

UNIVERSITY OF KENTUCKY
DEPARTMENT OF AGRONOMY
1969
RESULTS OF FIELD RESEARCH
FOR WEED CONTROL IN
AGRONOMIC CROPS

NOT FOR PUBLICATION

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1969 WEATHER DATA
 Campus Farm
 Lexington, Ky

Day	May		June			July			August		
	Precip.	Temp Max. Min.	Precip.	Temp. Max. Min.	Precip.	Temp. Max. Min.	Precip.	Temp. Max. Min.			
1		69 40		83 67	1.36	82 70		85 62			
2		77 51	.03	66 57	.02	83 65		82 68			
3		78 54	.28	69 46		83 65		82 61			
4		81 53		74 50		88 71		83 62			
5		84 62		79 56		90 74		83 59			
6		82 61	.26	85 62		86 74		87 62			
7		82 61		88 66	.25	81 71		89 65			
8	0.64	72 64		88 69		86 72		85 67			
9	2.60	60 46		70 58	.03	86 71	.33	90 70			
10		65 41		77 60	.05	79 72	.91	79 64			
11	0.22	54 41		86 64	.50	83 73		78 59			
12	0.05	64 42		88 69	.51	86 67		82 61			
13		72 45	.68	82 64		85 69		85 65			
14	0.42	70 56		82 68		83 64		87 67			
15	0.02	80 56	1.53	73 53		88 65		88 68			
16		76 61		71 50		89 74	1.07	81 69			
17		78 59		74 53		89 72	.54	83 69			
18	0.11	71 62	.05	71 59		88 71		88 71			
19	0.15	76 61	.02	82 63		89 72	.10	76 70			
20	0.25	74 61		83 64		88 72	2.97	83 68			
21		73 58		74 60	.48	80 72		71 64			
22		79 58		78 63		85 70	.07	80 58			
23	0.45	68 59	.71	78 65	.86	82 68		82 60			
24		70 58	.01	83 68		85 68		84 60			
25		74 60	.46	89 70		85 66		83 60			
26		72 56		89 73		85 66		83 64			
27		78 51		89 73		84 70		84 62			
28		84 59		89 69	.02	79 65		85 64			
29		84 63		89 68		77 62		86 65			
30		87 63		89 70		83 62		91 66			
31		87 64				84 61		86 67			
Sum	4.91		4.03		4.08		5.99				
Average		74.9 55.7		80.6 62.6		84.8 68.8		83.6 64.4			

These records apply only to Campus Farm Experiments, Lexington, Kentucky.

University of Kentucky - Agronomy Department - Lexington
Corn Pre-Emergence
Exp. I

