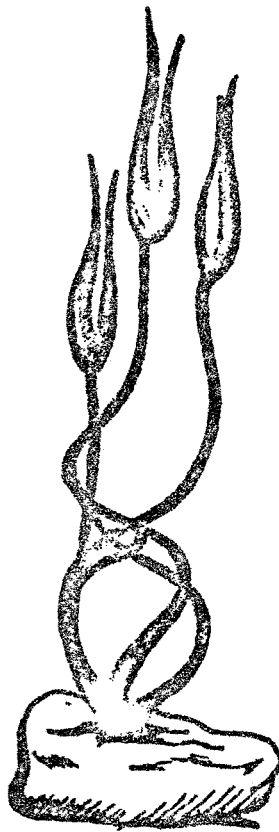


RESULTS OF HERBICIDE EVALUATION TRIALS 1974

NOT FOR PUBLICATION



UNIVERSITY OF KENTUCKY

DEPARTMENT OF AGRONOMY

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LIST OF HERBICIDES USED IN WEED CONTROL STUDIES 1973

1.

| | |
|---|-------------------|
| A-820: N- <u>sec</u> -butyl-4-tert-butyl-2, 6-dinitroaniline | Amchem |
| AC-92553: (Prowl) N-(1-ethylpropyl)-2, 6-dinitro-3, 4-xylidine | American Cyanimid |
| Alachlor: (Lasso)-2-chloro-2', 6'-diethyl-N-(methoxymethyl) acetamilide | Monsanto |
| Atrazine: (Aatrex): 2-chloro-4-(Ethylamino)-6-isopropylamino-s-triazine | Geigy |
| Balan: N-butyl-N-ethyl-a, a, a-trifluoro-2, 6-dinitro-p-toluidine | Elanco |
| BAS-3512: (Basagran) 3-isopropyl-1-H-2, 1, 3-benzothiadiazinone-(4) 3H-one-2, 2-dioxide | BASF |
| BAS-72461: Unknown | BASF |
| BAS-3924: N-propyl-N(2-chloroethyl)-2, 6-dinitro-4-trifluorememethyl-aniline | BASF |
| Cyanazine: (Bladex) 2-(4-chloro, -6-ethylamino-s-triazine-2-ylamino)-2-methylpropionitrile | Shell |
| CGA-10832: (Tolban) N-N-propyl-N-cyclopropylmethyl-4-trifluoro methyl-2,6-dinitroaniline | Geigy |
| CGA018762: (Procyazine) 2-((4 chloro-6-(cyclopropylamino)-1,3,5-triazine-2-yl)amino) -2-methylpropanenitrile | Geigy |
| CGA-24705: Unknown | Geigy |
| Chloramben: (Amiben) 3-amino-2,5-dichlorobenzoic acid | Amchem |
| Chloropropham: (CIPC): isopropyl <u>M</u> -chlorocarbanilate | PPG |
| Desiccate: Mono (N N-dimethy amino salt of Endothal) | Pennwalt |
| Devironol: 2(alpha-naphthoxy)-N, N-diethylpropionamide | Stauffer |
| Dicamba: (Banvel): 3,6-dichloro-o-anisic acid | Velsicol |
| Dinitramine: (Cobex): N ³ , N ³ -diethyl-2,4-dinitro-6-trifluoromethyl-m-phenylenediamine | U.S. Borax |
| Diphenamid: (Enide & Dymid) | Upjohn |
| Dyanap: 1-naphthylphthalamate + 6-dinitro-0-sec butylphenate | Uniroyal |
| Ethrel: 2 chloroethylphosphonic acid | Amchem |
| EL 119: (Surflan) 3,5-dinitro-N, N-dipropyl-sulfanilamide | Elanco |
| EPTC: (Eptam): S-ethyl dipropylthiocarbamate | Stauffer |
| Eradicane: EPTC + N, N-diallyl-2, 2-dichloroacetamide | Stauffer |
| Glyphosate: (Roundup) N-phosphonomethylglycine | Monsanto |
| H-26910: N-chloroacetyl-N-(2-methyl-6-ethylphenyl)-glycine isopropyl ester | Hercules |
| H-22234: N-chloroacetyl-N-(2,6-diethylphenyl)-glycine ethyl ester | Hercules |
| H-25893: N-chloroacetyl-N-(2,6-diethylphenyl)-glycine isopropyl ester | Hercules |
| H-22234: N-chloroacetyl-N-(2,6-diethylphenyl)-glycine ethyl ester | Hercules |
| HOE-22870: Unknown | American Hoechst |
| HOE-22408: Unknown | American Hoechst |
| Linuron: (Lorox): 3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea | Dupont |
| M-3724: (Dowco 233) Unknown | Dow |
| M-4053: (Dowco 333) Unknown | Dow |
| M-3972: (Dowco 290) 3,6-dichloropicolinic acid as the monethanolamine salt | Dow |
| Maloran: 3-(4-bromo-3-chlorophenyl)-1-methoxy-1-methylurea | Geigy |

| | |
|--|-----------|
| MBR 8251: (Destun) 1,1,1-trifluoro-4-(phenylsulfonyl) methanesulfono-0-toluidide | 3M |
| MBR 12325 | 3M |
| MC-4379: (Modown): methyl-5-(2',4'-dichlorophenoxy-2-nitrobenzoate | Mobil |
| Metribuzin: (Sencor) (Lexone) 4-amino-6-(1,1-dimethylethyl)-3-methylthio)-1,2,4-triazine 5-(4 HO-one) | Chemagro |
| Mobil 8475: Unknown | Mobil |
| Mobil 8479: Unknown | Mobil |
| Mobil 5714: Unknown | Mobil |
| NIA-25213: r-2-ethyl-5-methyl-C-5-(2-methylbenzyloxy)-3-dioxane | 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 | Geigy |
| Prefox: cyprazine + S-ethyl diethylthiocarbamate | Gulf |
| Premerge: (Dinoseb): 2-sec-butyl-4,6-dinitrophenol | Dow |
| R-29148: 2,2,5-trimethyl-N-dichloroacetyloxazolidine | Stauffer |
| R-25788: N, N-diallyl-2,2-dichloroacetamide | Stauffer |
| R-24191: 1-(m-t butylacetamidophenyl)-3-methyl-3-methoxy urea | Stauffer |
| R-31401: Unknown | Stauffer |
| RH-2512: Unknown | Rohm Haas |
| RH-2915: Unknown | Rohm Haas |
| S-6044: Unknown | Gulf |
| Simazine: (Princep): 2-chloro-4,6-bis (ethylamino)-s-triazine | Geigy |
| Sutan: S-ethyl diisobutylthiocarbamate | Stauffer |
| San-9789: (Zorial) 4-chloro-5-(methylamino)-2-a,a,a,-trifluoro-m-toly-3(2H-pyridazinone) | Sandos |
| Tillam: S-propyl butylethylthiocarbamate | Stauffer |
| Triflurolin: (Treflan): S-(a,a,a-trifluoro-2,6-dinitro-N, N-dipropyl-p-toluidine | Elanco |
| U-27267: 3,4,5-tribromo-N,N-A-trimethylpyrazole-1-acetamide | Upjohn |
| VEL 4207: Dicamba (3,5-dichloro-o-anisic acid) | Velsicol |
| VEL 5052: Temporarily withheld | Velsicol |
| VEL 5026: Temporarily withheld | Velsicol |
| VEL 5028: Temporarily withheld | Velsicol |
| VEL 4359: Dicamba (3,6-dichloro-o-anisic acid) | Velsicol |
| Vernolate: (Vernam): S-propyl dipropylthiocarbamate | Stauffer |
| 2.4-DB: (Butrac) | Amchem |
| X-77: Non-ionic surfactant | Chevron |

