

UNIVERSITY OF KENTUCKY

DEPARTMENT OF AGRONOMY

1972

RESULTS OF HERBICIDE EVALUATION TRIALS

NOT FOR PUBLICATION

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LIST OF HERBICIDES USED IN WEED CONTROL STUDIES 1972

A-820: N- <u>sec</u> -butyl-4- <u>tert</u> -butyl-2,6-dinitroaniline	Amchem
AC-92553: N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine	American Cyanamid
AC-922390: N- <u>sec</u> -Butyl-2,6-dinitro-3,4-xylidine	American Cyanamid
Alachor: (Lasso)-2-chloro-2',6'-diethyl-N-(methoxymethyl)acetamide	Monsanto
Amilon: (Chloramben + linuron)	Amchem
Atrazine: (AAtrex): 2-chloro-4-(ethylamino)-6-isopropylamino-s-triazine	Geigy
BAS 3512: 3-isopropyl-1-H-2,1,3-benzothiadiazinone-(4)3H-one-2,2-dioxide	BASF
BAS 3921: N-propyl-N(2-chloroethyl)-2,6-dinitro-4-trifluoromethyl-aniline	BASF
BAY 2236: 1,1-Dimethyl-3-(M-chloro-p-trifluoromethoxyphenyl)urea	Chemagro
BAY KUE 2236: 1,1-Dimethyl-3-(M-chloro-p-trifluoromethoxyphenyl)urea	Chemagro
Bladex: (SD-15418): 2-(4-chloro-6-ethylamino-s-triazine-2-ylamino)-2-methyl propionitrile	Shell
CGA-17482: Unknown	Geigy
CGA-10832: N-n-propyl-N-cyclopropylmethyl-4-trifluoromethyl-2,6-dinitroaniline	Geigy
Chloramben: 3-amino-2,5-dichlorobenzoic acid	Amchem
Chloroprotham: (CIPC): isopropyl N-(3-chlorophenyl) carbamate	Pittsburgh Plate Glass
Crop Oil	Gulf
Dinoseb: (Dow General): 2- <u>sec</u> butyl-4,6-dinitrophenol	Dow
Dyanap: 1-naphthylphthalate plus 6-Dinitro-0- <u>sec</u> butylphenate	Uniroyal
EL 119: 3,5-dinitro-N,N-dipropyl-sulfanilamide	Eli Lilly
EL 179: 4-isopropyl-2,6-dinitro-N,N-(dipropyl)aniline	Eli Lilly
EPTC: (Eptam) S-ethyl dipropylthiocarbamate	Stauffer
GS-35911	Geigy
Linuron: (Lorox): 3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea	Dupont
Maloran: 3-(4-Bromo-3-chlorophenyl)-1-methoxy-1-methylurea	Ciba
MBR 8251: (Destun)1,1,1-Trifluoro-4-(phenylsulfonyl)methanesulfono- <u>o</u> -toluidide	3 M
MC-4379: (Modown): Methyl-5-(2',4'-dichlorophenoxy)-2-nitrobenzoate	Mobile
MON-2139: (Glyphosate)N-phosphonomethylglycine	Monsanto
NIA-21844: 6- <u>tert</u> -butyl-3-isopropylisoxazolo-(5,4- <u>d</u> )pyrimidin-4(5H)-one	Niagara
NIA-23486: 6- <u>tert</u> -butyl-3-isopropylisoxazolo-(3,4- <u>d</u> )pyrimidin-4(5H)-one	Niagara
Nitralin: (Planavin) 4-(methylsulfonyl)-2,6-dinitro-N,N-dipropylaniline	Shell
Outfox: (Cyprazine): 2-chloro-4-cyclopropylamino-6-isopropylamino-1,3,5-triazine	Gulf
Paraquat: 1,1''-dimethyl-4,4'-bipyridinium ion	Chevron
Preforan: (fluorodiphen): p-nitrophenyl a,a,a-trifluoro-2-nitro-p-tolyl ether	Ciba
Prefix: Cyprazine + S-ethyl diethylthiocarbamate	Gulf
Premerge: (Dinoseb): 2- <u>sec</u> -butyl-4,6-dinitrophenol	Dow
R-25788: N,N-Diallyl-2,2-dichloroacetamide	Stauffer
S-18510: Unknown	Gulf
SD-30528: Unknown	Shell
SD-27695: Unknown	Shell
Sencor: (BAY 94337): 4-amino-6- <u>tert</u> -butyl-3-(methylthio)-s-triazine-5(4H)-one	Chemagro
Simazine: (princep): 2-chloro-4,6-bis(ethylamino)- <u>s</u> -triazine	Geigy
Solo: chloroprotham plus Naptalam	Uniroyal
Sutan: S-ethyl diisobutylthiocarbamate	Stauffer
Tenoran: (chloroxuron): 3- <u>p</u> -( <u>p</u> -chlorophenoxy)phenyl)-1,1-dimethylurea	Ciba
Trifluralin: (Treflan): <u>S</u> -(a,a,a-trifluoro-2,6-dinitro-N,N-dipropyl- <u>p</u> -toluidine,	Eli Lilly
Dinitramine: (Cobex): N,N'-Diethyl-2,4-dinitro-6-trifluoromethyl-m-phenylenediamine	U. S. Borax
Vernolate: (Vernam): <u>S</u> -propyl dipropylthiocarbamate	Stauffer
X-77: Non-ionic surfactant	Chevron

## WEATHER DATA 1972

Days	Precip.	May Temp.		Precip.	June Temp.		Precip.	July Temp.		Precip.	Aug. Temp.	
		Max.	Min.		Max.	Min.		Max.	Min.		Max.	Min.
1		77	60		71	44		88	66		84	65
2	.18	74	61		76	49		79	70		82	68
3	.31	68	53		83	56	.26	81	68	.96	85	69
4		66	52	.27	86	66		74	61	.91	72	64
5		72	43		84	65	.32	71	58	.02	79	58
6		77	51		80	64		71	49		78	58
7		74	58	.48	75	59		76	50		77	67
8	.17	65	59		80	54		81	55		79	58
9	.76	61	47	.08	82	63		83	64	1.80	74	60
10	.01	61	40	.24	66	49	.12	82	66		75	54
11		69	44		70	42		84	64		81	57
12		76	49		79	52	.06	88	66		83	62
13	.07	63	56	.07	81	66		87	68		86	68
14	.35	73	56	.01	87	68		86	67		87	65
15	.34	69	54		80	71		78	69		86	68
16	.04	72	55	.13	81	66	.35	77	67		89	67
17	.15	72	51		79	60	.05	84	70		88	73
18		75	54		85	61		88	70		90	73
19		76	56		87	66	.07	92	70		89	70

Days	Precip.	May Temp.		Precip.	June Temp.		Precip.	July Temp.		Precip.	Aug. Temp.	
		Max.	Min.		Max.	Min.		Max.	Min.		Max.	Min.
20		74	57	.04	74	67		90	73	.03	80	67
21	.08	77	58	.08	74	64		94	73		88	63
22		80	60		66	54	.18	91	74		85	70
23		79	59		65	45	.02	92	72		86	69
24		81	57		71	53		88	68		83	69
25		85	59		78	49	2.29	86	66		87	67
26		82	61		81	55		85	63	.96	85	69
27		75	57		86	58		86	71		75	63
28		79	58		72	67	.24	76	67		82	64
29		79	60	1.02	81	60	.87	69	64		84	59
30		71	62	.76	82	61	.03	79	62		83	64
31	.59	60	47				.02	84	65		88	63
Total	3.05			3.18			4.88			4.68		
AVG		73	55		78.1	58.4		83	66		82.9	64.9

## Techniques Used in Herbicide Trials

- Design: Trials were designed as randomized complete blocks with four replications of plots 2 rows wide by 40 to 50 feet long with border rows except in no-till corn and soybeans.
- Application: Treatments were applied with a CO<sub>2</sub> sprayer. Herbicides were incorporated with a power driven rototiller.
- Rating: Weed control was rated on a 0 to 10 scale where 0 equals no control and 10 equals perfect control and 7 is considered commercially acceptable. Crop injury was rated on a 0 to 10 scale also. A rating of 3 and above was considered not to be commercially acceptable.
- Cultivation: Plots were not cultivated
- Organic Matter:
- Campus Farm: 3.0 - 3.7%
  - Maine Chance Farm: 2.0 - 2.5%