Herb.	Form.	lb/A Active	Visual Evaluation 6/10		Crop Injury	Visual Evaluation 8/13		Corn Plants 1000/A at Harvest	Yield BU/A
			Weed Control %			Weed Control %			
			Grass	Broadleaf		Grass	Broadleaf		
Linuron & Propchlor	15% + 30%	3/4 + 1 1/2	38 g ^{1/}	55 fg	0 c	40 hi	33 h	24.4 ab	123 cdef
"	1 E + 2 E	3/4 + 1 1/2	53 fg	73 def	0 c	33 i	65 ef	23.4 abc	127 bcdef
Propchlor	65 W	4	45 g	40 g	0 c	33 i	33 h	22.3 abc	101 f
"		5	50 fg	38 g	0 c	65 defg	38 gh	22.7 abc	123 cdef
Propchlor & Atrazine	18G + 6G	3 3/5 + 1 1/5	83 bcde	95 ab	0 c	70 def	88 cd	24.9 a	154 ab
"		4 1/2 + 1 1/2	84 bcd	93 abc	0 c	80 cde	93 bc	25.3 a	159 a
Alachlor	4 E	2	90 bc	75 def	0 c	70 def	70 def	23.8 ab	149 abcd
"		4	93 ab	70 def	0 c	85 cd	68 def	23.9 ab	144 abcd
Alachlor	15 G	3	100 a	99 a	20 b	93 bc	93 bc	20.5 c	124 cdef
"		4 1/5	100 a	98 a	43 a	98 ab	98 ab	15.6 d	111 ef
Alachlor & Atrazine	65W + 80W	1 + 1	84 bcd	96 ab	0 c	70 defg	83 bcd	23.7 ab	150 abc
ACD 15 M	80 W	2	53 fg	93 abcd	0 c	43 hi	73 def	24.3 ab	127 bcdef
"		3	55 fg	88 bc	0 c	33 i	50 fgh	21.4 bc	120 def
Atrazine	80 W	2	63 defg	96 ab	0 c	60 efgh	85 cde	22.8 abc	145 abcd
Maloran	50 W	1 1/2	45 g	73 def	3 c	40 hi	55 fgh	22.3 abc	135 abcde
Maloran	10 G	2	58 fg	80 cde	3 c	48 ghi	50 fgh	25.6 a	134 abcde
Preforan	3 E	3	60 efg	65 ef	0 c	58 fgh	58 fg	23.8 ab	146 abcd
"		4 1/2	73 cdef	88 bcd	0 c	60 efgh	65 ef	23.3 abc	140 abcd
Propchlor & Atrazine	65W + 80W	3 + 1	60 efg	98 a	0 c	50 fghi	83 cde	24.9 a	149 abcd
Check - No Herbicide		0	100 a	100 a	0 c	100 a	100 a	24.5 ab	138 abcde
		c. v	16%	13%	147%	15%	15%	8%	13%

^{1/}Mean values within a column are not significantly different at 5% probability level if followed by one or more of same letters.

*All treatments are pre-emergence.

Location : Campus Farm, Lexington

Planted: May 1

Soil Type : Half Burgin and Half melvin silt loam

Treated: May 1

Variety : P. A. G. SX 29

University of Kentucky - Agronomy Department - Lexington
Corn - Pre-emergence

Herb.	Form.	Lb/A Active	Visual Evaluation % Weed Control 6/27		Visual Evaluation % Weed Control 8/13		Corn Plants 1000/A at Harvest	Yield BU/A
			Grass	Broadleaf	Grass	Broadleaf		
ACD 15 M *	80 W	2	35 d ^{1/}	85 de	28 c	83 b	26.4 a	58 b
ACD 15 M *	80 W	3	65 c	93 bc	70 b	85 b	28.1 a	80 ab
ACD M 2 *	80 W	2	38 d	88 cde	28 c	83 b	26.1 a	73 ab
ACD M 2 *	80 W	3	65 c	90 cd	63 b	85 b	27.4 a	93 ab
VCS 437 *	4 E	3	73 c	78 e	65 b	85 b	27.1 a	85 ab
Simazine **	80 W	2	88 b	98 ab	95 a	100 a	28.4 a	98 a
Simazine **	80 W	4	90 b	100 a	100 a	100 a	28.6 a	102 a
Check No Herb.			100 a	100 a	100 a	100 a	27.9 a	103 a
			C. V. 11%	8%	10%	7%	27%	22%

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* Pre-Emergence Treatments

** Pre-Plant Incorporated 2" deep
Location: Campus Farm, Lexington
Variety: P.A.G. sx-29
Soil Type: Donerail Silt Loam
Planted: May 16
Treated: May 16