Precipitation - 1974

Spindletop - Maine Chance

| Day | May | June | July | August |
|-------|------|------|------|--------|
| 1 | .17 | 2.92 | 0 | 0 |
| 2 | 1.20 | .02 | 0 | 0 |
| 3 | .20 | 0 | 0 | 1.24 |
| 4 | 0 | 0 | .17 | .36 |
| 5 | 0 | .02 | .08 | 0 |
| 6 | 0 | 0 | T | 0 |
| 7 | 0 | 0 | T | .04 |
| 8 | .54 | .80 | 0 | .06 |
| 9 | .13 | 0 | 0 | 1.01 |
| 10 | 0 | .52 | .16 | .02 |
| 11 | 0 | 0 | .27 | 2.25 |
| 12 | .10 | 0 | 0 | 0 |
| 13 | 0 | 0 | 0 | 0 |
| 14 | 0 | 0 | 0 | 0 |
| 15 | T | .15 | 1.15 | 0 |
| 16 | T | 0 | .07 | .25 |
| 17 | 0 | 0 | 0 | 0 |
| 18 | 0 | 0 | 0 | .12 |
| 19 | .09 | 0 | .75 | .06 |
| 20 | 0 | T | .21 | 0 |
| 21 | 0 | 0 | 0 | 0 |
| 22 | .67 | 2.50 | 0 | 0 |
| 23 | .15 | 1.95 | T | .11 |
| 24 | 0 | 0 | 0 | T |
| 25 | 0 | .10 | 0 | 0 |
| 26 | 0 | 0 | .25 | 0 |
| 27 | 0 | 0 | 0 | 1.82 |
| 28 | 0 | .51 | 0 | .92 |
| 29 | .37 | 0 | 0 | 1.43 |
| 30 | 1.75 | 0 | 0 | 2.34 |
| 31 | 1.21 | | 0 | 0 |
| Sums | 6.58 | 9.49 | 3.11 | 12.03 |
| Norms | 4.16 | 4.31 | 4.83 | 3.40 |

- Design: Trials were designed as randomized complete blocks with four replications of plots 2 rows wide by 30 to 40 feet long with border rows except in no-till corn and soybeans.
- Application: Treatments were applied with a CO₂ 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~~ 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:
Maine Chance Farm: Range 3.2 - 6.1%
Individual organic matter is listed on each experiment.
- pH: Maine Chance Farm: Range 5.4 - 6.4
Individual pH is listed on each experiment.

CORN - FREEMERGENCE 1974
 Department of Agronomy
 University of Kentucky

Visual Evaluation June 24

| Tst. No. | Herbicide Formulation | Rate lbs/A AI | % CONTROL | | |
|----------|------------------------------|---------------|----------------------|-----------|-------------|
| | | | Grasses | Broadleaf | Crop Injury |
| 1 | Astrex 4L* | 2.0 | 90 b-c ^{1/} | 100 a | 0 a |
| 2 | Princep 4L | 2.0 | 93 a-c | 83 c-e | 0 a |
| 3 | Bladex 4S | 3.0 | 95 a-c | 78 d-e | 0 a |
| 4 | Foxfour 4S | 2.0 | 85 c-d | 93 a-c | 0 a |
| 5 | Astrex 4L + Princep 4L | 1.0 + 2.0 | 90 b-c | 95 a-b | 0 a |
| 6 | Lasso 4E | 2.0 | 93 a-c | 78 d-e | 0 a |
| 7 | Lasso 4E + Astrex 4L TK Mix | 2.0 + 1.0 | 93 a-c | 98 a-b | 0 a |
| 8 | Lasso 4E + Astrex 4L TK Mix | 2.0 + 1.0 | 93 a-c | 90 a-c | 0 a |
| 9 | Lasso 4E + Sencor 50W | 2.5 + 2.5 | 90 b-c | 93 a-c | 0 a |
| 10 | Lasso 4E + Sencor 50W | 2.5 + .5 | 98 a-b | 100 a | 20 c |
| 11 | Prowl 3E | 1.5 | 85 c-d | 88 c-e | 0 a |
| 12 | Prowl 3E | 2.0 | 88 c-d | 90 b-d | 0 a |
| 13 | Prowl 3E + Astrex 4L | 1.5 + 1.5 | 93 a-c | 98 a-b | 0 a |
| 14 | Prowl 3E + Astrex 4L | 1.5 + 2.0 | 95 a-c | 98 a-b | 0 a |
| 15 | R-31401 2E | 2.0 | 85 c-d | 93 a-c | 0 a |
| 16 | R-31401 2E | 4.0 | 98 a-b | 98 a-b | 0 a |
| 17 | CGA-18762 80W | 2.5 | 93 a-c | 20 e | 0 a |
| 18 | CGA-18762 80W + Astrex 4L | 2.0 + 1.0 | 93 a-c | 95 a-c | 0 a |
| 19 | CGA-18762 80W + Princep 4L | 2.0 + 1.0 | 98 a-b | 85 c-e | 0 a |
| 20 | CGA-24705 6E | 2.5 | 95 a-c | 88 c-e | 0 a |
| 21 | CGA-24705 6E + Bladex 4S | 2.5 + 3.0 | 95 a-c | 93 a-c | 0 a |
| 22 | CGA-24705 6E + CGA-18762 80W | 1.5 + 2.0 | 88 b-c | 78 d-e | 0 a |
| 23 | CGA-24705 6E + CGA-18762 80W | 2.0 + 2.0 | 90 b-c | 85 c-e | 0 a |
| 24 | CGA-24705 6E + CGA-18762 80W | 2.5 + 2.0 | 95 a-c | 78 d-e | 0 a |
| 25 | CGA-24705 6E + Astrex 4L | 1.5 + 1.5 | 93 a-c | 100 a | 0 a |
| 26 | CGA-24705 6E + Astrex 4L | 2.0 + 1.5 | 95 a-c | 95 a-c | 0 a |
| 27 | CGA-24705 6E + Astrex 4L | 2.5 + 1.5 | 95 a-c | 98 a-b | 0 a |
| 28 | H-22234 4E | 3.0 | 90 b-c | 73 e | 0 a |

