4-1987

Weed Control Evaluations for Soybeans in Tennessee, 1986

University of Tennessee Agricultural Experiment Station

R. M. Hayes

G. N. Rhodes Jr.

G. A. Mitchell

M. L. Thornton

The University of Tennessee
Agricultural Experiment Station

Research Report 87-11
April 1987

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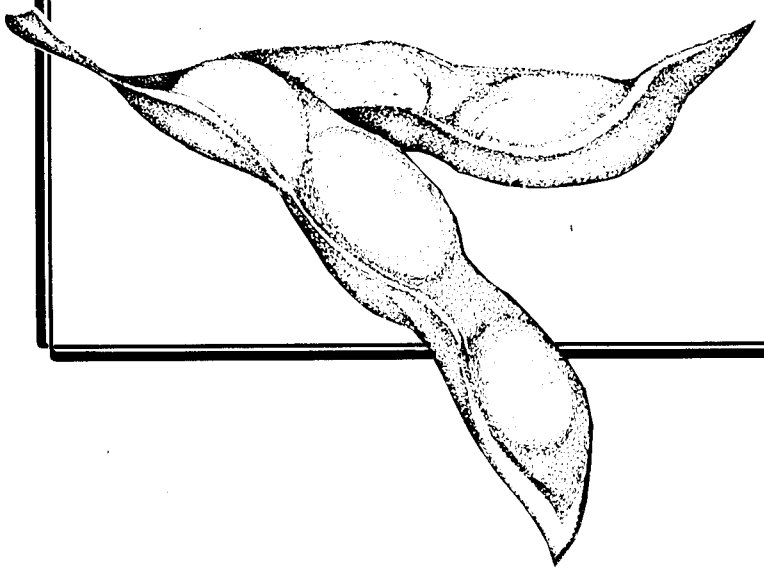
Department of Plant and Soil Science



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INTRODUCTION

This report is a summary of herbicide evaluations in soybeans conducted by the staff of The University of Tennessee, Department of Plant and Soil Science, in 1986. This publication contains results of individual experiments which are not summarized over time or location; therefore, data should not be taken out of context or used 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 at the Plateau Experiment Station; Bobby McKee at the Knoxville Experiment Station; 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, CPS, 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., Mobay Corp., Monsanto, PPG Industries, Rhone-Poulenc, Inc., Riverside-Terra, Rohm & Haas, Sandoz Crop Protection, Shell Chemical Co., Shell Development, Stauffer Chemical Co., Union Carbide, Uniroyal, Velsicol Chemical Co., and Zoecon.

Growing Season in Brief

The 1986 growing season was characterized by an early, warm, drier than normal spring planting season. Hail damaged wheat at the West Tennessee Experiment Station in early April. May was an excellent planting month, but excessive rainfall occurred the first two weeks of June. This was followed by below normal rainfall and above normal temperatures the remainder of the growing season. Harvest season was excellent for corn and cotton, but November was wet and soybean harvest was delayed at many locations.

ABBREVIATIONS USED IN THIS REPORT

Weed Abbreviations

ABUTH = velvetleaf
AMACH = smooth pigweed
AMBEL = common ragweed
ANTCO = mayweed
BRAPP = broadleaf signalgrass
BROSE = cheat
CASOB = sicklepod
CHEAL = common lambsquarters
CIMRA = trumpetcreeper
CRINJ = crop injury
CYPES = yellow nutsedge
DATST = jimsonweed
DIGSA = large crabgrass
ECLAL = eclipta alba
ERICA = horseweed (marestail)
EPHMA = spotted spurge
GLXMA = soybeans
HORPU = little barley
IPOHE = ivyleaf morningglory
IPOHG = entireleaf morningglory
IPOLA = pitted morningglory
MOLVE = carpetweed
PANDI = fall panicum
PHBPU = tall morningglory
POROL = common purslane
SIDSP = sida spinosa
SORHA = johnsongrass
XANST = common cocklebur
ELEIN = goosegrass

Other Abbreviations

Bu/A = bushels per acre
C.O.C. = crop oil concentrate
C.V. = coefficient of variation
DAT = days after treatment
DNMRT = Duncan's New Multiple Range Test
EP = early postemergence
fb = followed by
GPA = gallons per acre
lb/A = pounds per acre
LSD 0.05 = Least significant difference at 95% confidence level
MOA = method of application
MP = mid-postemergence
mph = miles per hour
N.S. or NS = not significant
O.M. = organic matter
P = probability
POD = post-directed
POE = postemergence
POT = postemergence overtop
PPI = preplant incorporated
PE or PRE = preemergence
PSI = pounds per square inch
qt/A = quarts per acre
RCB = randomized complete block
reps = replications
RH = relative humidity
TM = tank mixture

AMES PLANTATION

ROUTE 1

GRAND JUNCTION, TENNESSEE 38039

SUPERINTENDENT - Dr. James M. Anderson

Research at the Ames Plantation in 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.

Rainfall Data for Ames Plantation, Grand Junction, TN for 1986

Date	April	May	June	July	August	Sept.
			inches			
1						
2		0.45	0.03	0.58	0.07	0.01
3			0.23	T	0.03	0.03
4	1.08		T			
5	T		2.46			0.15
6	T		0.89			T
7	0.28		1.08		0.12	
8			T		0.33	
9		0.11	0.70		T	
10		0.35	0.07		0.07	
11		0.97	0.05		0.02	
12						0.91
13						T
14	0.07					
15	0.19			0.85		
16		T			0.58	
17					0.59	
18		0.10				
19		0.27				0.01
20	0.66					T
21	0.10					0.38
22		0.29				1.68
23		0.64				
24						
25		1.24				
26		0.30			0.06	
27		0.05		0.68	0.02	
28	0.08	0.15	0.24		0.27	
29		0.04				
30			0.06			
31						
Total	2.46	4.96	5.81	2.11	2.16	3.17

Maximum and minimum daily air temperatures at Ames Plantation Grand Junction, TN, during the 1986 growing season.

Date	April		May		June		July		August		Sept	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	Degrees F											
1	82	48	86	61	87	65	91	72	101	74	77	62
2	81	51	70	55	82	66	92	71	91	66	79	60
3	81	57	70	47	85	67	83	63	85	61	85	64
4	84	61	69	40	85	69	87	62	88	60	90	70
5	82	60	79	51	80	67	90	63	87	57	88	66
6	77	59	82	60	78	69	92	67	93	61	78	54
7	82	61	84	64	83	69	95	70	90	69	89	57
8	83	62	85	65	85	70	94	70	91	65	85	81
9	72	42	90	62	89	70	94	72	79	67	81	53
10	61	36	91	63	86	71	94	73	90	69	90	58
11	65	40	82	64	88	71	92	73	88	69	90	69
12	76	49	76	61	85	67	91	71	85	60	91	59
13	76	48	82	60	85	59	92	74	85	61	82	54
14	82	59	86	62	85	58	93	71	90	62	83	54
15	68	43	87	66	83	62	95	68	93	66	85	56
16	62	36	80	67	90	64	93	70	93	71	88	58
17	53	32	85	66	91	68	95	70	80	66	90	65
18	66	37	81	63	92	61	95	72	87	68	92	66
19	76	49	70	57	85	61	96	70	90	65	87	67
20	81	57	69	50	91	66	97	71	90	64	90	67
21	68	46	69	44	93	66	99	72	87	64	90	67
22	61	37	73	48	94	66	92	67	90	66	90	66
23	56	32	64	54	95	69	91	67	90	69	84	65
24	69	44	77	64	95	70	94	68	91	66	90	66
25	81	51	85	61	92	68	96	70	93	69	90	68
26	84	51	83	64	91	70	99	74	95	69	90	69
27	84	52	72	57	93	71	100	66	95	69	90	69
28	82	57	82	59	93	70	93	69	92	60	90	67
29	75	46	80	63	86	71	97	71	74	46	195	67
30	84	50	86	61	93	72	100	72	80	48	93	69
31			86	62			101	74	75	58		

PROJ. NUM.: UNITS: LBai/A
FILE NAME: APPRES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PRE HERBICIDE EVALUATION-AMES

RESEARCH BY: R.M. HAYES COUNTY: HARDEMAN ST: TN COUNTRY: USA
COOPERATOR : MARSHAL SMITH LAST UPDATE: 1/16/87 INITIATED: 05/16/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/31/86
REPORTED BY: R.M. HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: FALLOW PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.2
PREVIOUS TILL: CONVENTIONAL SOIL TEXTURE: SILT LOAM SOIL OM%: 1.2
FERTILITY: ACC. TO U.T. RECCOMEND. ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
MISC. 1: NUMBER OF REPS: 4
MISC. 2: REPORT TYPE: INTERIM

PLANTING DATE: 05/16/86 CROP CULTIVAR: ASGROW 5474
HARVEST DATE : 10/31/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/16/86	06/17/86	/ /	/ /	/ /
JULIAN DATE/YEAR	J136/86	J168/86	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	PRE	POST			
AIR/SOIL TEMP(F)	087/083	/	/	/	/
% REL. HUMIDITY	%				
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	OPT/	DRY/DRY	/	/	/
INCORP. EQUIP.	**NONE**				
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK	CO2BACKPACK			
SPRAYER GPA/PSI	18.0/32	18.0/32	. /	. /	. /
NOZZLE TYPE	FLATFAN8002	FLATFAN8002			
RAIN / IRRIG. in					
0-24 hr/1-3 days	. /0.37	. / .	. / .	. / .	. / .
4-7 days/2nd wk	0.93/1.78	. /0.30	. / .	. / .	. / .
3rd / 4th week	3.61/0.82	0.58/0.85	. / .	. / .	. / .

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 *****	****	*********	*********	*********	*********	*********
GLXMA	SOYBEANS		/	/	/	/	/
*****	**** PEST *****	****	*********	*********	*********	*********	*********
XANST	COMMONCOCKLEBUR		/	/	/	/	/
IPOHG	ENTIRELEAF		/	/	/	/	/
	MORNINGGLORY		/	/	/	/	/
DIGSA	LARGE CRABGRASS		/	/	/	/	/
CIMRA	TRUMPETCREEPER		/	/	/	/	/
AMBEL	COMMON RAGWEED		/	/	/	/	/
EPHMA	SPOTTED SPURGE		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: UNITS: LBai/A
FILE NAME: APPRES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PRE HERBICIDE EVALUATION-AMES

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EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1&4.%XANST CONTROL=%COMMON COCKLEBUR CONTROL.
2&5.%IPOHG CONTROL=%ENTIRELEAF MORNINGGLORY CONTROL.
3.%DIGSA CONTROL=%LARGE CRABGRASS CONTROL.
6.%CMIRA CONTROL=%TRUMPETCREEPER CONTROL.
7.%AMBEL CONTROL=%COMMON RAGWEED CONTROL.
8.%EPHMA CONTROL=%SPOTTED SPURGE CONTROL.
9.%MOISTU CALC.=%MOISTURE CALCULATED AT HARVEST.
10.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PRECENT MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL.

SUMMARY

EXCELLENT WEED PRESSURE WAS PRESENT AS EVIDENCED BY THE 50% YIELD REDUCTION IN THE WEEDY CHECK.COMBINATIONS OF GRASS HERBICIDES WITH BROADLEAF HERBICIDES PERFORMED VERY WELL.SENCOR AND LOROX PERFORMED POORLY ON COCKLEBUR,MORNINGGLORY,AND COMMON RAGWEED.THE TOTAL POST TREATMENT WAS ALSO VERY EFFECTIVE.

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PROJ. NUM.: UNITS: LBai/A
FILE NAME: APPRES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PRE HERBICIDE EVALUATION-AMES

RESEARCH BY: R.M. HAYES COUNTY: HARDEMAN ST: TN COUNTRY: USA
COOPERATOR : MARSHAL SMITH LAST UPDATE: 1/16/87 INITIATED: 05/16/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/31/86
APPL: PRE =05/16/86 POST =06/17/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%XANST CONTROL 6/17/86	%IPOMG CONTROL 6/17/86	%DIGSA CONTROL 6/17/86	%XANST CONTROL 7/18/86	%IPOMG CONTROL 7/18/86	%CHIRA CONTROL 7/18/86	%AMBEL CONTROL 7/18/86	%EPHMA CONTROL 7/18/86	%MOISTU CALC. 10/31/*	YIELD BU/ACRE 10/31/*
01	SCEPTER	SC 1.5	0.125	PRE	93	94	35	66	24	25	50	24	13.8	23.6
02	CANOPY	DF 75%	0.38	PRE	89	91	90	66	96	0	95	97	13.7	24.4
03	GEMINI	DF 60%	0.75	PRE	90	94	90	77	91	49	97	97	13.7	25.2
04	COMMAND	EC 6	1.0	PRE	75	20	97	54	23	61	68	97	13.8	24.4
05	SENCOR	DF 75%	0.38	PRE	48	31	41	41	24	24	25	47	13.4	20.0
06	LOROX	FL 4	0.75	PRE	20	8	49	33	24	72	57	0	13.8	20.2
07	PURSUIT	SC 2.0	0.125	PRE	91	94	97	66	95	72	23	96	13.6	18.9
08	TURBO	EC 8	2.0	PRE	46	19	96	38	24	49	0	95	13.8	22.4
09	PURSUIT	SC 2.0	0.063	PRE	61	86	90	50	94	24	36	71	13.5	22.8
	SCEPTER	SC 1.5	0.063	PRE										
10	COMMAND	EC 6	0.5	PRE	71	56	95	46	23	0	48	48	13.6	22.1
	SCEPTER	SC 1.5	0.063	PRE										
11	POAST	EC 1.5	0.1	POST1	0	0	0	96	71	24	98	25	13.3	23.9
	AGRIDEX	EC 4	1.00	POST1										
	BASAGRAN	SC 4	0.25	POST2										
	BLAZER	SC 2	0.125	POST2										
	X-77	%A 100%	0.25%	POST2										
	CULT.	7 DAYS AFTER RAIN												
12	CULT.	7 DAYS AFTER RAIN			0	0	0	23	0	24	20	24	13.7	20.4
13	COMMAND	EC 6	1.0	PRE	84	55	97	43	48	67	49	98	13.7	23.6
	SENCOR	DF 75%	0.188	PRE										
14	PROWL-	EC 2.4	0.87	PRE	89	93	94	54	24	45	48	35	13.5	26.4
	SCEPTER													
15	CINCH	EC 7	1.0	PRE	86	93	98	50	69	25	85	72	13.6	27.7
	CANOPY	DF 75%	0.38	PRE										

PROJ. NUM.: UNITS: LBai/A
FILE NAME: APPRES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PRE HERBICIDE EVALUATION-AMES

APPL: PRE =05/16/86 POST =06/17/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%XANST CONTROL 6/17/86	%IPOHG CONTROL 6/17/86	%DIGSA CONTROL 6/17/86	%XANST CONTROL 7/18/86	%IPOHG CONTROL 7/18/86	%CNIRA CONTROL 7/18/86	%AMBEL CONTROL 7/18/86	%EPHMA CONTROL 7/18/86	%MOISTU CALC. 10/31/*	YIELD BU/ACRE 10/31/*
16	LASSO ME FL 4.0		2.0	PRE	92	95	97	59	97	48	98	97	13.7	24.8
	CANOPY	DF 75%	0.38	PRE										
17	PROWL	EC 4.0	0.75	PRE	75	91	95	45	72	0	50	98	13.6	22.1
	CANOPY	DF 75%	0.188	PRE										
18	PROWL	DF 4.0	0.75	PRE	91	94	95	65	72	25	99	99	13.6	23.5
	CANOPY	DF 75%	0.38	PRE										
19	WEEDY CK				0	0	0	0	0	0	0	0	13.5	13.0
20	WEEDFREE				99	99	99	99	99	99	99	99	13.5	25.4
			LSD(0.05) =		30	28	23	32	54	51	55	45	.4	4.8
			STANDARD DEVIATION =		21	19	16	22	38	36	38	31	.2	3.3
			COEFF. OF VARIABILITY =		32	32	22	42	70	97	66	47	1.8	14.5

KNOXVILLE EXPERIMENT STATION

P. O. BOX 1071

KNOXVILLE, TENNESSEE 37901-1071

SUPERINTENDENT - Dr. John Hodges III

RAINFALL
Knoxville Experiment Station
Knoxville, TN 1986

Date	April	May	June	July	August	September
1	0	0	0	0	.21	.34
2	0	0	.05	.11	0	.87
3	0	0	0	1.54	0	1.41
4	0	0	.49	0	0	0
5	0	0	0	0	0	0
6	0	0	0	0	0	0
7	.03	0	0	0	.09	0
8	.70	.05	0	0	.24	0
9	.10	0	.16	0	.08	.01
10	0	0	.25	0	0	0
11	0	0	0	1.35	.46	0
12	0	.01	.07	0	.62	.40
13	0	0	0	.12	0	0
14	0	.10	0	.41	0	0
15	.04	0	0	.10	0	0
16	0	0	0	0	0	.25
17	0	0	0	0	.73	0
18	0	0	0	0	0	0
19	0	.10	0	0	0	0
20	0	.20	0	0	.04	.05
21	.50	0	0	0	0	0
22	.16	0	0	0	.05	0
23	0	.57	0	0	0	0
24	0	.53	0	0	0	.02
25	0	.28	0	0	0	0
26	0	0	0	0	0	0
27	0	.62	0	0	.56	0
28	0	.17	.08	0	.62	0
29	.41	.14	0	0	.05	0
30	0	0	.50	0	0	.01
31	-	0	-	0	0	-
Total	1.94	2.77	1.60	3.63	3.75	3.36

TEMPERATURE
Knoxville Experiment Station
Knoxville, TN 1986

	April		May		June		July		August		Sept	
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	83	44	84	50	84	60	88	71	83	63	73	62
2	83	47	84	43	85	64	91	75	91	64	71	62
3	81	47	84	43	86	64	85	60	92	65	70	66
4	84	49	65	33	83	64	83	58	90	61	80	67
5	83	48	75	42	78	63	88	65	90	63	80	68
6	83	51	83	47	85	64	90	69	93	65	83	63
7	80	53	84	60	87	68	92	69	94	67	82	54
8	80	58	86	58	89	73	93	68	86	67	82	54
9	69	43	85	52	76	68	94	71	90	68	73	54
10	53	32	86	52	86	68	93	71	86	68	80	56
11	64	32	80	60	86	70	93	66	88	68	84	60
12	71	35	81	61	87	70	90	68	78	64	83	64
13	74	41	77	62	86	63	88	71	87	65	82	56
14	78	45	77	51	85	63	89	68	87	65	79	54
15	79	53	86	57	87	63	88	68	88	68	83	56
16	68	41	83	61	89	63	86	69	91	67	82	58
17	68	37	84	57	89	63	90	69	91	71	81	61
18	51	41	88	60	89	58	95	70	80	68	80	61
19	71	40	80	60	89	55	96	69	85	66	74	65
20	78	46	78	56	90	55	96	70	88	67	78	66
21	78	48	70	48	92	67	96	71	86	68	84	64
22	57	40	68	43	92	60	96	70	87	70	84	59
23	55	26	74	49	92	60	96	70	89	69	87	59
24	61	29	65	49	94	70	95	72	89	70	85	66
25	74	39	81	58	92	60	94	69	89	58	88	64
26	84	50	76	60	90	55	95	69	89	60	88	65
27	89	52	76	64	93	62	95	73	90	65	89	65
28	90	52	82	64	93	67	97	69	85	61	90	64
29	79	48	80	64	95	73	93	71	72	51	91	64
30	79	46	82	65	91	71	98	63	75	52	90	64
31	--	--	84	60	--	--	94	60	75	53	--	--

02-16-1987 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

EVALUATION OF SOYBEAN PPI/PRE HERBICIDE COMBINATIONS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-6 with cooperator PLANT SCI FIELD LAB

Experimental Management

Date Planted 6-13-86 Variety ASGROW 5474 Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK,FIELD CULTIVATOR.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture LOAM
Soil Series STATLER % OM 1.0 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	6-13-86					
Time Treated	PM					
Cloud Cover	CLEAR					
Air Temperature	84					
Relative Humidity	48%					
Wind Speed/Direction	3MPH-W					
Soil Temperature	86					
Soil/Leaf Surface Moisture	DRY					
Soil Subsurface Moisture	DRY					
Soil Tilth	FINE					
Crop Stage	PPI&PRE					
Pest Name, Stage & Density						
IPOLA,PHPBU,IPOHG,3/FT	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	8002	19	19	6.3FT	20	WATER	41

Comments

IPOLA=PITTED MORNINGGLORY; PHPBU=TALL MORNINGGLORY; IPOHG=ENTIRELEAF MORNING-GLORY. PREPLANT TMTS WERE INCORPORATED TO A DEPTH OF 2 IN WITH A POWER-DRIVEN TILLER, ONE PASS. CONDITIONS WERE VERY DRY AFTER PLANTING, AND SOYBEAN EMERGENCE WAS SLOW AND UNEVEN. CROP INJURY WAS NOT EVIDENT IN ANY TMTS.

02-16-1987 SUMMARY

The University of Tennessee

EVALUATION OF SOYBEAN PPI/PRE HERBICIDE COMBINATIONS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-6 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	IPOLA 7-12-86	PHPBU 7-12-86	IPOHG 7-12-86	IPOLA 9-27-86	PHPBU 9-27-86	IPOHG 9-27-86
01	SCEPTER	1.5L	.125	PPI	81.3	77.5	77.5	53.8	43.8	43.8
02	CANOPY	.75D	.38	PPI	68.8	62.5	62.5	47.5	33.8	32.5
03	TREFLAN	4.0E	.75	PPI	82.5	76.3	76.3	53.8	47.5	46.3
03	COMMAND	6.0E	.56	PPI						
04	TREFLAN	4.0E	.75	PPI	92.5	86.3	86.3	60.0	48.8	48.8
04	SCEPTER	1.5L	.125	PPI						
05	TREFLAN	4.0E	.75	PPI	79.5	77.5	77.5	46.3	31.3	31.3
05	CANOPY	.75D	.38	PPI						
06	SONOLAN	3.0E	.75	PPI	86.3	81.3	81.3	65.0	60.0	60.0
06	COMMAND	6.0E	.56	PPI						
07	SONOLAN	3.0E	.75	PPI	88.8	83.8	83.8	65.0	53.8	53.8
07	SCEPTER	1.5L	.125	PPI						
08	SONOLAN	3.0E	.75	PPI	83.8	77.5	77.5	37.5	31.3	31.3
08	CANOPY	.75D	.38	PPI						
09	MFR13327	4.0E	1.13	PPI	82.5	72.5	72.5	52.5	46.3	46.3
10	TURBO	8.0E	2.0	PPI	80.0	70.0	70.0	46.3	35.0	32.5
11	TURBO	8.0E	1.0	PPI	88.8	78.8	78.8	71.3	65.0	62.5
11	SCEPTER	1.5L	.125	PPI						
12	SENCOR	4.0L	.25	PPI	87.5	81.3	81.3	63.8	43.8	43.8
12	SCEPTER	1.5L	.125	PPI						
13	PRO+SCEP	2.4E	.87	PPI	90.0	87.5	87.5	62.5	52.5	52.5
14	SCEPTER	1.5L	.125	PRE	80.0	77.5	77.5	46.3	30.0	30.0
15	SENCOR	4.0L	.25	PRE	52.5	45.0	45.0	43.8	36.3	36.3
16	TURBO	8.0E	2.0	PRE	60.0	52.5	45.0	46.3	37.5	37.5
17	TURBO	8.0E	1.0	PRE	86.3	78.8	78.8	56.3	45.0	45.0
17	SCEPTER	1.5L	.125	PRE						
18	SENCOR	4.0L	.25	PRE	68.8	66.3	65.0	50.0	40.0	40.0
18	SCEPTER	1.5L	.125	PRE						

The University of Tennessee
EVALUATION OF SOYBEAN PPI/PRE HERBICIDE COMBINATIONS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-6 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	IPOLA 7-12-86	PHPBU 7-12-86	IPOHG 7-12-86	IPOLA 9-27-86	PHPBU 9-27-86	IPOHG 9-27-86
19	SURFLAN	4.0L	.75	PRE	95.0	91.3	91.3	68.8	60.0	60.0
19	SCEPTER	1.5L	.125	PRE						
20	WEEDY				0.0	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					15.20	13.97	12.68	26.01	26.81	26.98
STANDARD DEVIATION =					10.75	9.878	8.971	18.39	18.95	19.08
COEFF. OF VARIABILITY =					14.01	13.87	12.68	35.50	45.07	45.77

02-16-1987 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

UTILITY OF COMMAND IN SOYBEAN WEED MANAGEMENT SYSTEMS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-7 with cooperator PLANT SCI FIELD LAB

Experimental Management

Date Planted 6-13-86 Variety ASGROW 5474 Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK, FIELD CULTIVATOR.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture LOAM
Soil Series STATLER % OM 1.0 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	6-13-86	7-18-86				
Time Treated	PM	PM				
Cloud Cover	CLEAR	CLEAR				
Air Temperature	84	87				
Relative Humidity	48%	50%				
Wind Speed/Direction	3MPH-W	2MPH-W				
Soil Temperature	86	93				
Soil/Leaf Surface Moisture	DRY	DRY				
Soil Subsurface Moisture	DRY	MOIST				
Soil Tilth	FINE	N/A				
Crop Stage	PRE	V5				
Pest Name, Stage & Density						
DIGSA,5/FT	PRE	1-2 TIL				
IPOLA,1/FT	PRE	4-5 LF				
PHPBU,4/FT	PRE	4-5 LF				
AMACH,2/FT	PRE	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	8002	19	19	6.3FT	20	WATER	41
2.	CO2 BACKPACK	3	FLAT FAN	8002	19	19	6.3FT	20	WATER	41

Comments

DIGSA=LARGE CRABGRASS; IPOLA=PITTED MORNINGGLORY; PHPBU=TALL MORNINGGLORY; AMACH=SMOOTH PIGWEED.

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

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-7 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-2-86	DIGSA 8-2-86	IPOLA 8-2-86	PHPBU 8-2-86	DIGSA 9-27-86	PHPBU 9-27-86	AMACH 9-27-86
01	COMMAND	6.0E	.75	PRE	0	80.0	40.0	22.5	56.3	30.0	41.3
02	LASSO MT	4.0L	2.0	PRE	0	85.0	15.0	15.0	77.5	50.0	85.0
03	COMMAND	6.0E	.75	PRE	0	91.3	52.5	35.0	82.5	57.5	96.3
03	SENCOR	4.0L	.38	PRE							
04	LASSO MT	4.0L	2.0	PRE	0	90.0	37.5	25.0	72.5	45.0	95.0
04	SENCOR	4.0L	.38	PRE							
05	COMMAND	6.0E	.75	PRE	0	90.0	63.8	52.5	85.0	62.5	97.5
05	CANOPY	.75D	.38	PRE							
06	LASSO MT	4.0L	2.0	PRE	0	75.0	58.8	51.3	67.5	50.0	93.8
06	CANOPY	.75D	.38	PRE							
07	COMMAND	6.0E	.75	PRE	0	86.3	87.5	80.0	77.5	73.8	99.5
07	SCEPTER	1.5L	.125	PRE							
08	LASSO MT	4.0L	2.0	PRE	0	70.0	70.0	60.0	62.5	65.0	97.5
08	SCEPTER	1.5L	.125	PRE							
09	COMMAND	6.0E	.75	PRE	0	87.5	71.3	60.0	80.0	66.3	97.5
09	SCEPTER	1.5L	.125	POT							
09	X-77	P	.25	POT							
10	LASSO MT	4.0L	2.0	PRE	0	73.8	58.8	43.8	62.5	62.5	98.3
10	SCEPTER	1.5L	.125	POT							
10	X-77	P	.25	POT							
11	COMMAND	6.0E	.75	PRE	0	85.0	76.3	72.5	78.8	65.0	91.3
11	CLASSIC	.25W	.008	POT							
11	X-77	P	.25	POT							
12	LASSO MT	4.0L	2.0	PRE	0	70.0	81.3	70.0	70.0	67.5	93.8
12	CLASSIC	.25W	.008	POT							
12	X-77	P	.25	POT							
13	COMMAND	6.0E	.75	PRE	0	87.5	97.5	95.0	83.8	82.5	98.8
13	COBRA	2.0E	0.2	POT							
13	X-77	P	.25	POT							
14	LASSO MT	4.0L	2.0	PRE	0	68.8	96.3	96.3	43.8	81.3	98.8
14	COBRA	2.0E	0.2	POT							
14	X-77	P	.25	POT							

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

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-7 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-2-86	DIGSA 8-2-86	IPOLA 8-2-86	PHPBU 8-2-86	DIGSA 9-27-86	PHPBU 9-27-86	AMACH 9-27-86
15	COMMAND	6.0E	.75	PRE	0	91.3	45.0	40.0	86.3	48.8	89.5
15	SENCOR	4.0L	.25	PRE							
16	COMMAND	6.0E	.75	PRE	0	90.0	60.0	47.5	81.3	60.0	97.5
16	CANOPY	.75D	.25	PRE							
17	COMMAND	6.0E	.75	PRE	0	75.0	76.3	65.0	75.0	61.3	98.8
17	SCEPTER	1.5L	.094	PRE							
18	COMMAND	6.0E	.75	PRE	0	90.0	47.5	35.0	76.3	47.5	95.8
18	GEMINI	.60W	.5	PRE							
19	WEEDFREE				0	100.0	100.0	100.0	100.0	100.0	100.0
20	WEEDY				0	0.0	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=						16.84	19.21	19.16	20.60	16.80	16.84
STANDARD DEVIATION =						11.90	13.58	13.55	14.56	11.88	11.91
COEFF. OF VARIABILITY =						15.01	22.00	25.42	20.53	20.21	13.49

01-01-1987 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

EVALUATION OF CINCH COMBINATIONS IN SOYBEANS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-8 with cooperator PLANT SCI FIELD LAB

Experimental Management

Date Planted 6-13-86 Variety ASGROW 5474 Row Width 36 IN
Design RCB No. Reps. 3 Plot Size 3 ROWS * 30FT
Field Preparation and Plot Maintenance DISK, FIELD CULTIVATOR.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture LOAM
Soil Series STATLER % OM 1.0 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	6-13-86					
Time Treated	PM					
Cloud Cover	CLEAR					
Air Temperature	84					
Relative Humidity	48%					
Wind Speed/Direction	3MPH-W					
Soil Temperature	86					
Soil/Leaf Surface Moisture	DRY					
Soil Subsurface Moisture	MOIST					
Soil Tilth	FINE					
Crop Stage	PRE					
Pest Name, Stage & Density						
DIGSA 2/FT	PRE					
PHPBU 1/FT	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	8002	19	19	6.3FT	20	WATER	41

Comments

DIGSA=LARGE CRABGRASS; PHPBU=TALL MORNINGGLORY.