CORN - PREEMERGENCE

% WEED CONTROL, JUNE 26

Trt. No.	Herbicide Formulation	Lb/a Active	Grass	Broad-Leaf	Crop Injury	Giant Foxtail	Morning Glory	Pigweed	Velvet Leaf	Lambs Quarter
1	BAY KUE 70W*	2.0	80 b-e	90 abc	0 a	70 b	70 b-e	85 a-d	83 a-e	70 b-c
2	AC-92553 3E	1.0	78 b-e	68 fgh	0 a	55 b	65 b-e	45 f	43 fg	80 b-e
3	do	2.0	78 b-e	93 ab	0 a	67 b	68 b-e	78 a-d	70 b-f	88 abc
4	AC-92161 80W	2.0	50 e	53 gh	0 a	60 b	60 b-e	50 ef	63 b-f	54 def
5	do	3.0	73 b-e	65 fgh	0 a	58 b	58 b-e	48 f	75 b-f	83 b-e
6	OUTFOX 1E	2.0	68 cde	87 b-f	0 d	85 ab	83 bcd	80 b-e	75 b-f	90 a-d
7	MC-4379 2 E	2.0	73 b-e	82 b-f	23 c	80 ab	80 b-e	90 abc	88 abc	90 abc
8	do + Lasso 4E	1.5 + 1.5	85 bcd	90 bcd	10 b	85 ab	85 bcd	90 a-d	90 a-d	88 a-d
9	Lasso 4E + Bladex 80W	2.0 + 1.5	88 bc	70 efg	0 a	48 b	45 e	83 b-e	45 efg	60 c-f
10	NIA 21844 80W	2.0	55 cde	65 fgh	0 a	55 b	50 de	60 def	48 efg	53 ef
11	do	3.0	68 b-e	75 d-g	0 a	58 b	58 b-e	70 c-f	68 b-f	65 b-f
12	do	4.0	80 bcd	75 d-g	0 a	63 b	63 b-e	80 b-e	63 b-f	63 b-f
13	NIA 23486 80W	0.5	65 cde	68 e-h	0 a	70 b	70 b-e	78 b-f	50 def	75 b-e
14	do	1.0	75 b-e	68 e-h	0 a	53 b	53 cde	75 b-f	43 fg	73 b-e
15	do	2.0	90 b	90 abc	0 a	83 ab	83 bcd	95 ab	60 c-f	93 ab
16	SD-30528 80W	2.0	85 bc	45 h	0 a	63 b	63 b-e	60 def	33 fg	35 fg
17	Atrazine 4L	2.0	63 cde	88 b-f	0 a	88 ab	88 ab	95 ab	73 b-f	93 ab
18	Simazine 4L	2.0	83 bcd	88 b-f	0 a	90 ab	90 ab	88 a-d	75 b-f	90 a-d
19	Atrazine 4L + Simazine 4L	1.0 + 1.0	73 b-e	78 c-f	0 a	68 b	68 b-e	85 b-d	60 b-f	90 a-d
20	do + Bladex 80W	1.0 + 1.0	85 bcd	90 bcd	0 a	83 ab	83 bc	93 abc	93 ab	65 b-f
21	do + Lasso 4E	1.0 + 2.0	88 bc	82 b-f	0 a	83 ab	83 bcd	90 abc	65 b-f	90 abc
22	MON-2139 3E	4.0	10 f	10 i	0 a	10 c	10 f	10 g	10 g	10 g
23	do	8.0	10 f	10 i	0 a	10 c	10 f	10 a	10 g	10 g
24	CHECK cultivated	- -	100 a	100 a	0 a	100 a	100 a	100 a	100 a	100 a
			CV=19%	16%	300%	31%	24%	21%	30%	23%

% WEED CONTROL, AUG. 7

Trt. No.	Herbicide Formulation	Lb/a Active	Grass	Broad-leaf	Giant Foxtail	Morning Glory	Pig-Weed	Velvet-Leaf	Lambs-Quarter	Plants 1000/A At Harvest	Yield BU/A
1	BAY KUE 70W*	2.0	58 b-g	70 bcd	58 b-h	38 e-i	78 bcd	7 c-f	60 ef	20 a	111 abc
2	AC-92553 3E	1.0	13 ij	30 fgh	13 jk	23 hi	30 fgh	30 ab	30 fgh	18 a	93 bc
3	do	2.0	35 f-j	68 bcd	35 g-k	38 e-i	70 b-e	55 d-g	70 b-e	20 a	127 abc
4	AC-92161 80W	2.0	18 hij	13 h	18 ijk	13 i	13 gh	13 h	13 h	19 a	94 bc
5d	do	3.0	43 e-i	15 gh	43 e-j	28 hi	13 gh	13 h	15 gh	20 a	115 abc
6	OUTFOX 1E	2.0	80 bc	80 bc	80 bc	75 b-e	90 ab	55 d-g	90 abc	20 a	122 abc
7	MC-4379 2 E	2.0	55 b-g	85 b	55 b-h	60 b-h	85 bc	75 bcd	85 bc	19 a	123 abc
8	do + Lasso 4E	1.5 + 1.5	70 bcd	73 bc	70 bcd	58 b-h	90 ab	90 abc	90 abc	19 a	143 a
9	Lasso 4E + Bladex 80W	2.0 + 1.5	60 b-g	17 gh	60 b-h	43 d-i	45 ef	23 gh	15 gh	19 a	107 abc
10	NIA 21844 80W	2.0	30 g-j	43 d-g	30 h-k	28 hi	43 efg	43 d-h	43 e-h	20 a	111 abc
11	do	3.0	63 b-g	58 c-f	63 b-h	33 ghi	58 c-f	58 d-g	65 cde	20 a	143 a
12	do	4.0	75 bcd	73 bc	75 bcd	48 c-i	68 b-e	68 b-e	80 bcd	19 a	145 a
13	NIA 23486 80W	0.5	40 f-j	38 e-h	40 f-k	38 e-i	45 ef	30 fgh	45 efg	20 a	114 abc
14	do	1.0	50 c-g	60 cde	50 c-i	33 f-i	53 def	35 e-h	53 def	19 a	126 abc
15	do	2.0	85 b	83 bc	85 b	73 bcd	93 ab	93 ab	93 ab	20 a	139 a
16	SD-30528 80W	2.0	30 g-j	13 h	30 h-k	25 hi	30 fgh	10 h	30 fgh	19 a	86 c
17	Atrazine 4L	2.0	45 d-h	82 bc	45 d-i	85 abc	90 ab	60 c-f	90 abc	20 a	116 abc
18	Simzaine 4L	2.0	75 b-e	75 bc	70 b-f	90 ab	90 ab	50 d-g	90 abc	21 a	129 ab
19	Atrazine 4L + Simazine 4L	1.0 + 1.0	75 bcd	78 bc	73 b-e	80 bcd	90 ab	75 bcd	90 abc	19 a	133 ab
20	do + Bladex 80W	1.0 + 1.0	65 b-f	83 bc	65 b-g	73 b-f	90 ab	73 bcd	90 abc	20 a	113 abc
21	do + Lasso 4E	1.0 + 2.0	83 bc	65 b-e	83 bc	68 b-g	90 ab	33 fgh	80 bcd	20 a	142 a
22	MON-2139 3E	4.0	10 j	10 h	10 k	10 i	10 h	10 h	10 h	20 a	145 a
23	do	8.0	10 j	10 h	10 k	10 i	10 h	10 h	10 h	19 a	141 a
24	CHECK cultivated	- -	100 a	100 a	100 a	100 a	100 a	100 a	100 a	17 a	129 ab
CV =			27%	24%	27%	34%	23%	30%	23%	8%	20%

\* All treatments - preemergence  
 Location: Campus Farm, Lexington, Kentucky  
 Planted and treated May 19  
 Soil type: silt loam  
 Fertilization: 100 lb N + 400 lb 12-12-12  
 Variety: Pioneer 3369R



University of Kentucky - Agronomy Department - Lexington  
Corn - Pre-plant Inc.

WEED CONTROL - June 26, 1972

Trt. No.	Herbicide Formulation	LB/A ACTIVE	GRASS	BROADLEAF	CROP INJURY	GIANT FOXTAIL	SMART-WEED	NUT SEDGE	MORNING GLORY	PIG WEED	VELVE LEAF
1	GS-35911 7E*	4	63 f	65 f	3 a	60 e	60 a-d	45 d	70 cd	73 d	53 ab
2	GS-35911 7E	6	83 de	83 c-f	5 a	85 cd	70 a-d	60 cd	65 d	83 bcd	40 ab
3	GS-35911 7E + ATRAZINE 4L	3 + 1	78 def	88 bcd	0 a	78 de	90 ab	65 bcd	88 a-d	85 bcd	30 ab
4	CGA-17482 4E	2	80 def	88 bcd	3 a	90 bcd	70 a-d	68 bcd	85 a-d	90 bcd	68 ab
5	CGA-17482 4E	4	95 abc	88 cd	35 bc	98 ab	73 a-d	85 ab	98 a	98 ab	45 ab
6	CGA-17482 4E + ATRAZINE 4L	2 + 1	85 cde	85 cde	0 a	85 cd	58 bcd	80 abc	83 a-d	88 bcd	93 a
7	PREFOX	4 + .75	93 a-d	97 ab	0 a	90 abc	68 a-d	80 abc	88 a-d	95 ab	43 ab
8	SUTAN 6E	4	83 de	63 ef	0 a	90 bcd	30 d	58 bcd	80 bcd	93 abc	60 ab
9	SUTAN 6E	8	95 abc	73 def	3 a	98 ab	48 bcd	85 ab	85 a-d	93 abc	23 bc
10	SUTAN 6E + R-25788	4 + 17	90 abc	60 f	0 a	93 abc	28 d	58 bcd	70 cd	83 cd	0 c
11	SUTAN 6E + R-25788	8 + .34	93 a-d	83 c-f	0 a	95 abc	68 a-d	83 abc	90 abc	95 ab	70 ab
12	SUTAN 6E + ATRAZINE	3 + 1	83 de	93 abc	0 a	95 abc	88 a-d	63 bcd	88 a-d	93 abc	68 ab
13	EPTAM 6E	3	95 abc	85 cde	8 a	98 ab	65 a-d	78 abc	85 a-d	95 ab	43 ab
14	EPTAM 6E	5	98 ab	90 abc	28 b	98 ab	78 abc	98 a	93 ab	100 a	75 ab
15	EPTAM 6E	8	95 abc	95 abc	48 c	98 ab	90 ab	98 a	98 a	98 ab	75 ab
16	EPTAM 6E + R-25788	3 + .25	90 b-e	80 cde	5 a	100 a	63 a-d	68 bcd	83 a-d	90 bc	45 ab
17	EPTAM 6E + R-25788	5 + .42	95 abc	88 bcd	0 a	98 ab	45 cd	93 a	95 ab	95 ab	90 a
18	EPTAM 6E + R-25788	8 + .67	98 ab	93 abc	3 a	98 ab	93 a	98 a	75 a-d	98 ab	73 ab
19	CHECK CULTIVATED		100 a	100 a	0 a	100 a	100 a	100 a	100 a	100 a	100 a
			CV = 21%	14%	79%	11%	37%	22%	18%	12%	74%