CORN - FREEMERGENCE 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A AI | Visual Evaluation June 24 | | |
|-------------|--------------------------|------------------|---------------------------|------------------------|-------------|
| | | | Grasses | % CONTROL Broadleaf | Crop Injury |
| 29 | H-22234 4E + Aatrex 4L | 3.0 + 1.0 | 95 a-c | 95 a-c | 0 a |
| 30 | H-22234 4E + Bladex 4S | 3.0 + 2.0 | 95 a-c | 98 a-1 | 0 a |
| 31 | Vel 5026 80W | .2 | 90 b-c | 70 e | 0 a |
| 32 | Vel 5026 80W | .4 | 90 b-c | 88 c-e | 18 b |
| 33 | Vel 5028 45W | .38 | 93 a-c | 73 e | 0 a |
| 34 | Vel 5028 45W | .75 | 90 a-c | 90 b-d | 5 a |
| 35 | M-3972 Dowco 290 3E | .5 | 30 f | 38 f | 0 a |
| 36 | M-3972 Dowco 290 3E | 1.0 | 63 e | 70 a | 0 a |
| 37 | M-3972 3E + Laseo 4E | .5 + 2.0 | 93 a-c | 98 a-b | 0 a |
| 38 | M-4053 Dowco 338 2E | 1.0 | 70 d-e | 70 e | 0 a |
| 39 | M-4053 Dowco 338 2E | 2.0 | 88 b-c | 78 d-e | 0 a |
| 40 | Check (Cultivated) | 0 | 100 a | 100 a | 0 a |

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

* All treatments are preemergence

LOCATION: Maine Chance

VARIETY: 3369A

FERTILIZATION: 300 lbs/A 16-16-16 + 150#/A N

TREATED & PLANTED: May 13

SOIL TYPE: Silt loam, O.M 3.8, pH 5.6

CORN - FREEMERGENCE 1974
 Department of Agronomy
 University of Kentucky

| Trr. No. | Herbicide Formulation | Rate lbs/A AI | Visual Evaluation July 25 | | | Yield Bu/A | Corn Plants 100/A at harvest |
|-------------|------------------------------|------------------|---------------------------|------------------------|-------------|---------------|------------------------------------|
| | | | Grasses | % Control Broadleaf | Crop Injury | | |
| 1 | Astrex 4L* | 2.0 | 83 c-e | 93 a-c | 0 a | 174 a | 21.8 a |
| 2 | Princep 4L | 2.0 | 90 b-c | 73 d-j | 0 a | 164 a | 22.3 a |
| 3 | Bladex 4S | 3.0 | 80 c-e | 55 i-l | 0 a | 157 a | 22.4 a |
| 4 | Foxfour 4S | 2.0 | 73 d-e | 93 a-c | 0 a | 164 a | 21.2 a |
| 5 | Astrex 4L + Princep 4L | 1.0 + 2.0 | 83 c-e | 90 a-d | 0 a | 162 a | 21.7 a |
| 6 | Lasso 4E | 2.0 | 85 b-d | 70 e-k | 0 a | 166 a | 21.2 a |
| 7 | Lasso 4E + Astrex 4L TK Mix | 2.0 + 1.0 | 85 b-d | 90 a-d | 0 a | 162 a | 21.1 a |
| 8 | Lasso 4E + Astrex 4L TK Mix | 2.0 + 1.0 | 85 b-d | 90 a-d | 0 a | 161 a | 22.2 a |
| 9 | Lasso 4E + Sencor 50 W | 2.5 + 2.5 | 85 b-d | 90 a-d | 0 a | 151 a | 20.9 a |
| 10 | Lasso 4E + Sencor 50W | 2.5 + .5 | 85 b-d | 90 a-d | 5 a | 172 a | 21.4 a |
| 11 | Prowl 3E | 1.5 | 78 c-e | 83 b-h | 0 a | 169 a | 22.2 a |
| 12 | Prowl 3E | 2.0 | 80 c-e | 78 c-i | 0 a | 172 a | 22.3 a |
| 13 | Prowl 3E + Astrex 4L | 1.5 + 1.5 | 83 c-e | 95 a-b | 0 a | 174 a | 22.1 a |
| 14 | Prowl 3E + Astrex 4L | 1.5 + 2.0 | 90 b-c | 95 a-b | 0 a | 171 a | 21.3 a |
| 15 | R-31401 2E | 2.0 | 85 b-d | 95 a-b | 0 a | 174 a | 22.2 a |
| 16 | R-31401 2E | 4.0 | 90 b-d | 90 b-f | 0 a | 166 a | 21.5 a |
| 17 | CGA-18762 80W | 2.5 | 85 b-d | 58 h-l | 0 a | 167 a | 21.3 a |
| 18 | CGA-18762 80W + Astrex 4L | 2.0 + 1.0 | 88 b-d | 93 a-c | 0 a | 165 a | 21.3 a |
| 19 | CGA-18762 80W + Princep 4L | 2.0 + 1.0 | 88 b-d | 80 c-i | 0 a | 167 a | 21.6 a |
| 20 | CGA-24705 6E | 2.5 | 85 b-d | 68 f-k | 0 a | 163 a | 20.6 a |
| 21 | CGA-24705 6E + Bladex 4S | 2.5 + 3.0 | 95 a-b | 85 b-f | 0 a | 173 a | 21.8 a |
| 22 | CGA-24705 6E + CGA-18762 80W | 1.5 + 2.0 | 78 c-e | 63 g-l | 0 a | 153 a | 19.6 a |
| 23 | CGA-24705 6E + CGA-18762 80W | 2.0 + 2.0 | 90 b-d | 70 e-k | 0 a | 173 a | 21.1 a |
| 24 | CGA-24705 6E + CGA-18762 80W | 2.5 + 2.0 | 85 b-d | 63 g-l | 0 a | 165 a | 21.8 a |
| 25 | CGA-24705 6E + Astrex 4L | 1.5 + 1.5 | 90 b-c | 95 a-b | 0 a | 172 a | 20.6 a |
| 26 | CGA-24705 6E + Astrex 4L | 2.0 + 1.5 | 90 b-c | 90 b-f | 0 a | 164 a | 21.2 a |
| 27 | CGA-24705 6E + Astrex 4L | 2.5 + 1.5 | 93 b-c | 95 a-b | 0 a | 171 a | 21.2 a |
| 28 | H-22234 4E | 3.0 | 73 d-e | 45 k-l | 0 a | 156 a | 21.5 a |

