (60WP)	.56	46	99	23	0	0	55	99	23	52	36.2 d
6. DPX R 8259	.75	72	99	0	0	0	85	99	66	8	41.4 bc
7. DPX R 8259	.94	96	99	23	0	0	98	99	43	40	39.0 cd
8. Scepter (1.5S)	.094	0	99	23	0	8	38	99	58	33	40.0 c
9. Scepter	.125	0	99	0	0	0	34	99	35	69	36.7 cd
10. Scepter	.188	29	99	0	0	0	70	98	38	25	42.8 abc
11. Command 6E	1.0	85	67	23	71	45	81	30	41	94	40.3 c
12. Command + Sencor	1.0 + .38	93	99	0	72	16	97	99	20	95	42.8 abc
13. Canopy fb Classic + X-77	.38; .008 + .25%	99	99	94	72	29	99	98	70	66	40.9 c
14. Canopy fb Scepter	.38; .188	99	99	68	23	69	99	99	60	20	44.0 ab
15. Lexone fb Classic + X-77	.38; .008 + .25%	99	99	71	46	33	98	99	73	73	43.9 ab
16. Lorox 50DF + Lasso 4ME	.75 + 2	67	99	0	95	10	87	99	49	99	39.8 c
17. Linex 4F + Lasso 4ME	.75 + 2	72	99	13	98	15	75	99	23	95	39.4 c
18. SC5676/R25788 (7EC)	1.0 + .17	47	99	0	72	0	36	99	23	94	36.5 cd
19. Weedy check	---	0	0	0	0	0	24	8	0	23	29.8 e
20. Weed free check	---	100	100	100	100	100	99	99	99	97	47.9 a
	LSD .05	44	15	42	38	17	34	18	N.S.	40	5.5

Variety : Essex Planted: May 29 Treated: Pre - 5/30; Post- 6/21 GPA: 18 MPH: 4 PSI: 32 Tips: 8002 Design: RCB
 Reps: 4 Plot size: 4-30" rows X 30' Soil type: Collins silt loam Fertility: high P; high K pH: 6.6 O.M.: 1.2%
 First rainfall: .34" in 8 days Insecticide/nematicide: Temik - 1 lb ai in furrow

¹Entire experiment treated with Verdict plus Agridex (0.125 lb ai/A + 1 qt/A) for grass control on July 1.

²Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

XANST = Common cocklebur, AMACH = Smooth pigweed, IPOHE = Ivyleaf morningglory, EPHMA = Spotted spurge, SORHA = Johnsongrass
 GLXMA = Soybean

H-692-85-W-S-CASOB Sickpod Control in Soybeans
West Tennessee Experiment Station. 1985

Treatment ¹	Rate lb ai/A	MOA	Percent Control or Injury					GLXMA Yield ³ Bu/A
			GLXMA ²	CASOB	AMACH	ELEIN	CASOB	
			-----June 30, 1985-----				7-15-85	
1. Scepter	.125	PRE	0	38	45	30	59	41.7 bc
2. Scepter	.25	PRE	0	51	99	70	63	38.9 bc
3. Scepter	.125	Post	0	84	87	0	86	42.3 b
4. Scepter fb Scepter	.125; .125	PRE; Post	0	94	99	69	91	45.8 ab
5. Scepter	.25	Post	8	95	96	68	92	45.3 ab
6. Scepter + Sencor	.125 + .38	PRE	0	43	94	96	49	44.8 ab
7. Scepter + Sencor fb Scepter	.125 + .38; .125	PRE; Post	0	98	99	99	97	43.8 ab
8. Canopy fb Scepter	.38; .125	PRE; Post	11	94	99	99	94	43.2 bc
9. Canopy	.38	PRE	4	55	88	92	75	43.6 ab
10. Canopy fb Classic - X-77	.38; .015 + .25%	PRE; Post	23	97	99	71	98	41.9 bc
11. Classic + X-77	.0078 + .25%	Post;						
fb Classic - X-77	.015 + .25%	Post	13	96	85	0	89	44.4 ab
12. Sencor fb Scepter	.5; .125	PRE; Post	0	97	98	99	97	48.1 a
13. MYX 104 25WP	0.5	Post	0	19	0	0	20	39.4 bc
14. Lasso + Sencor fb;	2.5 + .38;	PRE;						
Sencor - 2,4-DB	.25 + .2	Post Dir.	0	88	99	99	94	41.8 bc
15. Weedy check	---	---	0	0	0	0	13	35.0 c
16. Weed free check	---	---	0	99	99	99	99	42.9 b
	LSD .05		7	22	27	35	26	6.3