\* All treatments - preplant incorporated 2-3" deep  
Location - Campus Farm, Lexington, KY  
Planted and treated - May 19  
Soil Type - silt loam  
Fertilizer - 100 lb N + 400 lb of 12-12-12  
Variety - Pioneer 3369 A

## Corn - Pre-plant Inc.

Trt. No	Herbicide Formulation	LB/A ACTIVE	WEED CONTROL - August 7, 1972								
			GRASS	BROADLEAF	CROP INJURY	GIANT FOXTAIL	SMART- WEED	NUT SEDGE	MORNING GLORY	PIG WEED	VELVET LEAF
1	GS-35911 7E*	4	60 d	33 f-i	2 a	60 e	20 fgh	45 a	23 g	35 fg	23 f
2	GS-35911 7E	6	78 cd	40 e-i	5 a	78 de	38 d-h	60 a	38 fg	58 c-f	40 def
3	GS-35911 7E + ATRAZINE 4L	3 + 1	75 c	85 bc	0 a	75 d	68 bcd	65 a	80 bc	90 ab	73 bcd
4	CGA-17482 4E	2	78 cd	70 b-e	3 a	78 de	45 c-h	68 a	70 bcd	70 b-e	63 b-e
5	CGA-17482 4E	4	88 bc	60 b-f	35 a	88 bcd	30 d-h	85 a	68 b-e	75 bcd	55 b-f
6	CGA-17482 4E + ATRAZINE 4 L	2 + 1	78 c	75 bcd	0 a	80 cd	48 c-h	80 a	88 b	83 bcd	75 bc
7	PREFOX	4 + .75	90 bc	88 b	0 a	90 bcd	90 ab	80 a	73 bcd	90 ab	80 b
8	SUTAN 6E	4	90 bc	15 hi	0 a	90 bcd	15 gh	58 a	28 g	30 fg	23 f
9	SUTAN 6E	8	95 b	25 ghi	3 a	93 bc	13 gh	85 a	33 fg	38 efg	38 ef
10	SUTAN 6E + R-25788	4 + .17	93 ab	10 i	0 a	95 ab	10 h	58 a	23 g	23 g	23 f
11	SUTAN 6E + R-25788	8 + .34	78 b	50 d-h	0 a	93 bc	23 fgh	83 a	60 c-f	70 b-e	53 b-f
12	SUTAN 6E + ATRAZINE	3 + 1	93 cd	90 ab	0 a	78 ab	80 bc	62 a	83 bc	88 bc	78 b
13	EPTAM 6E	3	90 b	60 b-f	8 a	93 b-f	53 c-f	78 a	55 c-f	63 b-f	60 b-e
14	EPTAM 6E	5	93 bc	53 c-g	28 a	90 c-g	35 d-h	98 a	40 efg	58 c-f	43 c-f
15	EPTAM 6E	8	93 b	68 b-e	48 a	93 b-e	60 b-e	98 a	73 bcd	68 b-e	55 b-f
16	EPTAM 6E + R-25788	3 + .25	93 b	33 f-i	5 a	93 f-i	25 fgh	68 a	43 d-g	53 d-f	53 b-f
17	EPTAM 6E + R-25788	5 + .42	93 b	60 b-f	0 a	93 b-f	30 e-h	93 a	55 c-f	58 b-f	53 b-f
18	EPTAM 6E + R-25788	8 + .67	90 bc	85 bc	3 a	90 bc	65 b-e	98 a	80 bc	80 bcd	80 b
19	CHECK CULTIVATED		100 a	100 a	0 a	100 a	100 a	100 a	100 a	100a	100 a
CV =			10 %	27%	10%	10%	34%	22%	21%	24%	26%

Trt. No.		LB/A ACTIVE	CORN PLANTS 1000/A HARVEST	YIELD BU/A
1	GS-35911 7E*	4	18 a	103 cd
2	GS-35911 7E	6	17 a	115 bcd
3	GS-35911 7E + ATRAZINE 4L	3 + 1	19 a	120 a-d
4	CGA-17482 4E	2	19 a	124 a-d
5	CGA-17482 4E	4	15 a	108 cd
6	CGA-17482 4E + ATRAZINE 4L	2 + 1	19 a	126 a-d
7	PREFOX	4 + .75	18 a	135 abc
8	SUTAN 6E	4	19 a	115 bcd
9	SUTAN 6E	8	19 a	121 a-d
10	SUTAN 6E + R-25788	4 + 17	17 a	107 cd
11	SUTAN 6E + R-25788	8 + .34	19 a	129 a-d
12	SUTAN 6E + ATRAZINE	3 + 1	18 a	120 a-d
13	EPTAM 6E	3	18 a	127 a-d
14	EPTAM 6E	5	16 a	118 a-d
15	EPTAM 6E	8	17 a	101 d
16	EPTAM 6E + R-25788	3 + .25	18 a	120 a-d
17	EPTAM 6E + R-25788	5 + .42	20 a	143 ab
18	EPTAM 6E + R-25788	8 + .67	19 a	143 ab
19	CHECK (CULTIVATED)		19 a	147 a

CV= 8% 15%

University of Kentucky - Agronomy Department - Lexington, Kentucky  
 Corn - Zero tillage in Bluegrass Sod

Trt. No.	Herbicide Formulation	LB/A Active	Weed Control June 20, 1972			Weed Control Aug. 9, 1972			
			Grass	Broad-Leaf	Sod-Kill	Grass	Broad-Leaf	Sod-Kill	
1	Atrazine 4L*	2.0	85 ab	100 a	100 a	83 bc	98 a	100 a	
2	Simazine 4L	2.0	90 ab	100 a	100 a	90 abc	95 a	100 a	
13	Atrazine 4L + Paraquat 2E + x-77	2.0 + .25 + .5%	100 a	100 a	100 a	98 a	100 a	100 a	
4	Simazine 4L + Paraquat 2E + x-77	2.0 + .25 + .5%	90 ab	100 a	100 a	88 abc	98 a	100 a	
5	Atrazine 4L MON-2139 3E	2.0 + 1.0	95 ab	100 a	100 a	93 abc	98 a	100 a	
6	do + do	2.0 + 2.0	90 ab	100 a	100 a	93 abc	100 a	100 a	
7	do + do	2.0 + 3.0	98 ab	100 a	100 a	90 abc	100 a	100 a	
8	Simazine 4L + MON 2139 3E	2.0 + 1.0	95 ab	100 a	100 a	90 abc	100 a	100 a	
9	do + do	2.0 + 2.0	100 a	100 a	100 a	95 ab	100 a	100 a	
10	do + do	2.0 + 3.0	100 a	100 a	100 a	93 ab	98 a	100 a	
11	MON 2139 3E	1.0	10 c	55 bc	100 a	10 d	33 b	100 a	
12	do	2.0	33 c	33 cd	100 a	10 d	33 b	100 a	
13	do	3.0	10 c	10 d	100 a	10 d	10 b	100 a	
14	Atrazine 4L + Simazine 4L + Paraquat 2E + x-77	1.0 + 1.0 + .25 + .5%	100 a	100 a	100 a	100 a	100 a	100 a	
15	OUTFOX 1E + Paraquat 2E + x-77	2.0 + .25 + .5%	70 b	78 ab	100 a	100 a	100 a	100 a	
16	Bladex 80 W + do 2E + do	2.0 + .25 + .5%	28 c	53 cd	100 a	23 d	25 b	100 a	
17	do + Lasso 4E + Paraquat 2E + x-77	1.0 + 2.0 + .25 + .5%	23 c	25 d	100 a	20 d	25 b	100 a	
18	do + Atrazine 4L + Paraquat 2E + x-77	1.0 + 1.0 + .25 + .5%	90 ab	100 a	100 a	68 c	95 a	100 a	
19	Lasso 4E + do + do + do	2.0 + 1.0 + .25 + .5%	95 ab	100 a	100 a	83 bc	98 a	100 a	
			CV =	22%	23%	0%	18%	20%	0%

\* All treatment: Preemergence  
 Location: Maine Chance Farm  
 Soil type: Silt loam  
 Fertilization: 150 lb N  
 Variety: Pioneer 3369A  
 Planted: Treatment May 2