CORN - PREEMERGENCE 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A AI | Visual Evaluation July 25 | | | Yield Bu/A | Corn Plants 100/A at harvest |
|-------------|--------------------------|------------------|---------------------------|-----------|-------------|---------------|------------------------------------|
| | | | % Control | | | | |
| | | | Grasses | Broadleaf | Crop Injury | | |
| 29 | H-22234 4E + Aatrex 4L | 3.0 + 1.0 | 83 c-e | 88 b-e | 0 a | 162 a | 21.5 a |
| 30 | H-22234 4E + Bladex 4S | 3.0 + 2.0 | 85 b-d | 85 b-g | 0 a | 169 a | 21.3 a |
| 31 | Vel 5026 80W | .2 | 80 c-e | 50 j-l | 0 a | 159 a | 21.8 a |
| 32 | Vel 5026 80W | .4 | 85 b-d | 73 d-k | 8 a | 161 a | 21.7 a |
| 33 | Vel 5028 45W | .38 | 78 c-e | 55 i-e | 0 a | 153 a | 21.8 a |
| 34 | Vel 5028 45W | .75 | 85 b-d | 90 a-c | 3 a | 167 a | 21.5 a |
| 35 | M-3972 Dowco 290 3E | .5 | 48 f | 46 l | 0 a | 158 a | 21.2 a |
| 36 | M-3972 Dowco 290 3E | 1.0 | 63 e-f | 60 g-l | 0 a | 162 a | 21.2 a |
| 37 | M-3972 3E + Lasso 4E | .5 + 2.0 | 83 c-e | 88 b-f | 0 a | 159 a | 21.8 a |
| 38 | M-4053 Dowco 338 2E | 1.0 | 63 e-f | 58 h-l | 0 a | 147 a | 20.4 a |
| 39 | M-4053 Dowco 338 2E | 2.0 | 73 d-e | 63 g-l | 0 a | 152 a | 21.1 a |
| 40 | Check (Cultivated) | 0 | 100 a | 100 a | 0 a | 161 a | 20.9 a |

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

* All treatments are preemergence

LOCATION: Maine Chance

TREATED & PLANTED: May 13

VARIETY: 3369A

FERTILIZATION: 300 lbs/A 16-16-16 + 150#/A N

SOIL TYPE: Silt loam, O.M 3.8, pH 5.6

CORN - PREPLANT Incorporated - 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation June 24 | | | Visual Evaluation July 25 | | |
|----------|------------------------------------|-------------------|---------------------------|-----------|-------------|---------------------------|-----------|-------------|
| | | | % CONTROL | | | % CONTROL | | |
| | | | Grasses | Broadleaf | Crop Injury | Grasses | Broadleaf | Crop Injury |
| 1 | Bas-72461 4lbs. * | 4.0 | 92 a-b ^{1/} | 78 d-e | 15 b | 85 b-e | 58 e-i | 0 a |
| 2 | Bas-72461 4 lbs. | 8.0 | 100 a | 95 a-b | 49 c | 95 a-c | 83 b-a | 45 b |
| 3 | Profox 4 lbs. | 4.0 | 88 b-e | 75 d-e | 0 a | 85 c-e | 75 c-i | 0 a |
| 4 | COA 18762 80W | 2.5 | 78 e-f | 70 d-e | 0 a | 85 c-e | 55 h-j | 0 a |
| 5 | Eradicane 6E | 3.0 | 100 a | 80 c-d | 0 a | 95 a-c | 58 g-i | 0 a |
| 6 | Eradicane + Bladex 4S | 4.0 + 2.0 | 100 a | 83 c-d | 0 a | 95 a-c | 80 b-f | 0 a |
| 7 | Eradicane + Bladex 4S | 6.0 + 2.0 | 100 a | 95 a-b | 0 a | 100 a | 90 a-c | 0 a |
| 8 | Eradicane + Aatrex 4L | 3.0 + 1.0 | 100 a | 83 c-d | 0 a | 100 a | 83 b-a | 0 a |
| 9 | Sutan ⁺ 6.7E | 4.0 | 98 a-b | 70 d-e | 0 a | 93 a-a | 53 i-j | 0 a |
| 10 | Sutan ⁺ 6.7E | 6.0 | 100 a | 75 d-e | 0 a | 100 a | 70 d-i | 0 a |
| 11 | Sutan ⁺ + Aatrex 4L | 3.0 + 1.0 | 92 a-d | 85 c-d | 0 a | 98 a-b | 88 a-d | 0 a |
| 12 | Sutan ⁺ + R-291486-.25E | 4.0 | 95 a-c | 70 d-e | 0 a | 90 b-a | 60 f-i | 0 a |
| 13 | Sutan ⁺ + R-291486-.25E | 8.0 | 100 a | 78 d-e | 0 a | 98 a-b | 73 c-i | 0 a |
| 14 | Vernam 6.7E + Aatrex 4L | 3.0 + 1.0 | 98 a-b | 85 c-d | 0 a | 93 a-c | 70 d-i | 0 a |
| 15 | Vernam 6.7E + R-25788 6-.3E | 3.0 | 95 a-d | 70 d-e | 0 a | 95 a-c | 58 g-i | 0 a |
| 16 | Vernam 6.7E + R-29148 6-.25E | 3.0 | 90 a-f | 73 d-e | 0 a | 90 a-d | 55 h-j | 0 a |
| 17 | Vernam 6.7E + R-29148 6-.25E | 6.0 | 93 a-d | 75 d-e | 0 a | 93 a-e | 58 g-i | 0 a |
| 18 | Eptam + R-29148 6-.25E | 3.0 | 100 a | 73 d-e | 0 a | 93 a-e | 63 e-i | 0 a |
| 19 | Eptam + R-29148 6-.25E | 6.0 | 100 a | 83 c-d | 13 a-b | 95 a-c | 70 c-i | 5.0 a |
| 20 | R-31401 2E | 2.0 | 85 c-a | 78 c-d | 0 a | 75 a | 63 e-i | 0 a |
| 21 | R-31401 2E | 4.0 | 98 a-b | 95 a-b | 0 a | 90 a-d | 93 a-b | 0 a |
| 22 | R-31401 2E + Sutan ⁺ 6E | 1.0 + 4.0 | 98 a-b | 88 b-d | 0 a | 95 a-c | 78 c-g | 0 a |
| 23 | R-31401 2E + Sutan ⁺ 6E | 2.0 + 4.0 | 95 a-d | 93 b-c | 0 a | 98 a-b | 93 a-b | 0 a |
| 24 | M-4053 2 lbs. "Dowco 338" | 1.0 | 28 h | 15 g | 0 a | 75 e | 28 k | 0 a |
| 25 | M-4053 2 lbs. "Dowco 338" | 2.0 | 35 f-g | 35 f | 0 a | 60 c-e | 23 k | 5.0 a |
| 26 | Vel 5026 80W | .2 | 42 g-h | 38 f | 0 a | 48 f | 35 j-k | 0 a |
| 27 | Vel 5026 80W | .4 | 65 b-e | 75 d-e | 10 a-b | 90 a-d | 60 f-i | 5.0 a |
| 28 | Vel 5028 45W | .38 | 52 g | 60 e | 0 a | 45 f | 55 h-j | 0 a |
| 29 | Vel 5028 45W | .75 | 83 d-e | 83 c-d | 5 a-b | 78 d-e | 75 c-h | 2.5 a |
| 30 | Check (cultivated) | 0 | 100 a | 100 a | 0 a | 100 a | 100 a | 0 a |