University of Kentucky - Department of Agronomy - Lexington
Corn Post-Emergence

Herb.	Form.	Lb/A Active	Visual Evaluation % Weed Control 6/9		Crop Injury	Visual Evaluation % Weed Control 8/13		Corn Plants 1000/A at Harvest	Yield BU
			Grass	Broadleaf		Grass	Broadleaf		
Alachlor *	4 E	2	63 f ^{1/}	60 f	0 c	35 e	35 e	18.6 a	120 a
Alachlor *	4 E	4	88 bcde	68 ef	0 c	50 e	50 e	20.2	144 a
ACD 15 M & * Oil	80 W	2 + 1 gal	80 cde	98 ab	5 bc	75 cd	90 abc	19.6 a	128 a
ACD 15 M & * Oil	80 W	3 + 1 gal	80 cde	95 abc	0 c	83 cd	93 abc	18.1 a	132 a
ACD M 2 & * Oil	80 W	2 + 1 gal	78 def	88 cd	3 bc	73 cd	93 abc	19.2 a	127 a
ACD M 2 & * Oil	80 W	3 + 1 gal	80 cde	95 abc	0 c	78 cd	93 abc	19.9 a	140 a
S 6115 *	1 E	0.75	80 cde	98 ab	5 bc	80 cd	95 abc	19.9 a	137 a
S 6115 *	1 E	1	88 bcde	100 a	3 bc	88 bcd	98 ab	18.9 a	142 a
S 6115 *	1 E	2	98 a	100 a	15 b	100 a	100 a	18.3 a	133 a
Primaze & ** Oil	80 W	1 + 1 gal	78 def	90 bcd	0 c	75 cd	85 bcd	19.0 a	133 a
" * *	80 W	2 + 1 gal	83 bcde	98 ab	0 c	88 bc	88 abc	18.8 a	140 a
" * *	80 W	3 + 1 gal	90 bc	98 ab	0 c	93 ab	93 abc	18.1 a	135 a
Ametryne **	80 W	1	75 ef	85 de	0 c	80 cd	85 bcd	17.8 a	131 a
" **	80 W	2	90 bcd	100 a	0 c	88 bc	88 abc	18.0 a	133 a
BAY 86791 *	70 W	0.5	90 bcd	80 de	15 b	80 cd	60 de	17.8 a	128 a
BAY 94337 *	70 W	0.5	93 b	95 abc	45 a	95 ab	98 ab	15.9 a	117 a
Dalapon & Surf. **	74 W	1 + 0.25% v.v.	85 bcde	85 cd	0 c	70 d	80 cd	18.4 a	133 a
Dalapon M & Surf. **	74 W	1 + 0.25% v.v.	80 cde	68 ef	0 c	45 e	43 e	18.3 a	141 a
Maloran & Adjuvant * *	50 W	2 + 1 pt	88 bcde	100 a	0 c	80 cd	93 abc	20.3 a	128 a
Check-no herbicide			100 a	100 a	0 c	100 a	100 a	18.8 a	137 a
			C.V. 9%	10%	157%	13%	16%	10%	9%

^{1/} Mean values within a column are not significantly at 5% probability level if followed by one or more of same letters.

*Early Post

**Post Directed Treatments

Location: Campus Farm, Lexington

Soil Type: Melvin Silt Loam

Variety: P.A.G. sx-29

Planted: May 22

Treated: June 19 and June 29 respectively

University of Kentucky - Department of Agronomy - Lexington
Corn Gulf - Post-Emergence Supplement

Herb.	Form.	Lb/A Active	Visual Evaluation % Weed Control 7/2		Visual Evaluation % Weed Control 8/15		Corn Plants 1000/A at Harvest	Yield BU/A
			Grass	Broadleaf	Grass	Broadleaf		
Atrazine *	80 W	2	93 bc ^{1/}	98 ab	95 a	98 a	26.1 a	76 ab
Atrazine *	80 W	3	100 a	100 a	100 a	100 a	27.4 a	87 ab
S 6115 *	1 EC	2	90 bc	100 a	100 a	100 a	27.2 a	84 ab
S 6115 *	1 EC	3	100 a	100 a	100 a	100 a	26.4 a	80 ab
Atrazine + Oil **	80 W	2 + 1 gal	95 ab	95 ab	100 a	100 a	23.8 a	91 ab
Atrazine + Surf**	80 W	3 + 1 pt	85 bc	90 abc	95 a	98 a	24.7 a	88 ab
S 6115 **	1 EC	3/4	75 d	78 d	80 b	78 b	23.6 a	82 ab
S 6115 **	1 EC	1	88 cd	83 cd	83 b	80 b	23.6 a	86 ab
S 6115 **	1 EC	2	88 cd	90 bcd	95 a	95 a	24.1 a	103 a
Check No Herb.			100 a	100 a	100 a	100 a	24.4 a	87 ab
		C. V.	8%	10%	7%	8%	9%	10%

^{1/}Mean data values within a column are not significantly 5% probability level where followed by one or more of same letters.