Weeds: Large crabgrass, yellow foxtail, redroot and tumble pigweed

Trt. No.	Herbicide Formulation	LB/A Active	Corn	
			Plants 1000/A	Yield BU/A
1	Atrazine 4L*	2.0	21 a	134 a-e
2	Simazine 4L	2.0	21 a	125 b-e
3	Atrazine 4L + Paraquat 2E + x-77	2.0 + .25 + .5%	21 a	149 a-d
4	Simazine 4L + Paraquat 2E + x-77	2.0 + .25 + .5%	22 a	164 a
5	Atrazine 4L MON-2139 3E	2.0 + 1.0	21 a	159 a
6	do + do	2.0 + 2.0	21 a	153 a-d
7	do + do	2.0 + 3.0	21 a	157 abc
8	Simazine 4L + MON 2139 3E	2.0 + 1.0	21 a	152 a-d
9	do + do	2.0 + 2.0	21 a	153 a-d
10	do + do	2.0 + 3.0	20 a	142 a-e
11	MON 2139 3E	1.0	20 a	123 de
12	do	2.0	21 a	111 e
13	do	3.0	21 a	124 cde
14	Atrazine 4L + Simazine 4L + Paraquat 2E + x-77	1.0 + 1.0 + .25 + .5%	21 a	158 ab
15	Outfox 1 $\frac{1}{2}$ + Paraquat 2E + x-77	2.0 + .25 + .5%	20 a	149 a-d
16	Bladex 80 W + do 2E + do	2.0 + .25 + .5%	21 a	120 de
17	do + Lasso 4E + Paraquat 2E + x-77	1.0 + 2.0 + .25 + .5%	21 a	125 b-e
18	do + Atrazine 4L + Paraquat 2E + x-77	1.0 + 1.0 + .25 + .5%	21 a	136 a-e
19	Lasso 4E + do + do + do	2.0 + 1.0 + .25 + .5%	20 a	155 a-d
			CV =	5% 14%

University of Kentucky - Agronomy Department - Lexington  
Corn - Zero Tillage in Stalkland

Trt. No.	Herbicide Formulation	LB/A Active	Weed Control June 20, 1972		Weed Control August 8, 1972	
			Grass	Broadleaf	Grass	Broadleaf
1	Atrazine 4L*	2.0	25 de	55 a	30 a	70 a-c
2	do + Paraquat 2E + X-77	2.0 + .25 + .5%	55 a-e	68 a	28 a	90 a
3	do + MON 2139 3E	2.0 + 1.0	65 a-c	95 a	45 a	75 ab
4	do + do	2.0 + 2.0	43 a-e	63 a	23 a	70-a-c
5	do + do	2.0 + 3.0	68 a-d	75 a	43 a	85 a
6	do + Dow General 5E	2.0 + 2.5	73 ab	93 a	38 a	90 a
7	MON 2139 3E	1.0	28 c-e	53 a	10 a	10 d
8	do	2.0	10 e	10 a	10 a	10 d
9	do	3.0	30 b-e	75 a	10 a	25 d
10	Simazine 4L	2.0	60 a-d	68 a	38 a	72 ab
11	Simazine 4L + Paraquat 2E + x-77	2.0 + .25 + .5%	80 a	90 a	50 a	93 a
12	do + MON 2139	2.0 + 2.0	83 a	75 a	48 a	80 a
13	do + Dow General 5E	2.0 + 2.5	78 a	93 a	43 a	90 a
14	Atrazine 4L + Simazine 4L + Paraquat 2E + x-77	1.0 + 1.0 + .25 + .5%	75 a-c	93 a	33 a	85 a
15	do + Lasso 4 E + do + do	1.0 + 2.0 + .25 + .5%	76 a-d	85 a	28 a	85 a
16	Bladex 80W + Paraquat 2E + x-77	2.0 + .25 + .5%	30 b-e	63 a	23 a	40 b-d
17	do + Lasso 4E + Paraquat 2E + x-77	1.0 + 2.0 + .25 + .5%	60 a-d	45 a	23 a	33 cd
18	do + Atrazine 4L + do + do	1.0 + 1.0 + .25 + .5%	63 a-d	95 a	25 a	70 a-c
19	OUTFOX 1E + Paraquat 2E + x-77	2.0 + 2.5 + .5%	65 a-d	70 a	38 a	70 a-c
CV =			38 %	41 %	46 %	28 %

\* All treatments - preemergence  
 Location: Maine Chance Farm  
 Planted: Treated May 2  
 Soil Type: silt loam  
 Fertilization: 150 lb N  
 Variety: Pioneer 3369A

Weeds: Large crabgrass, yellow foxtail, redroot & tumble pigweed

Trt. No.	Herbicide Formulation	LB/A ACTIVE	Corn Plants 1000/A at Harvest	Yield BV/A
1	Atrazine 4L*	2.0	19 a	74 b-e
2	do + Paraquat 2E + x-77	2.0 + .25 + .5%	17 a	76 a-e
3	do + MON 2139 3E	2.0 + 1.0	19 a	97 a-c
4	do + do	2.0 + 2.0	18 a	91 a-c
5	do + do	2.0 + 3.0	18 a	107 a
6	do + Dow General 5E	2.0 + 2.5	17 a	85 a-e
7	MON 2139 3E	1.0	17 a	60 de
8	do	2.0	17 a	68 c-e
9	do	3.0	16 a	55 e
10	Simazine 4L	2.0	19 a	98 a-c
11	Simazine 4L + Paraquat 2E + x-77	2.0 + .25 + .5%	19 a	100 ab
12	do + MON 2139	2.0 + 2.0	19 a	107 a
13	do + Dow General 5E	2.0 + 2.5	18 a	105 ab
14	Atrazine 4L + Simazine 4L + Paraquat 2E + x-77	1.0 + 1.0 + .25 + .5%	18 a	93 a-c
15	do + Lasso 4 E + do + do	1.0 + 2.0 + .25 + .5%	19 a	87 a-d
16	Bladex 80W + Paraquat 2E + x-77	2.0 + .25 + .5%	18 a	83 a-e
17	do + Lasso 4E + Paraquat 2E + x-77	1.0 + 2.0 + .25 + .5%	18 a	91 a-d
18	do + Atrazine 4L + do + do	1.0 + 1.0 + .25 + .5%	18 a	101 ab
19	OUTFOX 1E + Paraquat 2E + x-77	2.0 + 2.5 + .5%	18 a	105 ab
			CV =	7 %
				21%