Variety : Asgrow A5474 Planted: May 27 Treated: Pre-May 27; POST June 12 - V2; Jun 20 V4 - POD and sequentials
GPA: 18 MPH: 4 PSI: 32 Tips: 8002 Design: RCB Reps: 4 Plot size: 4-30" rows x 30' Soil type: silt loam
Fertility: high P; high K pH: 7.3 O.M.: 1.3% First rainfall: .13" in 2 days after Pre's

¹Entire experiment area treated with Reflex + Verdict (.25 + .06 lb ai/A) + Agridex (1 qt/A).

²GLXMA = soybeans; CASOB = sickpod; AMACH = smooth pigweed; ELEIN = goosegrass

³Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

H-692-85-W-S Effect of rate and time on efficacy of Scepter and Classic

Treatment	Rate lb/A	DAP	Percent Injury or Control					GLXMA	GLXMA Yield (Bu./A)
			June 9, 1985					Height	
			GLXMA	DIGSA	XANST	AMACH	IPOGH	8-1-85 (in.)	
-----x-----									
1. Scepter	.125	0	0	69	99	99	93	47	48.9 abc
2. Scepter	.25	0	10	98	99	99	99	49	52.3 a
3. Classic	.03	0	26	98	99	99	99	46	46.8 abc
4. Classic	.06	0	30	99	99	99	99	41	50.6 a
5. Scepter	.125	7	0	13	0	50	0	48	37.9 cde
6. Scepter	.25	7	0	31	25	74	0	48	35.8 de
7. Classic + X-77	.015	7	0	0	25	25	0	46	39.1 cde
8. Classic + X-77	.03	7	0	0	44	99	0	50	38.1 cde
9. Scepter	.125	14	1	97	99	99	95	48	47.0 abc
10. Scepter	.25	14	3	95	99	99	86	48	43.7 a-e
11. Classic + X-77	.015	14	28	26	99	99	94	43	46.0 abc
12. Classic + X-77	.03	14	50	9	99	99	94	43	44.7 a-d
13. Scepter	.125	21	1	11	88	97	0	53	44.3 a-e
14. Scepter	.25	21	8	5	70	98	0	49	45.8 abc
15. Classic + X-77	.015	21	4	0	95	98	20	45	44.9 a-d
16. Classic + X-77	.03	21	11	5	92	99	3	45	43.6 a-e
17. Basagran + Blazer + AG98	.25 + .13 + .13%	14	3	60	98	99	98	47	44.3 a-e
18. Basagran + Blazer + AG98	.5 + .25 + .13%	21	13	45	99	99	93	48	40.5 b-e
19. Weedy check	---	--	0	0	0	23	0	44	34.6 e
20. Weed free check	---	--	0	99	99	99	99	49	43.4 a-e
LSD .05			6	• 30	31	32	13	5	7.8

Variety: Asgrow A5474 Planted: 5/17 Treated: PRE-5/17; 7 DAT-5/24; 14 DAT-5/31;
21 DAT-6/7 GPA: 18 MPH: 4 PSI: 32 Tips: 8002 Design: RCB Reps: 4
Plot size: 4-30" rows x 30' Soil type: Collins silt loam Fertility: H-P; H-K
pH: O.M.: Rainfall: Time of treatment

PRE -	Rainfall total for 7 DAT = 1.59"
7 DAT -	" " " " .13"
14 DAT -	" " " " .12"
21 DAT -	" " " " .75"

GLXMA = Soybeans
DIGSA = Large crabgrass
XANST = Common cocklebur
AMACH = Smooth pigweed
IPOGH = Entireleaf morningglory

H-692-85-W-S-NTDC Herbicide Evaluation for No-till Soybeans
West Tennessee Experiment Station, Jackson. 1985