The University of Tennessee
EVALUATION OF CINCH COMBINATIONS IN SOYBEANS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-8 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-12-86	DIGSA 7-12-86	PHPBU 7-12-86		CRINJ 9-27-86	DIGSA 9-27-86	PHPBU 9-27-86
01	CINCH	7.0E	.75	PRE	0.0	97.7	0.0	0	97.7	10.0	
02	LASSO MT	4.0L	2.0	PRE	0.0	97.7	0.0	0	97.7	46.7	
03	CINCH	7.0E	.75	PRE	1.7	97.7	75.0	0	98.0	26.7	
03	LEXONE	.75D	.25	PRE							
04	CINCH	7.0E	.75	PRE	0.0	99.3	93.3	0	97.0	43.3	
04	LEXONE	.75D	.38	PRE							
05	CINCH	7.0E	.75	PRE	0.0	97.7	68.3	0	95.0	33.3	
05	CANOPY	.75D	.25	PRE							
06	CINCH	7.0E	.75	PRE	0.0	97.7	93.3	0	93.3	36.7	
06	CANOPY	.75D	.38	PRE							
07	CINCH	7.0E	.75	PRE	5.0	97.0	93.3	0	98.0	73.3	
07	SCEPTER	1.5L	.094	PRE							
08	CINCH	7.0E	.75	PRE	5.0	98.0	91.7	0	97.0	55.0	
08	SCEPTER	1.5L	.125	PRE							
09	CINCH	7.0E	.75	PRE	0.0	98.7	85.0	0	97.7	43.3	
09	PURSUIT	1.92L	.094	PRE							
10	CINCH	7.0E	.75	PRE	1.7	99.0	90.0	0	97.7	36.7	
10	PURSUIT	1.92L	.125	PRE							
11	WEEDFREE				0.0	100.0	100.0	0	100.0	100.0	
12	WEEDY				0.0	0.0	0.0	0	0.0	0.0	
LEAST SIGNIFICANT DIFF. (.05)=					5.297	2.338	12.52		3.670	29.83	
STANDARD DEVIATION =					3.128	1.380	7.398		2.167	17.61	
COEFF. OF VARIABILITY =					281.5	1.533	11.23		2.432	41.86	

12-05-1986 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

SALVAGE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-9 with cooperator PLANT SCI FIELD LAB

Experimental Management

Date Planted 6-3-86 Variety ASGROW 5474 Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK,FIELD CULTIVATOR.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture LOAM
Soil Series STATLER % OM 1.0 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	7-15-86					
Time Treated	AM					
Cloud Cover	CLEAR					
Air Temperature	72					
Relative Humidity	91%					
Wind Speed/Direction	CALM					
Soil Temperature	84					
Soil/Leaf Surface Moisture	WET					
Soil Subsurface Moisture	WET					
Soil Tilth	N/A					
Crop Stage	V9,12 IN					
Pest Name, Stage & Density						
XANST 2/FT	12-18 IN					
DATST 1/FT	12-16 IN					
AMACH 2/FT	12-14 IN					
PHPBU,IPOHE 3/FT	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	8002	19	19	6.3FT	20	WATER	41

Comments

XANST=COMMON COCKLEBUR; DATST=JIMSONWEED; AMACH=SMOOTH PIGWEED; PHPBU=TALL MORNINGGLORY; IPOHE=IVYLEAF MORNINGGLORY. CONDITIONS WERE OPTIMUM FOR PERFORMANCE OF POSTEMERGENCE HERBICIDES.

The University of Tennessee
SALVAGE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-9 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-29-86	XANST 7-29-86	DATST 7-29-86	AMACH 7-29-86	PHFBU 7-29-86	IPOHE 7-29-86
01	BLAZER	2.0L	0.5	POT	6.3	72.5	94.3	95.5	90.0	90.0
01	AG-98	P	.125	POT						
02	BLAZER	2.0L	0.5	POT	17.5	83.8	95.0	91.3	92.5	92.5
02	2,4-DB	2.0L	.03	POT						
02	AG-98	P	.125	POT						
03	COBRA	2.0E	.2	POT	13.8	93.0	95.5	94.8	82.5	82.5
03	X-77	P	.25	POT						
04	COBRA	2.0E	.2	POT	17.5	93.0	95.3	89.8	87.5	87.5
04	2,4-DB	2.0L	.03	POT						
04	X-77	P	.25	POT						
05	CLASSIC	.25W	.012	POT	7.5	96.0	81.3	93.8	62.5	62.5
05	X-77	P	.25	POT						
06	CLASSIC	.25W	.012	POT	11.3	91.3	88.8	93.8	68.8	68.8
06	2,4-DB	2.0L	.03	POT						
06	X-77	P	.25	POT						
07	SCEPTER	1.5L	.125	POT	5.0	92.5	71.3	91.3	42.5	42.5
07	X-77	P	.25	POT						
08	SCEPTER	1.5L	.125	POT	8.8	87.5	62.5	92.5	66.3	66.3
08	2,4-DB	2.0L	.03	POT						
08	X-77	P	.25	POT						
09	RESCUE	2.06L	1.3	POT	18.8	81.3	85.0	81.3	68.8	70.0
09	X-77	P	0.5	POT						
10	WEEDY				0.0	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					5.200	9.357	12.15	9.753	7.993	7.647
STANDARD DEVIATION =					3.584	6.449	8.378	6.721	5.508	5.270
COEFF. OF VARIABILITY =					33.73	8.155	10.89	8.160	8.330	7.955

02-13-1986 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

SOYBEAN POST-GRASS HERBICIDE EVALUATION

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-5 with cooperator PLANT SCI FIELD LAB

Experimental Management

Date Planted 6-3-86 Variety ASGROW 5474 Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK,FIELD CULTIVATOR.

Site Description

Season Moisture DRY
Soil Texture LOAM
Soil Series STATLER % OM 1.0 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	6-23-86					
Time Treated	AM					
Cloud Cover	CLEAR					
Air Temperature	93					
Relative Humidity	63%					
Wind Speed/Direction	4MPH-S					
Soil Temperature	100					
Soil/Leaf Surface Moisture	DRY					
Soil Subsurface Moisture	DRY					
Soil Tilth	N/A					
Crop Stage	V3					
Pest Name, Stage & Density						
DIGSA	2-3 LF					
DIGSA	1-2 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	8002	19	19	6.3FT	20	WATER	41

Comments

DIGSA=LARGE CRABGRASS. C.O.C. WAS ADDED TO ALL TREATMENTS, EXCEPT WHIP, AT THE RATE OF 1 QT/AC. ON 7-12-86,FIRST DIGSA RATING IS FOR 2-3 LF GRASS, AND SECOND DIGSA RATING IS FOR GRASS WITH 1-2 TILLERS. DIGSA RATING ON 8-2-86 IS A COMPOSITE. TEST WAS HARVESTED ON 10-30-86.

The University of Tennessee
SOYBEAN POST-GRASS HERBICIDE EVALUATION

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-KPS-5 with cooperator PLANT SCI FIELD LAB

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-12-86	DIGSA 7-12-86	DIGSA 7-12-86	DIGSA 8-2-86	YIELD BU/AC
01	POAST	1.5E	.1	POT	0	89.5	70.0	78.8	35.80
02	POAST	1.5E	.2	POT	0	87.3	73.8	83.8	35.18
03	POAST	1.5E	.1	POT	0	93.3	78.8	81.3	36.45
03	AMS	1.0W	2.5	POT					
04	POAST	1.5E	.2	POT	0	95.8	85.0	94.3	40.05
04	AMS	1.0W	2.5	POT					
05	RE-45601	2.0E	.06	POT	0	93.8	81.3	85.8	38.03
06	RE-45601	2.0E	.125	POT	0	97.8	90.0	96.5	41.35
07	BAS-517	1.67E	.1	POT	0	98.0	88.8	97.0	36.38
08	BAS-517	1.67E	.2	POT	0	98.5	93.8	94.8	34.28
09	FUS-2000	1.0E	.19	POT	0	93.8	75.0	88.8	39.51
10	VERDICT	2.0E	.125	POT	0	96.3	87.5	96.5	41.93
11	ASSURE	0.8E	.125	POT	0	98.5	91.3	95.5	38.80
12	DPX620231	0.8E	.063	POT	0	95.5	83.8	93.3	37.22
13	WHIP	1.0E	.15	POT	0	83.8	55.0	67.5	36.65
14	WEEDY				0	0.0	0.0	0.0	27.25
LEAST SIGNIFICANT DIFF. (.05)=						7.283	13.00	8.983	8.181
STANDARD DEVIATION =						5.097	9.100	6.286	5.725
COEFF. OF VARIABILITY =						5.841	12.09	7.629	15.44

02-16-1987 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

SICKLEPOD MANAGEMENT IN SOYBEANS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-K-2 with cooperator SMALL GRAINS FARM

Experimental Management

Date Planted 6-2-86 Variety FORREST Row Width 30 IN
Design RCB No. Reps. 3 Plot Size 3 ROWS*25 FT
Field Preparation and Plot Maintenance DISK, FIELD CULTIVATOR.

Site Description

Season Moisture SEE RAINFALL TABLES.
Soil Texture SILT LOAM
Soil Series EMORY % OM 1.0 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	6-2-86	6-23-86	7-21-86	8-7-86		
Time Treated	PM	PM	PM	PM		
Cloud Cover	50%	50%	CLEAR	50%		
Air Temperature	85	88	89	85		
Relative Humidity	78%	60%	66%	62%		
Wind Speed/Direction	3MPH-SE	3MPH-S	CALM	2MPH-S		
Soil Temperature	90	92	104	100		
Soil/Leaf Surface Moisture	DRY	DRY	DRY	DRY		
Soil Subsurface Moisture	MOIST	MOIST	DRY	MOIST		
Soil Tilth	FINE	N/A	N/A	N/A		
Crop Stage	PRE	V3	V8	V10		
Pest Name, Stage & Density						
CASOB,6/FT	PRE	COT-1LF POT1	3 LF POT2	5LF POT3, PDIR		

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	8002	19	19	6.3FT	20	WATER	41
2.	"	"	"	"	"	"	"	"	"	"
3.	"	"	"	"	"	"	"	"	"	"
4.	"	"	"	"	"	"	"	"	"	"

Comments

CASOB=SICKLEPOD. PDIR TMTS WERE APPLIED WITH 2 NOZZLES/ROW, AT 30 PSI AND 20 GPA. APPROXIMATELY 0.5 IN OF RAIN OCCURRED IMMEDIATELY FOLLOWING APPLICATION OF POT3 AND PDIR TMTS.

02-16-1987

The University of Tennessee

SICKLEPOD MANAGEMENT IN SOYBEANS

Conducted at KNOXVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-K-2 with cooperator SMALL GRAINS FARM

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 9-20-86	CASOB 9-20-86
01	CANOPY	.75D	.38	PRE	0	88.3
01	CLASSIC	.25W	.008	POT1		
01	X-77	P	.25	POT1		
02	CANOPY	.75D	.38	PRE	0	60.0
02	CLASSIC	.25W	.008	POT2		
02	X-77	P	.25	POT2		
03	CANOPY	.75D	.38	PRE	0	46.7
03	CLASSIC	.25W	.008	POT3		
03	X-77	P	.25	POT3		
04	SCEPTER	1.5L	.125	PRE	0	71.7
04	SCEPTER	1.5L	.125	POT1		
04	X-77	P	.25	POT1		
05	SCEPTER	1.5L	.125	PRE	0	40.0
05	SCEPTER	1.5L	.125	POT2		
05	X-77	P	.25	POT2		
06	SCEPTER	1.5L	.125	PRE	0	33.3
06	SCEPTER	1.5L	.125	POT3		
06	X-77	P	.25	POT3		
07	CANOPY	.75D	.38	PRE	0	68.3
07	GOAL	1.6E	.25	PDIR		
07	AG-98	P	.25	PDIR		
08	CANOPY	.75D	.38	PRE	0	63.3
08	GOAL	1.6E	.25	PDIR		
08	2,4-DB	2.0L	.2	PDIR		
08	AG-98	P	.25	PDIR		
09	SCEPTER	1.5L	.125	PRE	0	80.0
09	GOAL	1.6E	.25	PDIR		
09	X-77	P	.25	PDIR		
10	SCEPTER	1.5L	.125	PRE	0	70.0
10	GOAL	1.6E	.25	PDIR		
10	2,4-DB	2.0L	.2	PDIR		
10	X-77	P	.25	PDIR		
11	WEEDFREE				0	100.0
12	WEEDY				0	0.0
LEAST SIGNIFICANT DIFF. (.05)=						21.88
STANDARD DEVIATION =						12.92
COEFF. OF VARIABILITY =						21.48

MIDDLE TENNESSEE EXPERIMENT STATION

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	0	0	0	.01	.19
2	0	.10	0	1.03	0	.44
3	0	0	0	.12	0	.26
4	.02	0	.52	0	0	.40
5	0	0	.17	0	0	.17
6	0	0	.28	0	0	0
7	.01	0	.41	.02	.05	0
8	.41	0	.30	0	.10	0
9	.16	0	0	0	0	0
10	0	0	0	.27	0	0
11	0	.03	0	0	.86	0
12	0	.02	.04	.32	0	.57
13	0	.12	0	.60	0	0
14	0	0	0	.10	0	0
15	.01	0	0	.08	0	0
16	0	0	0	.09	0	0
17	0	0	0	0	1.31	0
18	0	.06	0	0	0	0
19	0	.88	0	0	0	1.00
20	.15	.03	0	0	0	.04
21	.20	0	0	0	0	0
22	.10	0	0	0	0	.07
23	0	.02	0	0	0	0
24	0	0	0	0	0	0
25	0	.49	0	0	0	0
26	0	.20	0	.13	0	0
27	0	.62	0	.80	.02	.20
28	0	1.43	0	0	.82	0
29	.05	.58	.10	0	0	0
30	0	0	0	0	0	0
31	-	0	-	0	0	-
Total	1.11	4.58	1.82	3.56	3.17	3.34

TEMPERATURE
Middle Tennessee Experiment Station
Spring Hill, TN 1986

	April		May		June		July		August		Sept	
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	84	43	88	48	85	62	90	67	96	70	66	62
2	81	51	74	44	87	64	94	67	91	66	70	64
3	85	53	70	44	84	63	80	63	83	58	82	67
4	82	52	65	31	85	63	83	56	88	59	85	69
5	80	61	78	39	74	64	88	59	89	55	86	68
6	78	57	84	52	80	66	91	65	94	60	79	54
7	85	57	83	59	80	68	94	66	91	63	82	54
8	81	59	89	58	85	72	94	66	95	63	79	54
9	73	42	89	59	88	70	94	67	88	66	74	51
10	59	34	88	52	86	70	92	69	92	65	86	51
11	67	34	86	59	87	68	94	73	93	64	82	67
12	74	38	77	60	86	68	91	59	86	62	86	62
13	78	42	82	57	83	61	91	65	84	62	77	52
14	81	47	84	58	79	60	89	67	87	62	77	51
15	76	40	86	67	86	59	93	67	91	65	84	55
16	65	39	84	63	86	58	87	61	93	66	85	62
17	52	36	87	59	90	61	95	68	85	71	85	61
18	57	35	87	66	88	57	93	71	85	67	85	61
19	73	44	76	55	83	56	97	71	86	65	78	63
20	77	53	67	49	91	62	97	70	86	64	85	63
21	70	43	66	39	91	60	101	71	86	64	88	64
22	57	38	69	42	93	64	94	68	87	68	87	64
23	56	25	73	47	95	65	92	66	91	67	85	63
24	64	31	78	59	94	62	96	66	90	68	88	67
25	77	43	84	61	88	64	99	66	84	62	89	66
26	87	48	78	63	87	56	95	61	90	62	88	58
27	87	46	70	64	94	60	99	70	93	68	89	62
28	87	50	79	65	95	66	93	68	91	64	90	64
29	79	43	76	64	83	71	97	70	71	49	93	66
30	81	44	85	63	89	68	96	68	71	51	93	66
31	--	--	85	61	--	--	97	68	78	60	--	--

EXPERIMENT DESCRIPTION FORM

The University of Tennessee

SOYBEAN PPI/PRE EVALUATION

Conducted at SPRING HILL,TN by G.N.RHODES,JR.
Project TN-692-86-M-2 with cooperator MIDDLE TN EXPT STA

Experimental Management

Date Planted 6-18-86 Variety ESSEX Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK, FIELD CULTIVATOR.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture SILT LOAM
Soil Series MAURY % OM 1.0 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	6-18-86					
Time Treated	AM					
Cloud Cover	CLEAR					
Air Temperature	65					
Relative Humidity	66%					
Wind Speed/Direction	4MPH-W					
Soil Temperature	72					
Soil/Leaf Surface Moisture	DRY					
Soil Subsurface Moisture	MOIST					
Soil Tilth	FINE					
Crop Stage	PPI&PRE					
Pest Name, Stage & Density						
PHPBU 1/FT	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	8002	19	19	6.3FT	20	WATER	41

Comments

PHPBU=TALL MORNINGGLORY. PREPLANT TREATMENTS WERE INCOPORATED TO A DEPTH OF 2 IN WITH A POWER-DRIVEN TILLER, ONE PASS.

The University of Tennessee
SOYBEAN PPI/PRE EVALUATION

Conducted at SPRING HILL,TN by G.N.RHODES,JR.
Project TN-692-86-M-2 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-15-86	PHPBU 7-15-86		CRINJ 8-5-86	PHPBU 8-5-86
01	CANOPY	.75D	0.29	PPI	5.0	75.0	0		76.3
02	CANOPY	.75D	0.38	PPI	12.5	72.5	0		77.5
03	LEXONE	.75D	0.29	PPI	3.8	32.5	0		40.0
04	LEXONE	.75D	0.38	PPI	12.5	38.8	0		37.5
05	PURSUIT	1.92L	.063	PPI	6.3	65.0	0		60.0
06	PURSUIT	1.92L	.094	PPI	2.5	73.8	0		75.0
07	PURSUIT	1.92L	.125	PPI	6.3	71.3	0		73.8
08	SCEPTER	1.5L	.125	PPI	5.0	75.0	0		81.3
09	CANOPY	.75D	0.29	PRE	3.8	68.8	0		65.0
10	CANOPY	.75D	0.38	PRE	0.0	77.5	0		78.8
11	LEXONE	.75D	0.29	PRE	2.5	42.5	0		47.5
12	LEXONE	.75D	0.38	PRE	0.0	26.3	0		42.5
13	PURSUIT	1.92L	.063	PRE	8.8	60.0	0		61.3
14	PURSUIT	1.92L	.094	PRE	3.8	76.3	0		75.0
15	PURSUIT	1.92L	.125	PRE	0.0	67.5	0		65.0
16	SCEPTER	1.5L	.125	PRE	2.5	67.5	0		70.0
17	GEMINI	.60W	0.5	PRE	5.0	70.0	0		67.5
18	LOROX	4.0L	0.5	PRE	8.8	47.5	0		53.8
19	WEEDFREE				2.5	98.8	0		100.0
20	WEEDY				0.0	17.5	0		0.0
LEAST SIGNIFICANT DIFF. (.05)=					9.417	21.27			16.92
STANDARD DEVIATION =					6.659	15.04			11.96
COEFF. OF VARIABILITY =					145.9	24.58			19.18

12-09-1986 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

POST-BROADLEAF COMBINATIONS IN SOYBEANS

Conducted at SPRING HILL,TN by G.N.RHODES,JR.
Project TN-692-86-M-6 with cooperator MIDDLE TN EXPT STA

Experimental Management

Date Planted 6-18-86 Variety ESSEX Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK, FIELD CULTIVATOR.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture SILT LOAM
Soil Series MAURY % OM 1.0 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	7-16-86					
Time Treated	PM					
Cloud Cover	50%					
Air Temperature	74					
Relative Humidity	92%					
Wind Speed/Direction	CALM					
Soil Temperature	78					
Soil/Leaf Surface Moisture	WET					
Soil Subsurface Moisture	MOIST					
Soil Tilth	N/A					
Crop Stage	V5					
Pest Name, Stage & Density						
PHPBU,IPOHG 1/3FT	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	8002	19	19	6.3FT	20	WATER	41

Comments

PHPBU=TALL MORNINGGLORY; IPOHG=ENTIRELEAF MORNINGGLORY. ALL TREATMENTS INCLUDED X-77 SURFACTANT AT 0.25% (V/V).

The University of Tennessee
POST-BROADLEAF COMBINATIONS IN SOYBEANS

Conducted at SPRING HILL,TN by G.N.RHODES,JR.
Project TN-692-86-M-6 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-22-86	PHPBU 7-22-86	IPOHG 7-22-86	CRINJ 8-5-86	PHPBU 8-5-86	IPOHG 8-5-86
01	PURSUIT	1.92L	.063	POT	3.8	71.3	50.0	0	73.3	71.3
02	PURSUIT	1.92L	.094	POT	1.3	67.5	57.5	0	80.5	76.8
03	PURSUIT	1.92L	.125	POT	2.5	61.3	45.0	0	78.8	71.3
04	SCEPTER	1.5L	.094	POT	2.5	71.3	47.5	0	60.0	56.3
05	SCEPTER	1.5L	.125	POT	2.5	75.0	62.5	0	85.5	85.5
06	SCEPTER	1.5L	.094	POT	5.0	75.0	60.0	0	82.0	77.0
06	2,4-DB	2.0L	.03	POT						
07	SCEPTER	1.5L	.094	POT	16.3	91.3	78.8	0	80.8	79.5
07	BLAZER	2.0L	0.5	POT						
08	CLASSIC	0.25W	.008	POT	6.3	68.8	57.5	0	83.8	78.8
09	CLASSIC	0.25W	.012	POT	10.0	76.3	57.5	0	81.3	75.0
10	CLASSIC	0.25W	.008	POT	20.0	87.5	72.5	0	77.5	71.3
10	BLAZER	2.0L	0.5	POT						
11	CLASSIC	0.25W	.008	POT	17.5	81.3	65.0	0	81.3	76.3
11	BLAZER	2.0L	0.25	POT						
12	CLASSIC	0.25W	.008	POT	15.0	86.3	75.0	0	90.0	88.8
12	BLAZER	2.0L	.125	POT						
13	CLASSIC	0.25W	.008	POT	13.8	78.8	62.5	0	75.0	70.0
13	2,4-DB	2.0L	.03	POT						
14	BLAZER	2.0L	0.5	POT	20.0	91.3	81.3	0	93.0	89.3
15	BLAZER	2.0L	0.5	POT	23.8	93.3	85.0	0	86.3	86.3
15	2,4-DB	2.0L	.03	POT						
16	COBRA	2.0E	0.2	POT	23.8	88.8	73.8	0	85.0	82.5
17	COBRA	2.0E	0.2	POT	22.5	88.8	75.0	0	80.5	78.0
17	2,4-DB	2.0L	.03	POT						
18	COBRA	2.0E	0.2	POT	12.5	86.3	67.5	0	83.8	80.0
18	CLASSIC	0.25W	.008	POT						
19	WEEDFREE				0.0	100.0	100.0	0	100.0	100.0

The University of Tennessee
POST-BROADLEAF COMBINATIONS IN SOYBEANS

Conducted at SPRING HILL,TN by G.N.RHODES,JR.
Project TN-692-86-M-6 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-22-86	PHPBU 7-22-86	IPOHG 7-22-86	CRINJ 8-5-86	PHPBU 8-5-86	IPOHG 8-5-86
20	WEEDY				0.0	0.0	0.0	0	0.0	0.0
	LEAST SIGNIFICANT DIFF. (.05)=				5.454	16.20	18.62		18.32	18.88
	STANDARD DEVIATION			=	3.856	11.45	13.17		12.95	13.35
	COEFF. OF VARIABILITY			=	35.26	14.88	20.68		16.63	17.88

12-09-1986 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

MANAGEMENT OF JOHNSONGRASS IN SOYBEANS

Conducted at SPRING HILL,TN by G.N.RHODES,JR.
Project TN-692-86-M-1 with cooperator MIDDLE TN EXPT STA

Experimental Management

Date Planted 6-3-86 Variety ESSEX Row Width 36 IN
Design RCB No. Reps. 3 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK, FIELD CULTIVATOR.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture SILT LOAM
Soil Series MAURY % OM 1.6 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	6-5-86	7-9-86	7-15-86			
Time Treated	AM	PM	PM			
Cloud Cover	100%	CLEAR	CLEAR			
Air Temperature	87	82	90			
Relative Humidity	75%	82%	60%			
Wind Speed/Direction	3MPH-W	4MPH-W	CALM			
Soil Temperature	78	82	94			
Soil/Leaf Surface Moisture	WET	DRY	DRY			
Soil Subsurface Moisture	WET	DRY	DRY			
Soil Tilth	FINE	N/A	N/A			
Crop Stage	PRE	V6	V9			
Pest Name, Stage & Density						
SORHA 1/3FT		18-20 IN	20-22 IN			
DIGSA 1/2FT		3-4 TILL	3-4 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	8002	19	19	6.3FT	20	WATER	41
2.	CO2 BACKPACK	3	FLAT FAN	8002	19	19	6.3FT	20	WATER	41
3.	CO2 BACKPACK	3	FLAT FAN	8002	19	19	6.3FT	20	WATER	41

Comments

SORHA=JOHNSONGRASS; DIGSA=LARGE CRABGRASS. ALL GRASS HERBICIDES WERE APPLIED WITH C.O.C. AT 1QT/A. ENTIRE TEST WAS TREATED WITH BLAZER (0.38 LB AI/A) ON 6-18-86 FOR THE CONTROL OF SMOOTH PIGWEED.