WEED CONTROL, June 27, 1972

Trt. No.	Herbicide Formulation	LB/A Active	Grass	Broad-Leaf	Giant Foxtail	Jimson Weed	Cockle-Bur	Morning-Glory	Pig-Weed	Velvet Leaf	Lambs-Quarter
1	Amiben 2E*	3.0	15 mn	13 op	15 k-n	10 j	10 b-f	13 i	20 ghi	13 e	10 f
2	do + Sencor 50W	2.0 + 3/8	58 c-i	43 g-o	55 d-j	23 e-j	10 b-f	20 ghi	55 b-h	35 de	20 def
3	Amilon41.7	2.0 + .67	50 e-m	35 i-p	43 k-m	13 j	10 def	20 hi	50 c-i	10 e	35 b-f
4	Sencor 50W + Lasso 4E	3/8 + 2.0	88 a-e	65 b-j	88 a-d	38 d-i	13 b-f	35 e-i	88 a-d	28 de	55 b-f
5	Sencor 50W EL-119 75W	3/8 + 2.0	68 b-i	53 d-m	85 a-d	23 e-j	13 b-f	63 a-e	88 a-d	28 de	55 b-f
6	Lasso 4E	2.0	90 abc	58 b-k	90 abc	43 def	10 def	33 e-i	68 b-f	18 e	55 b-f
7	EL-119 75W	2.0	20 lmn	28 k-p	20 j-n	18 f-j	13 b-f	35 e-i	43 e-i	13 e	20 def
8	BAY KUE 2236 70W	2.0	78 b-g	55 c-l	70 b-h	30 d-j	10 b-f	40 d-i	45 d-i	33 de	50 b-f
9	AC-92553 3E	1.0	48 e-n	40 g-o	48 e-l	18 f-j	15 b-f	40 d-i	58 b-h	30 de	35 f
10	do	2.0	85 a-e	80 b-e	85 a-e	43 d-g	20 b-f	55 b-g	70 b-f	65 bc	50 b-f
11	AC-92390 3E	2.0	33 j-n	13 op	33 i-n	10 j	13 b-f	10 i	10 i	10 e	23 c-f
12	do	3.0	50 e-n	40 k-p	53 d-k	15 h-j	10 b-f	20 ghi	48 d-i	15 e	48 b-f
13	Linuron 50W	1.0	53 d-m	45 f-n	45 f-m	15 h-j	13 ef	25 f-i	70 b-f	33 de	30 c-f
14	Lasso 4E + Linuron 50W	2.0 + .5	73 b-h	60 b-k	73 b-h	43 d-g	13 c-f	33 e-i	73 b-f	38 de	68 a-e
15	EL-119 75W	1.5	25 k-n	13 op	25 j-n	13 ij	10 b-f	20 ghi	15 d-i	13 e	15 def
16	do	4.0	43 f-n	50 d-m	43 g-m	18 f-j	10 def	53 b-h	70 b-f	20 e	25 def
17	EL-119 75W + Linuron 50W	1.5 + 1.0	55 d-m	53 d-m	53 d-k	13 i-j	10 f	50 b-h	63 b-g	15 e	25 d-f
18	do + do	1.5 + 1.5	83 a-f	75 b-f	83 b-g	28 d-j	10 b-f	48 b-h	80 a-f	25 e	70 a-d
19	do + do	1.5 + 3.0	90 ab	80 b-e	90 ab	68 bc	33 b-e	55 b-g	90 abc	80 b	70 a-d
20	do + do	2.0 + 1.0	40 g-n	25 l-p	40 h-m	13 i-j	10 def	45 c-i	40 f-i	25 e	38 b-f
21	do + do	2.0 + 1.5	63 b-j	50 e-m	58 b-i	20 e-j	13 b-f	53 b-h	78 a-f	30 de	43 b-f
22	do + do	4.0 + 3.0	83 a-e	73 b-g	83 a-d	48 cd	10 def	38 e-i	92 ab	53 bcd	60 b-f
23	EL-119 75W + Sencor 50W	1.5 + 3/8	63 b-k	65 b-j	58 c-j	20 e-j	10 def	33 e-i	85 a-e	18 e	40 b-f
24	do + do	1.5 + .6	88 a-e	68 b-i	88 a-d	28 d-j	10 def	45 c-i	85 a-e	25 e	63 b-f
25	do + do	2.0 + .6	70 b-j	60 b-k	73 b-h	28 d-j	18 b-f	40 d-i	92 ab	33 de	73 a-d
26	Preforan 3E	3.0	35 h-n	35 i-p	33 i-n	25 d-j	10 b-f	20 ghi	63 b-g	18 e	30 b-f
27	do	4.5	83 a-f	70 b-h	83 b-f	50 cd	15 b-f	45 c-i	90 abc	18 e	48 b-f
28	Maloran 50W	1.5	53 d-m	38 i-p	53 d-k	23 e-j	10 b-f	33 e-i	55 b-h	30 de	33 b-f
29	do	3.0	78 b-g	80 b-e	78 b-h	25 d-j	23 b-f	60 b-f	90 abc	73 b	85 ab
30	Maloran + Lasso	1.5 + 1.5	60 b-l	40 h-p	63 b-h	25 d-j	13 c-f	38 e-i	88 a-d	15 e	40 b-f
31	S-18510 2E	3.0	38 g-n	33 j-p	48 c-f	15 g-j	10 b	25 f-i	20 ghi	15 e	15 ef
32	MC-4379 2E	2.0	50 e-n	83 bcd	53 d-k	80 b	37 bcd	78 abc	65 b-g	73 b	58 b-f
33	MC-4379 + Lasso	1.5 + 1.5	78 b-g	88 b	75 b-h	83 b	40 bc	80 ab	85 a-e	83 b	80 abc
34	Bladex + Lasso	.5 + 2.0	90 a-d	70 b-h	83 b-f	40 d-h	15 b-f	23 f-i	85 a-e	18 e	73 a-d



VISUAL EVALUATION June 27, 1972

Trt. No.	Herbicide Formulation	LB/A Active	Grass	Broad-Leaf	Giant Foxtail	Jimson Weed	Cockle-Bur	Morning Glory	Fig-Weed	Velvet-Leaf	Lambs-Quarter
35	Bladex 80 W	.5	10 n	10 p	10 mn	10 j	8 b-f	10 i	10 i	10 e	10 ef
36	do	1.0	10 n	18 nop	13 lmn	10 j	10 b-f	10 i	13 i	10 e	10 ef
37	SD-30528 80 W	2.0	30 j-n	23 mmop	30 i-n	10 j	8 b-f	10 i	23 ghi	10 e	23 c-f
38	SD-27695 4 E	4.0	25 k-n	23 mnop	10 mn	10 j	8 b-f	10 i	10 i	10 e	10 f
39	Lasso 4 E + Solo	1.5 + 2.0	50 e-m	40 g-o	58 d-j	20 e-j	5 def	35 e-i	50 d-i	25 e	20 c-f
40	Lasso 4 E + Dyanap	1.5 + 3.0	85 a-e	65 b-j	85 a-f	45 cde	3 f	50 b-h	68 b-f	27 de	55 b-f
41	Mon-2139 2 E	4.0	10 n	10 p	10 mn	10 j	10 b-f	10 i	10 i	10 e	10 ef
42	do	8.0	10 n	10 p	8 n	10 j	10 b-f	10 i	10 i	10 e	10 ef
43	MBR-8251 2 E	4.0	78 a-f	85 bc	78 bf	75 b	43 b	75 a-d	90 ab	83 b	98 abc
44	Check - cultivated	- -	100 a	100 a	100 a	100 a	100 a	100 a	100 a	100 a	100 a
		CV=	30 %	27%	29%	31%	80%	36%	32 %	36 %	60 %

\* All treatments are preemergence  
 Location: Campus Farm  
 Planted & treated: May 20  
 Soil type: silt loam  
 Fertilization: 400 lb/A 12-12-12  
 Variety: Cutler

Trt. No.	Herbicide Formulation	LB/A Active	Weed Control July 13, 1972			Weed Control Aug. 8, 1972			Yield BU/A
			Grass	Broad- Leaf	Crop Injury	Grass	Broad- Leaf	Crop Injury	
1	Amiben 2 E*	3.0	80 c-f	65 f-i	0 a	78 bcd	43 f-1	0 a	33
2	do + Sencor 50 W	2.0 + 3/8	75 efg	73 b-h	0 a	80 bcd	60 b-j	0 a	35
3	Amilon 41.7	2.0 + .67	80 c-f	73 b-h	0 a	83 bc	55 c-r	0 a	36
4	Sencor 50 W + Lasso 4 E	2.0 + 3/8	85 cde	75 b-h	0 a	85 bc	68 b-g	0 a	33
5	Sencor 50 W + EL-119 75 W	3/8 + 2.0	90 bc	60 hij	0 a	88 bc	65 b-h	0 a	36
6	Lasso 4 E	2.0	85 cde	65 f-i	0 a	63 cde	38 h-m	0 a	35
7	EL-119 75 W	2.0	80 c-f	75 b-h	0 a	78 bcd	43 e-1	0 a	37
8	BAY KUE 2236 70 W	2.0	90 bc	68 d-i	0 a	83 bc	68 b-g	0 a	27
9	AC-92553 3E	1.0	80 c-f	70 c-i	0 a	80 bcd	48 c-1	0 a	40
10	do	2.0	80 c-f	53 i-k	0 a	85 bc	55 c-k	0 a	37
11	AC-92390 3 E	2.0	80 c-f	58 hij	0 a	53 de	38 i-m	0 a	40
12	do	3.0	80 c-f	68 i-j	0 a	80 bcd	50 c-k	0 a	35
13	Linuron 50 W	1.0	85 cde	78 b-g	0 a	75 bcd	58 b-k	0 a	34
14	Lasso 4 E + Linuron 50 W	2.0 + .5	85 cde	70 c-i	0 a	85 bc	68 b-g	0 a	38
15	EL-119 75 W	1.5	80 c-f	68 d-i	0 a	85 bc	50 c-k	0 a	35
16	do	4.0	80 c-f	75 b-h	0 a	90 b	53 c-k	0 a	32
17	EL-119 75 W + Linuron 50 W	1.5 + 1.0	90 bc	83 f-i	0 a	85 bc	68 b-g	0 a	37
18	do + do	1.5 + 1.5	85 cde	73 b-h	0 a	85 bc	75 bc	0 a	35
19	do + do	1.5 + 3.0	80 c-f	65 f-i	0 a	90 b	60 b-j	0 a	37
20	do + do	2.0 + 1.0	85 cde	80 b-f	0 a	80 bcd	60 b-j	0 a	34
21	do + do	2.0 + 1.5	90 bc	85 bc	0 a	85 bc	70 b-f	0 a	34
22	do + do	4.0 + 3.0	90 bc	73 b-h	0 a	85 bc	83 b	0 a	40
23	EL-119 75 W + Sencor 50 W	1.5 + 3/8	85 cde	78 b-g	0 a	85 bc	58 b-k	0 a	40
24	do + do	1.5 + .6	85 cde	65 e-i	0 a	83 bc	73 bcd	0 a	37
25	do + do	2.0 + .6	85 cde	75 b-h	0 a	85 bc	53 c-k	0 a	36
26	Preforan 3 E	3.0	88 bcd	75 b-h	0 a	88 bc	63 b-i	0 a	34
27	do	4.5	90 bc	75 b-h	0 a	85 bc	58 b-k	0 a	36
28	Maloran 50 W	1.5	75 efg	75 b-h	0 a	55 de	43 g-1	0 a	35
29	do	3.0	78 def	58 hij	0 a	75 bcd	60 b-j	0 a	34
30	Maloran + Lasso	1.5 + 1.5	88 bcd	60 g-j	0 a	85 bc	63 b-i	0 a	35
31	S-18510 2 E	3.0	85 cde	83 b	0 a	88 bc	33 j-m	0 a	35