		Percent Injury or Control															
		-----July 15, 1985-----							--July 30, 1985--								
		G	A	X	E	I	D	S	A	X	E	I	S	7-29-85			
		L	M	A	P	P	A	O	M	A	P	P	O				
		X	A	N	H	O	T	R	A	N	H	O	R	GLXMA	GLXMA	GLXMA	
		M	C	S	M	H	S	H	C	S	M	H	H	height	growth	yield	
Treatment	Rate lb ai/A	A ¹	H	T	A	E	T	A	H	T	A	E	A	inches	stage	Bu/A ²	
1. Command + Bronco	1.0 + 4.0	0	0	25	0	25	50	25	8	0	0	0	25	64	9.8	30.8 f	
2. Command + Sencor + Bronco	1.0 + .25 + 4.0	0	49	0	0	0	50	21	70	0	13	0	25	62	8.0	29.4 f	
3. Scepter + Bronco	.125 + 4.0	5	99	97	72	97	99	94	98	95	25	71	81	58	9.3	38.9 a-e	
4. Scepter + Bronco	.188	11	99	99	97	83	99	99	99	97	44	85	74	57	8.5	41.1 abc	
5. Scepter + Bronco	.25 + 4.0	18	99	99	99	99	99	99	99	98	71	96	95	58	9.8	40.2 abc	
6. Canopy + Bronco	.188 + 4.0	18	99	99	99	99	99	98	99	98	98	96	92	51	9.0	43.8 a	
7. Canopy + Bronco	.28 + 4.0	40	99	99	99	99	99	95	99	99	99	96	93	46	7.5	40.1 abc	
8. Canopy + Bronco	.38 + 4.0	40	99	99	99	99	99	98	99	99	50	98	71	44	7.8	34.8 b-f	
9. Scepter + Sencor + Bronco	.125 + .25 + 4.0	15	99	97	69	55	97	99	97	90	13	38	60	57	9.3	39.0 a-e	
10. Scepter + Sencor + Bronco	.188 + .25 + 4.0	10	99	96	69	98	99	99	99	97	85	87	86	53	9.8	40.0 a-d	
11. Scepter + Sencor + Bronco	.125 + .38 + 4.0	4	99	98	67	96	99	97	95	94	25	82	43	62	9.5	42.7 ab	
12. Command + Scepter + Bronco	1.0 + .125 + 4.0	15	99	99	99	96	99	96	99	97	92	62	75	56	9.5	41.2 a-c	
13. Command + Canopy + Bronco	1.0 + .28 + 4.0	30	99	99	99	99	99	99	99	98	99	99	92	45	8.0	42.4 ab	
14. Sencor + Bronco	.38 + 4.0	0	57	15	0	0	25	25	74	6	0	0	8	64	9.0	31.6 e-f	
15. Linex + Bronco	1.0 + 4.0	0	87	28	0	0	74	25	94	23	0	8	8	58	8.8	32.3 d-f	
16. Zorial - Sencor + Bronco	1.0 + .25 + 4.0	0	82	55	25	23	98	94	73	23	0	0	35	57	9.5	34.0 c-f	
17. Bronco fb Classic + X-77	4.0 + .0078 + .13%	0	99	99	86	95	98	96	99	90	65	82	30	61	10.0	41.8 a-c	
18. Bronco fb Scepter	4.0 + .125	0	99	99	72	60	99	99	99	99	61	84	89	60	9.8	42.4 ab	
19. Bronco fb Basagran + Blazer + X-77	4.0 + .5 + .25 + .125%	3	97	88	91	47	72	93	87	53	70	78	58	58	9.3	36.3 a-f	
20. Bronco	4.0	0	0	0	0	0	0	0	20	0	0	0	0	58	9.5	35.1 b-f	
LSD .05		13	25	24	35	33	35	31	29	26	38	30	37	3	1.5	6.6	

Variety : Asgrow A5474 Planted: 6/13 Treated: Pre-6/14; POST-7/1 at V2 stage GPA: 18 MPH: 4 PSI: 32 Tips: 8002
Design: RCB Reps: 4 Plot size: 4 - 30" rows x 30' Soil type: Vicksburg/Collins silt loam Fertility: H-P; H-K
pH: 0.M.: 1% First rainfall: 0.15" in 2 days.

¹GLXMA = Soybeans AMACH = Smooth pigweed XANST = Common cocklebur EPHMA = Spotted spurge IPOHE = Ivyleaf morningglory
DATST = Jimsonweed SORHA = Johnsongrass

²Values within a column followed by the same letter(s) are not statistically distinguishable at the 5% level according to Duncan's New Multiple Range Test.