The University of Tennessee
MANAGEMENT OF JOHNSONGRASS IN SOYBEANS

Conducted at SPRING HILL,TN by G.N.RHODES,JR.
Project TN-692-86-M-1 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-22-86	SORHA 7-22-86	DIGSA 7-22-86	CRINJ 8-5-86	SORHA 8-5-86	DIGSA 8-5-86
01	POAST	1.5E	0.1	POT1	0.0	70.0	55.0	0	53.3	46.7
02	POAST	1.5E	0.1	POT1	0.0	78.3	68.3	0	61.7	53.3
02	AMS	1.0W	2.5	POT1						
03	POAST	1.5E	0.2	POT1	0.0	72.7	70.0	0	82.7	80.0
04	POAST	1.5E	0.2	POT1	0.0	85.0	71.7	0	85.0	76.7
04	AMS	1.0W	2.5	POT1						
05	BAS-517	1.67E	0.1	POT1	0.0	82.7	75.0	0	90.0	80.0
06	BAS-517	1.67E	0.15	POT1	0.0	86.7	78.3	0	91.7	88.3
07	BAS-517	1.67E	0.1	POT1	0.0	80.0	76.7	0	95.0	93.3
07	BAS-517	1.67E	0.1	POT2						
08	RE-45601	2.0E	.125	PRE	0.0	45.0	48.3	0	23.3	26.7
09	RE-45601	2.0E	.25	PRE	0.0	23.3	26.7	0	6.7	13.3
10	RE-45601	2.0E	.125	POT1	0.0	86.7	78.3	0	95.7	90.0
11	RE-45601	2.0E	.125	POT1	0.0	90.0	83.3	0	96.7	93.3
11	RE-45601	2.0E	.06	POT2						
12	RE-45601	2.0E	.125	POT1	0.0	86.7	76.7	0	97.0	93.3
12	RE-45601	2.0E	.125	POT2						
13	VERDICT	2.0E	.125	POT1	0.0	81.7	70.0	0	90.0	88.3
14	VERDICT	2.0E	.25	POT1	0.0	81.7	73.3	0	91.7	88.3
15	ASSURE	0.8E	.125	POT1	0.0	91.7	81.7	0	93.3	75.0
16	ASSURE	0.8E	.25	POT1	0.0	90.0	82.7	0	92.7	82.7
17	DP620231	0.8E	.063	POT1	0.0	85.0	75.0	0	93.3	76.7
18	DP620231	0.8E	.125	POT1	0.0	90.0	83.3	0	94.7	92.3
19	WHIP	1.0 E	.15	POT1	0.0	76.7	63.3	0	56.7	41.7
20	WHIP	1.0 E	.15	POT1	3.3	63.3	45.0	0	56.7	28.3
20	TACKLE	2.0L	0.5	POT1						

The University of Tennessee
MANAGEMENT OF JOHNSONGRASS IN SOYBEANS

Conducted at SPRING HILL,TN by G.N.RHODES,JR.
Project TN-692-86-M-1 with cooperator MIDDLE TN EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-22-86	SORHA 7-22-86	DIGSA 7-22-86		CRINJ 8-5-86	SORHA 8-5-86	DIGSA 8-5-86
21	WHIP	1.0E	0.15	POT1	15.0	90.0	71.7	0		70.0	50.0
21	TACKLE	2.0E	0.5	POT2							
21	X-77	P	0.25	POT2							
22	FUS 2000	1.0E	.188	POT1	0.0	85.0	71.7	0		92.3	85.0
23	WEEDY				0.0	0.0	0.0	0		0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					1.986	20.81	20.94			16.72	21.19
STANDARD DEVIATION =					1.203	12.61	12.69			10.13	12.84
COEFF. OF VARIABILITY =					151.0	16.84	19.13			13.62	19.14

MILAN EXPERIMENT STATION

205 ELLINGTON DRIVE

MILAN, TENNESSEE 38358

SUPERINTENDENT - Mr. John F. Bradley

Rainfall Data for Milan Experiment Station, Milan, TN in 1986

Date	April	May	June	July	August	Sept.
			inches			
1	1.33		0.15			0.12
2			0.25	0.35		
3						0.52
4			4.75			0.05
5			1.60			
6			0.24			
7			0.15		0.48	
8	1.43					
9			0.08			
10		0.30				
11			0.13			0.12
12			0.80	0.58		
13						
14				0.25		
15						
16					0.22	
17		0.50				0.08
18						1.25
19						0.10
20	0.85					0.10
21						
22		0.20				
23						
24		0.85				
25						
26		0.70		1.55		
27						
28		0.65				
29						
30	0.85					
31						
Total	4.46	3.20	8.15	2.73	0.70	2.24

TEMPERATURE
Milan Experiment Station
Milan, TN 1986

	April		May		June		July		August		Sept	
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	--	--	72	55	86	64	94	75	90	71	--	--
2	76	56	69	42	83	69	83	71	86	68	85	64
3	80	60	66	43	86	65	86	65	82	61	88	63
4	83	54	--	--	74	66	90	58	82	58	86	72
5	80	58	82	68	78	66	94	62	90	54	78	60
6	74	55	81	65	82	72	96	67	83	60	86	52
7	71	61	86	62	84	72	94	74	92	68	79	55
8	68	49	89	61	87	72	95	70	78	68	76	56
9	59	41	88	63	81	73	92	75	88	66	88	50
10	62	34	85	61	88	71	94	76	86	70	86	68
11	70	35	74	66	87	70	92	74	82	59	89	69
12	76	42	79	62	85	66	90	69	82	53	79	55
13	78	48	85	57	83	59	92	69	87	56	82	47
14	70	47	87	68	86	59	91	70	90	62	87	47
15	56	42	78	66	88	60	93	70	92	70	85	70
16	51	48	85	69	91	70	94	72	77	71	88	60
17	--	--	82	67	88	64	95	71	85	68	90	63
18	--	--	69	61	84	55	96	72	88	70	86	67
19	--	--	68	60	91	57	98	72	87	62	84	65
20	--	--	67	45	93	62	97	71	86	60	89	67
21	60	44	72	39	94	65	90	70	88	65	89	67
22	54	34	65	47	96	67	92	63	92	64	84	70
23	67	29	76	58	97	71	94	64	92	68	87	68
24	79	38	82	64	89	70	96	67	87	69	88	69
25	84	51	77	62	87	66	98	69	94	73	90	72
26	83	49	73	61	93	61	100	70	95	67	90	70
27	83	46	82	54	94	74	91	68	91	67	91	70
28	70	50	80	67	90	72	95	80	72	52	94	65
29	82	44	86	62	94	71	94	74	77	39	91	76
30	86	49	87	63	95	77	95	72	79	53	90	72
31	--	--	88	63	--	--	98	74	70	56	--	--

PROJ. NUM.: N-41 UNITS: LBai/A
FILE NAME: MESPPIS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PPI HERBICIDE EVALUATION-N41

RESEARCH BY: R.M. HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 3/05/87 INITIATED: 05/09/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/01/86
REPORTED BY: R.M.HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.0
PREVIOUS TILL: NO-TILLAGE SOIL TEXTURE: LORING SIL SOIL OM%: 1.0
FERTILITY: ACC. TO UT. RECCOMEND. ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
MISC. 1: NUMBER OF REPS: 4
MISC. 2: REPORT TYPE: INTERIM

PLANTING DATE: 05/09/86 CROP CULTIVAR: ASGROW A5474
HARVEST DATE : 10/01/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/09/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J129/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	PPI				
AIR/SOIL TEMP(F)	086/088	/	/	/	/
% REL. HUMIDITY	%				
WIND DIR/VELOC.	SE/03	/	/	/	/
ROOT/LEAF MOIST.	OPT/	/	/	/	/
INCORP. EQUIP.	TRIPLE-K				
INCORP. DEPTH in	04	.	.	.	.
SPRAYER TYPE	CO2BACKPACK				
SPRAYER GPA/PSI	18.0/032	. /	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. /0.30	. / .	. / .	. / .	. / .
4-7 days/2nd wk	. /0.70	. / .	. / .	. / .	. / .
3rd / 4th week	2.20/6.99	. / .	. / .	. / .	. / .

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 *****	****	*********	*********	*********	*********	*********
GLXMA	SOYBEAN		/	/	/	/	/
*****	**** PEST *****	****	*********	*********	*********	*********	*********
XANST	COCKLEBUR		/	/	/	/	/
POLPY	PA SMARTWEED		/	/	/	/	/
CHEAL	LAMBSQUARTERS		/	/	/	/	/
DIGSA	LRG. CRABGRASS		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: N-41 UNITS: LBai/A
FILE NAME: MESPPIS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PPI HERBICIDE EVALUATION-N41

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EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1.XANST=COMMON COCKLEBUR
2.DIGSA=LARGE CRABGRASS
3.POLPY=PENNSYLVANIA SMARTWEED
4.CHEAL=COMMON LAMBSQUATERS
5.YIELD BU/ACRE= SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL,(MOISTURE WAS 14.5% AND TEST WEIGHT WAS 53.8 POUNDS AT HARVEST).

SUMMARY

COCKLEBUR WAS THE PREDOMINANT WEED IN THIS TEST.VERY INTENSE AND PROLONGED RAINFALL RESULTED IN A LOSS OF COCKLEBUR CONTROL BY MID-JUNE.SCEPTER AND PURSUIT COMBINATIONS GENERALLY PROVIDED EXCELLENT CONTROL.CANOPY COMBINATIONS WERE GENERALLY GOOD,WHILE THE COMBINATIONS WITH COMMAND WERE ONLY FAIR ON COCKLEBUR.

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PROJ. NUM.: N-41
FILE NAME: MESPPIS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PPI HERBICIDE EVALUATION-N41

RESEARCH BY: R.M. HAYES
COOPERATOR : JOHN BRADLEY
TOTAL REPS : 4
APPL: PPI =05/09/86

COUNTY: GIBSON
LAST UPDATE: 3/05/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 05/09/86
COMPLETED: 10/01/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%XANST CONTROL 6/13/86	%POLPY CONTROL 6/13/86	%CHEAL CONTROL 6/13/86	%DIGSA CONTROL 6/13/86	YIELD BU/ACRE 10/01/*
01	SCEPTER	SC 1.5	0.125	PPI	92	99	99	77	24.4
	TREFLAN	EC 4	0.75	PPI					
02	CANOPY	DF 75%	0.38	PPI	85	99	99	97	25.1
	TREFLAN	EC 4	0.75	PPI					
03	GEMINI	DF 60%	0.5	PPI	76	99	99	97	23.1
	TREFLAN	EC 4	0.75	PPI					
04	PROWL-	FL 2.4	0.87	PPI	86	99	99	91	26.0
	SCEPTER								
05	SCEPTER	SC 1.5	0.125	PPI	92	99	99	99	26.0
	SONALAN	EC 3.0	0.75	PPI					
06	COMMAND	EC 6	0.56	PPI	70	99	99	96	20.5
	TREFLAN	EC 4	0.75	PPI					
07	SENCOR	DF 75%	0.38	PPI	78	94	99	94	23.7
	TREFLAN	EC 4	0.75	PPI					
08	PURSUIT	SC 1.95	0.125	PPI	93	98	99	99	27.5
	TREFLAN	EC 4	0.75	PPI					
09	SENCOR	DF 75%	0.19	PPI	76	97	98	97	22.9
	COMMAND	EC 6	1.0	PPI					
10	CANOPY	DF 75%	0.25	PPI	78	99	99	90	25.3
	COMMAND	EC 6	1.0	PPI					
11	CANOPY	DF 75%	0.38	PPI	75	99	99	97	24.0
	SONALAN	EC 3	0.75	PPI					
12	CANOPY	DF 75%	0.38	PPI	76	99	99	98	22.4
	CINCH	EC 7	1.0	PPI					
13	COMMAND	EC 6	0.56	PPI	63	91	99	98	19.8
	SONALAN	EC 3	0.75	PPI					

PROJ. NUM.: N-41 UNITS: LBai/A
FILE NAME: MESPPIS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PPI HERBICIDE EVALUATION-N41

APPL: PPI =05/09/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%XANST CONTROL 6/13/86	%POLPY CONTROL 6/13/86	%CHEAL CONTROL 6/13/86	%DIGSA CONTROL 6/13/86	YIELD BU/ACRE 10/01/*
14	SCEPTER SC	1.5	0.125	PPI	88	99	99	95	25.1
	LASSO ME FL	4	2.0	PPI					
15	WEEDY CK				0	0	0	0	15.7
16	WEEDFREE				99	99	99	99	27.1
				LSD(0.05) =	15	7	1	17	4.5
				STANDARD DEVIATION =	11	5	1	12	3.1
				COEFF. OF VARIABILITY =	14	5	1	13	13.1

PROJ. NUM.: N41 UNITS: LBai/A
FILE NAME: MESPRES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PREEMERGENCE HERBICIDE TRIAL-N41

RESEARCH BY: R.M. HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 3/15/87 INITIATED: 05/09/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/01/86
REPORTED BY: R.M. HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.0
PREVIOUS TILL: NO-TILLAGE SOIL TEXTURE: LORING SIL SOIL OM%: 1.0
FERTILITY: ACC. TO UT RECCOMEND. ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
MISC. 1: NUMBER OF REPS: 4
MISC. 2: REPORT TYPE: INTERIM

PLANTING DATE: 05/09/86 CROP CULTIVAR: ASGROW A5474
HARVEST DATE : 10/01/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: DRY MID: WET LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/09/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J129/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	PRE				
AIR/SOIL TEMP(F)	086/088	/	/	/	/
% REL. HUMIDITY	%				
WIND DIR/VELOC.	SE/03	/	/	/	/
ROOT/LEAF MOIST.	OPT/	/	/	/	/
INCORP. EQUIP.	**NONE**				
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK				
SPRAYER GPA/PSI	18.0/032	. /	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. /0.30	. / .	. / .	. / .	. / .
4-7 days/2nd wk	. /0.70	. / .	. / .	. / .	. / .
3rd / 4th week	2.20/6.99	. / .	. / .	. / .	. / .

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 *****	****	*********	*********	*********	*********	*********
GLXMA	SOYBEAN		/	/	/	/	/
*****	**** PEST *****	****	*********	*********	*********	*********	*********
XANST	COCKLEBUR		/	/	/	/	/
DIGSA	LARGE CRABGRASS		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: N41 UNITS: LBai/A
FILE NAME: MESPRES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PREEMERGENCE HERBICIDE TRIAL-N41

EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1.%XANST CONTROL=%COMMON COCKLEBUR CONTROL.
2.%DIGSA CONTROL=%LARGE CRABGRASS CONTROL.
3.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL,(MOISTURE WAS 17.1% AND TEST WEIGHT WAS 51.2 POUNDS AT HARVEST).

SUMMARY

THE PREDOMINANT WEED SPECIES IN THIS EXPERIMENT WERE COMMON COCKLEBUR AND LARGE CRABGRASS.ALL TREATMENTS IN THIS EXPERIMENT,EXCEPT CULTIVATION 7 DAYS AFTER RAIN AND THE WEEDY CHECK PROVIDED EXCELLENT CONTROL OF LARGE CRABGRASS.SCEPTER,GEMINI,COMMAND,AND THE COMBINATIONS OF PURSUIT-SCEPTER AND COMMAND-SCEPTER PROVIDED GOOD CONTROL OF COMMON COCKLEBUR.CANOPY,SENCOR,LOROX,AND TURBO DID NOT PROVIDE ADEQUATE COCKLEBUR CONTROL.YIELDS FOR THESE TREATMENTS WERE LOWER DUE TO THE POOR COCKLEBUR CONTROL.THE BEST TREATMENT IN THIS EXPERIMENT WAS THE TOTAL POST TREATMENT,CONSISTING OF POAST FOLLOWED BY A TANKMIX OF BASAGRAN-BLAZER FOLLOWED BY CULTIVATION.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: N41
FILE NAME: MESPRES6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN PREEMERGENCE HERBICIDE TRIAL-N41

RESEARCH BY: R.M. HAYES
COOPERATOR : JOHN BRADLEY
TOTAL REPS : 4
APPL: PRE =05/09/86

COUNTY: GIBSON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 05/09/86
COMPLETED: 10/01/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%XANST CONTROL 6/18/86	%DIGSA CONTROL 6/18/86	YIELD BU/ACRE 10/01/*
01	SCEPTER	SC	1.5 0.125	PRE	80.0	98.0	21.2
02	CANOPY	DF 75%	0.38	PRE	56.3	94.5	19.2
03	GEMINI	DF 60%	0.75	PRE	86.0	98.0	21.3
04	COMMAND	EC 6	1.0	PRE	84.8	98.0	21.2
05	SENCOR	DF 75%	0.38	PRE	35.0	98.0	15.6
06	LOROX	FL 4	0.75	PRE	27.5	97.0	17.5
07	PURSUIT	SC 1.95	0.125	PRE	50.0	98.0	19.4
08	TURBO	EC 8	2.0	PRE	45.0	98.0	17.0
09	PURSUIT	SC 1.95	0.063	PRE	82.0	99.0	20.6
	SCEPTER	SC 1.5	0.063	PRE			
10	COMMAND	EC 6	0.5	PRE	82.5	97.0	23.1
	SCEPTER	SC 1.5	0.063	PRE			
11	POAST	EC 1.5	0.1	POST1	96.0	99.0	23.1
	AGRIDEX	EC 4	1.00	POST1			
	BASAGRAN	SC 4	0.25	POST2			
	BLAZER	SC 2	0.125	POST2			
	X-77	%A 100%	0.25%	POST2			
	CULT.	7 DAYS AFTER RAIN					
12	CULT.	7 DAYS AFTER RAIN			0	0	16.3
13	WEEDY CK				0	0	15.9
14	WEEDFREE				99.0	99.0	19.8
				LSD(0.05) =	33.6	2.7	3.2
				STANDARD DEVIATION =	23.3	1.8	2.2
				COEFF. OF VARIABILITY =	39.6	2.2	11.3

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MNTSPES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

WEED CONTROL-FULL SEASON SOYBEANS N-41

RESEARCH BY: R.M. HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 3/15/87 INITIATED: 05/14/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/01/86
REPORTED BY: R.M. HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.5
PREVIOUS TILL: NO-TILLAGE SOIL TEXTURE: LORING SIL SOIL OM%: 1.3
FERTILITY: ACC.TO UT RECCOMEND. ROW WIDTH: 020 EXPERIMENTAL DESIGN: RCB
MISC. 1: NUMBER OF REPS: 4
MISC. 2: REPORT TYPE: INTERIM

PLANTING DATE: 05/14/86 CROP CULTIVAR: ESSEX
HARVEST DATE : 10/01/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/15/86	06/25/86	06/27/86	/ /	/ /
JULIAN DATE/YEAR	J135/86	J176/86	J178/86	J 0/00	J 0/00
GEN. APPLIC TYPE	PRE	POST1	POST2		
AIR/SOIL TEMP(F)	080/077	089/	/	/	/
% REL. HUMIDITY	%	050			
WIND DIR/VELOC.	SW/10	SW/02	/	/	/
ROOT/LEAF MOIST.	DRY/DRY	OPT/DRY	OPT/DRY	/	/
INCORP. EQUIP.					
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK	CO2BACKPACK	CO2BACKPACK		
SPRAYER GPA/PSI	18.0/032	018.0/032	018.0/032	. /	. /
NOZZLE TYPE	FLATFAN8002	FLATFAN8002	FLATFAN8002		
RAIN / IRRIG. in					
0-24 hr/1-3 days	. /0.50	. / .	. / .	. / .	. / .
4-7 days/2nd wk	0.20/2.20	0.35/ .	0.35/ .	. / .	. / .
3rd / 4th week	6.75/1.40	0.83/ .	0.83/ .	. / .	. / .

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 *****	****	*********	*********	*********	*********	*********
GLXMA	SOYBEANS		/	008/V4	/	/	/
*****	**** PEST *****	****	*********	*********	*********	*********	*********
XANST	COMMONCOCKLEBUR		/	006/6LEAF	/	/	/
DIGSA	LARGECRABGRASS		/	003/5LEAF	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MNTSPES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

WEED CONTROL-FULL SEASON SOYBEANS N-41

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EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1.%CRINJU VISUAL=%VISUAL CROP INJURY.
2.%XANST CONTROL=%COMMON COCKLEBUR CONTROL.
3.%DIGSA CONTROL=%LARGE CRABGRASS CONTROL.
4.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE,(MOISTURE WAS 14.8% AT HARVEST).

SUMMARY

THE PREDOMINANT WEED SPECIES IN THIS EXPERIMENT WERE COMMON COCKLEBUR AND LARGE CRABGRASS AND WEED PRESSURE WAS MODERATE.SCEPTER PREEMERGENCE DID NOT PROVIDE ADEQUATE(GREATER THAN 70%)CONTROL OF COCKLEBUR.CANOPY AT 0.19 AND 0.28 LBai/A,COMMAND,SENCOR,TURBO,AND GEMINI ALSO WERE POOR IN CONTROLLING COCKLEBUR.TURBO,PROWL-SCEPTER AND BRONCO DID NOT PROVIDE ADEQUATE CONTROL OF LARGE CRABGRASS.GEMINI+ ROUNDUP VISUALLY INJURED SOYBEANS IN EXCESS OF 20%.PARAQUAT PRE, FOLLOWED BY POAST POSTEMERGENCE,FOLLOWED BY SCEPTER PROVIDED THE HIGHEST CROP YIELD IN THIS EXPERIMENT.

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APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MNTSPES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

WEED CONTROL-FULL SEASON SOYBEANS N-41

RESEARCH BY: R.M. HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 3/15/87 INITIATED: 05/14/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/01/86
APPL: PRE =05/15/86 POST1=06/25/86 POST2=06/27/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%CRINJU VISUAL 7/17/86	%XANST CONTROL 7/17/86	%DIGSA CONTROL 7/17/86	YIELD BU/ACRE 10/01/*
01	COMMAND	EC 6	1	PRE	3	75	96	18.9
	CANOPY	DF 75%	0.38	PRE				
	AGRIDEX	EC 4	1	PRE				
02	COMMAND	EC 6	1	PRE	3	51	90	19.6
	CANOPY	DF 75%	0.19	PRE				
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	0.5%	PRE				
03	COMMAND	EC 6	1	PRE	0	54	70	19.3
	SCEPTER	SC 1.5	.0625	PRE				
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	0.5%	PRE				
04	COMMAND	EC 6	1	PRE	15	55	93	15.2
	IGNITE	SC 1.67	0.75	PRE				
	SENCOR	DF 75%	0.25	PRE				
05	TURBO	EC 8	2	PRE	0	28	66	15.5
	IGNITE	SC 1.67	0.75	PRE				
06	CANOPY	DF 75%	0.38	PRE	14	76	94	20.1
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	0.5%	PRE				
07	GEMINI	DF 60%	0.75	PRE	23	67	70	18.4
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	0.5%	PRE				
08	SCEPTER	SC 1.5	0.125	PRE	3	31	70	18.4
	PROWL	EC 4	0.75	PRE				
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	0.5%	PRE				
09	PROWL-SCEPTER	EC 2.4	0.87	PRE	0	43	69	14.1
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	0.5%	PRE				

PROJ. NUM.:
FILE NAME: MNTSPES6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

WEED CONTROL-FULL SEASON SOYBEANS N-41

APPL: PRE =05/15/86 POST1=06/25/86 POST2=06/27/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%CRINJURY VISUAL 7/17/86	%XANST CONTROL 7/17/86	%DIGSA CONTROL 7/17/86	YIELD BU/ACRE 10/01/*
10	CANOPY	DF 75%	0.28	PRE	3	67	96	20.1
	CINCH	EC 7	1	PRE				
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	0.5%	PRE				
11	BRONCO	EC 4	3	PRE	0	8	60	16.0
	SCEPTER	SC 1.5	0.125	PRE				
12	BRONCO	EC 4	3	PRE	5	46	71	19.6
	CANOPY	DF 75%	0.28	PRE				
13	SELECT	EC 2	.25	PRE	3	10	81	14.2
	SCEPTER	SC 1.5	.125	PRE				
	PARAQUAT	SC 2	0.25	PRE				
	X-77	%A 100%	0.5%	PRE				
14	PROWL	EC 4	0.75	PRE	13	92	97	23.8
	PARAQUAT	SC 2	0.25	PRE				
	X-77	%A 100%	0.5%	PRE				
	SCEPTER	SC 1.5	.0625	POST2				
	X-77	%A 100%	0.5%	POST2				
15	PROWL	EC 4	0.75	PRE	13	89	94	19.6
	PARAQUAT	SC 2	0.25	PRE				
	X-77	%A 100%	0.5%	PRE				
	CLASSIC	DF 25%	.0078	POST2				
	X-77	%A 100%	0.5%	POST2				
16	PARAQUAT	SC 2	0.25	PRE	15	97	95	22.3
	X-77	%A 100%	0.5%	PRE				
	PURSUIT	SC 2	.094	POST2				
	X-77	%A 100%	0.5%	POST2				
17	PARAQUAT	SC 2	0.25	PRE	0	81	95	21.5
	X-77	%A 100%	0.5%	PRE				
	POAST	EC 1.5	.10	POST1				
	X-77	%A 100%	0.25%	POST1				
	BASAGRAN	SC 4	0.25	POST1				
	BLAZER	SC 2	0.125	POST1				
18	PARAQUAT	SC 2	.25	PRE	4	95	95	25.2
	X-77	%A 100%	0.5%	PRE				
	POAST	EC 1.5	.05	POST1				
	AGRIDEX	EC 4	1	POST1				
	SCEPTER	SC 1.5	0.06	POST2				
	X-77	%A 100%	0.25%	POST2				

PROJ. NUM.:
FILE NAME: MNTSPES6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

WEED CONTROL-FULL SEASON SOYBEANS N-41

APPL: PRE =05/15/86 POST1=06/25/86 POST2=06/27/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%CRINJU VISUAL 7/17/86	%XANST CONTROL 7/17/86	%DIGSA CONTROL 7/17/86	YIELD BU/ACRE 10/01/*
19	PROWL	EC 4	0.75	PRE	16	84	89	21.1
	PARAQUAT	SC 2	0.25	PRE				
	X-77	%A 100%	0.5%	PRE				
	DYANAP	EC 3	1.5	POST2				
	BUTYRAC	SC 2	.06	POST2				
20	ROUNDUP	SC 4	2	PRE	3	15	70	18.9
			LSD(0.05) =		17	43	41	5.4
			STANDARD DEVIATION =		12	30	29	3.7
			COEFF. OF VARIABILITY =		179	52	35	19.6

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MINCORP2 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

INCORPORATION STUDY AT MILAN

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EXPERIMENT COMMENTS

INJURY: CANOPY>SCEPTER>COMMAND.
CANOPY GAVE VIRTUALLY COMPLETE WEED CONTROL.
SCEPTER GAVE VERY LITTLE ELEUSINE INDICA(GOOSEGRASS) CONTROL.
COMMAND GAVE POOR CONTROL OF NIGHTSHADE,GROUNDCHERRY,JIMSONWEED,
MORNINGGLORY,AND COCKELBUR.
INCORPORATION TOOLS SEEMED TO INFLUENCE WEED CONTROL LESS WITH
CANOPY THAN THEY DID WITH COMMAND OR SCEPTER.

1.%ELEIN CONTROL=PERCENT GOOSEGRASS CONTROL.
2.%CRINJU VISUAL=PERCENT VISUAL CROP INJURY.
3.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE.

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APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.:
FILE NAME: MINCORP2

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

INCORPORATION STUDY AT MILAN

RESEARCH BY: R.M.HAYES
COOPERATOR : JOHN F.BRADLEY
TOTAL REPS : 6
APPL: PPI =05/20/86

COUNTY: GIBSON
LAST UPDATE: 3/05/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 05/20/86
COMPLETED: 11/21/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%ELEIN CONTROL 6/27/86	%CRINJU VISUAL 6/27/86	YIELD BU/ACRE 11/21/*
01	SCEPTER DISC	SC 1.5 1X	0.125		78	6	13.4
02	SCEPTER CHECK		0.125		81	4	15.6
03	SCEPTER DO-ALL	1X	0.125		82	5	14.4
04	SCEPTER TRIPLE-K	1X	0.125		73	2	18.7
05	SCEPTER ROLL-HAR	1X	0.125		78	6	16.9
06	SCEPTER DO-ALL	2X	0.125		87	10	18.4
07	SCEPTER TRIPLE-K	2X	0.125		73	1	19.2
08	SCEPTER DISC + TRIPLE-K		0.125		75	8	14.9
09	CANOPY DISC	DF 75% 1X	0.38		97	12	18.5
10	CANOPY CHECK		0.38		99	18	17.5
11	CANOPY DO-ALL	1X	0.38		99	15	13.5
12	CANOPY TRIPLE-K	1X	0.38		98	14	20.2
13	CANOPY ROLL-HAR	1X	0.38		98	15	20.0

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MINCORP2 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

INCORPORATION STUDY AT MILAN

APPL: PPI =05/20/86

TRT. NO.	PESTICIDE NAME	FORMU.	APPLI-CATION LBai/A	TYPE	%ELEIN CONTROL 6/27/86	%CRINJU VISUAL 6/27/86	YIELD BU/ACRE 11/21/*
14	CANOPY DO-ALL 2X		0.38		99	12	18.9
15	CANOPY TRIPLE-K 2X		0.38		99	12	23.0
16	CANOPY DISC + TRIPLE-K		0.38		96	13	18.1
17	COMMAND DISC	EC 6.0 1X	1.0		86	1	18.4
18	COMMAND CHECK		1.0		99	3	21.6
19	COMMAND DO-ALL 1X		1.0		96	3	20.6
20	COMMAND TRIPLE-K 1X		1.0		97	1	20.3
21	COMMAND ROLL-HAR 1X		1.0		95	1	19.5
22	COMMAND DO-ALL 2X		1.0		97	0	22.3
23	COMMAND TRIPLE-K 2X		1.0		98	2	22.1
24	COMMAND DISC + TRIPLE-K		1.0		87	0	17.5
			LSD(0.05) =		8	5	5.5
			STANDARD DEVIATION =		7	4	4.7
			COEFF. OF VARIABILITY =		8	57	25.4

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MPRERCS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

FULL SEASON NO-TILL SOYBEANS CORN STALKS

RESEARCH BY: R.M. HAYES
COOPERATOR : JOHN BRADLEY
TOTAL REPS : 4
REPORTED BY: R.M. HAYES

COUNTY: GIBSON ST: TN COUNTRY: USA
LAST UPDATE: 3/15/87 INITIATED: 05/14/86
EXPT. STATUS: 4 COMPLETED: 10/02/86
RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: NO-TILL CORN
PREVIOUS TILL: NO-TILLAGE
FERTILITY: ACC. TO UT RECCOMEND.
MISC. 1:
MISC. 2:

PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.0
SOIL TEXTURE: SILT LOAM SOIL OM%: 1.2
ROW WIDTH: 020 EXPERIMENTAL DESIGN: RCB
NUMBER OF REPS: 4
REPORT TYPE: INTERIM

PLANTING DATE: 05/14/86
HARVEST DATE : 10/02/86
RESIDUE TAKEN: N

CROP CULTIVAR: ESSEX
SEASONAL RAINFALL DURING EXPERIMENT
EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/14/86	06/25/86	06/27/86	/ /	/ /
JULIAN DATE/YEAR	J134/86	J176/86	J178/86	J 0/00	J 0/00
GEN. APPLIC TYPE	PRE	POST1	POST2		
AIR/SOIL TEMP(F)	/	089/	/	/	/
% REL. HUMIDITY	%	050			
WIND DIR/VELOC.	/	SW/02	/	/	/
ROOT/LEAF MOIST.	DRY/DRY	OPT/DRY	OPT/DRY	/	/
INCORP. EQUIP.	**NONE**				
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK	CO2BACKPACK	CO2BACKPACK		
SPRAYER GPA/PSI	18.0/032	018.0/032	018.0/032	. /	. /
NOZZLE TYPE	FLATFAN8002	FLATFAN8002	FLATFAN8002		
RAIN / IRRIG. in					
0-24 hr/1-3 days	. /0.50	. / .	. / .	. / .	. / .
4-7 days/2nd wk	. /2.40	0.35/ .	0.35/ .	. / .	. / .
3rd / 4th week	5.15/2.20	0.83/ .	0.83/ .	. / .	. / .