^{1/} Mean values within a column are not significantly different at 5% level probability if followed by one or more of the same letters. FERTILIZATION: 300 lbs/A 16-16-16 + 150 lbs/A N Treated & Planted: May 13
 *All treatments are preplant incorporated. LOCATION: Main Chance VARIETY: 3369A Soil type - Silt Loam pH 5.5 O.M. 3.7

CORN - FREPLANT Incorporated - 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Evaluation | Rate lbs/A active | % CONTROL | | | | Yield Bu/A | Corn Plants 100/A at harvest |
|----------|------------------------------|-------------------|-----------|------------|------------|-----------|------------|------------------------------|
| | | | Pigweed | Jimsonweed | Velvetleaf | Cocklebur | | |
| 1 | Bas-72461 4 lbs. * | 4.0 | 88 a-b | 75 a-e | 75 a-c | 28 g-j | 129 b-g | 16.9 a-c |
| 2 | Bas-72461 4 lbs. | 8.0 | 85 a | 80 a-d | 80 a-c | 60 b-g | 74 h | 13.3 d |
| 3 | Prefix 4 lbs. | 4.0 | 88 a | 73 a-e | 58 b-e | 65 b-f | 148 a-f | 19.5 a-b |
| 4 | CGA 18762 80W | 2.5 | 60 b-d | 60 b-g | 43 e-g | 23 h-j | 131 b-g | 18.8 a-b |
| 5 | Eradicane 6E | 3.0 | 83 a-b | 48 d-h | 58 b-e | 30 f-j | 128 b-g | 17.9 a-c |
| 6 | Eradicane + Bladex 4S | 4.0 + 2.0 | 85 a-b | 68 a-f | 78 a-c | 70 a-e | 141 a-g | 17.1 a-c |
| 7 | Eradicane + Bladex 4S | 6.0 + 2.0 | 83 a-c | 83 a-c | 83 a-b | 83 a-c | 157 a-d | 18.7 a-b |
| 8 | Eradicane + Aatrex 4L | 3.0 + 1.0 | 83 a-c | 83 a-c | 83 a-b | 73 a-d | 166 a | 20.3 a-b |
| 9 | Sutan + 6.7E | 4.0 | 80 a-c | 30 g-i | 43 e-g | 20 h-j | 134 a-g | 19.0 a-b |
| 10 | Sutan + 6.7E | 8.0 | 90 a | 68 a-f | 73 a-d | 63 b-f | 137 a-g | 17.9 a-c |
| 11 | Sutan + Aatrex 4L | 3.0 + 1.0 | 85 a | 90 a | 90 a | 93 a | 136 a-g | 19.0 a-b |
| 12 | Sutan + R-291486-.25E | 4.0 | 85 a-b | 78 a-e | 75 a-c | 58 b-g | 111 g | 18.7 a-b |
| 13 | Sutan + R-291486-.25E | 8.0 | 85 a | 73 a-e | 73 a-d | 53 c-h | 152 a-e | 19.6 a-b |
| 14 | Vernam 6.7E + Aatrex 4L | 3.0 + 1.0 | 85 a-b | 55 c-g | 75 a-c | 65 b-e | 160 a-c | 20.2 a-b |
| 15 | Vernam 6.7E + R-25788 6-.3E | 3.0 | 93 a | 38 f-h | 73 a-d | 43 d-i | 120 e-g | 17.8 a-c |
| 16 | Vernam 6.7E + R-29148 6-.25E | 3.0 | 88 a | 45 e-h | 70 a-e | 70 a-e | 143 a-g | 17.3 a-c |
| 17 | Vernam 6.7E + R-29148 6-.25E | 6.0 | 80 a-c | 43 f-h | 75 a-c | 60 b-g | 143 a-g | 18.8 a-b |
| 18 | Eptam + R-29148 6-.25E | 3.0 | 85 a | 45 e-h | 58 b-e | 50 c-h | 156 a-d | 19.7 a-b |
| 19 | Eptam + R-29148 6-.25E | 6.0 | 85 a | 80 a-c | 73 a-d | 50 d-i | 128 c-g | 14.5 c-d |
| 20 | R-31401 2E | 2.0 | 83 a-c | 75 a-e | 45 d-g | 58 b-g | 157 a-c | 20.6 a |
| 21 | R-31401 2E | 4.0 | 90 a | 83 a-c | 83 a-b | 83 a-c | 162 a-b | 19.9 a-b |
| 22 | R-31401 2E + Sutan + 6E | 1.0 + 4.0 | 90 a | 83 a-c | 83 a-b | 70 a-e | 155 a-d | 20.6 a |
| 23 | R-31401 2E + Sutan + 6E | 2.0 + 4.0 | 88 a | 88 a-b | 88 a | 83 a-b | 167 a | 18.8 a-b |
| 24 | M-4053 2 lbs. "Dowco 338" | 1.0 | 55 c-d | 20 h-i | 20 g-h | 20 h-j | 115 f-g | 16.6 b-d |
| 25 | M-4053 2 lbs. "Dowco 338" | 2.0 | 70 a-d | 10 i | 10 h | 10 i-j | 121 e-g | 17.9 a-c |
| 26 | Vel 5026 80W | .2 | 73 a-d | 23 h-i | 23 g-h | 30 f-j | 115 g | 18.7 a-b |
| 27 | Vel 5026 80W | .4 | 83 a-b | 45 e-h | 50 c-f | 35 e-j | 128 b-g | 19.0 a-b |
| 28 | Vel 5028 45W | .38 | 73 d | 33 g-i | 28 g-h | 38 e-j | 124 d-g | 17.2 a-c |
| 29 | Vel 5028 45W | .75 | 70 a-d | 83 a-d | 80 a-c | 80 a-c | 166 a | 18.7 a-b |
| 30 | Check (cultivated) | 0 | 100 a | 100 a | 100 a | 100 a | 142 a-g | 17.5 a-c |