*Sprayed on surface after planting

**Early post weeds 2" high

Location: Lexington, Kentucky, Spindletop

Soil: Maury Silt Loam

Variety: P.A.G. sx-28

Planted: May 15

Treated: May 15 pre-emergent treatments

June 11 Early post treatments

University of Kentucky - Agronomy Department - Lexington
Corn Zero Tillage

Herb	Form.	Lb/A Active	Visual Evaluation % Weed Control 7/25		Sod Kill
			Grass	Broadleaf	
Atrazine & *	80 W +	2 + 1/4	98 a ^{1/}	98 ab	100 a
Paraquat	2 E				
Atrazine & MSMA	80 W + 4 E	2 + 2 1/2	93 ab	95 abc	100 a
Atrazine &	80 W +	2 + 2 1/2	93 ab	93 bc	100 a
Cocadylic Acid	2 1/2				
Atrazine + Tronic	80 W	2 + 1 pt	93 ab	98 ab	100 a
ACD 15M &	80 W +	2 + 1/4	80 bc	93 bc	100 a
Paraquat	2 E				
ACD 15M &	80 W +	3 + 1/4	78 bc	95 abc	100 a
Paraquat	2 E				
SD 15418 +	80 W +	2 + 1/4	90 ab	63 d	100 a
Paraquat	2 E				
SD 15418 +	80 W +	3 + 1/4	93 ab	75 d	100 a
Paraquat	2 E				
Maloran +	50 W	1 1/2 + 1/4	45 d	90 c	100 a
Paraquat	2 E				
Maloran &	80 W +	2 + 1/4	60 cd	90 c	100 a
Paraquat	2 E				
S 6115 +	1 E +	2 + 1/4	100 a	98 ab	100 a
Paraquat	2 E				
S 6115 &	1 E +	3 + 1/4	100 a	100 a	100 a
Paraquat	2 E				
C. V.			14%	11%	

^{1/} Mean values within a column are not significantly different at 5% probability level if followed by one or more of same letters.
* All treatments pre-emergence

Location: Maine-Chance, Lexington, Kentucky
Soil Type: Maury Silt Loam
Variety: P.A.G. sx-29
Planted: May 19
Treated: May 13

University of Kentucky - Agronomy Department - Hartford
Pre-plant

Herb	Form.	Lb/A Active	% Control Grass	7/12 Broadleaf	Control Grass	8/27 Broadleaf	Plant 1000/A	Yield BU/A
Butylate *	6 E	4	87 a ^{1/}	87 a	73 a	43 b	14.8 a	90.3 a
Butylate & Atrazine	6 E + 80 W	3 + 1	93 a	100 a	87 a	97 a	18.7 a	109.2 a
Atrazine **	80 W	2	70 b	87 a	47 b	97 a	17.9 a	106.0 a
1 Cult & Butylate	6 E	4	93 a	87 a	93 a	57 b	17.9 a	107.1 a
Check		0	0 c	0 b	0 c	0 c	16.5 a	85.6 a
C.V.			10%	16%	33%	26%	16%	10%

^{1/} Mean values within a column are not significantly different at 5% probability if followed by one or more of same letters.

*Pre-plant Incorporated Treatments

**Pre-plant Surface Treatment

Location: Hartford, Kentucky

Soil Type:

Variety:

Planted: May 14

Treated: May 14

University of Kentucky - Agronomy Department - Hartford
Post-Plant

Herb	Form.	Lb/A Active	Visual Evaluation % Weed Control 7/12		Crop Injury	Visual Evaluation % Weed Control 8/27		Plants 1000/A	Yield BU/A
			Grass	Broadleaf		Grass	Broadleaf		
Atrazine & Oil*	80 W	2 + 1 gal	63 b ^{1/}	93 a	0 b	37 b	93 a	19.0 a	105 a
S 6115 + Oil	1 E	2 + 1 gal	87 a	100 a	30 a	83 a	93 a	17.2 a	106 a
Atrazine & Soy O	80 W	2 + 1 gal	53 b	100 a	0 b	33 b	90 a	17.4 a	110 a
Atrazine & Tronic	80 W	2 + 1 qt	60 b	100 a	0 b	33 b	90 a	17.3 a	110 a
S 6115 + Oil	1 E	2 + 1 gal	73 b	100 a	33 a	63 a	97 a	18.9 a	113 a
Check		0	0 c	0 b	0 b	0 c	0 b	16.7 a	105 a

C.V. 13% 6% 33% 34% 6% 9% 8%

^{1/} Mean values within a column are not significantly different at 5% probability level if followed by one or more of the same letters.

* All treatments applied post-emergence

Location: Hartford, Kentucky

Soil Type:

Variety:

Planted: May 14

Treated: May 28

University of Kentucky - Agronomy Department - Mayfield
Corn

Herb	Form.	Lb/A Active	Visual Evaluation %		Crop Injury	Plants 1000/A	Yield BU/A
			Weed Control Grass	6/26 Broadleaf			
Propchlor *	65 W	5	87 a ^{1/}	70 a	0 b	23.6 bc	113 a
Alachlor & *	4 E +	1 + 3/4	90 a	90 a	0 b	25.1 abc	106 a
Linuron	50 W						
Atrazine **	80 W	2	87 a	87 a	0 b	28.1 a	134 a
Simazine *	80 W	2	90 a	90 a	0 b	26.5 ab	141 a
Atrazine *	80 W	2	90 a	90 a	0 b	24.8 abc	127 a
Malaron *	50 W	2 1/2	90 a	90 a	17 a	21.7 c	117 a
Primaze	80 W	2	90 a	90 a	0 b	26.1 ab	138 a
Propchlor & *	65 W +	3 + 1	90 a	90 a	0 b	25.1 abc	136 a
Atrazine	80 W						
Alachlor *	4 E	2	90 a	90 a	0 b	25.0 abc	115 a
Check		0	60 a	20 b	0 b	27.7 a	118 a
Butylate **	6 E	4	90 a	83 a	0 b	26.3 ab	120 a
Butylate & * *	6 E +	3 + 1	90 a	90 a	3 b	27.1 ab	123 a
Atrazine	80 W						
			C.V. 10%	13%	284%	7%	12%

^{1/}Mean values within a column are not significantly different at 5% probability level if followed by one or more of same letters.

*Treatments per-emergence

**Treatments pre-plant incorporated

Location: Mayfield

Soil Type: Waverly Silt Loam

Variety:

Planted: April 24

Treated: April 24

University of Kentucky - Department of Agronomy - Lexington
Soybeans - Pre-emergence