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 *****	****	*********	*********	*********	*********	*********
GLXMA	SOYBEANS		/	/	/	/	/
*****	**** PEST *****	****	*********	*********	*********	*********	*********
ERICA	HORSEWEED		012/	/	/	/	/
SORHA	JOHNSONGRASS		012/	/	/	/	/
DIGSA	LARGE CRABGRASS		001/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MPRERCS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

FULL SEASON NO-TILL SOYBEANS CORN STALKS

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EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1.%BRNDWN VISUAL=%VISUAL BURNDOWN.
2.%CRINJU VISUAL=%VISUAL CROP INJURY.
3.%ERICA CONTROL=%HORSEWEED CONTROL.
4.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13% MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL,(MOISTURE WAS 14.5% AT HARVEST).

SUMMARY

SUMMER ANNUAL WEED PRESSURE IN THIS EXPERIMENT WAS MINIMAL.THE PREDOMINANT WEED SPECIES IN THIS TEST WAS HORSEWEED(MARESTAIL).WHEN HORSEWEED IS PRESENT INITIAL BURNDOWN CAN BE DIFFICULT.TREATMENTS IN WHICH HORSEWEED WAS NOT ADEQUATELY(GREATER THAN 70%)CONTROLLED PRODUCED LOWER CROP YIELDS.TREATMENTS CONTAINING ROUNDUP CONTROLLED HORSEWEED SIGNIFICANTLY BETTER THAN TREATMENTS CONTAINING PARAQUAT. A VISUAL INJURY RATING WAS MADE DURING MID-SEASON.GEMINI AND CANOPY TREATMENTS RESULTED IN A SOYBEAN HEIGHT REDUCTION.THIS HEIGHT REDUCTION DID NOT RESULT IN A YIELD LOSS.

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APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.:
FILE NAME: MPRERCS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

FULL SEASON NO-TILL SOYBEANS CORN STALKS

RESEARCH BY: R.M. HAYES
COOPERATOR : JOHN BRADLEY
TOTAL REPS : 4

COUNTY: GIBSON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 05/14/86
COMPLETED: 10/02/86

APPL: PRE =05/14/86 POST1=06/25/86 POST2=06/27/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%BRNDWN VISUAL 5/30/86	%CRINJU VISUAL 7/17/86	%ERICA CONTROL 7/17/86	YIELD BU/ACRE 10/02/*
01	SCEPTER	SC	1.5	PRE	90	0	89	28.7
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				
02	SCEPTER	SC	1.5	PRE	96	0	95	32.0
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				
03	CANOPY	DF 75%	.188	PRE	84	0	96	30.0
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				
04	CANOPY	DF 75%	.38	PRE	85	20	97	27.7
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				
05	GEMINI	DF 60%	0.5	PRE	71	10	91	27.5
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				
06	GEMINI	DF 60%	1	PRE	85	23	95	26.6
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				
07	COMMAND	EC 6	1	PRE	88	0	91	31.1
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				
08	COMMAND	EC 6	1	PRE	68	3	83	27.0
	SENCOR	DF 75%	.25	PRE				
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				
09	SENCOR	DF 75%	.38	PRE	76	0	85	28.5
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				
10	LOROX	FL 4	1	PRE	46	0	56	21.5
	LASSO ME	FL 4	2	PRE				
	ROUNDUP	SC 4	1	PRE				
	X-77	%A 100%	.5%	PRE				

PROJ. NUM.:
FILE NAME: MPRERCS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

FULL SEASON NO-TILL SOYBEANS CORN STALKS

APPL: PRE =05/14/86 POST1=06/25/86 POST2=06/27/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%BRNDWN VISUAL 5/30,'86	%CRINJU VISUAL 7/17/86	%ERICA CONTROL 7/17/86	YIELD BU/ACRE 10/02/*
11	ROUNDUP	SC 4	1	PRE	95	0	97	32.4
	X-77	%A 100%	.5%	PRE				
	POAST	EC 1.5	.1	POST1				
	AGRIDEX	EC 4	1	POST1				
	BASAGRAN	SC 4	.25	POST2				
	BLAZER	SC 2	.125	POST2				
	X-77	%A 100%	.5%	POST2				
12	ROUNDUP	SC 4	1	PRE	97	6	95	27.1
	X-77	%A 100%	.5%	PRE				
13	WEEDFREE				26	5	59	22.0
	BRONCO	EC 4	4	PRE				
	BASAGRAN	SC 4	.75	POST1				
	FUSILADE	EC 1	.188	POST2				
	X-77	%A 100%	.5%	POST2				
14	CANOPY	DF 75%	0.38	PRE	74	0	71	21.5
	PARAQUAT	SC 2	.5	PRE				
	X-77	%A 100%	.5%	PRE				
15	SCEPTER	SC 1.5	.125	PRE	60	0	43	20.0
	PARAQUAT	SC 2	.5	PRE				
	X-77	%A 100%	.5%	PRE				
16	COMMAND	EC 6	1	PRE	41	0	40	15.0
	PARAQUAT	SC 2	.5	PRE				
	X-77	%A 100%	.5%	PRE				
				LSD(0.05) =	18	10	13	6.4
				STANDARD DEVIATION =	12	7	9	4.4
				COEFF. OF VARIABILITY =	16	171	11	17.0

PROJ. NUM.: N41 UNITS: LBai/A
FILE NAME: MPRERSS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

NO-TILL SOYBEANS IN OLD SOYBEAN STUBBLE

RESEARCH BY: R.M. HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 3/15/87 INITIATED: 05/14/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/02/86
REPORTED BY: RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: W-NTGS-84;NTSB-85 PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.3
PREVIOUS TILL: NO-TILLAGE SOIL TEXTURE: LORING SIL SOIL OM%: 1.2
FERTILITY: ACCORD. TO UT RECCOMEND ROW WIDTH: 020 EXPERIMENTAL DESIGN: RCB
MISC. 1: NUMBER OF REPS: 4
MISC. 2: REPORT TYPE: INTERIM

PLANTING DATE: 05/14/86 CROP CULTIVAR: ESSEX
HARVEST DATE : 10/02/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/14/86	06/25/86	/ /	/ /	/ /
JULIAN DATE/YEAR	J134/86	J176/86	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	PRE	POST1			
AIR/SOIL TEMP(F)	/	089/	/	/	/
% REL. HUMIDITY	%	050			
WIND DIR/VELOC.	/	SW/02	/	/	/
ROOT/LEAF MOIST.	DRY/DRY	OPT/DRY	/	/	/
INCORP. EQUIP.	**NONE**				
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK	CO2BACKPACK			
SPRAYER GPA/PSI	18.0/032	018.0/032	. /	. /	. /
NOZZLE TYPE	FLATFAN8002	FLATFAN8002			
RAIN / IRRIG. in					
0-24 hr/1-3 days	. /0.50	. /0.28	. / .	. / .	. / .
4-7 days/2nd wk	. /2.40	. /0.35	. / .	. / .	. / .
3rd / 4th week	5.15/2.20	2.30/ .	. / .	. / .	. / .

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 *****	*****	*********	*********	*********	*********	*********
GLXMA	SOYBEANS		/	/	/	/	/
*****	**** PEST *****	*****	*********	*********	*********	*********	*********
XANST	COMMONCOCKLEBUR		/	/	/	/	/
DIGSA	LARGECRABGRASS		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: N41 UNITS: LBai/A
FILE NAME: MPRERSS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

NO-TILL SOYBEANS IN OLD SOYBEAN STUBBLE

EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1.%CRINJU VISUAL=%VISUAL CROP INJURY.
2.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13% MOISTURE, (MOISTURE AT HARVEST WAS 13.7%).

SUMMARY

WEED PRESSURE IN THIS TEST WAS VERY LIGHT.NO WEED POPULATIONS WERE PRESENT IN SUFFICIENT QUANTITIES TO BE RATED.A VISUAL CROP INJURY RATING WAS TAKEN,AND YIELD DATA ALSO WERE TAKEN.GEMINI AND CANOPY TREATMENTS REDUCED THE HEIGHT OF THE SOYBEAN PLANTS.THESE TREATMENTS ALSO PRODUCED THE LOWEST CROP YIELDS IN THE EXPERIMENT.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: N41 UNITS: LBai/A
FILE NAME: MPRERSS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

NO-TILL SOYBEANS IN OLD SOYBEAN STUBBLE

RESEARCH BY: R.M. HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 3/15/87 INITIATED: 05/14/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/02/86
APPL: PRE =05/14/86 POST1=06/25/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%CRINJU VISUAL 7/17/86	%CRINJU VISUAL 10/02/*	YIELD BU/ACRE
01	SCEPTER	SC	1.5	PRE		0	27.9
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			
02	SCEPTER	SC	1.5	PRE		3.8	27.2
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			
03	CANOPY	DF	75% .188	PRE		17.5	26.2
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			
04	CANOPY	DF	75% .38	PRE		25.0	23.5
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			
05	GEMINI	DF	60% 0.5	PRE		15.0	24.8
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			
06	GEMINI	DF	60% 1	PRE		31.3	25.0
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			
07	COMMAND	EC	6	PRE		0	29.7
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			
08	COMMAND	EC	6	PRE		0	29.0
	SENCOR	DF	75% .25	PRE			
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			
09	SENCOR	DF	75% .38	PRE		0	30.8
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			
10	LOROX	FL	4	PRE		0	30.9
	LASSO ME	FL	4	PRE			
	ROUNDUP	SC	4	PRE			
	X-77	%A	100% .5%	PRE			

PROJ. NUM.: N41
FILE NAME: MPRERSS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

NO-TILL SOYBEANS IN OLD SOYBEAN STUBBLE

APPL: PRE =05/14/86 POST1=06/25/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%CRINJU VISUAL 7/17/86	YIELD BU/ACRE 10/02/*
11	ROUNDUP	SC 4	1	PRE	0	31.1
	X-77	%A 100%	.5%	PRE		
	POAST	EC 1.5	.1	POST1		
	AGRIDEX	EC 4	1	POST1		
	BASAGRAN	SC 4	.25	POST2		
	BLAZER	SC 2	.125	POST2		
	X-77	%A 100%	.5%	POST2		
12	ROUNDUP	SC 4	1	PRE	0	30.0
	X-77	%A 100%	.5%	PRE		
13	WEEDFREE				5.0	28.1
	BRONCO	EC 4	1	PRE		
	BASAGRAN	SC 4	.75	POST1		
	FUSILADE	EC 1	.188	POST2		
	X-77	%A 100%	.5%	POST2		
				LSD(0.05) =	9.1	3.1
				STANDARD DEVIATION =	6.3	2.1
				COEFF. OF VARIABILITY =	84.4	7.6

PROJ. NUM.: N-41 UNITS: LBai/A
FILE NAME: MPON41S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-N41CT

RESEARCH BY: R.M.HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 1/09/87 INITIATED: 05/09/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/01/86
REPORTED BY: R.M.HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.0
PREVIOUS TILL: NO-TILLAGE SOIL TEXTURE: HENRY SIL SOIL OM%: 1.0
FERTILITY: ACC. TO UT RECCOMEND ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
MISC. 1: NUMBER OF REPS: 4
MISC. 2: REPORT TYPE: INTERIM

PLANTING DATE: 05/09/86 CROP CULTIVAR: ASGROW A5474
HARVEST DATE : 10/01/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: DRY MID: WET LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/30/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J150/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	POST2				
AIR/SOIL TEMP(F)	091/	/	/	/	/
% REL. HUMIDITY	065%				
WIND DIR/VELOC.	NW/01	/	/	/	/
ROOT/LEAF MOIST.	WET/DRY	/	/	/	/
INCORP. EQUIP.	N/A				
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK				
SPRAYER GPA/PSI	018.0/032	. /	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	. / .	. / .	. / .	. / .	. / .
3rd / 4th week	. / .	. / .	. / .	. / .	. / .

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 *****	****	*********	*********	*********	*********	*********
GLXMA	SOYBEANS		005/V2	/	/	/	/
*****	**** PEST *****	****	*********	*********	*********	*********	*********
XANST	COMMONCOCKLEBUR		004/5LF	/	/	/	/
IPOHE	IVYLEAF MG		002/3LF	/	/	/	/
POLPY	PA.SMARTWEED		002/4LF	/	/	/	/
DIGSA	LARGE CRABGRASS		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: N-41 UNITS: LBai/A
FILE NAME: MPON41S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-N41CT

EXPERIMENT COMMENTS

ENTIRE EXPERIMENT TREATED WITH POAST (0.5PT/A) PLUS AGRIDEX (2 PT/A) FOR ANNUAL GRASS CONTROL.

KEY TO DATA HEADERS

1.%IPOHE CONTROL=%IVYLEAF MORNINGGLORY CONTROL.
2.%XANST CONTROL=%COMMON COCKLEBUR CONTROL.
3.%POLPY CONTROL=%PENNSYLVANIA SMARTWEED CONTROL.
4.%DIGSA CONTROL=%LARGE CRABGRASS CONTROL.
5.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL,(MOISTURE WAS 14.5% AND TEST WEIGHT WAS 55 POUNDS AT HARVEST).

SUMMARY

THE PREDOMINANT WEEDS IN THIS EXPERIMENT WERE COMMON COCKLEBUR, IVYLEAF MORNINGGLORY,PENNSYLVANIA SMARTWEED,AND LARGE CRABGRASS.WEED PRESSURE WAS MODERATE IN THIS EXPERIMENT.TREATMENTS WERE APPLIED AT THE OPTIMUM TIME FOR WEED CONTROL.AT APPLICATION,AIR TEMPERATURE WAS HIGH,SOIL WATER WAS ADEQUATE,AND BOTH SOYBEANS AND WEEDS WERE SHOWING RAPID GROWTH.ALL TREATMENTS PROVIDED ADEQUATE CONTROL OF COMMON COCKLEBUR AND PENNSYLVANIA SMARTWEED.THE COBRA+SCEPTER COMBINATION DID NOT PROVIDE ADEQUATE CONTROL OF IVYLEAF MORNINGGLORY.COBRA+X-77,TACKLE +SCEPTER,BASAGRAN+BLAZER,AND CLASSIC AT 0.0078LB AI/A DID NOT PROVIDE ADEQUATE CONTROL OF LARGE CRABGRASS.YIELDS OF COBRA TREATMENTS WERE SIGNIFICANTLY LOWER THAN THE HIGHEST TREATMENT IN TEST.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: N-41 UNITS: LBai/A
FILE NAME: MPON41S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-N41CT

RESEARCH BY: R.M.HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 1/09/87 INITIATED: 05/09/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/01/86
APPL: POST2=05/30/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%IPOHE CONTROL 6/13/86	%XANST CONTROL 6/13/86	%POLPY CONTROL 6/13/86	%DIGSA CONTROL 6/13/86	YIELD BU/ACRE 10/01/*
01	PURSUIT	SC 2	.063	POST2	81	88	97	88	27.6
	X-77	%A 100%	0.25%	POST2					
02	PURSUIT	SC 2	.094	POST2	89	95	98	98	25.8
	X-77	%A 100%	0.25%	POST2					
03	PURSUIT	SC 2	.063	POST2	84	99	98	98	24.8
	SCEPTER	SC 1.5	.063	POST2					
	X-77	%A 100%	0.25%	POST2					
04	PURSUIT	SC 2	.063	POST2	84	96	99	98	25.9
	ARSENAL	SC 2	.004	POST2					
	X-77	%A 100%	0.25%	POST2					
05	COBRA	EC 2	0.2	POST2	79	90	88	54	23.9
	X-77	%A 100%	0.25%	POST2					
06	COBRA	EC 2	0.2	POST2	86	88	57	86	22.5
	AGRIDEX	EC 4	0.5	POST2					
07	COBRA	EC 2	0.15	POST2	80	92	99	84	25.3
	BASAGRAN	SC 4	0.5	POST2					
	AGRIDEX	EC 4	0.5	POST2					
08	COBRA	EC 2	0.15	POST2	69	97	99	91	27.0
	SCEPTER	SC 1.5	0.125	POST2					
	X-77	%A 100%	0.25%	POST2					
09	TACKLE	SC 2	0.5	POST2	97	78	99	97	26.7
	X-77	%A 100%	0.25%	POST2					
10	TACKLE	SC 2	0.38	POST2	93	89	99	67	29.7
	SCEPTER	SC 1.5	0.063	POST2					
	X-77	%A 100%	0.25%	POST2					
11	CLASSIC	DF 25%	.0039	POST2	88	90	95	76	25.7
	X-77	%A 100%	0.25%	POST2					

PROJ. NUM.: N-41 UNITS: LBai/A
FILE NAME: MPON41S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-N41CT

APPL: POST2=05/30/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%IPOME CONTROL 6/13/86	%XANST CONTROL 6/13/86	%POLPY CONTROL 6/13/86	%DIGSA CONTROL 6/13/86	YIELD BU/ACRE 10/01/*
12	CLASSIC	DF 25%	.0078	POST2	97	97	98	54	26.8
	X-77	%A 100%	0.25%	POST2					
13	CLASSIC	DF 25%	.0117	POST2	98	98	98	70	28.3
	X-77	%A 100%	0.25%	POST2					
14	CLASSIC	DF 25%	.0078	POST2	99	99	99	77	29.4
	BUTYRAC	SC 2	.03	POST2					
	X-77	%A 100%	0.25%	POST2					
15	CLASSIC	DF 25%	.0078	POST2	99	92	99	95	28.5
	BLAZER	SC 2	0.38	POST2					
	X-77	%A 100%	0.25%	POST2					
16	BASAGRAN	SC 4	0.5	POST2	98	88	99	98	26.6
	BLAZER	SC 2	0.25	POST2					
	X-77	%A 100%	0.25%	POST2					
17	BLAZER	SC 2	0.38	POST2	98	90	99	98	25.2
	BUTYRAC	SC 2	0.03	POST2					
	X-77	%A 100%	0.25%	POST2					
18	BASAGRAN	SC 4	0.5	POST2	96	89	99	53	27.1
	BUTYRAC	SC 2	0.03	POST2					
	X-77	%A 100%	0.25%	POST2					
19	WEEDY CK				0	0	0	0	21.3
20	WEEDFREE				99	99	99	99	27.3
			LSD(0.05) =		15	11	15	29	5.5
			STANDARD DEVIATION =		10	7	10	20	3.8
			COEFF. OF VARIABILITY =		12	8	11	25	14.6

PROJ. NUM.:
FILE NAME: MPOES6S6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-S6

RESEARCH BY: R.M.HAYES
COOPERATOR : JOHN BRADLEY
TOTAL REPS : 4
REPORTED BY: R.M.HAYES

COUNTY: GIBSON
LAST UPDATE: 1/09/87
EXPT. STATUS: 4
RELATED FILE: **NONE**

ST: TN COUNTRY: USA
INITIATED: 05/29/86
COMPLETED: 10/02/86
SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS
PREVIOUS TILL: CONVENTIONAL
FERTILITY: ACC. TO UT RECCOMEND.
MISC. 1:
MISC. 2:

PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.5
SOIL TEXTURE: GRENADA SIL SOIL OM%: 1.2
ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
NUMBER OF REPS: 4
REPORT TYPE: INTERIM

PLANTING DATE: 05/09/86
HARVEST DATE : 10/02/86
RESIDUE TAKEN: N

CROP CULTIVAR: ASGROW 5474
SEASONAL RAINFALL DURING EXPERIMENT
EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/29/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J149/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	POST2				
AIR/SOIL TEMP(F)	084/	/	/	/	/
% REL. HUMIDITY	065%				
WIND DIR/VELOC.	SW/01	/	/	/	/
ROOT/LEAF MOIST.	WET/DRY	/	/	/	/
INCORP. EQUIP.					
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK				
SPRAYER GPA/PSI	018.0/032	. /	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. /0.15	. / .	. / .	. / .	. / .
4-7 days/2nd wk	6.05/0.80	. / .	. / .	. / .	. / .
3rd / 4th week	. / .	. / .	. / .	. / .	. / .

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 *****	****	**********	**********	**********	**********	**********
GLXMA	SOYBEANS		005/V2	/	/	/	/
*****	**** PEST *****	****	**********	**********	**********	**********	**********
XANST	COMMONCOCKLEBUR		003/4LF	/	/	/	/
IPOHG	ENTIRELEAF MG		002/3LF	/	/	/	/
IPOHE	IVYLEAF MG		002/3LF	/	/	/	/
AMACH	SMOOTH PIGWEED		003/4LF	/	/	/	/
ELEIN	GOOSEGRASS		0.5/2-3LF	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MPOES6S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-S6

EXPERIMENT COMMENTS

ENTIRE EXPERIMENT TREATED WITH POAST (0.5PT/A) PLUS AGRIDEX (2 PT/A) FOR ANNUAL GRASS CONTROL.

KEY TO DATA HEADERS

1.%CRLFBU VISUAL=%VISUAL CROP LEAFBURN.
2&7.%XANST CONTROL=%COMMON COCKLEBUR CONTROL.
3&8.%IPOHG CONTROL=%ENTIRELEAF MORNINGGLORY CONTROL.
4&9.%AMACH CONTROL=%SMOOTH PIGWEED CONTROL.
5&10.%ELEIN CONTROL=%GOOSEGRASS CONTROL.
6.%CRINJU VISUAL=%VISUAL CROP INJURY.
11.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13% MOISTURE (MOISTURE AT HARVEST WAS 16%).

SUMMARY

WEEDS PRESENT IN THIS EXPERIMENT WERE COMMON COCKLEBUR,ENTIRELEAF MORNINGGLORY,SMOOTH PIGWEED,AND GOOSEGRASS.POAST AT 0.5PT/A WAS APPLIED OVER THE ENTIRE EXPERIMENT WHEN GOOSEGRASS WAS IN THE 1-2 LEAF STAGE.THERE WERE NO OTHER GRASS HERBICIDES APPLIED TO THE EXPERIMENT. PURSUIT AT 0.094LB AI/A,COMBINATIONS OF PURSUIT-SCEPTER AND CLASSIC-BLAZER GAVE EXCELLENT SEASON-LONG CONTROL OF ALL WEEDS PRESENT.COBRA, COBRA-BASAGRAN,AND BLAZER-BUTYRAC BURNED THE SOYBEAN FOILAGE IN EXCESS OF 20% AFTER APPLICATION.YIELDS RANGED FROM 12.1 BU/A IN THE WEEDY CHECK,TO 30.4 BU/A,WITH THE PURSUIT-SCEPTER COMBINATION.TREATMENTS IN THIS EXPERIMENT WERE APPLIED AT THE OPTIMUM TIME FOR MAXIMUM CONTROL.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: INTERIM DATA UNITS: LBai/A
FILE NAME: MPOES6S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-S6

RESEARCH BY: R.M.HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 03/15/87 INITIATED: 05/29/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/02/86
APPL: POST2=05/29/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%CRLFBU VISUAL 5/29/86	%XANST CONTROL 6/10/86	%IPOHG CONTROL 6/10/86	%AMACH CONTROL 6/10/86	%ELEIN CONTROL 6/10/86	%CRINJU VISUAL 6/10/86	%XANST CONTROL 6/27/86	%IPOHG CONTROL 6/27/86	%AMACH CONTROL 6/27/86	%ELEIN CONTROL 6/27/86	YIELD BU/ACRE 10/02/*
01	PURSUIT	SC 2	.063	POST2	0	91	89	99	99	0	83	92	99	86	28.0
	X-77	%A 100%	0.25%	POST2											
02	PURSUIT	SC 2	.094	POST2	0	96	96	99	99	0	90	96	99	95	30.2
	X-77	%A 100%	0.25%	POST2											
03	PURSUIT	SC 2	.063	POST2	1	96	95	99	99	0	96	94	98	92	30.4
	SCEPTER	SC 1.5	.063	POST2											
	X-77	%A 100%	0.25%	POST2											
04	PURSUIT	SC 2	.063	POST2	0	95	94	99	99	10	80	91	98	90	26.8
	ARSENAL	SC 2	.004	POST2											
	X-77	%A 100%	0.25%	POST2											
05	COBRA	EC 2	0.2	POST2	15	90	97	99	98	3	74	75	95	71	23.0
	X-77	%A 100%	0.25%	POST2											
06	COBRA	EC 2	0.2	POST2	24	86	97	99	98	6	68	75	94	74	23.2
	AGRIDEX	EC 4	0.5	POST2											
07	COBRA	EC 2	0.15	POST2	24	79	95	99	91	6	56	80	87	59	18.4
	BASAGRAN	SC 4	0.5	POST2											
	AGRIDEX	EC 4	0.5	POST2											
08	COBRA	EC 2	0.15	POST2	11	96	97	99	99	0	91	84	97	91	28.3
	SCEPTER	SC 1.5	0.125	POST2											
	X-77	%A 100%	0.25%	POST2											
09	TACKLE	SC 2	0.5	POST2	13	87	77	99	99	0	71	96	94	89	24.2
	X-77	%A 100%	0.25%	POST2											
10	TACKLE	SC 2	0.38	POST2	9	94	99	99	99	0	85	97	98	93	29.5
	SCEPTER	SC 1.5	0.063	POST2											
	X-77	%A 100%	0.25%	POST2											
11	CLASSIC	DF 25%	.0039	POST2	0	85	90	90	41	0	71	85	63	58	23.2
	X-77	%A 100%	0.25%	POST2											

PROJ. NUM.: INTERIM DATA UNITS: LBai/A
FILE NAME: MPOES6S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-S6

APPL: POST2=05/29/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%CRLFBU VISUAL 5/29/86	%XANST CONTROL 6/10/86	%IPOHG CONTROL 6/10/86	%AMACH CONTROL 6/10/86	%ELEIN CONTROL 6/10/86	%CRINJU VISUAL 6/10/86	%XANST CONTROL 6/27/86	%IPOHG CONTROL 6/27/86	%AMACH CONTROL 6/27/86	%ELEIN CONTROL 6/27/86	YIELD BU/ACRE 10/02/*
12	CLASSIC	DF 25%	.0078	POST2	0	95	97	98	73	0	79	96	89	74	25.8
	X-77	%A 100%	0.25%	POST2											
13	CLASSIC	DF 25%	.0117	POST2	0	97	97	98	80	3	85	97	93	78	28.8
	X-77	%A 100%	0.25%	POST2											
14	CLASSIC	DF 25%	.0078	POST2	6	97	96	97	78	5	81	95	86	71	25.1
	BUTYRAC	SC 2	.03	POST2											
	X-77	%A 100%	0.25%	POST2											
15	CLASSIC	DF 25%	.0078	POST2	11	97	99	99	99	1	93	99	99	99	27.8
	BLAZER	SC 2	0.38	POST2											
	X-77	%A 100%	0.25%	POST2											
16	BASAGRAN	SC 4	0.5	POST2	10	90	99	99	74	0	71	97	90	82	22.7
	BLAZER	SC 2	0.25	POST2											
	X-77	%A 100%	0.25%	POST2											
17	BLAZER	SC 2	0.38	POST2	21	91	99	99	99	13	78	96	97	90	20.6
	BUTYRAC	SC 2	0.03	POST2											
	X-77	%A 100%	0.25%	POST2											
18	BASAGRAN	SC 4	0.5	POST2	4	90	97	99	32	8	69	81	66	16	19.1
	BUTYRAC	SC 2	0.03	POST2											
	X-77	%A 100%	0.25%	POST2											
19	WEEDY CK				0	0	0	0	0	0	0	0	0	0	12.1
20	WEEDFREE				0	99	99	99	99	0	99	99	99	99	26.3
				LSD(0.05) =	3	8	16	4	29	5	9	13	11	13	4.4
				STANDARD DEVIATION =	2	6	11	3	20	4	6	9	8	9	3.0
				COEFF. OF VARIABILITY =	32	7	12	3	24	139	9	10	9	12	12.3

PROJ. NUM.: S-6-2 UNITS: LBai/A
FILE NAME: MP02S6S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-S6-2

RESEARCH BY: R.M.HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 1/22/87 INITIATED: 06/11/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/02/86
REPORTED BY: R.M.HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS PLOT SIZE(LxW): 10.0x 30.0 SOIL pH : .
PREVIOUS TILL: CONVENTIONAL SOIL TEXTURE: GRENADA SIL SOIL OM%: .
FERTILITY: ACC. TO UT RECCOMEND. ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
MISC. 1: NUMBER OF REPS: 4
MISC. 2: REPORT TYPE: INTERIM

PLANTING DATE: 05/09/86 CROP CULTIVAR: ASGROW 5474
HARVEST DATE : 10/02/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	06/11/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J162/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	POST4				
AIR/SOIL TEMP(F)	088/	/	/	/	/
% REL. HUMIDITY	080%				
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	WET/DRY	/	/	/	/
INCORP. EQUIP.					
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK				
SPRAYER GPA/PSI	018.0/032	. /	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	00.8/ .	. / .	. / .	. / .	. /
4-7 days/2nd wk	. / .	. / .	. / .	. / .	. / .
3rd / 4th week	. / .	. / .	. / .	. / .	. / .