NO-TILL CORN BLUEGRASS SOD - 1974

Department of Agronomy
University of Kentucky

11

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation June 24 | | |
|----------|--|-----------------------|---------------------------|---------------------|---------|
| | | | Grasses | % CONTROL Broadleaf | Sodkill |
| 1 | Astrex 4L + Paraquat 2E + X-77* | 2.0 + .25 + .5% | 98 a-b <u>1/</u> | 100 a | 100 a |
| 2 | Princep 4L + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 98 a-b | 98 a-b | 98 a |
| 3 | Bladex 4S + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 93 a-c | 95 a-c | 95 a |
| 4 | Lasso 4E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 65 f | 65 e-f | 0 d |
| 5 | Lasso 4E + Paraquat 2E + X-77 | 2.5 + .25 + .5% | 55 f | 55 f | 20 c |
| 6 | Lasso 4E + Roundup 3E | 2.0 + 2.0 | 75 d-f | 90 c-d | 100 a |
| 7 | Lasso 4E + Roundup 3E | 2.5 + 2.0 | 85 c-a | 85 c-d | 100 a |
| 8 | Astrex 4L + Roundup 3E | 2.0 + 2.0 | 100 a | 100 a | 100 a |
| 9 | Princep 4L + Roundup 3E | 2.0 + 2.0 | 85 c-d | 93 a-c | 90 a |
| 10 | Bladex 4S + Roundup 3E | 3.0 + 2.0 | 90 b-d | 93 a-c | 100 a |
| 11 | Bladex 4S + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 98 a-b | 100 a | 100 a |
| 12 | Princep 4L + Lasso 4E + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 100 a | 100 a | 100 a |
| 13 | Lasso 4E + Astrex 4L + Roundup 3E | 2.0 + 1.0 + 2.0 | 93 a-c | 100 a | 100 a |
| 14 | Lasso 4E + Sencor 50W + Paraquat 2E + X-77 | 2.5 + .5 + .25 + .5% | 100 a | 100 a | 100 a |
| 15 | Desiccate .5E | 1.0 | 60 f | 65 e-f | 0 d |
| 16 | Desiccate .5E + Astrex 4L | 1.0 + 2.0 | 95 a-c | 98 a-b | 98 a |
| 17 | R-31401 2 E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 98 a-b | 98 a-b | 95 a |
| 18 | R-31401 2 E + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 95 a-c | 100 a | 100 a |
| 19 | R-31401 2 E + R-24191 50W + X-77 | 2.0 + .5 + .5% | 85 b-c | 85 b-d | 58 b |
| 20 | R-31401 2 E + R-24191 50W + X-77 | 3.0 + 1.0 + .5% | 95 a-c | 98 a-b | 93 a |
| 21 | R-24191 50W + Astrex 4L + X-77 | .5 + 2.0 + .5% | 55 f | 55 f | 0 d |
| 22 | R-24191 50W + X-77 | 1.0 + .5% | 55 f | 60 e-f | 0 d |
| 23 | H-22234 2 E + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 70 e-f | 78 d-e | 48 b |
| 24 | Princep 4L + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 100 a | 100 a | 100 a |

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

FERTILIZATION: 200 lbs/A N

VARIETY: 3369 A

*All Treatments Preemergence

Soil type silt loam

O.M 4.0

pH 6.0

TREATED: May 10

PLANTED: May 20

NO-TILL CORN BLUEGRASS SOD - 1974
 Department of Agronomy
 University of Kentucky

| Ttt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation July 26 | | |
|-------------|--|-----------------------|---------------------------|------------------------|---------|
| | | | Grasses | % CONTROL Broadleaf | Sodkill |
| 1 | Astrex 4L + Paraquat 2E + X-77* | 2.0 + .25 + .5% | 63 d-g | 85 a-d | 100 a |
| 2 | Princep 4L + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 83 a-c | 83 a-c | 88 a |
| 3 | Bladex 4S + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 58 f-g | 73 c-d | 100 a |
| 4 | Lasso 4E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 60 e-g | 73 c-d | 28 c-d |
| 5 | Lasso 4E + Paraquat 2E + X-77 | 2.5 + .25 + .5% | 55 f-g | 75 c-d | 5- b-c |
| 6 | Lasso 4E + Roundup 3E | 2.0 + 2.0 | 50 | 65 d | 100 a |
| 7 | Lasso 4E + Roundup 3E | 2.5 + 2.0 | 60 e-g | 68 c-d | 100 a |
| 8 | Astrex 4L + Roundup 3E | 2.0 + 2.0 | 85 a | 95 a | 98 a |
| 9 | Princep 4L + Roundup 3E | 2.0 + 2.0 | 65 c-g | 80 b-d | 100 a |
| 10 | Bladex 4S + Roundup 3E | 3.0 + 2.0 | 50 g | 70 c-d | 100 a |
| 11 | Bladex 4S + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 83 a-d | 93 a-b | 100 a |
| 12 | Princep 4L + Lasso 4E + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 80 a-e | 85 a-d | 93 a |
| 13 | Lasso 4E + Astrex 4L + Roundup 3E | 2.0 + 1.0 + 2.0 | 68 c-g | 85 a-d | 100 a |
| 14 | Lasso 4E + Sencor 50W + Paraquat 2E + X-77 | 2.5 + .5 + .25 + .5% | 88 a-b | 95 a | 100 a |
| 15 | Desiccate .5E | 1.0 | 70 b-g | 70 c-d | 5.0 d |
| 16 | Desiccate .5E + Astrex 4L | 1.0 + 2.0 | 68 c-g | 80 b-d | 75 a-b |
| 17 | R-31401 2 E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 63 d-g | 75 c-d | 100 a |
| 18 | R-31401 2 E + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 83 a-c | 95 a | 100 a |
| 19 | R-31401 2 E + R-24191 50W + X-77 | 2.0 + .5 + .5% | 70 b-g | 70 c-d | 8.0 d |
| 20 | R-31401 2 E + R-24191 50W + X-77 | 3.0 + 1.0 + .5% | 75 a-f | 95 a | 100 a |
| 21 | R-24191 50W + Astrex 4L + X-77 | .5 + 2.0 + .5% | 70 b-g | 70 c-d | 18 d |
| 22 | R-24191 50W + X-77 | 1.0 + .5% | 65 c-g | 70 c-d | 20 c-d |
| 23 | R-22234 2 E + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 55 f-g | 70 c-d | 30 c-d |
| 24 | Princep 4L + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 90 a | 95 a | 100 a |