Trt. No.	Herbicide Formulation	Weed Control July 13, 1972				Weed Control August 8, 1972			
		LB/A Active	Grass	Broad-Leaf	Crop Injury	Grass	Broad-Leaf	Crop Injury	Yield BU/A
32	MC-4379 2 E	2.0	80 c-f	83 b-e	8 b	80 bcd	70 b-e	8 b	32
33	MC-4379 2 E + Lasso 4 E	1.5 + 1.5	93 b	83 b	15 c	85 bc	53 c-k	15 c	31
34	Bladex 80 W + Lasso 4 E	.5 + 2.0	90 bc	68 d-i	0 a	90 b	48 d-1	0 a	29
35	Bladex	.5	65 g	45 jk	0 a	63 cde	38 m	0 a	35
36	do	1.0	83 cde	63 f-j	0 a	80 bcd	30 k-n	0 a	32
37	SD-30528 80 W	2.0	70 fg	40 k	0 a	25 f	18 mn	0 a	31
38	SD - 27695 4	4.0	65 g	23 l	0 a	48 e	23 lmn	0 a	29
39	Lasso 4 E Solo	1.5 + 2.0	85 cde	75 b-h	0 a	80 bcd	55 c-k	0 a	34
40	Lasso 4 E + Dyanap	1.5 + 3.0	83 c-f	70 c-i	0 a	83 bc	10 n	0 a	31
41	MON - 2139 3 E	4.0	10 h	10 m	0 a	10 f	10 n	0 a	29
42	do	8.0	10 h	10 m	0 a	10 f	45 e-1	0 a	39
43	MBR-8251 2 E	4.0	85 cde	70 c-i	0 a	85 bc	100 a	0 a	24
44	CHECK (cultivated)		100 a	100 a	0 a	100 a			35

\* All treatments are preemergence

Location: Maine Chance

Planted & treated: May 20

Soil type: silt loam

Fertilization: 400 lb/a 12-12-12

Weeds: Large crabgrass, yellow foxtail, redroot, tumble pigweed & velvetleaf

WEED CONTROL June 27, 1972

Trt. No.	Herbicide Formulation	LB/A Active	Grass	Broad-Leaf	Giant Foxtail	Jimson Weed	Cockle-Bur	Morning Glory	Pig-Weed	Velvet Leaf	Lambs Quarter
1	A-820 4 E*	2.0	75 gh	64 efg	75 def	48 cde	35 b	68 b-f	85 bcd	58 b-e	80 cde
2	A-820* + Sencor **	1.5 + 3/8	88 c-g	68 d-g	88 b-e	45 cde	35 b	55 c-f	93 ab	60 bcd	85 cde
3	BAS 3921 3 E*	1.5	83 e-h	58 fg	85 cde	33 cde	43 b	60 b-f	93 ab	40 b-e	73 def
4	BAS 3921*	1.5	83 d-h	65 efg	93 abc	38 cde	43 b	80 b-e	88 abc	58 b-e	83 cde
5	CGA 10832 4E*	.75	85 e-h	70 b-g	68 ef	25 ef	18 b	55 def	90 d	43 cde	58 fg
6	do*	1.5	90 b-g	70 b-g	90 a-d	28 c-f	30 b	73 b-f	90 bcd	28 de	90 bcd
7	do*	3.0	93 a-f	83 b-e	95 abc	50 b-e	58 b	83 b-e	88 bcd	48 b-e	83 cde
8	do* + Maloran**	1 + 1.5	93 a-f	85 b	93 abc	58 b-e	60 b	85 bcd	93 ab	55 b-e	93 a-d
9	do * + Preforan**	1 + 3	95 abc	83 b-e	95 abc	10 f	45 b	78 b-e	93 ab	68 bc	95 abc
10	Treflan 4 E*	.75	85 e-h	70 b-g	83 cde	55 b-e	20 b	83 b-e	90 ab	53 b-e	80 cde
11	do * + Maloran**	.75 + 1.5	93 a-f	83 bcd	93 abc	55 b-e	48 b	88 ab	98 ab	50 b-e	95 abc
12	do* + Preforan**	.75 + 3	95 a-d	85 b	98 ab	38 def	50 b	88 ab	98 ab	68 bc	95 abc
13	Vernam 6 E*	2.0	93 a-f	77 b-f	83 cde	63 bcd	43 b	78 b-e	90 bcd	60 b-e	85 cde
14	do * + Preforan 3 E **	2 + 3	95 a-d	78 b-e	100 a	83 b	65 b	80 b-e	98 ab	75 b	98 ab
15	Treflan 4 E* + Solo**	.75 + 2.5	98 ab	78 b-f	98 ab	65 bcd	43 b	75 b-f	98 ab	65 bcd	90 a-d
16	do* + Dyanap**	.75 + 3	93 a-f	73 b-g	90 a-d	50 cde	45 b	83 b-e	88 bcd	48 b-e	85 cde
17	Planavin 4 E*	1.0	65 h	53 g	58 f	28 c-f	13 b	48 ef	65 cd	33 cde	43 g
18	do* + Bladex**	1.0 + .5	78 fgh	65 d-g	65 ef	43 cde	23 b	45 f	68 cd	20 e	60 efg
19	USB-3584 2 E*	.50	88 c-g	75 b-f	88 b-e	50 b-e	40 b	78 b-e	85 bcd	50 b-e	88 bcd
20	Treflan* + CIPC**	.75 + 2.0	93 a-f	80 b-e	93 abc	68 bc	48 b	80 b-e	85 bcd	53 b-e	80 cde
21	do + do 4E*	.75 + 2.0	88 c-g	78 b-f	88 b-e	43 cde	30 b	83 bc	88 bcd	60 bcd	85 cde
22	Check (cultivated)	- - -	100 a	100 a	100 a	100 a	100 a	100 a	100 a	100 a	100 a
CV=			12%	13%	13%	33%	85%	22%	15%	33%	15%

\*All treatments are preplant incorporated 2-3" deep

\*\*Preemergence

Planted & treated May 22

Soil type: silt loam

Fertilization - 400 lb/a 12-12-12

Variety: Cutler

Location: Campus Farm

Trt. No.	LB/a Active	% Weed Control July 19, 1972			% Weed Control Aug. 7, 1972			
		Grass	Broad- Leaf	Crop Injury	Grass	Broad- Leaf	Crop Injury	
1	A-820 4E*	2.0	90 a	80 b-e	10 a	77 a	43 c-g	0 a
2	A-820 4E + Sencor 50 W**	1.5 + 3/8	97 a	83 bcd	0 a	80 a	60 b-f	0 a
3	BAS 3921 4E*	1.5	97 a	87 bcd	0 a	90 a	67 bcd	0 a
4	BAS 3921 4E	1.5	90 a	77 b-e	3 a	83 a	60 b-f	0 a
5	CGA 10832 4E*	0.75	87 a	73 cde	0 a	87 a	50 b-f	0 a
6	do*	1.5	90 a	83 bcd	0 a	90 a	53 b-f	0 a
7	do*	3.0	93 a	87 bc	0 a	90 a	77 b	0 a
8	do* + Maloran 50W**	1.0 + 1.5	93 a	90 b	0 a	90 a	77 b	0 a
9	do* + Preforan 4E **	1.0 + 3.0	87 a	77 b-e	0 a	93 a	37 d-g	0 a
10	Treflan 4E*	0.75	90 a	73 cde	0 a	90 a	43 c-g	0 a
11	do + Maloran 50W**	0.75 + 1.5	87 a	83 bcd	0 a	77 a	70 bc	0 a
12	do* + Preforan 3E**	0.75 + 3.0	90 a	80 bcd	0 a	90 a	27 fg	0 a
13	Vernam 6E*	2.0	77 a	70 de	10 a	77 a	53 b-f	0 a
14	do* + Preforan**	2.0 + 3.0	93 a	90 b	10 a	83 a	77 b	7 a
15	Treflan* + Solo**	0.75 + 2.5	83 a	83 bcd	0 a	77 a	50 b-f	0 a
16	do* + Dyanap**	0.75 + 3.0	93 a	83 bcd	0 a	80 a	47 b-g	0 a
17	Planavin 4E*	1.0	77 a	57 ef	0 a	60 a	33 efg	0 a
18	do** + Bladex 80W**	1.0 + 0.5	93 a	40 f	0 a	83 a	17 g	0 a
19	USB - 3584 2E*	0.50	83 a	67 de	0 a	80 a	47 b-g	0 a
20	Treflan* + CIPC**	0.75 + 2.0	83 a	83 bcd	0 a	80 a	57 b-f	0 a
21	do + do 4E*	0.75 + 2.0	93 a	87 bcd	7 a	73 a	37 d-g	0 a
22	Check cultivated	- -	100 a	100 a	0 a	100 a	100 a	0 a
CV=			13%	11%	368%	16%	21%	812%

\*\* Preemergence treatments are preplant incorporated 2-3" deep

\* Treatments are preplant incorporated 2-3" deep

Planted and treated: June 2

Soil type: Silt loam

Fertilization: 400 lb/A 12-12-12

Variety: Cutler

Location: Main Chance

Weeds: Large crabgrass, yellow foxtail, redroot, tumble pigweed & velvetleaf.