Herb.	Form	Lb/A Active	Visual Evaluation % Weed Control 6/27		Visual Evaluation % Weed Control 7/24		Yield BU/A
			Grass	Broadleaf	Grass	Broadleaf	
Alachlor & Linuron	4 E + 50 W	1 + 3/4	93 bcd ^{1/}	98 ab	78 bcde	78 bcd	No harvest
Alachlor & Linuron	2.67 E + 1.33 E	1 + 1/2	98 ab	100 a	80 bcd	80 bc	
"		2 + 1	100 a	100 a	90 b	88 bc	
"		3 + 1 1/2	100 a	100 a	90 b	90 b	
Alachlor	4 E	2	95 abc	85 def	75 bcde	45 efgh	
Alachlor	15 G	3	93 bcd	83 ef	73 bcdef	48 efgh	
"		4 1/5	98 ab	98 ab	88 b	83 bc	
Diphenamid & DNBP	2 lb + 1 1/2 lb	2 + 1 1/2	83 defg	63 h	50 efgh	40 fghi	
"		3 + 2 1/4	85 cdef	78 fg	63 cdefg	48 efgh	
Maloran	50 W	1 1/2	65 fg	85 d	55 defgh	68 cde	
Maloran	50 W	2	80 defg	98 ab	40 ghi	83 bc	
Preforan	3 E	2	80 defg	78 ef	45 fgh	40 ghi	
Preforan	3 E	3	83 defg	83 ef	38 ghi	55 defg	
Preforan	50 W	4	83 defg	80 ef	35 hi	45 efgh	
Kerb	75 W	3/4	63 g ³³	33 h	18 i	18 j	
Kerb	75 W	1 1/2	80 defg	65 j	35 hi	30 hij	
Alachlor & Linuron	10 G + 5 G	2 + 1	95 abc	98 ab	83 bc	88 bc	
"		2.50 + 1 1/4	95 abc	95 b	83 bc	83 bc	
DCPA & Linuron	75 W + 50 W	6 + 3/4	85 def	83 de	63 cdefg	55 defg	
DCPA & Dinoseb	75 W + 3 E	6 + 3	78 efg	73 g	55 defgh	43 efghi	
DCPA &	75 W +	6 + 1	90 cde	93 c	60 cdefgh	65 cdef	
Metobromuron	50 W						
DCPA	75 W	7 1/2	78 efg	55 i	53 efgh	20 ij	
Linuron	50 W	1 1/2	85 cdef	98 ab	58 cdefgh	78 bcd	
Check - No Herbicide			100 a	100 a	100 a	100 a	
		C.V.	11%	13%	19%	18%	

^{1/} Mean values within a column are not significantly different at 5% probability if followed by one or more of same letter.

* All treatments pre-emergence

Location: Campus Farm
Soil Type: Melvin Silt Loam

Variety: Kent
Planted: May 22

Treated: May 22

University of Kentucky - Agronomy Department - Lexington
Soybean - Pre-emergent

Herb	Form	Lb/A Active	Visual Evaluation %		Crop Injury	BU/ A
			Grass	Broadleaf		
UNI 1000	10 G 16/30	4	50 b ^{1/}	60 b	10 a	49 a
Alanap Plus	16/30	4	63 b	68 b	5 a	51 a
UNI 1000	20 G 16/30	4	43 b	53 b	0 a	58 a
UNI 1000	20 G 16/30	4	48 b	60 b	0 a	51 a
UNI 1000	10 G 25/50	3 + 2	50 b	58 b	0 a	55 a
Alanap plus	25/50	3 + 2	58 b	70 b	0 a	53 a
Alanap plus	2 + 1 1/3	3 + 1.5	63 b	70 b	0 a	52 a
UNI 1000	2 + 2	2 + 2	68 b	75 b	0 a	53 a
No Herb.			100 a	100 a	0 a	50 a
C.V.			23%	18%	294%	9%

^{1/} Mean values within a column are not significantly different at 5% probability level if followed by one or more of same letters.

Location: Campus Farm
Soil Type: Burgin Silt Loam
Variety: Kent
Planted: May 27
Treated: May 27

University of Kentucky - Department of Agronomy - Lexington
Soybeans II - Pre-plant Incorporated