NO-TILL CORN BLUEGRASS SOO - 1974

Department of Agronomy
University of Kentucky

| Txt. No. | Herbicide Formulation | Rate lbs/A active | Yield bu/A | CORN PLANTS 100/A at harvest |
|----------|--|-----------------------|------------|------------------------------|
| 1 | Aatrex 4L + Paraquat 2E + X-77* | 2.0 + .25 + .5% | 134 a | 17.8 a |
| 2 | Princep 4L + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 154 a | 16.1 a |
| 3 | Bledax 4S + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 155 a | 19.4 a |
| 4 | Lasso 4E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 140 a | 19.0 a |
| 5 | Lasso 4E + Paraquat 2E + X-77 | 2.5 + .25 + .5% | 140 a | 16.2 a |
| 6 | Lasso 4E + Roundup 3E | 2.0 + 2.0 | 148 a | 19.0 a |
| 7 | Lasso 4E + Roundup 3E | 2.5 + 2.0 | 155 a | 21.5 a |
| 8 | Aatrex 4L + Roundup 3E | 2.0 + 2.0 | 134 a | 19.8 a |
| 9 | Princep 4L + Roundup 3E | 2.0 + 2.0 | 139 a | 17.9 a |
| 10 | Bledax 4S + Roundup 3E | 3.0 + 2.0 | 126 a | 16.7 a |
| 11 | Bledax 4S + Aatrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 126 a | 17.1 a |
| 12 | Princep 4L + Lasso 4E + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 126 a | 15.8 a |
| 13 | Lasso 4E + Aatrex 4L + Roundup 3E | 2.0 + 1.0 + 2.0 | 141 a | 17.4 a |
| 14 | Lasso 4E + Sencor 50S + Paraquat 2E + X-77 | 2.5 + .5 + .25 + .5% | 154 a | 18.9 a |
| 15 | Desiccate .5E | 1.0 | 107 a | 16.0 a |
| 16 | Desiccate .5E + Aatrex 4L | 1.0 + 2.0 | 134 a | 16.5 a |
| 17 | R-31401 2E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 134 a | 17.8 a |
| 18 | R-31401 2E + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 166 a | 20.3 a |
| 19 | R-31401 2E + R-24191 50W + X-77 | 2.0 + .5 + .5% | 147 a | 18.3 a |
| 20 | R-31401 2E + R-24191 50W + X-77 | 3.0 + 1.0 + .5% | 130 a | 17.5 a |
| 21 | R-24191 50W + Aatrex 4L + X-77 | .5 + 2.0 + .5% | 114 a | 14.4 a |
| 22 | R-24191 50W + X-77 | 1.0 + .5% | 123 a | 18.1 a |
| 23 | H-22234 2 E + Aatrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 156 a | 18.4 a |
| 24 | Princep 4L + Aatrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 124 a | 15.7 a |

NO-TILL CORN STALKLAND 1974
 Department of Agronomy
 University of Kentucky

Visual Evaluation June 24

CONTROL

| Treat. No. | Herbicide Formulation | Rate | | Grasses | Broadleaf | Crop Injury |
|---------------|---|-------|-------------------|---------|-----------|----------------|
| | | lbs/A | active | | | |
| 1 | Astrex 4L + Paraquat 2E + X-77 ^a | 2.0 | + .25 + .5% | 95 a-a | 98 a-b | Ca |
| 2 | Princep 4L + Paraquat 2E + X-77 | 2.0 | + .25 + .5% | 85 b-b | 93 b-c | Ca |
| 3 | Bladex 4E + Paraquat 2E + X-77 | 3.0 | + .25 + .5% | 98 a-b | 58 f | Ca |
| 4 | Lasso 4E + Paraquat 2E + X-77 | 2.0 | + .25 + .5% | 93 a-c | 75 d-f | Ca |
| 5 | Lasso 4E + Paraquat 2E + X-77 | 2.5 | + .25 + .5% | 88 a-c | 65 f | Ca |
| 6 | Lasso 4E + Roundup 3E | 2.0 | + 2.0 | 83 b-c | 60 f | Ca |
| 7 | Lasso 4E + Roundup 3E | 2.5 | + 2.0 | 68 a-c | 65 f | Ca |
| 8 | Astrex 4L + Roundup 3E | 2.0 | + 2.0 | 95 a-d | 100 a | Ca |
| 9 | Princep 4L + Roundup 3E | 2.0 | + 2.0 | 95 a-d | 88 b-d | Ca |
| 10 | Bladex 4E + Roundup 3E | 3.0 | + 2.0 | 100 e | 73 e-f | Ca |
| 11 | Bladex 4E + Astrex 4L + Paraquat 2E + X-77 | 2.0 | + 1.0 + .25 + .5% | 95 a-c | 88 e-e | Ca |
| 12 | Princep 4L + Lasso 2E + Paraquat 2E + X-77 | 2.0 | + 1.0 + .25 + .5% | 98 a-b | 95 a-e | Ca |
| 13 | Lasso 4E + Astrex 4L + Roundup | 2.0 | + 1.0 + 2.0 | 98 a-b | 95 a-b | Ca |
| 14 | Lasso 4E + Sencor 50W + Paraquat 2E + X-77 | 2.5 | + .5 + .25 + .5% | 100 a | 90 b-c | Ca |
| 15 | Basisto .5E | 1.0 | | 10 e | 10 g | Ca |
| 16 | Basisto + Astrex 4L | 1.0 | + 2.0 | 85 b-c | 95 a-c | Ca |
| 17 | R-31401 2 lbs. + Paraquat 2E + X-77 | 2.0 | + .25 + .5% | 90 a-c | 95 a-e | Ca |
| 18 | R-31401 2 lbs. + Paraquat 2E + X-77 | 3.0 | + .25 + .5% | 90 a-c | 98 a-b | Ca |
| 19 | R-31401 2 lbs. + R-24191 50W + X-77 | 2.0 | + .5 + .5% | 75 c-d | 93 b-c | Ca |
| 20 | R-31401 2 lbs. + R-24191 50W + X-77 | 3.0 | + 1.0 + .5% | 90 a-c | 98 a-b | Ca |
| 21 | R-24191 50W + Astrex 4L + X-77 | .5 | + 2.0 + .5% | 20 e | 20 g | Ca |
| 22 | R-24191 50 W + X-77 | 1.0 | + .5% | 10 e | 10 g | Ca |
| 23 | X-22234 2 lbs. + Astrex 4L + Paraquat 2E + X-77 | 2.0 | + 1.0 + .25 + .5% | 55 d | 58 f | Ca |
| 24 | Princep 4L + Astrex 4L + Paraquat 2E + X-77 | 2.0 | + 1.0 + .25 + .5% | 100 a | 100 a | Ca |