Weed Control July 13, 1972

Trt. No.	Herbicide Formulation	LB/A Active	Grass	Broad-Leaf	Fox-Tail	Jimson-Weed	Cockle-Bur
1	Linuron + x-77**	1.0 + .5	70 de	83 a-e	53 f	80 c-f	90 abc
2	Linuron + Crop Oil**	1.0 + 1.0 gpa	70 de	75 b-f	68 ef	90 a-e	93 abc
3	do + Paraquat + X-77**	1.0 + .25 + .5	98 ab	90 abc	98 a	85 b-f	90 abc
4	do + Lasso + X-77**	1.0 + 2.0 + .5	85 cd	93 abc	83 b-e	90 a-d	93 abc
5	do + Lasso + Paraquat + X-77**	1.0 + 2.0 + .25 + .5	98 ab	95 abc	98 a	93 abc	90 a-d
6	do + DNBP (DG)**	1.0 + 2.5	60 ef	90 abc	60 ef	93 abc	83 a-d
7	do + MON-2139**	1.0 + .5	95 abc	88 a-d	98 a	85 b-f	85 a-d
8	do + do**	1.0 + 1.0	100 a	88 a-d	100 a	90 abc	98 ab
9	do + do**	1.0 + 1.5	100 a	90 abc	93 abc	83 b-f	90 abc
10	MON-2139**	.5	63 ef	43 fg	88 a-d	35 h-i	45 a
11	do**	1.0	68 de	55 def	75 c-f	63 f-g	68 abc
12	do**	1.5	73 de	68 c-f	93 abc	65 efg	65 abc
13	do	2.0	90 abc	58 def	90 abc	45 gh	58 abc
14	EL-179 + Linuron + Paraquat + X-77**	2.0 + 1.0 + .25 + .5	100 a	95 ab	100 a	98 ab	98 ab
15	do + DNDB (Premerge) + Paraquat + X-77**	2.0 + 2.5 + .25 + .5	43 f	93 abc	68 def	83 c-f	93 abc
16	do + Sencor + Paraquat + X-77**	2.0 + .5 + .25 + .5	100 a	88 a-d	98 a	88 a-e	93 abc
17	CGA 10832* + Maloran + Paraquat + X-77**	1.0 + 1.5 + .25 + .5	98 ab	75 b-f	100 a	65 efg	65 abc
18	do* + Preforan + do + do**	1.0 + 3.0 + .25 + .5	100 a	83 a-e	100 a	88 a-e	78 abc
19	Amilon**	2.0 + .6	53 ef	68 b-f	70 def	68 d-g	78 abc
20	do + Paraquat + X-77**	2.0 + .6 + .25 + .5	90 bc	83 a-e	93 abc	85 b-f	98 ab
21	Treflan*	.75	100 a	38 f-g	100 a	13 i	13 abc
22	do* + Linuron + X-77**	.75 + 1.0 + .5	95 abc	93 abc	98 a	90 abc	95 ab
23	do* + do + crop oil**	.75 + 1.0 + gpa	100 a	95 ab	100 a	98 ab	98 ab
24	do* + do + Paraquat + X-77**	.75 + 1.0 + .25 + .5	100 a	98 a	98 a	93 abc	98 ab
25	do* + DNBP (DG)**	.75 + 1.0 + 2.5	98 ab	93 abc	100 a	100 a	100 a
26	Check (cultivated)	- -	100 a	100 a	100 a	100 a	100 a

\*\* Preemergence CV= 11% 22% 14% 17% 19%

\* Treated: Treflan + CGA 10832 May 19  
Planted: Treated June 7  
Fertilization: 400 lb/a 12-12-12  
Preplant Incorporated Variety: Cutler  
Location: Campus Farm

Weed Control July 13, 1972

Trt. No.	Herbicide Formulation	LB/A Active	Morning-Glory	Pig-Weed	Velvet-Leaf	Lambs-quarter
1	Linuron + x-77**	1.0 + .5	58 cd	98 a	98 ab	95 ab
2	Linuron + Crop Oil**	1.0 + 1.0 gpa	58 cd	93 a	93 ab	93 abc
3	do + Paraquat + X-77**	1.0 + .25 + .5	78 bc	95 a	98 ab	98 ab
4	do + Lasso + X-77**	1.0 + 2.0 + .5	73 bcd	93 a	93 ab	93 abc
5	do + Lasso + Paraquat + X-77**	1.0 + 2.0 + .25 + .5	83 bc	93 a	93 ab	93 abc
6	do + DNBP (DG)**	1.0 + 2.5	83 bc	95 a	95 ab	95 ab
7	do + MON-2139**	1.0 + .5	78 bc	93 a	93 ab	93 abc
8	do + do**	1.0 + 1.0	80 bc	98 a	98 ab	98 ab
9	do + do**	1.0 + 1.5	83 bc	93 a	93 ab	93 abc
10	MON-2139**	.5	45 d	45 bc	45 c	45 ef
11	do**	1.0	70 bcd	85 a	65 c	75 bcd
12	do**	1.5	85 ab	65 b	65 c	65 cde
13	do	2.0	55 cd	95 a	45 c	50 def
14	EL-179 + Linuron + Paraquat + X-77**	2.0 + 1.0 + .25 + .5	90 ab	95 a	98 ab	95 ab
15	do + DNDB (Premerge) + Paraquat + X-77**	2.0 + 2.5 + .25 + .5	88 b	95 a	93 ab	93 abc
16	do + Sencor + Paraquat + X-77**	2.0 + .5 + .25 + .5	80 bc	93 a	93 ab	93 abc
17	CGA 10832* + Maloran + Paraquat + X-77**	1.0 + 1.5 + .25 + .5	75 bc	95 a	85 b	95 ab
18	do* + Preforan + do + do**	1.0 + 3.0 + .25 + .5	75 bc	95 a	63 c	95 ab
19	Amilon**	2.0 + .6	45 d	95 a	95 ab	95 ab
20	do + Paraquat + X-77**	2.0 + .6 + .25 + .5	73 bcd	98 a	98 ab	98 ab
21	Treflan*	.75	18 e	33 c	13 d	33 ef
22	do* + Linuron + X-77**	.75 + 1.0 + .5	78 bc	95 a	95 ab	95 ab
23	do* + do + crop oil**	.75 + 1.0 + gpa	85 b	98 a	98 ab	98 ab
24	do* + do + Paraquat + X-77**	.75 + 1.0 + .25 + .5	88 b	98 a	98 ab	98 ab
25	do* + DNBP (DG)**	.75 + 1.0 + 2.5	90 ab	100 a	100 a	100 a
26	Check (cultivated)	--	100 a	100 a	100 a	100 a

CV =

19%

17%

14%

19%

WEED CONTROL Aug 21, 1972

Trt. No.	Herbicide Formulation	LB/A Active	Grass	Broad-Leaf	Giant Foxtail	Jimson Weed	Cockle-Bur	
1	Linuron + x-77**	1.0 + .5	55 ef	40 def	43 c	20 d-g	25 b-e	
2	Linuron + Crop Oil**	1.0 + 1.0 gpa	68 de	58 b-f	68 b	45 b-e	40 bcd	
3	do + Paraquat + X-77**	1.0 + .25 + .5	90 bc	48 c-f	90 b	35 b-g	33 b-e	
4	do + Lasso + X-77**	1.0 + 2.0 + .5	73 de	70 bcd	83 b	53 bc	43 bcd	
5	do + Lasso + Paraquat + X-77**	1.0 + 2.0 + .25 + .5	90 bc	73 bcd	90 b	53 bc	53 b	
6	do + DNBP (DG)**	1.0 + 2.5	40 fg	63 b-e	43 c	38 b-g	33 b-e	
7	do + MON-2139**	1.0 + .5	68 de	53 c-f	78 b	40 b-f	35 b-e	
8	do + do**	1.0 + 1.0	90 bc	35 efg	90 b	23 d-g	25 b-e	
9	do + do**	1.0 + 1.5	90 bc	58 b-f	90 b	33 b-g	45 bcd	
10	MON-2139**	.5	10 h	10 g	10 d	10 g	10 e	
11	do**	1.0	10 h	10 g	10 d	10 g	10 e	
12	do**	1.5	10 h	10 g	10 d	10 g	10 e	
13	do	2.0	10 h	10 g	10 d	10 g	10 e	
14	EL-179 + Linuron + Paraquat + X-77**	2.0 + 1.0 + .25 + .25	90 bc	68 bcd	90 b	53 bc	53 b	
15	do + DNDB (Premerge) + Paraquat + X-77**	2.0 + 2.5 + .25 + .5	48 f	63 b-e	78 b	40 b-f	35 b-e	
16	do + Sencor + Paraquat + X-77**	2.0 + .5 + .25 + .5	90 bc	55 c-f	90 b	38 b-g	33 b-e	
17	CGA 10832* + Maloran + Paraquat + X-77**	1.0 + 1.5 + .25 + .5	90 bc	33 efg	90 b	25 c-g	23 b-e	
18	do* + Preforan + do + do**	1.0 + 3.0 + .25 + .5	90 bc	30 fg	90 b	20 d-g	20 cde	
19	Amilon**	2.0 + .6	25 g	30 fg	23 cd	15 fg	15 de	
20	do + Paraquat + X-77**	2.0 + .6 + .25 + .5	78 cd	38 efg	73 b	20 d-g	23 b-e	
21	Treflan*	.75	90 bc	10 g	70 b	10 g	10 e	
22	do* + Linuron + X-77**	.75 + 1.0 + .5	90 bc	58 b-f	80 b	33 b-g	33 b-e	
23	do* + do + crop oil**	.75 + 1.0 + gpa	90 bc	73 bc	90 b	48 bcd	48 bc	
24	do* + do + Paraquat + X-77**	.75 + 1.0 + .25 + .5	93 b	60 b-e	88 b	35 b-g	33 b-e	
25	do* + DNBP (DG)**	.75 + 1.0 + 2.5	90 bc	83 b	90 b	38 b	53 b	
26	Check (cultivated)		100 a	100 a	100 a	100 a	100 a	
			CV =	12%	26%	18%	32%	29%