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 *****	*****	**********	**********	**********	**********	**********
GLXMA	SOYBEANS		010/V4	/	/	/	/
*****	**** PEST *****	*****	**********	**********	**********	**********	**********
XANST	COMMONCOCKLEBUR		007/8LV	/	/	/	/
IPOHG	ENTIRELEAF MG		029/13LV	/	/	/	/
IPOHE	IVYLEAF MG		029/13LV	/	/	/	/
AMACH	SMOOTH PIGWEED		009/9LV	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: S-6-2 UNITS: LBai/A
FILE NAME: MP02S6S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-S6-2

EXPERIMENT COMMENTS

ENTIRE EXPERIMENT TREATED WITH POAST (0.5PT/A) PLUS AGRIDEX (2 PT/A) FOR ANNUAL GRASS CONTROL.

KEY TO DATA HEADERS

1.%CRLFBU VISUAL=%CROP LEAF BURN.
2.%CRINJU VISUAL=%CROP INJURY.
3&9.%AMACH CONTROL= %SMOOTH PIGWEED CONTROL.
4&8.%IPOHG CONTROL= %IVYLEAF MORNINGGLORY CONTROL.
5&7.%XANST CONTROL= %COMMON COCKLEBUR CONTROL.
6.%DIGSA CONTROL= %LARGE CRABGRASS CONTROL.
10.%EPHMA CONTROL= %SPOTTED SPURGE CONTROL.
11.%ELEIN CONTROL = %GOOSEGRASS CONTROL.
12.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE,(MOISTURE AT HARVEST WAS 16%).

SUMMARY

THE MAIN OBJECTIVE OF THIS EXPERIMENT WAS TO EVALUATE CONTROL OF NEW SOYBEAN HERBICIDES ON WEEDS AT A LARGER STAGE THAN WHERE OPTIMUM CONTROL IS NORMALLY OBTAINED.WEED PRESSURE WAS EXCELLENT IN THIS EXPERIMENT.NONE OF THE TREATMENTS PROVIDED ADEQUATE CONTROL OF GOOSE-GRASS.POOR CONTROL OF ENTIRELEAF MORNINGGLORY AND LARGE CRABGRASS ALSO WAS OBTAINED FROM MOST TREATMENTS.TREATMENTS CONTAINING COBRA RESULTED IN CROP INJURY GREATER THAN 20%.HOWEVER THESE TREATMENTS PROVIDED THE HIGHEST LEVEL OF OVERALL CONTROL OF THE WEED SPECIES PRESENT.CROP YIELDS ALSO WERE HIGHEST FROM THESE TREATMENTS.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: S-6-2
FILE NAME: MP02S6S6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-S6-2

RESEARCH BY: R.M.HAYES
COOPERATOR : JOHN BRADLEY
TOTAL REPS : 4
APPL: POST4=06/11/86

COUNTY: GIBSON
LAST UPDATE: 1/22/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 06/11/86
COMPLETED: 10/02/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%CRLFBU VISUAL 6/13/86	%CRINJU VISUAL 6/18/86	%AMACH CONTROL 6/18/86	%IPOHG CONTROL 6/18/86	%XANST CONTROL 6/18/86	%DIGSA CONTROL 6/18/86	%XANST CONTROL 6/27/86	%IPOHG CONTROL 6/27/86	%AMACH CONTROL 6/27/86	%ELEIN CONTROL 6/27/86	YIELD BU/ACRE 10/02/*
01	PURSUIT	SC 2	.063	POST4	0	0	94	24	95	10	99	41	99	20	23.7
	X-77	%A 100%	0.25%	POST4											
02	PURSUIT	SC 2	.094	POST4	0	0	89	53	91	33	98	40	99	58	26.3
	X-77	%A 100%	0.25%	POST4											
03	SCEPTER	SC 1.5	0.063	POST4	0	0	79	18	78	50	99	0	94	51	24.0
	X-77	%A 100%	0.25%	POST4											
04	SCEPTER	SC 1.5	0.125	POST4	0	0	93	18	89	36	99	8	99	8	23.9
	X-77	%A 100%	0.25%	POST4											
05	COBRA	EC 2	0.2	POST4	6	26	98	95	98	59	99	77	98	8	25.1
	X-77	%A 100%	0.25%	POST4											
06	COBRA	EC 2	0.2	POST4	28	33	99	98	98	66	99	99	98	15	28.0
	AGRIDEX	EC 4	0.5	POST4											
07	COBRA	EC 2	0.15	POST4	21	35	97	96	96	78	99	96	98	58	27.5
	BASAGRAN	SC 4	0.5	POST4											
	AGRIDEX	EC 4	0.5	POST4											
08	COBRA	EC 2	0.15	POST4	6	24	98	88	97	73	99	33	99	56	24.6
	SCEPTER	SC 1.5	0.125	POST4											
	X-77	%A 100%	0.25%	POST4											
09	TACKLE	SC 2	0.5	POST4	5	4	94	56	61	43	49	13	85	30	21.3
	X-77	%A 100%	0.25%	POST4											
10	TACKLE	SC 2	0.38	POST4	4	10	95	38	78	48	93	15	99	20	23.0
	SCEPTER	SC 1.5	0.063	POST4											
	X-77	%A 100%	0.25%	POST4											
11	CLASSIC	DF 25%	.0039	POST4	0	0	44	30	60	13	64	60	55	6	20.3
	X-77	%A 100%	0.25%	POST4											
12	CLASSIC	DF 25%	.0078	POST4	0	0	66	35	74	13	80	20	80	8	23.0
	X-77	%A 100%	0.25%	POST4											

PROJ. NUM.: S-6-2 UNITS: LBai/A
FILE NAME: MP02S6S6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL IN SOYBEANS-S6-2

APPL: POST4=06/11/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%CRLFBU VISUAL 6/13/86	%CRINJU VISUAL 6/18/86	%AMACH CONTROL 6/18/86	%IPOHG CONTROL 6/18/86	%XANST CONTROL 6/18/86	%DIGSA CONTROL 6/18/86	%XANST CONTROL 6/27/86	%IPOHG CONTROL 6/27/86	%AMACH CONTROL 6/27/86	%ELEIN CONTROL 6/27/86	YIELD BU/ACRE 10/02/*
13	CLASSIC	DF 25%	.0117	POST4	0	0	85	36	87	28	93	44	95	0	24.7
	X-77	%A 100%	0.25%	POST4											
14	CLASSIC	DF 25%	.0078	POST4	0	0	94	45	72	13	85	53	89	0	22.7
	BUTYRAC	SC 2	.03	POST4											
	X-77	%A 100%	0.25%	POST4											
15	CLASSIC	DF 25%	.0078	POST4	6	15	94	64	84	48	81	79	91	13	23.2
	BLAZER	SC 2	0.38	POST4											
	X-77	%A 100%	0.25%	POST4											
16	BASAGRAN	SC 4	0.5	POST4	5	10	94	59	85	63	84	23	87	43	24.9
	BLAZER	SC 2	0.25	POST4											
	X-77	%A 100%	0.25%	POST4											
17	BLAZER	SC 2	0.38	POST4	5	20	96	71	80	43	86	62	97	25	23.7
	BUTYRAC	SC 2	0.03	POST4											
	X-77	%A 100%	0.25%	POST4											
18	BASAGRAN	SC 4	0.5	POST4	0	3	43	25	78	8	91	15	43	13	23.0
	BUTYRAC	SC 2	0.03	POST4											
	X-77	%A 100%	0.25%	POST4											
19	WEEDY CK				0	0	0	0	0	0	25	8	13	0	18.1
20	WEEDFREE				0	0	99	99	99	99	99	99	99	99	31.2
			LSD(0.05) =		3	6	43	46	43	52	45	53	41	51	12.4
			STANDARD DEVIATION =		2	4	30	32	30	36	31	37	29	35	8.6
			COEFF. OF VARIABILITY =		54	46	36	61	37	87	36	83	33	134	35.7

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MPONTSS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL NO-TILL SOYBEANS

RESEARCH BY: R.M.HAYES
COOPERATOR : JOHN BRADLEY
TOTAL REPS : 4
REPORTED BY: R.M.HAYES

COUNTY: GIBSON ST: TN COUNTRY: USA
LAST UPDATE: 3/05/87 INITIATED: 05/14/86
EXPT. STATUS: 4 COMPLETED: 10/01/86
RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS
PREVIOUS TILL: NO-TILLAGE
FERTILITY: ACC. TO UT RECCOMEND
MISC. 1:
MISC. 2:

PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.5
SOIL TEXTURE: GRENADA SIL SOIL OM%: 1.3
ROW WIDTH: 020 EXPERIMENTAL DESIGN: RCB
NUMBER OF REPS: 4
REPORT TYPE: INTERIM

PLANTING DATE: 05/14/86
HARVEST DATE : 10/01/86
RESIDUE TAKEN: N

CROP CULTIVAR: ESSEX
SEASONAL RAINFALL DURING EXPERIMENT
EARLY: DRY MID: WET LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	06/25/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J176/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	POST				
AIR/SOIL TEMP(F)	085/	/	/	/	/
% REL. HUMIDITY	050%				
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	OPT/DRY	/	/	/	/
INCORP. EQUIP.	**NONE**				
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK				
SPRAYER GPA/PSI	018.0/032	. /	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	. / .	. / .	. / .	. / .	. / .
3rd / 4th week	. / .	. / .	. / .	. / .	. / .

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 *****	****	**********	**********	**********	**********	**********
GLXMA	SOYBEANS		/	/	/	/	/
*****	**** PEST *****	****	**********	**********	**********	**********	**********
XANST	COMMONCOCKLEBUR		/	/	/	/	/
SIDSP	PRICKLY SIDA		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MPONTSS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL NO-TILL SOYBEANS

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EXPERIMENT COMMENTS

ENTIRE EXPERIMENT TREATED WITH ROUNDUP AT 1 QT/A AT PLANTING TO CONTROL EXISTING VEGETATION. FUSILADE 2000 AT 1.5 PT/A FOR GRASS CONTROL.

KEY TO DATA HEADERS

1.%XANST CONTROL=%COMMON COCKLEBUR CONTROL.
2.%SIDSP CONTROL=%PRICKLY SIDA CONTROL.
3.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13% MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL,(MOISTURE WAS 12.8% AND TEST WEIGHT WAS 53.76 POUNDS AT HARVEST).

SUMMARY

THE PREDOMINANT WEED SPECIES IN THIS EXPERIMENT WERE COMMON COCKLEBUR AND PRICKLY SIDA.ALL TREATMENTS IN THIS TEST EXCEPT TACKLE AND CLASSIC TREATMENTS PROVIDED ADEQUATE(GREATER THAN 70%)CONTROL OF COCKLEBUR.PURSUIT AT 0.063 LBSai/A AND CLASSIC AT 0.0078 LBSai/A PROVIDED POOR CONTROL OF TEAWEED.SCEPTER AT 0.063 LBai/A PROVIDED THE HIGHEST LEVEL OF WEED CONTROL OF THE WEEDS PRESENT AND WAS ALSO ONE OF THE HIGHEST YIELDING TREATMENTS IN THE EXPERIMENT.

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APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: UNITS: LBai/A
FILE NAME: MPONTSS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL NO-TILL SOYBEANS

RESEARCH BY: R.M.HAYES COUNTY: GIBSON ST: TN COUNTRY: USA
COOPERATOR : JOHN BRADLEY LAST UPDATE: 3/05/87 INITIATED: 05/14/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/01/86
APPL: POST =06/25/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%XANST CONTROL 7/17/86	%SIDSP CONTROL 7/17/86	YIELD BU/ACRE 10/01/*
01	PURSUIT	SC 2	.063	POST2	89	67	21.4
	X-77	%A 100%	0.25%	POST2			
02	PURSUIT	SC 2	.094	POST2	96	78	22.9
	X-77	%A 100%	0.25%	POST2			
03	SCEPTER	SC 1.5	.063	POST2	98	93	22.6
	X-77	%A 100%	0.25%	POST2			
04	SCEPTER	SC 1.5	.125	POST2	96	85	21.3
	X-77	%A 100%	0.25%	POST2			
05	COBRA	EC 2	0.2	POST2	81	90	16.3
	X-77	%A 100%	0.25%	POST2			
06	COBRA	EC 2	0.2	POST2	79	80	18.6
	AGRIDEX	EC 4	0.5	POST2			
07	COBRA	EC 2	0.15	POST2	77	96	16.4
	BASAGRAN	SC 4	0.5	POST2			
	AGRIDEX	EC 4	0.5	POST2			
08	COBRA	EC 2	0.15	POST2	97	91	22.1
	SCEPTER	SC 1.5	0.125	POST2			
	X-77	%A 100%	0.25%	POST2			
09	TACKLE	SC 2	0.5	POST2	63	94	18.5
	X-77	%A 100%	0.25%	POST2			
10	TACKLE	SC 2	0.38	POST2	93	76	20.1
	SCEPTER	SC 1.5	0.063	POST2			
	X-77	%A 100%	0.25%	POST2			
11	CLASSIC	DF 25%	.0039	POST2	61	81	18.5
	X-77	%A 100%	0.25%	POST2			
12	CLASSIC	DF 25%	.0078	POST2	73	38	18.3
	X-77	%A 100%	0.25%	POST2			

PROJ. NUM.:
FILE NAME: MPONTSS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST BROADLEAF CONTROL NO-TILL SOYBEANS

APPL: POST =06/25/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%XANST CONTROL 7/17/86	%SIDSP CONTROL 7/17/86	YIELD BU/ACRE 10/01/*
13	CLASSIC	DF 25%	.0117	POST2	92	70	21.4
	X-77	%A 100%	0.25%	POST2			
14	CLASSIC	DF 25%	.0078	POST2	85	79	22.5
	BUTYRAC	SC 2	.03	POST2			
	X-77	%A 100%	0.25%	POST2			
15	CLASSIC	DF 25%	.0078	POST2	73	94	14.4
	BLAZER	SC 2	0.38	POST2			
	X-77	%A 100%	0.25%	POST2			
16	BASAGRAN	SC 4	0.5	POST2	82	82	19.4
	BLAZER	SC 2	0.25	POST2			
	X-77	%A 100%	0.25%	POST2			
17	BLAZER	SC 2	0.38	POST2	90	92	19.9
	BUTYRAC	SC 2	0.03	POST2			
	X-77	%A 100%	0.25%	POST2			
18	BASAGRAN	SC 4	0.5	POST2	98	97	21.9
	BUTYRAC	SC 2	0.03	POST2			
	X-77	%A 100%	0.25%	POST2			
19	WEEDY CK				21	43	13.2
20	WEEDFREE				26	43	17.3
			LSD(0.05) =		30	38	7.8
			STANDARD DEVIATION =		21	26	5.4
			COEFF. OF VARIABILITY =		26	33	28.1

PROJ. NUM.:
FILE NAME: MCASOBS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SICKLEPOD CONTROL IN SOYBEANS AT MES

RESEARCH BY: R. M. HAYES
COOPERATOR : JOHN BRADLEY
TOTAL REPS : 4
REPORTED BY: R.M. HAYES

COUNTY: GIBSON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4
RELATED FILE: **NONE**

ST: TN COUNTRY: USA
INITIATED: 05/20/86
COMPLETED: 10/01/86
SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS
PREVIOUS TILL: CONVENTIONAL
FERTILITY: ACC. TO U.T. RECCOMEND.
MISC. 1:
MISC. 2:

PLOT SIZE(LxW): 10.0x 30.0 SOIL pH : .
SOIL TEXTURE: SILT LOAM SOIL OM%: .
ROW WIDTH: 020 EXPERIMENTAL DESIGN: RCB
NUMBER OF REPS: 4
REPORT TYPE: INTERIM

PLANTING DATE: 05/20/86
HARVEST DATE : 10/01/86
RESIDUE TAKEN: N

CROP CULTIVAR: ASGROW 5474
SEASONAL RAINFALL DURING EXPERIMENT
EARLY: WET MID: OPT LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/20/86	05/20/86	06/12/86	06/25/86	/ /
JULIAN DATE/YEAR	J140/86	J140/86	J163/86	J176/86	J 0/00
GEN. APPLIC TYPE	PPI	PRE	POST1	POST2	
AIR/SOIL TEMP(F)	/	/	079/	089/	/
% REL. HUMIDITY	%			050	
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	OPT/	OPT/	WET/DRY	OPT/DRY	/
INCORP. EQUIP.	TRIPLE-K	NONE			
INCORP. DEPTH in	02	.	.	.	.
SPRAYER TYPE	CO2BACKPACK	CO2BACKPACK	CO2BACKPACK	CO2BACKPACK	
SPRAYER GPA/PSI	18.0/032	18.0/032	18.0/032	18.0/032	. /
NOZZLE TYPE	FLATFAN8002	FLATFAN8002	FLATFAN8002	FLATFAN8002	
RAIN / IRRIG. in					
0-24 hr/1-3 days	. /0.20	. /0.20	0.20/ .	. / .	. / .
4-7 days/2nd wk	1.55/1.38	1.55/1.38	. / .	0.22/ .	. / .
3rd / 4th week	6.27/0.33	6.27/0.33	0.22/ .	0.83/ .	. / .

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 *****	****	**********	**********	**********	**********	**********
GLXMA	SOYBEANS		/	/	/	/	/
*****	**** PEST *****	****	**********	**********	**********	**********	**********
CASOB	SICKLEPOD		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.:
FILE NAME: MCASOBS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SICKLEPOD CONTROL IN SOYBEANS AT MES

EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1&3.%CRSTUN VISUAL=%VISUAL INJURY ON SOYBEANS.
2&4.%CASOB CONTROL=%SICKLEPOD CONTROL.
5.MOISTUR %AT HARVEST=%MOISTURE MEASURED AT HARVEST.
6.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE
WITH THE YIELD CORRECTED TO 13% MOISTURE WITH A
TEST WEIGHT OF 60 POUNDS PER BUSHEL.

SUMMARY

SOYBEANS WERE STUNTED WITH CANOPY PRE AT 0.38 LB.AI/A,ESPECIALLY WHERE SEQUENTIAL APPLICATIONS OF SCEPTER OR CLASSIC WERE APPLIED. SICKLEPOD PRESSURE WAS UNIFORM AND INTENSE.THE MOST EFFECTIVE PROGRAM WAS THE "OLD PROGRAM" RECOMMENDED BY U.T. CONSISTING OF LASSO+SENCOR PRE FOLLOWED BY SENCOR+2,4-DB POST-DIRECTED.TREATMENTS WITH CANOPY PROVIDED THE BEST EARLY SEASON CONTROL,BUT THIS DID NOT HOLD UNLESS FOLLOWED WITH CLASSIC POST.SENCOR PRE FOLLOWED BY SCEPTER POST PROVIDED EXCELLENT CONTROL.CONTROL WITH SCEPTER ALONE WAS ONLY FAIR AT BEST,BUT BY STUNTING THE SICKLEPOD,SOYBEAN YIELD REDUCTIONS WERE ONLY 20-25% COMPARED TO 37% IN THE WEEDY CHECK.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.:
FILE NAME: MCASOBS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SICKLEPOD CONTROL IN SOYBEANS AT MES

RESEARCH BY: R. M. HAYES
COOPERATOR : JOHN BRADLEY
TOTAL REPS : 4

COUNTY: GIBSON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 05/20/86
COMPLETED: 10/01/86

APPL: PPI =05/20/86 PRE =05/20/86 POST1=06/12/86 POST2=06/25/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%CRSTUN %CASOB VISUAL 6/13/86	%CASOB CONTROL 6/13/86	%CRSTUN %CASOB VISUAL 9/11/86	%CASOB CONTROL 9/11/86	MOISTUR %AT HAR 10/01/*	YIELD BU/ACRE 10/01/*
01	SCEPTER	SC 1.5	0.125	PPI	0	35	0	43	13.1	18.4
02	SCEPTER	SC 1.5	0.25	POST1	0	10	0	69	12.1	20.8
03	SCEPTER	SC 1.5	0.125	POST1	0	0	0	43	12.4	19.7
04	SCEPTER	SC 1.5	0.125	PRE	1	41	0	68	12.9	23.0
	SCEPTER	SC 1.5	0.125	POST1						
05	SCEPTER	SC 1.5	0.25	POST1	0	8	0	61	12.1	23.4
06	SCEPTER	SC 1.5	0.125	PPI	4	70	4	54	12.5	19.6
	SENCOR	DF 75%	0.38	PPI						
07	SCEPTER	SC 1.5	0.125	PPI	3	76	8	74	13.0	23.6
	SENCOR	DF 75%	0.38	PPI						
	SCEPTER	SC 1.5	0.125	POST1						
08	CANOPY	DF 75%	0.38	PPI	6	89	14	75	12.9	19.2
	SCEPTER	SC 1.5	0.125	POST1						
09	CANOPY	DF 75%	0.38	PPI	10	90	6	48	12.4	22.4
10	CANOPY	DF 75%	0.38	PRE	11	91	23	94	12.8	24.8
	CLASSIC	DF 25%	0.008	POST1						
11	CLASSIC	DF 25%	0.008	POST1	0	13	0	91	11.9	25.0
	CLASSIC	DF 25%	0.008	POST2						
12	SENCOR	DF 75%	0.5	PPI	0	54	0	91	12.0	26.6
	SCEPTER	SC 1.5	0.125	POST1						
13	SCEPTER	SC 1.5	0.125	PPI	0	10	4	55	12.5	18.9
	COBRA	EC 2.0	0.2	POST1						
14	LASSO ME	FL 4.0	2.5	PPI	0	13	0	96	12.0	30.2
	SENCOR	DF 75%	0.38	PPI						
	SENCOR	DF 75%	0.25	POD						
	BUTYRAC	SC 2.0	0.2	POD						

PROJ. NUM.:
FILE NAME: MCASOBS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SICKLEPOD CONTROL IN SOYBEANS AT MES

APPL: PPI =05/20/86 PRE =05/20/86 POST1=06/12/86 POST2=06/25/86

TRT. NO.	PESTICIDE NAME	FORMU.	APPLI-CATION TYPE	%CRSTUN VISUAL 6/13/86	%CASOB CONTROL 6/13/86	%CRSTUN VISUAL 9/11/86	%CASOB CONTROL 9/11/86	MOISTUR %AT HAR 10/01/*	YIELD BU/ACRE 10/01/*
15	WEEDY CK			0	0	0	0	13.1	10.3
16	WEEDFREE			0	99	0	98	12.8	26.7
	LSD(0.05) =			3	28	10	20	1.4	5.0
	STANDARD DEVIATION =			2	19	7	14	1.0	3.5
	COEFF. OF VARIABILITY =			107	44	199	21	7.8	15.9

PLATEAU EXPERIMENT STATION

CROSSVILLE, TENNESSEE

38555

SUPERINTENDENT - Dr. Robert D. Freeland

RAINFALL
Plateau Experiment Station
Crossville, TN 1986

Date	April	May	June	July	August	September
1	0	0	0	0	.56	.66
2	0	0	.16	.42	0	.33
3	0	0	0	1.08	0	.47
4	0	0	.42	0	0	1.66
5	0	0	.09	0	0	.20
6	.05	0	0	0	0	0
7	.28	0	.03	0	.02	0
8	.41	0	.14	.13	.01	0
9	0	0	0	0	0	0
10	0	0	.72	.06	0	0
11	0	0	.02	1.09	.68	0
12	0	0	.08	.06	0	.34
13	0	.06	0	0	0	0
14	0	0	0	.13	.01	0
15	.08	0	0	0	0	0
16	0	0	0	0	0	0
17	0	0	0	0	.34	0
18	0	0	0	0	0	0
19	0	.05	0	0	.02	0
20	.06	.38	0	0	0	.70
21	.48	0	0	.08	0	.07
22	.22	0	0	0	.42	0
23	0	.79	0	0	0	0
24	0	.11	0	0	0	0
25	0	.38	0	0	0	0
26	0	.04	0	0	0	.48
27	0	1.52	0	0	.38	0
28	0	2.93	0	0	.63	.03
29	.24	.10	.20	0	0	0
30	0	0	.01	0	0	0
31	-	0	-	0	.03	-
Total	1.82	6.36	1.87	3.05	3.10	4.94

TEMPERATURE
Plateau Experiment Station
Crossville, TN 1986

	April		May		June		July		August		Sept	
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	78	51	82	51	81	58	87	66	83	61	62	57
2	76	51	72	44	82	60	84	67	84	62	65	62
3	76	50	65	36	81	59	79	57	84	60	71	64
4	78	55	61	36	79	60	78	54	83	59	75	64
5	77	56	73	40	72	61	82	64	82	57	78	63
6	77	56	79	59	79	62	84	64	87	61	77	55
7	74	54	80	58	81	62	85	64	88	62	77	51
8	76	55	84	55	82	68	88	65	85	62	79	53
9	69	38	83	53	85	67	89	68	87	63	71	51
10	50	32	84	52	85	65	87	68	84	64	78	54
11	58	35	80	56	80	66	83	63	89	65	73	65
12	65	40	76	55	82	66	84	66	81	59	72	62
13	70	45	71	59	79	58	84	68	82	61	74	51
14	74	49	80	59	77	56	85	65	84	62	79	52
15	72	40	80	60	82	61	87	65	85	65	80	55
16	60	33	76	60	81	57	84	65	87	64	77	60
17	44	35	80	60	84	59	86	65	84	64	79	59
18	46	35	82	65	83	52	90	66	80	66	76	59
19	71	45	70	59	79	55	92	68	82	63	68	61
20	75	52	66	50	85	61	92	67	84	60	75	60
21	60	43	63	39	87	65	93	64	83	62	83	62
22	53	32	63	39	89	61	89	66	80	65	83	60
23	49	24	70	47	89	62	89	67	85	64	81	60
24	59	32	70	53	89	66	90	68	85	66	82	65
25	74	50	78	58	85	58	92	67	83	54	83	61
26	80	52	72	58	83	55	90	70	86	65	83	62
27	84	57	69	61	86	55	92	66	83	67	84	62
28	85	54	72	62	90	64	90	65	85	56	84	62
29	69	43	71	62	88	69	91	67	67	42	83	64
30	74	48	81	59	83	65	91	62	71	44	84	65
31	--	--	82	60	--	--	91	59	71	52	--	--

12-08-1986 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

SCEPTER COMBINATIONS FOR SOYBEAN WEED MANAGEMENT

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-P-3 with cooperator PLATEAU EXPT STA

Experimental Management

Date Planted 6-19-86 Variety ESSEX Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK,ROTERRA,POWER-DRIVEN TILLER, CULTI-PACKER.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture SILT LOAM
Soil Series TILSIT % OM 1.6 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	6-18-86	6-19-86	7-17-86			
Time Treated	PM	PM	AM			
Cloud Cover	CLEAR	CLEAR	50%			
Air Temperature	70	83	85			
Relative Humidity	64%	56%	74%			
Wind Speed/Direction	CALM	CALM	1MPH-S			
Soil Temperature	78	92	100			
Soil/Leaf Surface Moisture	DRY	DRY	DRY			
Soil Subsurface Moisture	MOIST	MOIST	MOIST			
Soil Tilth	FINE	FINE	N/A			
Crop Stage	PPI	PRE	V4			
Pest Name, Stage & Density						
AMACH 2/FT	PRE	PRE	2-3 LF			
CYPES 4/FT	PRE	PRE	3-4 IN			
MOLVE 5/FT	PRE	PRE	2-3 IN			
EPHMA,IPOHE 1/FT	PRE	PRE	3 IN,4LF			

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	8002	19 IN	19 IN	6.3FT	20	WATER	41
2.	CO2 BACKPACK	3	FLAT FAN	8002	19 IN	19 IN	6.3FT	20	WATER	41
3.	CO2 BACKPACK	3	FLAT FAN	8002	19 IN	19 IN	6.3FT	20	WATER	41

Comments

CRINJ=CROP INJURY;AMACH=SMOOTH PIGWEED;CYPES=YELLOW NUTSEDGE;MOLVE=CARPETWEED; EPHMA=SPOTTED SPURGE;IPOHE=IVYLEAF MORNINGGLORY. TEST WAS HARVESTED ON 12-4-86.