Herb	Form	Lb/A Active	Visual Evaluation % Weed Control 6/26		Crop Injury	Visual Evaluation % Weed Control 7/24		Crop Injury	Yield BU/A
			Grass	Broadleaf		Grass	Broadleaf		
BAS 2903 H *	4 E	3	95 abc ^{1/}	78 efgh	10 ef	78 bc	50 hi	0 d	43 bcdefg
BAS 2903 H *	4 E	4	93 abc	85 cdef	15 def	75 c	63 defgh	0 d	46 abcde
VCS 438 *	1 E	2	93 abc	68 fgh	5 f	85 bc	53 ghi	0 d	43 bcdefg
VCS 438 *	1 E	3	98 ab	93 abc	23 cde	93 b	88 b	0 d	48 abcde
VCS 437 *	4 F	2 1/2	93 abc	83 cdefg	10 ef	78 bc	75 cde	0 d	48 abcd
VCS 437 *	4 F	3	95 abc	88 bcdef	8 f	78 bc	73 cdef	0 d	41 bcdefghi
Amiben *	2 E	3	75 d	50 i	8 f	83 bc	23 j 0	0 d	32 i
Alachlor *	4 E	2	95 abc	80 defgh	13 def	83 bc	63 defgh	0 d	42 bcdefg
BAY 86791 *	70 W	1	90 bc	63 hi	10 ef	75 c	35 ij	0 d	33 hi
BAY 94337 *	70 W	1	98 ab	90 cdef	5 f	85 bc	78 bcd	0 d	50 abc
Linuron & Propchlor	15 W + 30 W	3/4 + 1 1/2	95 abc	85 cdef	10 ef	85 bc	80 bc	0 d	51 ab
Alachlor **	4 E	2	98 ab	88 bcdef	13 def	90 bc	68 cdefgh	0 d	47 abcde
Alachlor **	4 E	3	100 a	90 bcde	13 def	93 b	75 cde	0	54 a
Butylate **	6 E	3	100 a	73 fgh	13 def	88 bc	58 efgh	3 cd	38 efghi
Butylate **	6 E	4	100 a	73 fgh	25 cde	88 bc	55 fgh	3 cd	36 fghi
Vernolate **	6 E	2	98 ab	78 efgh	25 cde	83 bc	50 hi	0 d	34 ghi
Vernolate **	7 E	2	98 ab	73 fgh	13 def	90 bc	53 ghi	0 d	39 defghi
Vernolate & **	6 E +	1 1/2 + 3/4	93 abc	88 cdefg	13 def	80 bc	70 cdefg	0 d	40 cdefghi
Linuron **	50 W								
Trifluran **	4 E	3/4	98 ab	68 ghi	15 def	80 bc	58 efgh	0 d	42 bcdefg
Trifluran & **	4 E +	1/2 + 3/4	98 ab	78 efgh	5 f	85 bc	73 cdef	0 d	45 abcdef
Linuron **	50 W								
Chloroxuron & Adj. ***	50 W	1 1/2 + .5%	88 cd	93 bcd	43 c	45 d	80 bcd	8 bc	41 bcdefghi
Chloroxuron & ***	50 W	3/4 + 3 qt	85 cd	98 ab	40 cd	35 d	50 hi	8 bc	42 bcdefgh
Non-phytotoxic Oil									
Alachlor (pre) *	4 E	1 + 1	98 ab	100 a	23 cde	88 bc	80 bcd	10 b	46 abcde
Chloroxuron & adj. ***	50 W								
BAY 86791	70 W	1	100 a	100 a	93 b	100 a	100 a	98 a	6 j
BAY 94337	70 W	1	100 a	100 a	100 a	100 a	100 a	100 a	0 j
Check No Herb.			100 a	100 a	0 f	100 a	100 a	0 d	49 abc

C.V. 10% 12% 39% 12% 12% 59% 14%

^{1/}Mean values within a column are not significantly different at 5% probability if followed by one or more of same letter.

* Pre-emergence treatment

** Pre-plant Incorporated 2"

*** Post-emergence treatment

Location: Campus Farm, Lexington

Soil Type: Melvin Silt Loam

Variety: Kent

Planted: May 26 and 27

Treated: May 26 and 27, June 11

post-emergence

University of Kentucky - Department of Agronomy - Henderson^{1/}
Soybeans

Herb	Form	Lb/A Active	Percent Control ^{2/}		Yield	
			Grass	Broadleaf	BU 1966-69	1969
Naptalam + Chlorpropham	2 + 1 1/3	3.00 + 2.00	62	58	37.8	31.0
Amiben	2 E	3.00	82	62	36.0	35.7
Linuron	50 W	1.00	85	75	36.9	34.4
Trifluralin	4 E	0.75	85	22	29.0	23.7
Vernolate	6 E	2.50	85	15	33.5	26.4
Diphenamid + Dinoseb	2 + 1	2.00 + 1.00	75	82	37.9	41.7
Alachlor	4 E	2.0	90	88	---	43.3
Linuron +Alachlor	50 W + 4 E	0.75 + 0.50	90	75	---	41.4
Chlorpropham + Amiben	2 + 4	1.00 + 2.00	85	80	---	46.4
Check			62	42	23.5	31.0