WEED CONTROL Aug 21, 1972

Trt. No.	Herbicide Formulation	LB/A Active	Morning-Glory	Pig-Weed	Velvet-Leaf	Lambs-Quarter
1	Linuron + x-77**	1.0 + .5	25 bcd	63 ef	50 b-f	63 bc
2	Linuron + Crop Oil**	1.0 + 1.0 gpa	33 bcd	70 def	68 bcd	70 bc
3	do + Paraquat + X-77**	1.0 + .25 + .5	35 bc	75 b-e	45 b-f	73 bc
4	do + Lasso + X-77**	1.0 + 2.0 + .5	25 bcd	78 b-e	60 bcd	70 bc
5	do + Lasso + Paraquat + X-77**	1.0 + 2.0 + .25 + .5	48 b	80 b-e	78 b-f	80 bc
6	do + DNBP (DG)**	1.0 + 2.5	33 bcd	70 def	63 b-e	75 bc
7	do + MON-2139**	1.0 + .5	33 bcd	80 b-e	65 b	80 bc
8	do + do**	1.0 + 1.0	18 cd	73 c-f	55 b-e	68 bc
9	do + do**	1.0 + 1.5	45 b	85 bcd	73 b-e	88 b
10	MON-2139**	.5	10 d	10 h	10 b-e	10 e
11	do**	1.0	10 d	10 h	10 g	10 e
12	do**	1.5	10 d	10 h	10 g	10 e
13	do	2.0	10 d	10 h	10 g	10 e
14	EL-179 + Linuron + Paraquat + X-77**	2.0 + 1.0 + .25 + .5	45 b	75 b-e	70 bc	80 bc
15	do + DNDB (Premerge) + Paraquat + X-77**	2.0 + 2.5 + .25 + .5	30 bcd	80 b-e	50 bf	73 bc
16	do + Sencor + Paraquat + X-77**	2.0 + .5 + .25 + .5	25 bcd	78 b-e	60 bc	75 bc
17	CGA 10832* + Maloran + Paraquat + X-77**	1.0 + 1.5 + .25 + .5	23 bcd	63 ef	35 b-f	75 bc
18	do* + Preforan + do + do**	1.0 + 3.0 + .25 + .5	25 bcd	73 c-f	33 b-e	55 e
19	Amilon**	2.0 + .6	18 cd	55 f	30 c-g	50 ed
20	do + Paraquat + X-77**	2.0 + .6 + .25 + .5	28 bcd	68 ef	55 d-g	58 bc
21	Treflan*	.75	10 d	10 h	10 g	10 e
22	do* + Linuron + X-77**	.75 + 1.0 + .5	28 bcd	80 b-e	65 b-e	68 bc
23	do* + do + crop oil**	.75 + 1.0 + gpa	38 bc	88 bc	68 bcd	75 bc
24	do* + do + Paraquat + X-77**	.75 + 1.0 + .25 + .5	35 bc	88 b	65 b-e	80 bc
25	do* + DNBP (DG)**	.75 + 1.0 + 2.5	48 b	85 bcd	68 bc	80 bc
26	Check (cultivated)		100 a	100 a	100 a	100 a

CV = 29% 14% 19% 16%

Trt. No.	Herbicide Formulation	LB/A Active	Weed Control Aug. 4, 1972		Weed Control Sept. 7, 1972		
			Grass	Crop Injury	Grass	Broad-Leaf	Crop Injury
1	Linuron + x-77 *	1.0 + .5%	40 fg	0 a	33 ef	80 abc	0 a
2	do + crop oil	1.0 + 1 gpa	43 efg	0 a	23 ef	60 a-d	0 a
3	do + DNBP (D.G.)	1.0 + 2.5	45 ef	8 ab	30 ef	75 abc	0 a
4	do + Paraquat + x-77	1.0 + 0.25 + .5%	88 a-d	0 a	73 a-d	75 abc	0 a
5	do + MON-2139	0.5 + 2.0	100 a	0 a	90 a	90 a	0 a
6	do + do	1.0 + 2.0	98 ab	0 a	90 a	88 a	0 a
7	do + do	1.5 + 2.0	75 b-e	0 a	90 a	90 a	9 b
8	do + do	2.0 + 2.0	98 ab	13 bc	90 a	90 a	0 a
9	do + do	1.0 + .5	90 ab	0 a	83 ab	90 a	0 a
10	do + do	1.0 + 1.0	100 a	3 a	88 ab	88 a	0 a
11	do + do	1.0 + 1.5	98 ab	0 a	88 ab	85 abc	0 a
12	do + do	1.0 + 2.0	98 ab	0 a	88 ab	90 a	0 a
13	do + Lasso + x-77	1.0 + 2.0 + .5%	38 fg	0 a	30 ef	80 abc	0 a
14	do + do + Paraquat + x-77	1.0 + 2.0 + .25 + .5%	88 ab	0 a	75 a-d	73 abc	0 a
15	do + EL-119 + do + do	1.0 + 2.0 + .25 + .5%	95 ab	0 a	70 a-d	55 b-e	0 a
16	EL-119 + DNBP + do + do	2.0 + 3.0 + .25 + .5%	65 c-f	0 a	48 c-f	48 c-f	0 a
17	EL-119 + Sencor + do + do	2.0 + 3/8 + .25 + .5%	88 abc	20 c	80 abc	83 ab	30 a
18	Maloran + x-77	1.5 + .5%	58 c-f	0 a	43 def	75 abc	0 a
19	do + Paraquat + x-77	1.5 + .25 + .5%	93 ab	0 a	55 b-e	80 abc	0 a
20	Preforan + x-77	3.0 + .5%	15 g	0 a	15 f	55 b-e	0 a
21	do + Paraquat + x-77	3.0 + .25% + .5%	55 def	0 a	43 def	35 def	0 a
22	do + CGA 10832 + Paraquat + x-77	3.0 + 1.0 + .25 + .5%	53 ef	0 a	20 ef	23 f	0 a
23	do + Lasso + Paraquat + x-77	3.0 + 1.0 + .25 + .5%	95 ab	0 a	28 ef	28 ef	0 a
24	Maloran + do + do + do	1.5 + 1.0 + .25 + .5%	95 ab	0 a	90 a	90 a	0 a
25	MON-2139	1.0	95 ab	0 a	83 ab	80 abc	0 a
26	MON-2139	2.0	98 ab	0 a	88 ab	83 ab	0 a
27	MON-2139	3.0	100 a	a	85 ab	88 a	0 a

CV= 21% 383% 25% 21% 255%

\* All treatment: preemergence  
Location: Woodford Co.  
Planted & treated: July 6  
Variety: Calland  
Weeds: Large crabgrass, smartweed

University of Kentucky - Agronomy Department - Lexington  
Burley Tobacco

Weed Control      Weed Control  
July 13, 1972    Aug. 4

Trt. No.	Herbicide Formulation	LBS/A Active	Grass	Broad-Leaf	Grass	Broad-Leaf
1	A-820*	2	90 b	80 b	93 abc	35 def
2	Paarlan*	1.5	88 bc	83 b	83 bc	50 b-e
3	do*	3	90 b	88 b	93 abc	68 b
4	Balan 1.5*	1.5	85 bc	78 bc	88 bc	60 bc
5	do*	3.0	90 b	90 b	90 abc	68 b
6	Balan 2.5 G*	1.5	90 b	73 bc	88 bc	50 b-e
7	do*	3.0	90 b	80 b	85 c	53 b-e
8	Balan 5.G*	1.5	83 bc	60 cd	88 bc	33 ef
9	do	3.0	88 bc	83 b	98 ab	58 bcd
10	Tillam*	4	90 b	80 b	80 c	68 b
11	do + Devrinal*	4 + .5	90 b	80 b	83 c	70 b
12	do + do*	4 + 1	90 b	80 b	96 ab	73 b
13	Devrinal*	1	90 b	53 d	83 bc	28 f
14	U-27267*	2.25	90 b	75 bc	98 bc	55 b-e
15	do**	2.25	85 bc	53 d	83 c	58 bcd
16	Enide**	6.0	80 c	78 bc	88 bc	38 c-f
17	USB-3584*	.25	85 bc	85 b	78 c	55 b-e
18	do*	.50	88 bc	80 b	83 abc	63 b
19	Check (cultivated)		100 a	100 a	100 a	100 a

CV=    5            11            14            18

Location: Maine Chance

\* Preplant incorporated

\*\*Post Transplant

Treated: June 6

Transplanted: June 7

Fertilization: 1500 lb/A of 5-10-15 + 150 lb/a of N

Variety: KY 14

Weed: Large crabgrass, yellow foxtail, redroot & tumble pigweed & velvetleaf