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TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-17-86	AMACH 7-17-86	CYPES 7-17-86	MOLVE 7-17-86	EPHMA 7-17-86	IPOHE 7-17-86
01	SCEPTER	1.5L	.063	PPI	2.5	100.0	77.5	100.0	90.0	82.5
02	SCEPTER	1.5L	.125	PPI	5.0	100.0	93.8	100.0	88.8	88.8
03	PROWL	4.0E	.75	PPI	0.0	91.3	63.8	100.0	80.0	57.5
04	SCEPTER	1.5L	.063	PPI	2.5	100.0	78.8	100.0	88.8	80.0
04	PROWL	4.0E	.75	PPI						
05	SCEPTER	1.5L	.125	PPI	13.8	100.0	81.3	100.0	90.0	83.8
05	PROWL	4.0E	.75	PPI						
06	SCEPTER	1.5L	.063	PPI	12.5	100.0	87.5	100.0	95.0	87.5
06	PROWL	4.0E	.75	PPI						
06	TACKLE	2.0L	.25	POT						
06	X-77	P	.25	POT						
07	SCEPTER	1.5L	.063	PPI	5.0	100.0	82.5	100.0	87.5	86.3
07	PROWL	4.0E	.75	PPI						
07	TACKLE	2.0L	.38	POT						
07	X-77	P	.25	POT						
08	SCEPTER	1.5L	.125	PPI	8.8	100.0	88.3	100.0	88.8	87.5
08	PROWL	4.0E	.75	PPI						
08	TACKLE	2.0L	.25	POT						
08	X-77	P	.25	POT						
09	SCEPTER	1.5L	.125	PPI	6.3	100.0	87.5	98.8	91.3	86.3
09	PROWL	4.0E	.75	PPI						
09	TACKLE	2.0L	.38	POT						
09	X-77	P	.25	POT						
10	SCEPTER	1.5L	.094	PRE	7.5	100.0	63.8	100.0	78.8	71.3
11	SCEPTER	1.5L	.125	PRE	3.8	97.5	78.8	100.0	88.8	76.3
12	SCEPTER	1.5L	.156	PRE	5.0	100.0	81.3	100.0	85.0	75.0
13	SCEPTER	1.5L	.094	PRE	5.0	98.8	66.3	100.0	72.5	80.0
13	SCEPTER	1.5L	.156	POT						
13	X-77	P	.25	POT						
14	SCEPTER	1.5L	.125	PRE	0.0	98.8	85.0	100.0	87.5	77.5
14	SCEPTER	1.5L	.125	POT						
14	X-77	P	.25	POT						

The University of Tennessee
SCEPTER COMBINATIONS FOR SOYBEAN WEED MANAGEMENT

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-P-3 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-17-86	AMACH 7-17-86	CYPES 7-17-86	MOLVE 7-17-86	EPHMA 7-17-86	IPOHE 7-17-86
15	SCEPTER	1.5L	.156	PRE	1.3	97.5	82.5	100.0	85.0	83.8
15	SCEPTER	1.5L	.094	POT						
15	X-77	P	.25	POT						
16	PURSUIT	1.92L	.063	PRE	0.0	98.3	72.5	98.8	83.8	77.5
17	PURSUIT	1.92L	.094	PRE	1.3	98.8	83.8	100.0	91.3	87.5
18	PURSUIT	1.92L	.125	PRE	6.3	100.0	82.5	100.0	90.5	81.3
19	WEEDFREE				0.0	100.0	100.0	100.0	100.0	100.0
20	WEEDY				0.0	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					6.012	3.145	17.34	1.088	11.03	13.44
STANDARD DEVIATION =					4.251	2.223	12.26	.7694	7.804	9.507
COEFF. OF VARIABILITY =					98.58	2.364	15.96	.8110	9.386	12.26

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TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-5-86	AMACH 8-5-86	CYPES 8-5-86	MOLVE 8-5-86	EPHMA 8-5-86	IPOHE 8-5-86
01	SCEPTER	1.5L	.063	PPI	0.0	95.0	60.0	97.5	67.5	57.5
02	SCEPTER	1.5L	.125	PPI	7.5	100.0	85.0	100.0	77.5	78.8
03	PROWL	4.0E	.75	PPI	0.0	76.3	17.5	97.5	27.5	25.0
04	SCEPTER	1.5L	.063	PPI	2.5	85.0	67.5	100.0	68.8	66.3
04	PROWL	4.0E	.75	PPI						
05	SCEPTER	1.5L	.125	PPI	12.5	98.8	73.8	100.0	75.0	70.0
05	PROWL	4.0E	.75	PPI						
06	SCEPTER	1.5L	.063	PPI	11.3	100.0	85.0	100.0	95.0	97.5
06	PROWL	4.0E	.75	PPI						
06	TACKLE	2.0L	.25	POT						
06	X-77	P	.25	POT						
07	SCEPTER	1.5L	.063	PPI	10.0	100.0	81.3	100.0	87.5	95.0
07	PROWL	4.0E	.75	PPI						
07	TACKLE	2.0L	.38	POT						
07	X-77	P	.25	POT						
08	SCEPTER	1.5L	.125	PPI	8.8	100.0	76.3	100.0	86.3	91.3
08	PROWL	4.0E	.75	PPI						
08	TACKLE	2.0L	.25	POT						
08	X-77	P	.25	POT						
09	SCEPTER	1.5L	.125	PPI	15.0	100.0	81.3	100.0	91.3	92.5
09	PROWL	4.0E	.75	PPI						
09	TACKLE	2.0L	.38	POT						
09	X-77	P	.25	POT						
10	SCEPTER	1.5L	.094	PRE	2.5	97.5	45.0	95.0	50.0	45.0
11	SCEPTER	1.5L	.125	PRE	6.3	98.8	70.0	100.0	65.0	67.5
12	SCEPTER	1.5L	.156	PRE	5.0	97.5	68.8	100.0	60.0	52.5
13	SCEPTER	1.5L	.094	PRE	3.8	100.0	65.0	100.0	56.3	72.5
13	SCEPTER	1.5L	.156	POT						
13	X-77	P	.25	POT						
14	SCEPTER	1.5L	.125	PRE	1.3	100.0	78.8	100.0	77.5	72.5
14	SCEPTER	1.5L	.125	POT						
14	X-77	P	.25	POT						

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TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-5-86	AMACH 8-5-86	CYPES 8-5-86	MOLVE 8-5-86	EPHMA 8-5-86	IPOHE 8-5-86
15	SCEPTER	1.5L	.156	PRE	3.8	100.0	81.3	100.0	58.8	73.8
15	SCEPTER	1.5L	.094	POT						
15	X-77	P	.25	POT						
16	PURSUIT	1.92L	.063	PRE	1.3	99.3	67.5	87.5	70.0	67.5
17	PURSUIT	1.92L	.094	PRE	3.8	100.0	77.5	100.0	73.8	63.8
18	PURSUIT	1.92L	.125	PRE	2.5	100.0	75.0	98.8	68.8	70.0
19	WEEDFREE				0.0	100.0	100.0	100.0	100.0	100.0
20	WEEDY				0.0	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					5.623	11.54	23.39	6.185	22.58	22.92
STANDARD DEVIATION =					3.976	8.166	16.54	4.373	15.96	16.21
COEFF. OF VARIABILITY =					81.56	8.837	24.39	4.662	23.54	23.86

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TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-18-86	AMACH 8-18-86	CYPES 8-18-86	MOLVE 8-18-86	EPHMA 8-18-86	IPOHE 8-18-86	YIELD BU/A
01	SCEPTER	1.5L	.063	PPI	3.8	96.3	70.0	91.3	70.0	62.5	38.30
02	SCEPTER	1.5L	.125	PPI	5.0	100.0	78.8	100.0	76.3	75.0	46.57
03	PROWL	4.0E	.75	PPI	0.0	68.8	20.0	86.3	27.5	15.0	36.35
04	SCEPTER	1.5L	.063	PPI	0.0	98.8	62.5	100.0	67.5	56.3	49.78
04	PROWL	4.0E	.75	PPI							
05	SCEPTER	1.5L	.125	PPI	7.5	99.3	75.0	98.8	86.3	65.0	39.18
05	PROWL	4.0E	.75	PPI							
06	SCEPTER	1.5L	.063	PPI	6.3	100.0	91.3	100.0	92.5	91.3	46.25
06	PROWL	4.0E	.75	PPI							
06	TACKLE	2.0L	.25	POT							
06	X-77	P	.25	POT							
07	SCEPTER	1.5L	.063	PPI	3.8	100.0	68.8	100.0	80.0	91.3	46.28
07	PROWL	4.0E	.75	PPI							
07	TACKLE	2.0L	.38	POT							
07	X-77	P	.25	POT							
08	SCEPTER	1.5L	.125	PPI	7.5	98.8	86.3	100.0	88.8	92.5	43.25
08	PROWL	4.0E	.75	PPI							
08	TACKLE	2.0L	.25	POT							
08	X-77	P	.25	POT							
09	SCEPTER	1.5L	.125	PPI	8.8	100.0	82.5	100.0	81.3	88.8	43.25
09	PROWL	4.0E	.75	PPI							
09	TACKLE	2.0L	.38	POT							
09	X-77	P	.25	POT							
10	SCEPTER	1.5L	.094	PRE	0.0	98.8	45.0	90.0	57.5	40.0	45.53
11	SCEPTER	1.5L	.125	PRE	0.0	97.5	72.5	98.8	70.0	68.8	42.53
12	SCEPTER	1.5L	.156	PRE	2.5	97.5	72.5	100.0	60.0	45.0	46.23
13	SCEPTER	1.5L	.094	PRE	2.5	100.0	61.3	100.0	60.0	73.8	47.30
13	SCEPTER	1.5L	.156	POT							
13	X-77	P	.25	POT							
14	SCEPTER	1.5L	.125	PRE	0.0	100.0	75.0	98.8	67.5	71.3	47.30
14	SCEPTER	1.5L	.125	POT							
14	X-77	P	.25	POT							

The University of Tennessee
SCEPTER COMBINATIONS FOR SOYBEAN WEED MANAGEMENT

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-P-3 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-18-86	AMACH 8-18-86	CYPES 8-18-86	MOLVE 8-18-86	EPHMA 8-18-86	IPOHE 8-18-86	YIELD BU/A
15	SCEPTER	1.5L	.156	PRE	2.5	100.0	80.0	100.0	55.0	77.5	51.18
15	SCEPTER	1.5L	.094	POT							
15	X-77	P	.25	POT							
16	PURSUIT	1.92L	.063	PRE	0.0	98.8	83.8	96.3	85.0	75.0	48.53
17	PURSUIT	1.92L	.094	PRE	3.8	100.0	86.3	100.0	85.0	67.5	47.83
18	PURSUIT	1.92L	.125	PRE	1.3	100.0	82.5	100.0	87.5	78.8	45.35
19	WEEDFREE				0.0	100.0	100.0	100.0	100.0	100.0	45.70
20	WEEDY				0.0	0.0	0.0	0.0	0.0	0.0	31.95
LEAST SIGNIFICANT DIFF. (.05)=					4.729	8.149	23.17	7.666	19.59	21.50	9.409
STANDARD DEVIATION =					3.344	5.762	16.39	5.420	13.85	15.20	6.653
COEFF. OF VARIABILITY =					121.6	6.215	23.51	5.828	19.82	22.77	14.97

EXPERIMENT DESCRIPTION FORM

The University of Tennessee

MANAGEMENT OF ANNUAL GRASSES IN SOYBEANS

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-F-8 with cooperator PLATEAU EXPT STA

Experimental Management

Date Planted 6-20-86 Variety ESSEX Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK,ROTERRA,POWER-DRIVEN TILLER. CULTIPACKER.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture SILT LOAM
Soil Series TILSIT % OM 1.6 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	6-19-86	7-17-86				
Time Treated	PM	AM				
Cloud Cover	CLEAR	CLEAR				
Air Temperature	83	85				
Relative Humidity	56%	74%				
Wind Speed/Direction	1MPH-N	2MPH-S				
Soil Temperature	92	100				
Soil/Leaf Surface Moisture	DRY	DRY				
Soil Subsurface Moisture	MOIST	MOIST				
Soil Tilth	FINE	N/A				
Crop Stage	PRE	V5				
Pest Name, Stage & Density						
DIGSA 8/FT	PRE	3-4 LF				
PANDI 2/FT	PRE	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	8002	19	19	6.3FT	20	WATER	41
2.	CO2 BACKPACK	3	FLAT FAN	8002	19	19	6.3FT	20	WATER	41

Comments

DIGSA=LARGE CRABGRASS; PANDI=FALL PANICUM. ENTIRE TEST WAS TREATED WITH CLASSIC + X-77 (.008 LB AI/AC + .25% V/V) ON 7-11-86 FOR CONTROL OF SMOOTH PIGWEED. TEST WAS HARVESTED ON 12-12-86.

The University of Tennessee
MANAGEMENT OF ANNUAL GRASSES IN SOYBEANS

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-P-8 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-5-86	DIGSA 8-5-86	PANDI 8-5-86	CRINJ 8-18-86	DIGSA 8-18-86	PANDI 8-18-86	YIELD BU/AC
01	RE-45601	2.0E	.125	PRE	0.0	7.5	7.5	0.0	21.3	20.0	45.35
02	RE-45601	2.0E	.25	PRE	0.0	23.8	23.8	0.0	50.0	57.5	46.07
03	RE-45601	2.0E	.5	PRE	0.0	30.0	32.5	0.0	48.8	47.5	43.18
04	RE-45601	2.0E	.06	POT	2.5	100.0	100.0	0.0	99.3	100.0	51.40
05	RE-45601	2.0E	.125	POT	0.0	100.0	100.0	0.0	100.0	100.0	43.95
06	WHIP	1.0E	.15	POT	0.0	98.8	100.0	0.0	98.3	99.5	45.73
07	ASSURE	0.8E	.125	POT	2.5	100.0	100.0	0.0	100.0	100.0	46.30
08	VERDICT	2.0E	.125	POT	0.0	100.0	100.0	0.0	99.3	100.0	44.63
09	WHIP	1.0E	.15	POT	5.0	97.0	100.0	0.0	96.5	94.5	44.23
09	TACKLE	2.0L	.38	POT							
10	ASSURE	0.8E	.125	POT	6.3	98.8	100.0	0.0	97.3	100.0	44.45
10	TACKLE	2.0L	.38	POT							
11	VERDICT	2.0E	.125	POT	8.8	99.3	100.0	2.5	98.5	100.0	41.33
11	TACKLE	2.0L	.38	POT							
12	VERDICT	2.0E	.125	POT	7.5	96.3	100.0	0.0	96.8	100.0	47.75
12	SCEPTER	1.5L	.125	POT							
13	VERDICT	2.0E	.125	POT	5.0	98.8	100.0	1.3	99.3	100.0	42.05
13	CLASSIC	.25W	.008	POT							
14	VERDICT	2.0E	.125	POT	11.3	97.5	100.0	0.0	98.0	100.0	41.13
14	COBRA	2.0E	.2	POT							
15	FUS 2000	1.0E	.19	POT	0.0	99.3	100.0	0.0	100.0	100.0	44.63
16	POAST	1.5E	.1	POT	0.0	100.0	100.0	0.0	100.0	100.0	45.88
17	POAST	1.5E	.2	POT	2.5	100.0	100.0	0.0	98.0	100.0	42.78
18	POAST	1.5E	.1	POT	0.0	100.0	100.0	0.0	99.3	100.0	46.10
18	AMS	1.0W	2.5	POT							
19	POAST	1.5E	.2	POT	0.0	100.0	100.0	0.0	99.5	100.0	44.28
19	AMS	1.0W	2.5	POT							

The University of Tennessee
MANAGEMENT OF ANNUAL GRASSES IN SOYBEANS

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-P-8 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-5-86	DIGSA 8-5-86	PANDI 8-5-86	CRINJ 8-18-86	DIGSA 8-18-86	PANDI 8-18-86	YIELD BU/AC
20	WEEDY				0.0	0.0	0.0	0.0	0.0	0.0	44.60
LEAST SIGNIFICANT DIFF. (.05)=					5.257	12.48	12.14	1.189	10.76	7.748	7.801
STANDARD DEVIATION =					3.717	8.829	8.589	.8409	7.610	5.479	5.516
COEFF. OF VARIABILITY =					145.0	10.72	10.32	448.5	8.954	6.374	12.31

12-08-1986 EXPERIMENT DESCRIPTION FORM

The University of Tennessee

POST-BROADLEAF COMBINATIONS IN SOYBEANS

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-P-7 with cooperator PLATEAU EXPT STA

Experimental Management

Date Planted 6-19-86 Variety ESSEX Row Width 36 IN
Design RCB No. Reps. 4 Plot Size 3 ROWS*30 FT
Field Preparation and Plot Maintenance DISK,ROTERRA,POWER-DRIVEN TILLER, CULTI-PACKER.

Site Description

Season Moisture SEE RAINFALL TABLES
Soil Texture SILT LOAM
Soil Series TILSIT % OM 1.6 pH 6.0

Application Information

	1	2	3	4	5	6
Date Treated	7-16-86					
Time Treated	PM					
Cloud Cover	100%					
Air Temperature	75					
Relative Humidity	88%					
Wind Speed/Direction	CALM					
Soil Temperature	84					
Soil/Leaf Surface Moisture	DRY					
Soil Subsurface Moisture	MOIST					
Soil Tilth	N/A					
Crop Stage	V4					
Pest Name, Stage & Density						
AMACH1 10/FT	2-3 LF					
AMACH2 2/FT	6-8 LF					
IPOLA 1/FT	6-8 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	8002	19 IN	19 IN	6.3FT	20	WATER	41

Comments

CRINJ=CROP INJURY;AMACH=SMOOTH PIGWEED;IPOLA=PITTED MORNINGGLORY.AMACH1 REFERS TO 2-3 LF SMOOTH PIGWEED, AND AMACH2 REFERS TO 6-8 LF SMOOTH PIGWEED. X-77 SURFACTANT WAS INCLUDED IN ALL TREATMENTS AT 0.25% V/V. TEST WAS HARVESTED ON 12-4-86.

The University of Tennessee
POST-BROADLEAF COMBINATIONS IN SOYBEANS

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-F-7 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-22-86	AMACH1 7-22-86	AMACH2 7-22-86	IPOLA 7-22-86	CRINJ 8-5-86	AMACH1 8-5-86	AMACH2 8-5-86	IPOLA 8-5-86
01	PURSUIT	1.92L	.063	POT	7.5	83.8	66.3	31.3	7.5	98.8	88.8	56.3
02	PURSUIT	1.92L	.094	POT	6.3	85.0	63.8	33.8	6.3	100.0	91.8	72.5
03	PURSUIT	1.92L	.125	POT	8.8	87.5	67.5	32.5	6.3	100.0	95.5	65.0
04	SCEPTER	1.5L	.094	POT	6.3	86.3	68.8	35.0	5.0	100.0	90.0	58.8
05	SCEPTER	1.5L	.125	POT	10.0	86.3	60.0	37.5	5.0	100.0	97.5	72.5
06	SCEPTER	1.5L	.094	POT	7.5	80.0	55.0	31.3	8.8	99.3	85.0	66.3
06	2,4-DB	2.0L	.03	POT								
07	SCEPTER	1.5L	.094	POT	21.3	100.0	100.0	98.8	10.0	100.0	100.0	92.5
07	BLAZER	2.0L	0.5	POT								
08	CLASSIC	0.25W	.008	POT	7.5	90.0	71.3	37.5	1.3	92.5	78.8	65.0
09	CLASSIC	0.25W	.012	POT	12.5	85.0	61.3	38.8	6.3	97.5	82.5	55.0
10	CLASSIC	0.25W	.008	POT	18.8	100.0	100.0	95.0	5.0	100.0	97.5	95.0
10	BLAZER	2.0L	0.5	POT								
11	CLASSIC	0.25W	.008	POT	18.8	100.0	96.8	73.8	5.0	100.0	95.0	78.8
11	BLAZER	2.0L	0.25	POT								
12	CLASSIC	0.25W	.008	POT	17.5	98.8	78.8	56.3	6.3	100.0	85.5	62.5
12	BLAZER	2.0L	.125	POT								
13	CLASSIC	0.25W	.008	POT	7.5	80.0	57.5	36.3	3.8	93.8	68.8	67.5
13	2,4-DB	2.0L	.03	POT								
14	BLAZER	2.0L	0.5	POT	21.3	100.0	98.8	97.5	6.3	100.0	98.5	91.8
15	BLAZER	2.0L	0.5	POT	22.5	100.0	100.0	100.0	8.8	100.0	100.0	93.8
15	2,4-DB	2.0L	.03	POT								
16	COBRA	2.0E	0.2	POT	27.5	100.0	100.0	93.8	10.0	100.0	96.3	85.0
17	COBRA	2.0E	0.2	POT	28.8	100.0	100.0	100.0	16.3	100.0	99.3	95.5
17	2,4-DB	2.0L	.03	POT								
18	COBRA	2.0E	0.2	POT	30.0	100.0	100.0	95.0	16.3	100.0	100.0	88.0
18	CLASSIC	0.25W	.008	POT								
19	WEEDFREE				0.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0

The University of Tennessee
POST-BROADLEAF COMBINATIONS IN SOYBEANS

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-P-7 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 7-22-86	AMACH1 7-22-86	AMACH2 7-22-86	IPOLA 7-22-86	CRINJ 8-5-86	AMACH1 8-5-86	AMACH2 8-5-86	IPOLA 8-5-86
20	WEEDY				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAST SIGNIFICANT DIFF. (.05)=					5.666	5.754	8.848	12.86	5.924	3.289	8.240	16.92
STANDARD DEVIATION				=	4.006	4.069	6.256	9.100	4.189	2.326	5.826	11.96
COEFF. OF VARIABILITY				=	28.61	4.617	8.096	14.87	62.64	2.472	6.657	16.37

The University of Tennessee
POST-BROADLEAF COMBINATIONS IN SOYBEANS

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-P-7 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-18-86	AMACH1 8-18-86	AMACH2 8-18-86	IPOLA 8-18-86	YIELD BU/A
01	PURSUIT	1.92L	.063	POT	1.3	100.0	99.0	66.3	39.52
02	PURSUIT	1.92L	.094	POT	0.0	100.0	98.3	81.3	45.57
03	PURSUIT	1.92L	.125	POT	0.0	100.0	99.8	75.0	45.73
04	SCEPTER	1.5L	.094	POT	1.3	100.0	99.5	61.3	37.05
05	SCEPTER	1.5L	.125	POT	2.5	100.0	100.0	60.0	38.85
06	SCEPTER	1.5L	.094	POT	3.8	100.0	98.8	61.3	40.22
06	2,4-DB	2.0L	.03	POT					
07	SCEPTER	1.5L	.094	POT	2.5	100.0	100.0	90.0	45.57
07	BLAZER	2.0L	0.5	POT					
08	CLASSIC	0.25W	.008	POT	0.0	99.5	79.5	65.0	40.80
09	CLASSIC	0.25W	.012	POT	3.8	98.5	81.3	63.8	36.70
10	CLASSIC	0.25W	.008	POT	0.0	100.0	99.0	93.8	44.30
10	BLAZER	2.0L	0.5	POT					
11	CLASSIC	0.25W	.008	POT	0.0	100.0	97.5	81.3	40.95
11	BLAZER	2.0L	0.25	POT					
12	CLASSIC	0.25W	.008	POT	0.0	98.3	75.0	70.0	34.60
12	BLAZER	2.0L	.125	POT					
13	CLASSIC	0.25W	.008	POT	1.3	99.0	77.5	73.8	36.90
13	2,4-DB	2.0L	.03	POT					
14	BLAZER	2.0L	0.5	POT	3.8	100.0	97.5	92.0	42.00
15	BLAZER	2.0L	0.5	POT	0.0	100.0	100.0	95.5	43.08
15	2,4-DB	2.0L	.03	POT					
16	COBRA	2.0E	0.2	POT	2.5	100.0	98.5	82.5	37.05
17	COBRA	2.0E	0.2	POT	2.5	100.0	97.5	95.3	37.55
17	2,4-DB	2.0L	.03	POT					
18	COBRA	2.0E	0.2	POT	5.0	100.0	99.0	92.5	41.13
18	CLASSIC	0.25W	.008	POT					
19	WEEDFREE				0.0	100.0	100.0	100.0	46.80

The University of Tennessee
POST-BROADLEAF COMBINATIONS IN SOYBEANS

Conducted at CROSSVILLE,TN by G.N.RHODES,JR.
Project TN-692-86-P-7 with cooperator PLATEAU EXPT STA

TRT. NUM.	PEST. NAME	FORM	RATE #ai/A	GROW. STAGE	CRINJ 8-18-86	AMACH1 8-18-86	AMACH2 8-18-86	IPOLA 8-18-86	YIELD BU/A
20	WEEDY				0.0	0.0	0.0	0.0	22.88
LEAST SIGNIFICANT DIFF. (.05)					4.188	1.157	8.726	19.34	8.567
STANDARD DEVIATION					2.961	.8186	6.170	13.67	6.058
COEFF. OF VARIABILITY					197.4	.8638	6.866	18.23	15.19

WEST TENNESSEE EXPERIMENT STATION

605 AIRWAYS BLVD.

JACKSON, TENNESSEE 38301

SUPERINTENDENT - Dr. James F. Brown

Rainfall data for West Tennessee Experiment Station, Jackson, TN for 1986. (inches)

Day	April	May	June	July	August	September	October	November
1		0.05		T		0.06		
2		0.76	2.22	0.04		0.04	0.03	
3			0.05		T	T	0.58	
4			0.02			0.01		
5	1.52		0.94			T	0.20	0.74
6	0.04		0.32		T		T	0.02
7	0.04		0.31		0.11		0.02	0.07
8	1.22		0.52	0.39	0.18			4.68
9			0.73		T			0.39
10			1.25	0.09	0.97			
11		0.58	0.19	T	0.23			0.95
12		T	T			0.14	0.12	
13				0.36			0.42	
14	0.11			1.27			0.02	
15	0.01	T		1.60	T			0.10
16		T			T			T
17		T			0.20			
18		0.34				0.63		
19		0.16				1.45		
20	0.43					0.23		0.25
21	0.27					0.53		
22								
23		0.77					T	T
24		0.02	T				0.55	0.08
25		0.55					1.20	0.09
26		0.20					0.04	0.57
27		0.08		0.81	0.26		0.02	0.01
28	0.09	0.10			0.03			
29		0.03	0.44					
30								
31								
TOTAL	3.73	3.64	6.99	4.56	1.98	3.09	3.20	7.90

Temperature Data for West Tennessee Experiment Station, Jackson, TN for 1986. (maximum/minimum)

Day	April	May	June	July	August	September	October	November
1	85/50	87/65	88/66	91/75	100/74	81/62	91/72	77/54
2	80/56	72/47	85/67	91/72	90/69	76/62	88/65	78/55
3	80/60	68/48	84/69	84/67	85/63	86/66	87/68	77/53
4	85/60	67/40	84/70	88/60	85/62	89/72	89/75	64/45
5	83/59	76/53	74/67	89/62	87/58	88/69	87/69	62/53
6	76/57	83/62	79/70	92/71	94/62	79/54	87/55	61/53
7	81/61	83/64	81/72	94/73	86/64	88/59	62/45	59/54
8	78/60	86/65	84/72	91/73	93/68	82/54	70/43	70/56
9	69/42	88/66	88/71	94/76	80/69	80/55	70/48	66/52
10	60/38	89/65	80/71	92/76	90/69	89/64	77/55	62/40
11	64/39	84/65	86/71	92/76	87/69	88/73	75/54	56/45
12	73/48	73/63	85/67	92/74	84/60	90/58	79/55	47/38
13	78/51	80/61	84/62	90/69	84/62	81/52	65/53	47/19
14	60/38	84/67	83/61	93/69	88/67	83/51	54/42	29/17
15	71/36	86/70	83/64	91/69	92/68	87/62	61/35	43/24
16	59/36	77/62	88/66	92/71	90/73	88/68	62/35	44/40
17	52/33	85/65	90/69	93/73	88/73	90/66	69/39	59/42
18	64/45	81/61	90/61	94/75	85/68	91/70	75/45	62/46
19	75/53	68/56	85/60	95/74	88/67	85/66	75/44	66/37
20	79/57	69/50	90/66	97/74	89/65	84/69	75/42	50/41
21	65/47	69/45	93/67	97/74	87/69	90/69	75/45	54/30
22	61/40	73/53	94/69	89/68	89/70	89/69	78/49	59/29
23	55/32	68/55	95/72	90/68	90/71	86/69	72/52	59/30
24	67/43	75/63	94/71	93/70	92/69	89/70	70/56	56/38
25	81/53	81/64	91/69	94/72	90/71	90/73	64/55	49/41
26	86/54	80/66	89/67	96/76	92/71	90/72	64/56	64/47
27	85/52	72/59	93/73	97/69	94/71	90/69	60/44	51/43
28	89/62	81/65	92/72	91/75	91/61	92/69	66/43	48/43
29	74/46	80/65	86/70	96/76	73/50	94/70	71/45	51/37
30	85/54	86/63	92/75	95/74	78/58	92/72	75/48	48/43
31		86/64		98/72	79/61		72/45	

PROJ. NUM.: UNITS: LBai/A
FILE NAME: WTPPIS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

HERBICIDE EVALUATION FOR SOYBEANS-PPI

RESEARCH BY: R.M. HAYES COUNTY: MADISON ST: TN COUNTRY: USA
COOPERATOR : LAST UPDATE: 3/15/87 INITIATED: 05/13/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/07/86
REPORTED BY: R.M. HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.0
PREVIOUS TILL: CONVENTIONAL SOIL TEXTURE: COLLINS SIL SOIL OM%: 01.1
FERTILITY: 0-40-40 ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
MISC. 1: TEMIK 0.5 LB AI/A IN FURROW NUMBER OF REPS: 4
MISC. 2: REPORT TYPE: INTERIM

PLANTING DATE: 05/13/86 CROP CULTIVAR: ASGROW A5474
HARVEST DATE : 10/07/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/13/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J133/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	PPI				
AIR/SOIL TEMP(F)	082/082	/	/	/	/
% REL. HUMIDITY	%				
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	OPT/	/	/	/	/
INCORP. EQUIP.	S-TINEDOALL				
INCORP. DEPTH in	3 IN	.	.	.	.
SPRAYER TYPE	CO2BACKPACK				
SPRAYER GPA/PSI	18.0/032	. /	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	0.56/0.76	. / .	. / .	. / .	. / .
3rd / 4th week	1.49/4.18	. / .	. / .	. / .	. / .