LSD (.05)

12.5

^{1/} Variety - Clark 63

^{2/} Visual evaluation on August 27 following two cultivations

University of Kentucky - Agronomy Department - Lexington
Burley Tobacco

Herb	Form.	Lb/A Active	Visual Evaluation % Weed Control 7/9		Crop Injury	Visual Evaluation % Weed Control 8/14		Tob Plt No 80 ¹ Tot.	Yield Lb/A
			Grass	Broadleaf		Grass	Broadleaf		
EL 179 *	6 E	.75	75 f ^{1/}	65 f	3 b	48 d	33 h	53 a	2202 abcde
EL 179 *	6 E	1	75 f	65 f	3 b	40 de	40 fgh	53 a	2177 abcde
EL 179 *	6 E	1.50	88 def	73 def	0 b	78 bc	50 defgh	57 a	2470 ab
EL 179 *	6 E	2	90 cde	80 bcde	10 ab	75 bc	48 defgh	56 a	2182 abcde
EL 179 *	6 E	3	98 ab	83 bcde	5 b	78 bc	53 defgh	55 a	2214 abcde
Benefin *	1.5 E	1.12	83 def	65 f	0 b	70 c	38 gh	55 a	2133 bcde
Benefin *	1.5 E	1.50	93 bcd	73 def	8 b	78 bc	40 fgh	54 a	2092 bcde
Benefin *	2.5 G	1.12	83 def	65 f	0 b	78 bc	43 efgh	56 a	2111 bcde
Benefin *	2.5 G	1.50	93 bcd	80 bcde	0 b	78 bc	50 defgh	57 a	2175 abcde
Benefin *	1.5	1.50	88 def	65 f	10 ab	70 c	40 fgh	53 a	2133 bcde
Benefin **	1.5	3	98 ab	80 bcde	8 ab	80 bc	55 cdefgh	57 a	2383 abcd
Diphenamid ****	4 D	6	95 abc	85 bcd	0 b	85 b	63 bcdefg	51 a	2233 abcde
Pebulate *	6 E	3	83 def	75 cdef	10 ab	73 bc	50 defgh	55 a	2162 bcde
Pebulate *	6 E	4	88 def	78 cdef	0 b	85 b	65 bcdef	56 a	2327 abcd
Pebulate *	10 G	3	83 def	70 ef	8 b	73 bc	50 defgh	55 a	2061 cde
Pebulate *	10 G	4	90 cde	85 bcd	10 ab	80 bc	73 bcd	55 a	2284 abcd
Vernolate *	6 E	3	88 def	83 bcde	3 b	78 bc	58 bcdefg	55 a	2378 abcd
Maloran ***	50 W	6	93 bcd	90 b	25 a	80 bc	80 b	55 a	2419 abc
Maloran ***	50 W	1.50	75 ef	78 cdef	10 ab	33 e	35 h	54 a	2028 de
Maloran ****	50 W	3	90 cde	88 bc	10 b	80 bc	78 bc	56 a	2392 abcd
Diphenamid	50 W	6	95 abc	85 bc	5 b	85 b	65 bcde	51 a	2324 abcd
Diphenamid X	50 W	6	90 cde	78 cdef	5 b	83 bc	53 defgh	55 a	2409 abcd
Check-Noncultivate			10 g	10 g	0 b	10 f	10 i	52 a	1878 e
Check-cultivated			100 a	100 a	0 b	100 a	100 a	53 a	2547 a
			C.V. 9%	9%	142%	10%	19%	7%	10%

^{1/}Mean values within a column are not significantly different at 5% probability if followed by one or more of same letters.

* Pre-plant Incorporated 2"
 ** Pre-plant Incorporated 4-6"
 *** Pre-plant Surface
 **** Post Plant 0 days
 X Pre-plant Incorporated 1"

Location: Spindletop Farm, Lexington
 Soil Type: Maury Silt Loam
 Variety: Ky 10
 Planted: June 5
 Treated: June 6