**H-692-85-W-Cr-Post Postemergence Herbicide Evaluation - Corn
West Tennessee Experiment Station, Jackson. 1985**

Treatment	Rate lb ai/A	Percent Injury or Control, 6-9-85	
		Corn	XANST
1. Atrazine + RS010 + X-77	1 + .9 + .5%	3	99
2. Bladex + RS010 + X-77	.75 + .9 + .5%	17	99
3. SC0051 + X-77	0.5 + .5%	10	99
4. SC0051 + X-77	1.0 + .5%	10	99
5. SC0051 + Aatrex + X-77	0.5 + 1.0 + .5%	0	99
6. CN11-6180 + X-77	0.5 + 1.0 + .5%	0	99
7. Buctril + X-77	.25 + .5%	0	98
8. Buctril + X-77	.38 + .5%	0	98
9. Buctril + Aatrex + X-77	.25 + .5 + .5%	0	99
10. Buctril + 2,4-D + X-77	.25 + .25 + .5%	0	98
11. Weedy check	---	2	98
12. Weed free check	---	3	99

Variety : Pioneer 3147 Planted: 4/19/85 Treated: 5/8/85 GPA: 18 MPH: 3.8
 PSI: Tips: 8002 Design: RCB Reps: 3 Plot size: 3 - 30" rows x 30'
 Soil type: Collins silt loam Fertility: pH: O.M.:

Corn 3-4 leaves
 Cockleburs 2-3" (XANST)
 Morningglories 2"

DATA SHEET FOR
WEED SCIENCE

Experiment Number H-692-85-W-Rescue

Title Effect of Rescue on Weed-free Soybeans

Loc. Station West Tennessee Experiment Station Year 1985

Notes on Procedures:

1. Crop Cultivar Essex
3. Stand - Date Up June 19
5. Soil Type Lexington silt loam
7. Fertilization

2. Date of Planting June 14
4. Harvest Date
6. Soil Test Date Fall '84 pH 6.7 P H K H
8. Plot Data:
Size 10' X 25' area treated 10' x 25'
Area harvested 5' x 25' row width 30"
9. Experiment Design RCB
Number of Replications 4
10. Soil organic matter 1 % Fall '84 Date

Date	lb/A	Type
	None	

11. Climatic data and equipment data at time of herbicide application:

Date	Crop Stage	Weed Stage		Temperature		Wind mph	Rel. Humid	Cloud Cover	Rain	
				Air'	Soil 4"				hrs. to	Amt.
7-16-85	V6	N/A								
7-23-85	V8									

Date	Soil Moisture		Sprayer	Nozzle			gpa	psi	Speed' mph
	1"	4"		Type	Size	Spacing			
7-16-85	Good	Good	CO ₂	Flat fan	8002	19"	18	32	4
7-27-85	Good	Good	CO ₂	Flat fan	8002	19"	18	32	4

12. Method of herbicide incorporation: N/A Depth

13. Insecticide None

14. Cultural practices: Land preparation: Past crops 19 84 soybeans, 1983 corn.

Conventional tillage - disking 2X, harrowing.

H-692-85-W-Rescue

Effect of Rescue on Weed-free Soybeans
WTES, Jackson. 1985

Treatment ¹	Rate/A	GLXMA	GLXMA	GLXMA	GLXMA ²
		Stage	Injury (%)	Height (In.)	Yield (Bu/A)
1 Weed free check	--		0	24	52.7 ab
2 Weedy check	--		0	23	53.8 a
3 Rescue + X-77	2 qts + 0.5%	V6	26	19	49.8 bc
4 Rescue + X-77	3 qts + 0.5%	V6	26	20	48.2 c
5 Rescue + X-77	3 qts + 0.5%	V8	23	20	53.2 a
6 Classic + X-77	.0078 lb ai/A + 0.5%	V6	3	23	54.5 a
LSD .05			4	2	3.1

Variety: Essex Planted: June 14 Sprayed: V6 Post on July 16, 1985;
sprayed V8 post on July 23, 1985. Sprayer was CO₂ with 8002 tips. 30 psi;
16 gpa. Soil moisture was excellent both times.

¹This experiment was cultivated once and there was virtually no weed competition.

²Values followed by the same letter(s) are not statistically distinguishable at the 5% probability level according to Duncan's New Multiple Range Test.