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 *****	****	**********	**********	**********	**********	**********
GLXMA	SOYBEANS		/	/	/	/	/
*****	**** PEST *****	****	**********	**********	**********	**********	**********
XANST	COMMONCOCKLEBUR		/	/	/	/	/
IPOHG	ENTIRELEAF MG		/	/	/	/	/
AMACH	SMOOTH PIGWEED		/	/	/	/	/
CHEAL	C.LAMBSQUARTER		/	/	/	/	/
ELEIN	GOOSEGRASS		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: UNITS: LBai/A
FILE NAME: WTPPIS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

HERBICIDE EVALUATION FOR SOYBEANS-PPI

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EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1.%CRSTUN VISUAL=%VISUAL CROP STUNTING.
2&7.%XANST CONTROL=%COMMON COCKLEBUR CONTROL.
3.%IPOHG CONTROL=%ENTIRELEAF MORNINGGLORY CONTROL.
4.%AMACH CONTROL=%SMOOTH PIGWEED CONTROL.
5.%CHEAL CONTROL=%COMMON LAMBSQUATERS CONTROL.
6.%ELEIN CONTROL=%GOOSEGRASS CONTROL.
8.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE WITH A TEST WEIGHT FO 60 POUNDS PER BUSHEL,(MOISTURE WAS 15% AT HARVEST).

SUMMARY

WEED PRESSURE WAS HEAVY,AS EVIDENCED BY THE 53% YIELD REDUCTION OF THE WEEDY CHECK.COMMON COCKLEBUR WAS THE PREDOMINANT WEED SPECIES IN THIS TEST.SINCE IT WAS THE PREDOMINANT SPECIES IT WAS THE ONE RATED AT PRE HARVEST.CLIMATIC CONDITIONS WERE OPTIMUM WHEN THIS TEST WAS APPLIED.EXCESSIVE AND PROLONGED RAINFALL,IN LATE-MAY AND EARLY-JUNE, MAY HAVE ADVERSELY AFFECTED SOME TREATMENTS IN THIS TEST.11 OF 20 TREATMENTS IN THIS EXPERIMENT PROVIDED ADEQUATE SEASON-LONG CONTROL OF COCKLEBUR.PURSUIT LOOKED GOOD ALONE ON GRASSES AS WELL AS ON BROADLEAF WEEDS.SENCOR-TREFLAN WAS WEAK ON COCKLEBUR AND LAMBSQUARTERS.CANOPY-CINCH SHOWED EARLY-SEASON CROP STUNTING BUT THIS DID NOT AFFECT YIELD. PURSUIT-TREFLAN WAS THE HIGHEST YIELDING TREATMENT.NO YIELD DATA WERE TAKEN ON REP ONE BECAUSE SANDY AREAS AFFECTED YIELDS IN THAT REP.

==========

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.:
FILE NAME: WTPPIS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

HERBICIDE EVALUATION FOR SOYBEANS-PPI

RESEARCH BY: R.M. HAYES
COOPERATOR :
TOTAL REPS : 4
APPL: PPI =05/13/86

COUNTY: MADISON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 05/13/86
COMPLETED: 10/07/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%CRSTUN VISUAL 6/04/86	%XANST CONTROL 6/04/86	%IPOHG CONTROL 6/04/86	%AMACH CONTROL 6/04/86	%CHEAL CONTROL 6/04/86	%ELEIN CONTROL 6/04/86	%XANST CONTROL 9/25/86	YIELD BU/ACRE 10/07/*
01	SCEPTER	SC 1.5	0.125	PPI	0	92	93	99	95	99	82	22.8
	TREFLAN	EC 4	0.75	PPI								
02	CANOPY	DF 75%	0.38	PPI	0	91	94	99	97	96	68	16.6
	TREFLAN	EC 4	0.75	PPI								
03	GEMINI	DF 60%	0.5	PPI	0	91	93	99	95	98	80	22.4
	TREFLAN	EC 4	0.75	PPI								
04	PROWL-	FL 2.4	0.87	PPI	5	95	96	99	97	98	83	23.4
	SCEPTER											
05	SCEPTER	SC 1.5	0.125	PPI	0	96	98	99	99	99	73	20.2
	SONALAN	EC 3.0	0.75	PPI								
06	COMMAND	EC 6	0.56	PPI	0	83	90	99	94	98	60	16.6
	TREFLAN	EC 4	0.75	PPI								
07	SENCOR	DF 75%	0.38	PPI	5	59	58	72	61	98	45	16.0
	TREFLAN	EC 4	0.75	PPI								
08	PURSUIT	SC 2.0	0.125	PPI	0	94	94	99	98	99	85	25.0
	TREFLAN	EC 4	0.75	PPI								
09	SENCOR	DF 75%	0.19	PPI	1	87	68	88	99	99	69	14.6
	COMMAND	EC 6	1.0	PPI								
10	CANOPY	DF 75%	0.25	PPI	0	91	90	99	98	99	67	24.1
	COMMAND	EC 6	1.0	PPI								
11	CANOPY	DF 75%	0.38	PPI	0	94	96	99	99	99	74	21.8
	SONALAN	EC 3	0.75	PPI								
12	CANOPY	DF 75%	0.38	PPI	29	94	90	99	92	99	70	23.1
	CINCH	EC 7	1.0	PPI								
13	COMMAND	EC 6	0.56	PPI	0	88	89	97	90	99	24	12.7
	SONALAN	EC 3	0.75	PPI								

PROJ. NUM.:
FILE NAME: WTPPIS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

HERBICIDE EVALUATION FOR SOYBEANS-PPI

APPL: PPI =05/13/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%CRSTUN VISUAL 6/04/86	%XANST CONTROL 6/04/86	%IPOHG CONTROL 6/04/86	%AMACH CONTROL 6/04/86	%CHEAL CONTROL 6/04/86	%ELEIN CONTROL 6/04/86	%XANST CONTROL 9/25/86	YIELD BU/ACRE 10/07/*
14	SCEPTER	SC	1.5	PPI	0	96	91	99	99	98	82	24.1
	LASSO ME	FL	4	PPI								
15	PURSUIT	SC	2.0	.0625 PPI	0	88	90	99	90	92	59	17.3
16	PURSUIT	SC	2.0	.094 PPI	0	91	89	99	98	87	83	21.5
17	PURSUIT	SC	2.0	0.125 PPI	0	94	95	99	99	95	71	17.9
18	MFR13327	EC	4.0	1.125 PPI	0	78	81	98	88	95	49	16.3
19	WEEDY CK				0	0	0	0	0	0	0	11.8
20	WEEDFREE				0	99	99	99	99	99	99	27.0
				LSD(0.05) =	5	16	17	16	15	5	24	NA
				STANDARD DEVIATION =	3	11	12	11	10	3	16	NA
				COEFF. OF VARIABILITY =	165	13	14	12	12	4	25	NA

PROJ. NUM.: INTERIM DATA UNITS: LBai/A
FILE NAME: WTPRES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

HERBICIDE EVALUATION IN SOYBEANS-PRE

RESEARCH BY: R.M. HAYES
COOPERATOR :
TOTAL REPS : 4
REPORTED BY: R.M. HAYES

COUNTY: MADISON ST: TN COUNTRY: USA
LAST UPDATE: 3/05/87 INITIATED: 05/13/86
EXPT. STATUS: 4 COMPLETED: 10/07/86
RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS
PREVIOUS TILL: CONVENTIONAL
FERTILITY: 0-40-40
MISC. 1: TEMIK 0.5 LB AI/A IN FURROW
MISC. 2:

PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.0
SOIL TEXTURE: COLLINS SIL SOIL OM%: 01.0
ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
NUMBER OF REPS: 4
REPORT TYPE: INTERIM

PLANTING DATE: 05/13/86
HARVEST DATE : 10/07/86
RESIDUE TAKEN: N

CROP CULTIVAR: ASGROW A5474
SEASONAL RAINFALL DURING EXPERIMENT
EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/13/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J133/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	PRE				
AIR/SOIL TEMP(F)	082/082	/	/	/	/
% REL. HUMIDITY	%				
WIND DIR/VELOC.	W/05	/	/	/	/
ROOT/LEAF MOIST.	OPT/	/	/	/	/
INCORP. EQUIP.	**NONE**				
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK				
SPRAYER GPA/PSI	18.0/032	18.0/	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	00.6/02.2	. / .	. / .	. / .	. / .
3rc / 4th week	01.5/ .	. / .	. / .	. / .	. / .

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 *****	*****	**********	**********	**********	**********	**********
GLXMA	SOYBEANS		/	/	/	/	/
******	**** PEST *****	*****	**********	**********	**********	**********	**********
XANST	COMMONCOCKLEBUR		/	/	/	/	/
IPOHG	ENTIRELEAF MG		/	/	/	/	/
AMACH	SMOOTH PIGWEED		/	/	/	/	/
ELEIN	GOOSEGRASS		/	/	/	/	/
CHEAL	C.LAMBSQUATERS		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.:
FILE NAME: WTPRES6

INTERIM DATA

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

HERBICIDE EVALUATION IN SOYBEANS-PRE

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EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1&7.%XANST CONTROL=COMMON COCKLEBUR CONTROL.
2.%AMACH CONTROL=%SMOOTH PIGWEED CONTROL.
3.%CHEAL CONTROL=%COMMON LAMBSQUATERS CONTROL.
4.%IPOHE CONTROL=%IVYLEAF MORNINGGLORY CONTROL.
5.%ELEIN CONTROL=%GOOSEGRASS CONTROL.
6.%CRSTUN VISUAL=%VISUAL CROP STUNTING.
8.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL,(MOISTURE WAS 15 PERCENT AT HARVEST).

SUMMARY

COMMON COCKLEBUR WAS THE PREDOMINANT WEED SPECIE IN THIS EXPERIMENT AND WEED PRESSURE WAS MODERATE TO HEAVY.EXCESSIVE AND PROLONGED RAINFALL IN LATE-MAY AND EARLY-JUNE RESULTED IN A LOSS OF WEED CONTROL BY LATE-JUNE.SINCE COCKLEBUR WAS THE PREDOMINANT WEED SPECIES,IT WAS USED FOR THE PRE-HARVEST RATING.CANOPY,GEMINI,COMMAND,PURSUIT,CINCH-CANOPY,AND LASSO-CANOPY PROVIDED GOOD SEASON-LONG COCKLEBUR CONTROL. THE PROWL-SCEPTER AND CINCH-CANOPY TREATMENTS CAUSED EARLY-SEASON CROP STUNTING IN EXCESS OF 20 PERCENT.DUE TO EXTREME DROUGHT,SANDY AREAS IN REP 1 CAUSED A YIELD REDUCTION IN SOME TREATMENTS SO ONLY 3 REPS WERE HARVESTED IN THIS TEST.

==========

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: INTERIM DATA UNITS: LBai/A
FILE NAME: WTPRES6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

HERBICIDE EVALUATION IN SOYBEANS-PRE

RESEARCH BY: R.M. HAYES COUNTY: MADISON ST: TN COUNTRY: USA
COOPERATOR : LAST UPDATE: 3/05/87 INITIATED: 05/13/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/07/86
APPL: PRE =05/13/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%XANST CONTROL 6/03/86	%AMACH CONTROL 6/03/86	%CHEAL CONTROL 6/03/86	%IPOHG CONTROL 6/03/86	%ELEIN CONTROL 6/03/86	%CRSTUN VISUAL 6/03/86	%XANST CONTROL 9/25/86	YIELD BU/ACRE 10/07/*
01	SCEPTER	SC 1.5	0.125	PRE	80	99	95	73	75	0	65	27.7
02	CANOPY	DF 75%	0.38	PRE	91	99	86	88	90	4	83	30.0
03	GEMINI	DF 60%	0.75	PRE	94	99	99	92	90	0	97	31.2
04	COMMAND	EC 6	1.0	PRE	97	79	99	49	97	0	92	34.8
05	SENCOR	DF 75%	0.38	PRE	61	74	81	49	69	0	44	28.3
06	LOROX	FL 4	0.75	PRE	70	99	98	55	80	0	30	24.4
07	PURSUIT	SC 2.0	0.125	PRE	91	99	99	91	93	0	84	29.3
08	TURBO	EC 8	2.0	PRE	81	94	80	53	99	5	58	25.1
09	PURSUIT	SC 2.0	0.063	PRE	89	99	99	75	79	0	64	31.6
	SCEPTER	SC 1.5	0.063	PRE								
10	COMMAND	EC 6	0.5	PRE	87	98	99	74	99	0	58	31.9
	SCEPTER	SC 1.5	0.063	PRE								
11	POAST	EC 1.5	0.1	POST1	5	0	0	0	72	0	90	28.3
	AGRIDEX	EC 4	1.00	POST1								
	BASAGRAN	SC 4	0.25	POST2								
	BLAZER	SC 2	0.125	POST2								
	X-77	%A 100%	0.25%	POST2								
	CULT.	7 DAYS	AFTER	RAIN								
12	CULT.	7 DAYS	AFTER	RAIN	0	0	0	0	0	0	64	27.0
13	COMMAND	EC 6	1.0	PRE	92	91	99	53	99	0	74	29.3
	SENCOR	DF 75%	0.188	PRE								
14	PROWL-	EC 2.4	0.87	PRE	93	99	99	91	98	21	64	23.5
	SCEPTER											
15	CINCH	EC 7	1.0	PRE	94	99	99	84	99	23	83	30.0
	CANOPY	DF 75%	0.38	PRE								

PROJ. NUM.:
FILE NAME: WTPRES6

INTERIM DATA

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

HERBICIDE EVALUATION IN SOYBEANS-PRE

APPL: PRE =05/13/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%XANST CONTROL 6/03/86	%AMACH CONTROL 6/03/86	%CHEAL CONTROL 6/03/86	%IPOHG CONTROL 6/03/86	%ELEIN CONTROL 6/03/86	%CRSTUN VISUAL 6/03/86	%XANST CONTROL 9/25/86	YIELD BU/ACRE 10/07/*
16	LASSO ME FL	4.0	2.0	PRE	95	99	99	91	99	9	85	31.9
	CANOPY	DF 75%	0.38	PRE								
17	PROWL	EC 4.0	0.75	PRE	85	99	99	84	91	4	40	28.3
	CANOPY	DF 75%	0.188	PRE								
18	PROWL	DF 4.0	0.75	PRE	91	99	99	88	96	0	58	24.4
	CANOPY	DF 75%	0.38	PRE								
19	WEEDY CK				0	0	0	0	0	0	0	18.5
20	WEEDFREE				99	99	99	99	99	0	96	31.6
				LSD(0.05) =	14	7	9	14	18	8	36	NA
				STANDARD DEVIATION =	9	5	6	9	12	5	25	NA
				COEFF. OF VARIABILITY =	13	6	8	15	15	164	37	NA

PROJ. NUM.: H-692 UNITS: LBai/A
FILE NAME: WPOSTSB6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN POST BROADLEAF CONTROL (JACKSON)

RESEARCH BY: R.M. HAYES COUNTY: MADISON ST: TN COUNTRY: USA
COOPERATOR : LAST UPDATE: 3/15/87 INITIATED: 07/11/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/31/86
REPORTED BY: R.M. HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.5
PREVIOUS TILL: CONVENTIONAL SOIL TEXTURE: SILT LOAM SOIL OM%: 1.0
FERTILITY: 0-40-40 ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
MISC. 1: TOPSIN-M + PENETRATOR 0.5 LB AI + 1 PT/A NUMBER OF REPS: 4
MISC. 2: AT R3 AND R5 GROWTH STAGES. REPORT TYPE: INTERIM

PLANTING DATE: 06/19/86 CROP CULTIVAR: ASGROW 5474
HARVEST DATE : 10/31/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: DRY MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	07/11/86	07/16/86	/ /	/ /	/ /
JULIAN DATE/YEAR	J192/86	J197/86	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	POST1	POST2			
AIR/SOIL TEMP(F)	086/	/	/	/	/
% REL. HUMIDITY	070%				
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	OPT/DRY	OPT/DRY	/	/	/
INCORP. EQUIP.					
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2BACKPACK	CO2BACKPACK			
SPRAYER GPA/PSI	018.0/032	018.0/032	. /	. /	. /
NOZZLE TYPE	FLATFAN8002	FLATFAN8002			
RAIN / IRRIG. in					
0-24 hr/1-3 days	. /0.60	. / .	. / .	. / .	. / .
4-7 days/2nd wk	1.70/ .	. /0.74	. / .	. / .	. / .
3rd / 4th week	0.74/ .	0.12/1.00	. / .	. / .	. / .

SPEC. CODE	SPECIES	DENSITY	APPLIC. 1 HTin/STG.	APPLIC. 2 HTin/STG.	APPLIC. 3 HTin/STG.	APPLIC. 4 HTin/STG.	APPLIC. 5 HTin/STG.
*****	**** CROP *****	*****	**********	**********	**********	**********	**********
GLXMA	SOYBEANS		10 /V4	12 /V5	/	/	/
*****	**** PEST *****	*****	**********	**********	**********	**********	**********
AMACH	SMOOTH PIGWEED		7 /2-3LV	8 /4-5LV	/	/	/
XANST	COCKLEBUR		3 /6LV	4 /7-8LV	/	/	/
IPOHG	ENTIRELEAF MG		2 /4LV	3 /6LV	/	/	/
EPHMA	SPOTTED SPURGE		3.7/4LV	4.5/6LV	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.: H-692 UNITS: LBai/A
FILE NAME: WPOSTSB6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN POST BROADLEAF CONTROL (JACKSON)

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EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1.%CRINJU VISUAL=%VISUAL CROP INJURY.
2.%XANST CONTROL=%COMMON COCKLEBUR CONTROL.
3.%AMACH CONTROL=%SMOOTH PIGWEED CONTROL.
4.%IPOHG CONTROL=%ENTIRELEAF MORNINGGLORY CONTROL.
5.%SIDSP CONTROL=%PRICKLY SIDA(TEAWEED)CONTROL.
6.%EMPHA CONTROL=%SPOTTED SPURGE CONTROL.
7.WD CTRL AT HARVEST=%TOTAL WEED CONTROL AT HARVEST.THIS RATING INCLUDES CONTROL OF ALL WEED SPECIES PRESENT.
8.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER ACRE.
9.TEST WT CALC.=TEST WEIGHT CALCULATED AT HARVEST.
10.%MOISTU CALC.PERCENT MOISTURE CALCULATED AT HARVEST.

SUMMARY

WEED PRESSURE WAS EXCELLENT IN THIS TEST,AS EVIDENCED BY THE 48% YIELD REDUCTION IN THE WEEDY CHECK.EARLY WEED EMERGENCE WAS SLOW DUE TO VERY DRY CONDITIONS,HOWEVER LATE SEASON WEED COMPETITION WAS QUITE INTENSE DUE TO RAINFALL SOON AFTER APPLICATION.RESCUE CAUSED VISUAL SOYBEAN INJURY IN EXCESS OF 30%.SCEPTER PROVIDED POOR CONTROL OF ENTIRELEAF MORNINGGLORY AND SPOTTED SPURGE.CLASSIC PROVIDED POOR CONTROL OF TEAWEED AND SPOTTED SPURGE.BASAGRAN+BLAZER PROVIDED POOR CONTROL OF ALL WEEDS,EXCEPT COCKLEBUR.RESCUE PROVIDED POOR CONTROL OF ALL WEEDS,EXCEPT MORNINGGLORY.PURSUIT PROVIDED GOOD-EXCELLENT CONTROL OF ALL WEEDS AND ALSO RESULTED IN THE HIGHEST CROP YIELDS IN THE TEST.

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APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: H-692 UNITS: LBai/A
FILE NAME: WPOSTSB6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN POST BROADLEAF CONTROL (JACKSON)

RESEARCH BY: R.M. HAYES COUNTY: MADISON ST: TN COUNTRY: USA
COOPERATOR : LAST UPDATE: 3/15/87 INITIATED: 07/11/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 10/31/86
APPL: POST1=07/11/86 POST2=07/16/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%CRINJU CONTROL VISUAL 7/25/86	%XANST CONTROL 7/25/86	%AMACH CONTROL 7/25/86	%IPOHG CONTROL 7/25/86	%SIDSP CONTROL 7/25/86	%EPHMA CONTROL 7/25/86	WD CTRL AT HARV 10/31/*	YIELD BU/ACRE 10/31/*	TEST WT CALC. 10/31/*	%MOISTU CALC. 10/31/*
01	SCEPTER	SC 1.5	.0625	POST2	0	98	81	63	97	10	66	35.3	51.9	14.9
	X-77	%A 100%	0.25%	POST2										
02	SCEPTER	SC 1.5	0.094	POST2	0	98	89	65	95	16	50	36.2	52.2	14.8
	X-77	%A 100%	0.25%	POST2										
03	SCEPTER	SC 1.5	0.125	POST2	0	99	87	76	97	23	74	37.3	53.1	14.2
	X-77	%A 100%	0.25%	POST2										
04	PURSUIT	SC 2.0	.0625	POST2	0	97	96	86	92	84	91	42.8	53.1	13.9
	X-77	%A 100%	.25%	POST2										
05	PURSUIT	SC 2.0	.094	POST2	0	98	98	89	97	87	97	42.3	52.4	14.3
	X-77	%A 100%	.25%	POST2										
06	PURSUIT	SC 2.0	0.125	POST2	0	99	97	90	99	88	97	38.1	53.2	14.3
	X-77	%A 100%	0.25%	POST2										
07	SCEPTER	SC 1.5	.0625	POST2	0	99	97	90	97	83	96	41.6	54.6	13.3
	PURSUIT	SC 2.0	.0625	POST2										
	X-77	%A 100%	.25%	POST2										
08	SCEPTER	SC 1.5	.094	POST2	0	99	99	93	99	90	98	43.4	55.3	13.3
	PURSUIT	SC 2.0	.094	POST2										
	X-77	%A 100%	0.25%	POST2										
09	CLASSIC	DF 25%	.0039	POST2	0	99	73	72	15	13	63	39.4	53.5	14.1
	X-77	%A 100%	0.25%	POST2										
10	CLASSIC	DF 25%	.0078	POST2	0	99	86	82	40	9	71	38.7	54.1	14.0
	X-77	%A 100%	0.25%	POST2										
11	BASAGRAN	SC 4	0.25	POST2	0	75	40	33	68	3	21	33.6	53.2	13.8
	BLAZER	SC 2	0.125	POST2										
	AGRIDEX	EC 4	.25	POST2										
12	BASAGRAN	SC 4	0.5	POST2	0	80	49	49	90	28	50	39.3	54.4	13.6
	BLAZER	SC 2	0.25	POST2										
	AGRIDEX	EC 4	0.25	POST2										

PROJ. NUM.: H-692 UNITS: LBai/A
FILE NAME: WPOSTSB6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SOYBEAN POST BROADLEAF CONTROL (JACKSON)

APPL: POST1=07/11/86 POST2=07/16/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%CRINJU VISUAL 7/25/86	%XANST CONTROL 7/25/86	%AMACH CONTROL 7/25/86	%IPOHG CONTROL 7/25/86	%SIDSP CONTROL 7/25/86	%EPHMA CONTROL 7/25/86	WD CTRL AT HARV 10/31/*	YIELD BU/ACRE 10/31/*	TEST WT CALC. 10/31/*	%MOISTU CALC. 10/31/*
13	BASAGRAN	SC 4	0.75	POST2	0	97	46	35	97	3	38	35.1	53.5	13.7
	32%N	%A 100%	5.5%	POST2										
14	SCEPTER	SC 1.5	0.125	POST2	0	97	95	60	95	38	83	38.6	54.0	13.6
	BLAZER	SC 2	0.25	POST2										
	X-77	%A 100%	0.25%	POST2										
15	SCEPTER	SC 1.5	.125	POST4	0	98	93	34	70	10	68	38.1	54.8	13.3
	X-77	%A 100%	0.25%	POST4										
16	PURSUIT	SC 2	.094	POST4	0	96	94	78	55	84	90	41.7	54.1	13.3
	X-77	%A 100%	0.25%	POST4										
17	CLASSIC	DF 25%	.0078	POST4	0	96	94	84	5	74	78	38.9	54.6	13.3
	X-77	%A 100%	0.25%	POST4										
18	RESCUE	SC 2.06	1.03	POST4	33	61	54	86	28	15	26	27.4	49.6	15.2
	X-77	%A 100%	0.5%	POST4										
19	WEEDYCK				0	0	0	0	0	0	0	22.4	49.2	15.7
20	WEEDFREE				0	99	99	99	99	99	99	39.1	53.5	13.7
			LSD(0.05) =		2	39	42	44	NA	43	42	15.4	20.6	5.4
			STANDARD DEVIATION =		1	27	29	30	NA	30	29	10.6	14.3	3.7
			COEFF. OF VARIABILITY =		69	30	37	44	NA	70	43	28.4	26.8	26.6

PROJ. NUM.:
FILE NAME: WPOEJGS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST JOHNSONGRASS CONTROL IN SOYBEANS

RESEARCH BY: R.M. HAYES
COOPERATOR :
TOTAL REPS : 4
REPORTED BY: R.M. HAYES

COUNTY: MADISON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4
RELATED FILE: **NONE**

ST: TN COUNTRY: USA
INITIATED: 05/13/86
COMPLETED: 10/07/86
SOURCE: UNIVER.

PREVIOUS CROP: SOYBEAN
PREVIOUS TILL: CONVENTIONAL
FERTILITY: 0-40-40
MISC. 1: TEMIK 0.5 LB AI/A IN FURROW (TOPSIN-M +
MISC. 2: PENETRATOR .5 LB/AI/A+1 PT/A AT V5,R3&R5

PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.0
SOIL TEXTURE: COLLINS SIL SOIL OM%: 01.0
ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
NUMBER OF REPS: 4
REPORT TYPE: INTERIM

PLANTING DATE: 05/13/86
HARVEST DATE : 10/07/86
RESIDUE TAKEN: N

CROP CULTIVAR: ASGROW A5474
SEASONAL RAINFALL DURING EXPERIMENT
EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	06/23/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J174/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	POST				
AIR/SOIL TEMP(F)	095/	/	/	/	/
% REL. HUMIDITY	050%				
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	WET/DRY	/	/	/	/
INCORP. EQUIP.					
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE					
SPRAYER GPA/PSI	018.0/032	. /	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	00.3/ .	. / .	. / .	. / .	. / .
3rd / 4th week	0.05/00.6	. / .	. / .	. / .	. / .

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 *****	****	**********	**********	**********	**********	**********
GLXMA	SOYBEAN		/	/	/	/	/
*****	**** PEST *****	****	**********	**********	**********	**********	**********
SORHA	JOHNSONGRASS		/	/	/	/	/
ELEIN	GOOSEGRASS		/	/	/	/	/
BRAPP	B. SIGNALGRASS		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.:
FILE NAME: WPOEJGS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST JOHNSONGRASS CONTROL IN SOYBEANS

EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1.%ELEIN CONTROL = %GOOSEGRASS CONTROL.
2.%SORHA CONTROL = %JOHNSONGRASS CONTROL.
3.YIELD BU/ACRE = SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL,(MOISTURE WAS 13% AT HARVEST).

SUMMARY

WEED PRESSURE WAS INTENSE IN THIS EXPERIMENT,AS EVIDENCED BY THE 48% YIELD REDUCTION IN THE WEEDY CHECK.TREATMENT APPLICATION WAS DELAYED DUE TO PROLONGED EARLY-SEASON RAINFALL.THIS DELAY RESULTED IN POOR CONTROL FROM SOME TREATMENTS.ASSURE AT 0.125 LBai/A,DPXY 6202-31 AT 0.06 LBai/A,SELECT AT 0.125 LBai/A,FUSILADE 2000 AT 0.188 LBai/A, AND BAS 517 AT 0.1 AND 0.2 LBai/A PROVIDED ADEQUATE(GREATER THAN 70%) CONTROL OF GOOSEGRASS AND JOHNSONGRASS IN THIS EXPERIMENT.BAS 517 AT BOTH RATES PROVIDED THE HIGHEST LEVEL OF CONTROL OF BOTH GRASSES. REPLICATION ONE WAS NOT HARVESTED BECAUSED SANDY AREAS AFFECTED SOYBEAN GROWTH OF SOME PLOTS IN THAT REP.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.:
FILE NAME: WPOEJGS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST JOHNSONGRASS CONTROL IN SOYBEANS

RESEARCH BY: R.M. HAYES
COOPERATOR :
TOTAL REPS : 4
APPL: POST =06/23/86

COUNTY: MADISON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 05/13/86
COMPLETED: 10/07/86

RT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%ELEIN CONTROL 7/18/86	%SORHA CONTROL 7/18/86	YIELD BU/ACRE 10/07/*
01	ASSURE	EC 0.8	0.06	4WAP	63.8	63.8	10.6
	AGRIDEX	EC 4	1				
02	ASSURE	EC 0.8	0.125	4WAP	78.8	77.5	13.4
	AGRIDEX	EC 4	1				
03	DPXY6202 -31	EC 0.8	0.03	4WAP	58.8	56.3	11.4
	AGRIDEX	EC 4	1				
04	DPXY6202 -31	EC 0.8	0.06	4WAP	86.3	75.0	15.4
	AGRIDEX	EC 4	1				
05	BAS 517	EC 1.67	0.1	4WAP	89.8	91.0	15.2
	AGRIDEX	EC 4	1				
06	BAS 517	EC 4	0.2	4WAP	94.0	96.0	15.2
	AGRIDEX	EC 4	1				
07	SELECT	EC 2	0.06	4WAP	42.5	76.3	10.9
	AGRIDEX	EC 4	1				
08	SELECT	EC 2	0.125	4WAP	82.5	88.5	17.7
	AGRIDEX	EC 4	1				
09	POAST	EC 1.5	0.188	4WAP	40.0	68.8	12.7
	AGRIDEX	EC 4	1				
10	POAST	EC 1.5	0.28	4WAP	58.8	71.8	11.9
	AGRIDEX	EC 4	1				
11	FUSILADE 2000	EC 1	0.188	4WAP	71.3	86.3	16.4
12	VERDICT	EC 2	0.06	4WAP	47.5	37.5	9.2
	AGRIDEX	EC 4	1				

PROJ. NUM.:
FILE NAME: WPOEJGS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

POST JOHNSONGRASS CONTROL IN SOYBEANS

APPL: POST =06/23/86

TRT. NO.	PESTICIDE NAME	FORMU.	APPLI-CATION LBai/A	TYPE	%ELEIN CONTROL 7/18/86	%SORHA CONTROL 7/18/86	YIELD BU/ACRE 10/07/*
13	VERDICT	EC 2	0.125	4WAP	85.0	61.3	12.4
	AGRIDEX	EC 4	1				
14	WEEDY CK				0	0	9.2
				LSD(0.05) =	12.7	13.8	NA
				STANDARD DEVIATION =	8.8	9.6	NA
				COEFF. OF VARIABILITY =	13.7	14.1	NA

PROJ. NUM.: UNITS: LBai/A
FILE NAME: WNTJGRS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

JOHNSONGRASS CONTROL IN NO-TILL SOYBEANS

RESEARCH BY: R.M. HAYES COUNTY: MADISON ST: TN COUNTRY: USA
COOPERATOR : LAST UPDATE: 3/05/87 INITIATED: 07/29/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 11/19/86
REPORTED BY: R.M.HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: WHEAT PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.0
PREVIOUS TILL: NO-TILL SOIL TEXTURE: LEXINGTONSIL SOIL OM%: 1.2
FERTILITY: 0-40-40 ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
MISC. 1: TEMIK 0.5 LB AI/A IN FURROW NUMBER OF REPS: 4
MISC. 2: BRONCO AT 4 QTS/A PRE REPORT TYPE: INTERIM

PLANTING DATE: 06/19/86 CROP CULTIVAR: ASGROW A5474
HARVEST DATE : 11/19/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: DRY MID: DRY LATE: OPT

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	07/29/86	/ /	/ /	/ /	/ /
JULIAN DATE/YEAR	J210/86	J 0/00	J 0/00	J 0/00	J 0/00
GEN. APPLIC TYPE	POST				
AIR/SOIL TEMP(F)	096/092	/	/	/	/
% REL. HUMIDITY	055%				
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	MOD/DRY	/	/	/	/
INCORP. EQUIP.					
INCORP. DEPTH in	.	.	.	.	.
SPRAYER TYPE	CO2 TRACTOR				
SPRAYER GPA/PSI	012.0/032	. /	. /	. /	. /
NOZZLE TYPE	FLATFAN8002				
RAIN / IRRIG. in					
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	. /1.26	. / .	. / .	. / .	. / .
3rd / 4th week	. / .	. / .	. / .	. / .	. / .

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 *****	*****	*********	*********	*********	*********	*********
GLXMA	SOYBEAN		016/	/	/	/	/
*****	**** PEST *****	*****	*********	*********	*********	*********	*********
SORHA	JOHNSONGRASS	20 /M2	024/ / / / / / / / / / /	/ / / / / / / / / / /	/ / / / / / / / / / /	/ / / / / / / / / / /	/ / / / / / / / / / /

PROJ. NUM.:
FILE NAME: WNTJGRS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

JOHNSONGRASS CONTROL IN NO-TILL SOYBEANS

EXPERIMENT COMMENTS

KEY TO DATA HEADERS

1,& 2.%SORHA CONTROL=%JOHNSONGRASS CONTROL.
3. YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE AT 13 PERCENT MOISTURE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL.
4.%MOIST CALC.=PERCENT MOISTURE CALCULATED AT HARVEST FOR EACH PLOT.
5.TEST WT CALC.=TEST WEIGHT CALCULATED FOR EACH PLOT AT HARVEST.

SUMMARY

ENTIRE EXPERIMENT WAS SPRAYED PREEMERGENCE WITH BRONCO(3 QTS/A) AND ESCAPE BROADLEAF WEEDS WERE CONTROLLED BY HAND HOEING.THERE WAS AN AVERAGE OF 20 RHIZOME JOHNSONGRASS PLANTS PER METER SQUARE AT THE TIME OF TREATMENT.SOYBEAN YIELD OF THE BEST TREATMENTS WERE ALMOST 2.5 TIMES HIGHER THAN THE WEEDY CHECK.THIS REFLECTS THE EXTREME INTERFERENCE OF JOHNSONGRASS UNDER THESE GROWING CONDITIONS.THIS REPRESENTS APPROXIMATELY A 60% YIELD REDUCTION,WHICH IS IN LINE WITH OTHER INTERFERENCE STUDIES.ALL TREATMENTS YIELDED SIGNIFICANTLY HIGHER THAN THE WEEDY(JOHNSONGRASS)CHECK,BUT THERE WAS NO DIFFERCENCE BETWEEN TREATMENTS AT P=.05,WHILE AT P=.10 WHIP AND PURSUIT TREATMENTS YIELDED SIGNIFICANTLY LOWER,WHICH CORRESPONDED TO THEIR POOR JOHNSONGRASS CONTROL.DPXY6202-31(0.06LBai/A),BAS 517(0.2LBai/A),SELECT(0.06LBai/A) FUSILADE 2000(0.188LBai/A),AND VERDICT(0.125LBai/A)ALL PROVIDED EXCELLENT JOHNSONGRASS CONTROL THROUGHOUT THE GROWING SEASON.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.:
FILE NAME: WNTJGRS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

JOHNSONGRASS CONTROL IN NO-TILL SOYBEANS

RESEARCH BY: R.M. HAYES
COOPERATOR :
TOTAL REPS : 4
APPL: POST =07/29/86

COUNTY: MADISON
LAST UPDATE: 3/05/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 07/29/86
COMPLETED: 11/19/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%SORHA CONTROL 8/14/86	%SORHA CONTROL 9/25/86	YIELD BU/ACRE 11/19/*	% MOIST CALC. 11/19/*	TEST WT CALC. 11/19/*
01	ASSURE	EC 0.8	0.06	4WAP	93	79	28.3	18.7	49.3
	AGRIDEX	EC 4	1						
02	ASSURE	EC 0.8	0.125	4WAP	91	89	28.8	18.3	49.2
	AGRIDEX	EC 4	1						
03	DPXY6202 -31	EC 0.8	0.03	4WAP	96	87	28.2	18.7	48.9
	AGRIDEX	EC 4	1						
04	DPXY6202 -31	EC 0.8	0.06	4WAP	96	92	35.6	19.1	48.6
	AGRIDEX	EC 4	1						
05	BAS 517	EC 1.67	0.1	4WAP	93	72	28.9	18.9	48.1
	AGRIDEX	EC 4	1						
06	BAS 517	EC 4	0.2	4WAP	94	97	32.4	18.1	49.3
	AGRIDEX	EC 4	1						
07	SELECT	EC 2	0.06	4WAP	93	90	34.8	18.9	48.6
	AGRIDEX	EC 4	1						
08	SELECT	EC 2	0.125	4WAP	97	93	34.6	18.4	48.8
	AGRIDEX	EC 4	1						
09	POAST	EC 1.5	0.188	4WAP	84	69	27.9	18.3	48.2
	AGRIDEX	EC 4	1						
10	POAST	EC 1.5	0.28	4WAP	93	75	32.5	18.5	49.3
	AGRIDEX	EC 4	1						
11	FUSILADE 2000	EC 1	0.188	4WAP	91	98	33.3	18.3	49.2
	AGRIDEX	EC 4	1	4WAP					
12	FUSILADE 2000	EC 1	0.28	4WAP	92	98	33.6	18.8	49.2
	AGRIDEX	EC 4	1	4WAP					

PROJ. NUM.: UNITS: LBai/A
FILE NAME: WNTJGRS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

JOHNSONGRASS CONTROL IN NO-TILL SOYBEANS

APPL: POST =07/29/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%SORHA CONTROL 8/14/86	%SORHA CONTROL 9/25/86	YIELD BU/ACRE 11/19/*	% MOIST CALC. 11/19/*	TEST WT CALC. 11/19/*
13	VERDICT	EC 2	0.06	4WAP	84	83	36.3	18.2	50.0
	AGRIDEX	EC 4	1						
14	VERDICT	EC 2	0.125	4WAP	90	92	29.2	18.9	49.1
	AGRIDEX	EC 4	1						
15	WHIP	EC 1	.15	4WAP	89	58	26.1	18.6	48.6
16	PURSUIT	SC 2	.0625	4WAP	78	70	26.7	19.0	48.6
	X-77	%A 100%	.5%	4WAP					
17	PURSUIT	SC 2	.125	4WAP	79	71	26.5	18.3	49.1
	X-77	%A 100%	.5%	4WAP					
18	WEEDY CK				0	0	14.4	19.7	47.7
				LSD(0.05) =	8	25	10.4	1.0	1.7
				STANDARD DEVIATION =	6	18	7.2	.7	1.2
				COEFF. OF VARIABILITY =	7	23	24.4	3.8	2.4

PROJ. NUM.: UNITS: LBai/A
FILE NAME: WCASOBS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SICKLEPOD CONTROL IN SOYBEANS AT WTES

RESEARCH BY: R.M. HAYES COUNTY: MADISON ST: TN COUNTRY: USA
COOPERATOR : LAST UPDATE: 1/22/87 INITIATED: 05/13/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 09/29/86
REPORTED BY: R.M. HAYES RELATED FILE: **NONE** SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.5
PREVIOUS TILL: CONVENTIONAL SOIL TEXTURE: COLLINS SIL SOIL OM%: .
FERTILITY: 0-40-40 ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCB
MISC. 1: TREFLAN 0.75 LB AI/A NUMBER OF REPS: 4
MISC. 2: TEMIK 0.5 LB AI/A IN FURROW AT PLANTING REPORT TYPE: INTERIM

PLANTING DATE: 05/13/86 CROP CULTIVAR: ASGROW 5474
HARVEST DATE : 09/29/86 SEASONAL RAINFALL DURING EXPERIMENT
RESIDUE TAKEN: N EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/13/86	05/13/86	06/12/86	07/03/86	/ /
JULIAN DATE/YEAR	J133/86	J133/86	J163/86	J184/86	J 0/00
GEN. APPLIC TYPE	PPI	PRE	POST1	POST2	
AIR/SOIL TEMP(F)	084/082	084/082	079/	/	/
% REL. HUMIDITY	%				
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	OPT/	OPT/	WET/DRY	DRY/DRY	/
INCORP. EQUIP.	DO-ALL	**NONE**			
INCORP. DEPTH in	02	.	.	.	.
SPRAYER TYPE	CO2BACKPACK	CO2BACKPACK	CO2BACKPACK	CO2BACKPACK	
SPRAYER GPA/PSI	18.0/032	18.0/032	18.0/032	18.0/032	. /
NOZZLE TYPE	FLATFAN8002	FLATFAN8002	FLATFAN8002	FLATFAN8002	
RAIN / IRRIG. in					
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	0.56/1.72	0.56/1.72	. / .	0.35/2.30	. / .
3rd / 4th week	1.49/4.18	1.49/4.18	0.28/0.30	. /0.74	. / .

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 *****	****	**********	**********	**********	**********	**********
GLYMX	SOYBEANS		/	/	/	/	/
*****	**** PEST *****	****	**********	**********	**********	**********	**********
CASOB	SICKLEPOD		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.:
FILE NAME: WCASOBS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SICKLEPOD CONTROL IN SOYBEANS AT WTES

EXPERIMENT COMMENTS

TREFLAN 0.75 LB AI/A OVER ENTIRE EXPERIMENT.

KEY TO DATA HEADERS

1.%CASOB CONTROL = % SICKLEPOD CONTROL.
2. '' '' '' '' '' .
3. '' '' '' '' '' .
4.YIELD BU/ACRE = SOYBEAN YIELD IN BUSHELS PER ACRE WITH THE YIELD CORRECTED TO 13% MOISTURE WITH A TEST WEIGHT OF 60 LBS. PER BUSHEL.

SUMMARY

THERE WAS EXCELLENT SICKLEPOD PRESSURE IN THIS TEST AS EVIDENCED BY THE 24% YIELD REDUCTION IN THE WEEDY CHECK.CANOPY,CANOPY FOLLOWED BY CLASSIC OR SCEPTER AND LASSO+SENCOR FOLLOWED BY SENCOR+BUTYRAC,AND CLASSIC FOLLOWED BY CLASSIC PROVIDED THE BEST SICKLEPOD CONTROL AND PRODUCED THE HIGHEST SOYBEAN YIELDS.SCEPTER PREEMERGENCE AND SCEPTER PRE FOLLOWED BY COBRA PROVIDED POOR CONTROL AND WERE AMONG THE LOWEST YIELDING TREATMENTS.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.: UNITS: LBai/A
FILE NAME: WCASOBS6 PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SICKLEPOD CONTROL IN SOYBEANS AT WTES

RESEARCH BY: R.M. HAYES COUNTY: MADISON ST: TN COUNTRY: USA
COOPERATOR : LAST UPDATE: 1/22/87 INITIATED: 05/13/86
TOTAL REPS : 4 EXPT. STATUS: 4 COMPLETED: 09/29/86
APPL: PPI =05/13/86 PRE =05/13/86 POST1=06/12/86 POST2=07/03/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLICATION TYPE	%CASOB CONTROL 6/04/86	%CASOB CONTROL 8/12/86	%CASOB CONTROL 9/17/86	YIELD BU/ACRE 9/29/86
01	SCEPTER	SC 1.5	0.125	PRE	56.3	57.5	45.0	26.6
02	SCEPTER	SC 1.5	0.25	POST1	0	71.8	68.8	30.3
03	SCEPTER	SC 1.5	0.125	POST1	0	62.5	51.3	30.9
04	SCEPTER	SC 1.5	0.125	PRE	40.0	70.5	58.8	31.9
	SCEPTER	SC 1.5	0.125	POST1				
05	SCEPTER	SC 1.5	0.25	POST1	0	61.0	55.0	31.6
06	SCEPTER	SC 1.5	0.125	PRE	74.8	62.0	53.8	29.5
	SENCOR	DF 75%	0.38	PRE				
07	SCEPTER	SC 1.5	0.125	PRE	66.3	76.8	69.0	36.1
	SENCOR	DF 75%	0.38	PRE				
	SCEPTER	SC 1.5	0.125	POST1				
08	CANOPY	DF 75%	0.38	PRE	70.0	84.3	83.0	39.4
	SCEPTER	SC 1.5	0.125	POST1				
09	CANOPY	DF 75%	0.38	PRE	81.3	65.0	63.8	30.6
10	CANOPY	DF 75%	0.38	PRE	80.0	91.5	85.5	32.6
	CLASSIC	DF 25%	0.008	POST1				
11	CLASSIC	DF 25%	0.008	POST1	0	84.5	84.0	35.3
	CLASSIC	DF 25%	0.008	POST2				
12	SENCOR	DF 75%	0.5	PRE	78.8	87.3	83.0	31.3
	SCEPTER	SC 1.5	0.125	POST1				
13	SCEPTER	SC 1.5	0.125	PRE	35.0	55.0	53.8	27.7
	COBRA	EC 2.0	0.2	POST1				
14	LASSO ME	FL 4.0	2.5	PRE	83.0	90.0	87.3	31.1
	SENCOR	DF 75%	0.38	PRE				
	SENCOR	DF 75%	0.25	POD				
	BUTYRAC	SC 2.0	0.2	POD				

PROJ. NUM.:
FILE NAME: WCASOBS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

SICKLEPOD CONTROL IN SOYBEANS AT WTES

APPL: PPI =05/13/86 PRE =05/13/86 POST1=06/12/86 POST2=07/03/86

TRT. NO.	PESTICIDE NAME	FORMU. LBai/A	APPLICATION TYPE	%CASOB CONTROL 6/04/86	%CASOB CONTROL 8/12/86	%CASOB CONTROL 9/17/86	YIELD BU/ACRE 9/29/86
15	WEEDY CK		0	0	0	0	26.0
16	WEEDFREE		0	0	99.0	99.0	34.6
	LSD(0.05) =			21.0	13.8	17.3	7.0
	STANDARD DEVIATION =			14.6	9.5	12.0	4.9
	COEFF. OF VARIABILITY =			35.0	13.6	18.4	15.4

PROJ. NUM.:
FILE NAME: WABUTHS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

VELVETLEAF CONTROL IN SOYBEANS

RESEARCH BY: R.M. HAYES
COOPERATOR :
TOTAL REPS : 4
REPORTED BY: R.M. HAYES

COUNTY: MADISON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4
RELATED FILE: **NONE**

ST: TN COUNTRY: USA
INITIATED: 05/12/86
COMPLETED: 09/29/86
SOURCE: UNIVER.

PREVIOUS CROP: SOYBEANS
PREVIOUS TILL: CONVENTIONAL
FERTILITY: 60-60-60
MISC. 1: TREFLAN 0.75 LB AI/A PPI
MISC. 2: TEMIK 0.5 LB AI/A

PLOT SIZE(LxW): 10.0x 30.0 SOIL pH :6.8
SOIL TEXTURE: DEXTER SIL SOIL OM%: 1.0
ROW WIDTH: 030 EXPERIMENTAL DESIGN: RCBD
NUMBER OF REPS: 4
REPORT TYPE: INTERIM

PLANTING DATE: 05/12/86
HARVEST DATE : 09/29/86
RESIDUE TAKEN: N

CROP CULTIVAR: ASGROW A5474
SEASONAL RAINFALL DURING EXPERIMENT
EARLY: WET MID: DRY LATE: DRY

APPLICATION INFO	APPLIC. 1	APPLIC. 2	APPLIC. 3	APPLIC. 4	APPLIC. 5
APPLICATION DATE	05/12/86	05/12/86	06/12/86	/ /	/ /
JULIAN DATE/YEAR	J132/86	J132/86	J163/86	J 0/00	J 0/00
GEN. APPLIC TYPE	PPI	PRE	POST		
AIR/SOIL TEMP(F)	/082	/082	080/	/	/
% REL. HUMIDITY	%				
WIND DIR/VELOC.	/	/	/	/	/
ROOT/LEAF MOIST.	OPT/	OPT/	WET/DRY	/	/
INCORP. EQUIP.	FLEX TINE				
INCORP. DEPTH in	02	.	.	.	.
SPRAYER TYPE	CO2BACKPACK	CO2BACKPACK	CO2BACKPACK		
SPRAYER GPA/PSI	18.0/032	18.0/032	18.0/032	. /	. /
NOZZLE TYPE	FLATFAN8002	FLATFAN8002	FLATFAN8002		
RAIN / IRRIG. in					
0-24 hr/1-3 days	. / .	. / .	. / .	. / .	. / .
4-7 days/2nd wk	. / .	. / .	. / .	. / .	. / .
3rd / 4th week	. / .	. / .	. / .	. / .	. / .

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 *****	*****	**********	**********	**********	**********	**********
GLXMA	SOYBEANS		/	/	/	/	/
*****	**** PEST *****	*****	**********	**********	**********	**********	**********
ABUTH	VELVETLEAF		/	/	/	/	/
ANVCR	SPURRED ANODA		/	/	/	/	/
SIDSP	PRICKLY SIDA		/	/	/	/	/
ECLAL	ECLIPTA ALBA		/	/	/	/	/
DATST	JIMSONWEED		/	/	/	/	/
IPOHG	IVYLEAF MORNINGGLORY		/	/	/	/	/
			/	/	/	/	/
			/	/	/	/	/

PROJ. NUM.:
FILE NAME: WABUTHS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

VELVETLEAF CONTROL IN SOYBEANS

EXPERIMENT COMMENTS

TREFLAN 0.75 LB AI/A PPI OVER THE ENTIRE EXPERIMENT FOR CONTROL OF GRASSES AND SMALL SEEDED BROADLEAF WEEDS

KEY TO DATA HEADERS

1,7&13.%ABUTH CONTROL=%VELVETLEAF CONTROL.
2,8&14.%ANVCR CONTROL=%SPURRED ANODA CONTROL.
3,9&15.%SIDSP CONTROL=%PRICKLY SIDA(TEAWEED)CONTROL.
4&11.%ECLAL CONTROL=%ECLIPTA ALBA CONTROL.
5&10.%DATST CONTROL=%JIMSONWEED CONTROL.
6&12.%IPOHG CONTROL=%IVYLEAF MORNINGGLORY CONTROL.
16.YIELD BU/ACRE=SOYBEAN YIELD IN BUSHELS PER ACRE WITH A TEST WEIGHT OF 60 POUNDS PER BUSHEL AT 13% MOISTURE,(MOISTURE AT HARVEST WAS 12 PERCENT AND TEST WEIGHT WAS 55.04 POUNDS PER BUSHEL).

SUMMARY

THE MAIN OBJECTIVE OF THIS EXPERIMENT WAS TO EVALUATE NEW HERBICIDES FOR THE CONTROL OF VELVETLEAF IN SOYBEANS.SPURRED ANODA,ECLIPTA ALBA,JIMSONWEED,TEAWEED,AND IVYLEAF MORNINGGLORY WERE ALSO PRESENT IN SUFFICIENT POPULATIONS TO BE RATED.MORNINGGLORY PRESSURE WAS SPORADIC IN REPS 1 AND 2.POPULATIONS OF ALL OTHER WEEDS WERE MODERATE AND DISTRIBUTED EVENLY.THE HIGHEST LEVEL OF OVERALL WEED CONTROL WAS OBTAINED WITH COMMAND AT 1.0 LBai/A.ONLY 3 REPS WERE HARVESTED IN THIS EXPERIMENT,BECAUSE SEVERE DROUGHT CONDITIONS AFFECTED SOYBEAN DEVELOPEMENT IN THE FOURTH REP,WHICH HAD A SANDY AREA IN IT.

APPROVED BY: _____ SUBMITTED BY: _____

DATE: _____ DATE: _____

PROJ. NUM.:
FILE NAME: WABUTHS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

VELVETLEAF CONTROL IN SOYBEANS

RESEARCH BY: R.M. HAYES
COOPERATOR :
TOTAL REPS : 4

COUNTY: MADISON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 05/12/86
COMPLETED: 09/29/86

APPL: PPI =05/12/86 PRE =05/12/86 POST =06/12/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%ABUTH CONTROL 6/12/86	%AMVCR CONTROL 6/12/86	%SIDSP CONTROL 6/12/86	%ECLAL CONTROL 6/12/86	%DATST CONTROL 6/12/86	%IPOHG CONTROL 6/12/86	%ABUTH CONTROL 8/12/86	%AMVCR CONTROL 8/12/86	%SIDSP CONTROL 8/12/86	%DATST CONTROL 8/12/86	%ECLAL CONTROL 8/12/86	%IPOHG CONTROL 8/12/86
01	COMMAND	EC 6.0	0.5	PPI	96	98	96	93	98	84	95	91	98	91	89	80
02	COMMAND	EC 6.0	1.0	PPI	98	98	99	95	99	90	98	99	98	99	95	96
03	CANOPY	DF 75%	0.25	PPI	88	86	82	98	92	92	86	88	90	91	97	99
04	CANOPY	DF 75%	0.38	PPI	94	99	94	99	99	96	83	94	89	99	99	97
05	SCEPTER	SC 1.5	0.125	PPI	61	59	91	77	97	94	83	84	98	93	88	97
06	PURSUIT	SC 2.0	0.125	PPI	87	76	92	78	89	91	89	79	96	88	87	65
07	LEXONE	DF 75%	0.38	PPI	67	79	48	89	92	78	81	86	90	92	90	87
08	COBRA	EC 2.0	0.25	PRE	65	78	55	94	99	86	61	76	74	99	92	99
09	PURSUIT	SC 2.0	0.125	POST2	0	0	0	0	0	0	93	96	60	99	82	94
	X-77	%A 100%	0.25%	POST2												
10	BASAGRAN	SC 4.0	0.75	POST2	0	0	0	0	0	0	84	87	90	98	99	83
	32%N	%A 100%	5%	POST2												
11	SCEPTER	SC 1.5	0.125	POST2	0	0	0	0	0	0	54	66	77	48	90	80
	X-77	%A 100%	0.25%	POST2												
12	CLASSIC	DF 25%	0.012	POST2	0	0	0	0	0	0	59	55	13	99	95	99
	X-77	%A 100%	0.25%	POST2												
13	WEEDY CK				0	0	0	0	0	0	0	0	0	0	0	0
14	WEEDFREE				99	99	99	99	99	99	99	99	99	99	99	99
				LSD(0.05) =	22	19	16	15	10	11	21	21	21	24	14	NA
				STANDARD DEVIATION =	15	13	11	11	7	8	14	14	14	17	10	NA
				COEFF. OF VARIABILITY =	28	24	20	18	11	14	19	18	19	20	11	NA

PROJ. NUM.:
FILE NAME: WABUTHS6

UNITS: LBai/A
PRINTED: 03/15/87

W E S T E R N T E N N E S S E E A G R I E X P S T A T I O N

VELVETLEAF CONTROL IN SOYBEANS

RESEARCH BY: R.M. HAYES
COOPERATOR :
TOTAL REPS : 4
APPL: PPI =05/12/86 PRE =05/12/86 POST =06/12/86

COUNTY: MADISON
LAST UPDATE: 3/15/87
EXPT. STATUS: 4

ST: TN COUNTRY: USA
INITIATED: 05/12/86
COMPLETED: 09/29/86

TRT. NO.	PESTICIDE NAME	FORMU.	LBai/A	APPLI-CATION TYPE	%ABUTH CONTROL 9/18/86	%ANVCR CONTROL 9/18/86	%SIDSP CONTROL 9/18/86	YIELD BU/ACRE 9/29/86
01	COMMAND	EC 6.0	0.5	PPI	96	93	98	33.0
02	COMMAND	EC 6.0	1.0	PPI	99	99	99	27.8
03	CANOPY	DF 75%	0.25	PPI	80	91	95	28.4
04	CANOPY	DF 75%	0.38	PPI	87	93	96	31.5
05	SCEPTER	SC 1.5	0.125	PPI	71	80	99	30.0
06	PURSUIT	SC 2.0	0.125	PPI	91	74	99	29.0
07	LEXONE	DF 75%	0.38	PPI	85	85	85	31.5
08	COBRA	EC 2.0	0.25	PRE	46	86	78	29.4
09	PURSUIT	SC 2.0	0.125	POST2	95	95	55	28.8
	X-77	%A 100%	0.25%	POST2				
10	BASAGRAN	SC 4.0	0.75	POST2	85	84	93	28.7
	32%N	%A 100%	5%	POST2				
11	SCEPTER	SC 1.5	0.125	POST2	61	67	76	28.4
	X-77	%A 100%	0.25%	POST2				
12	CLASSIC	DF 25%	0.012	POST2	80	51	16	27.2
	X-77	%A 100%	0.25%	POST2				
13	WEEDY CK				0	0	0	23.9
14	WEEDFREE				99	99	99	32.1
				LSD(0.05) =	27	27	17	NA
				STANDARD DEVIATION =	19	19	12	NA
				COEFF. OF VARIABILITY =	25	24	15	NA