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

* All treatments preemergence
 FERTILIZATION: 200 lbs/A N

VARIETY: 3349 A
 TREATED: May 10
 PLANTED: May 20
 Soil type silt loam
 O.M 4.0
 pH 5.6

NO-TILL CORN STALKLAND 1974
 Department of Agronomy
 University of Kentucky

Visual Evaluation July 26

| TTC. No. | Herbicide Formulation | Rate lbs/A active | % CONTROL | | Crop Injury |
|-------------|---|-----------------------|-----------|-----------|----------------|
| | | | Grasses | Broadleaf | |
| 1 | Astrex 4L + Paraquat 2E + X-77* | 2.0 + .25 + .5% | 75 a-f | 89 a-d | 0 a |
| 2 | Princep 4L + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 85 a-b | 70 b-d | 0 a |
| 3 | Bladex 4S + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 90 a-b | 38 a-g | 0 a |
| 4 | Lasso 4E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 83 a-d | 58 a-g | 0 a |
| 5 | Lasso 4E + Paraquat 2E + X-77 | 2.5 + .25 + .5% | 88 a-b | 30 c | 0 a |
| 6 | Lasso 4E + Roundup 3E | 2.0 + 2.0 | 88 a-b | 28 g | 0 a |
| 7 | Lasso 4E + Roundup 3E | 2.5 + 2.0 | 88 a-b | 38 a-g | 0 a |
| 8 | Astrex 4L + Roundup 3E | 2.0 + 2.0 | 78 a-e | 90 a-c | 0 a |
| 9 | Princep 4L + Roundup 3E | 2.0 + 2.0 | 88 a-b | 65 c-e | 0 a |
| 10 | Bladex 4S + Roundup 3E | 3.0 + 2.0 | 88 a-b | 50 a-g | 0 a |
| 11 | Bladex 4S + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 88 a-b | 38 b-d | 0 a |
| 12 | Princep 4L + Lasso 2E + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 83 a-d | 90 a-b | 0 a |
| 13 | Lasso 4E + Astrex 4L + Roundup | 2.0 + 1.0 + 2.0 | 80 a-e | 83 a-d | 0 a |
| 14 | Lasso 4E + Sencor 50W + Paraquat 2E + X-77 | 2.5 + .5 + .25 + .5% | 83 a-d | 75 a-d | 0 a |
| 15 | Desiccate .5E | 1.0 | 48 f-h | 38 a-g | 0 a |
| 16 | Desiccate + Astrex 4L | 1.0 + 2.0 | 55 a-h | 75 a-d | 0 a |
| 17 | R-31401 2 lbs. + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 68 b-f | 80 a-d | 0 a |
| 18 | R-31401 2 lbs. + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 83 a-c | 93 a | 0 a |
| 19 | R-31401 2 lbs. + R-24191 50W + X-77 | 2.0 + .5 + .5% | 55 d-h | 85 a-c | 0 a |
| 20 | R-31401 2 lbs. + R-24191 50W + X-77 | 3.0 + 1.0 + .5% | 70 a-f | 85 a-d | 0 a |
| 21 | R-24191 50W + Astrex 4L + X-77 | .5 + 2.0 + .5% | 48 h | 35 f-g | 0 a |
| 22 | R-24191 50W + X-77 | 1.0 + .5% | 35 g-h | 38 a-g | 0 a |
| 23 | H-22234 2 lbs. + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 60 c-g | 60 d-f | 0 a |
| 24 | Princep 4L + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 93 a | 93 a | 0 a |

NO-TILL CORN STALKLAND 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Yield Bu/A | CORN PLANTS 100/A at harvest |
|----------|---|-----------------------|------------|------------------------------|
| 1 | Astrex 4L + Paraquat 2E + X-77* | 2.0 + .25 + .5% | 173 a-b | 21.0 a |
| 2 | Princep 4L + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 164 a-c | 20.9 a |
| 3 | Bladex 4S + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 152 a-d | 22.4 a |
| 4 | Lasso 4E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 158 a-c | 22.6 a |
| 5 | Lasso 4E + Paraquat 2E + X-77 | 2.5 + .25 + .5% | 148 a-e | 22.0 a |
| 6 | Lasso 4E + Roundup 3E | 2.0 + 2.0 | 156 a-c | 21.0 a |
| 7 | Lasso 4E + Roundup 3E | 2.5 + 2.0 | 142 b-e | 20.2 a |
| 8 | Astrex 4L + Roundup 3E | 2.0 + 2.0 | 167 a-c | 23.6 a |
| 9 | Princep 4L + Roundup 3E | 2.0 + 2.0 | 157 a-c | 19.5 a |
| 10 | Bladex 4S + Roundup 3E | 3.0 + 2.0 | 162 a-c | 22.6 a |
| 11 | Bladex 4S + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 150 a-a | 22.3 a |
| 12 | Princep 4L + Lasso 2E + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 174 a-b | 22.4 a |
| 13 | Lasso 4E + Astrex 4L + Roundup | 2.0 + 1.0 + .20 | 156 a-c | 21.8 a |
| 14 | Lasso 4E + Sencor 50W + Paraquat 2E + X-77 | 2.5 + .5 + .25 + .5% | 165 a-c | 23.9 a |
| 15 | Desiccate .5E | 1.0 | 120 e-f | 21.0 a |
| 16 | Desiccate + Astrex 4L | 1.0 + 2.0 | 137 c-e | 22.4 a |
| 17 | R-31401 2 lbs. + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 169 a-c | 22.2 a |
| 18 | R-31401 2 lbs. + Paraquat 2E + X-77 | 3.0 + .25 + .5% | 169 a-c | 24.1 a |
| 19 | R-31401 2 lbs. + R-24191 50W + X-77 | 2.0 + .5 + .5% | 148 a-e | 20.0 a |
| 20 | R-31401 2 lbs. + R-24191 50W + X-77 | 3.0 + 1.0 + .5% | 151 a-e | 21.5 a |
| 21 | R-24191 50W + Astrex 4L + X-77 | .5 + 2.0 + .5% | 124 d-f | 20.3 a |
| 22 | R-24191 50W + X-77 | 1.0 + .5% | 106 f | 17.7 a |
| 23 | H-22234 2 lbs. + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 153 a-d | 21.9 a |
| 24 | Princep 4L + Astrex 4L + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 176 a | 23.0 a |

CORN MOBIL COMPARISONS - 1974
Department of Agronomy
University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation June 24 | | | Visual Evaluation July 25 | | |
|----------|--------------------------------|-------------------|---------------------------|---------------------|-------------|---------------------------|---------------------|-------------|
| | | | Grasses | % CONTROL Broadleaf | Crop Injury | Grasses | % CONTROL Broadleaf | Crop Injury |
| 1 | MoDown 2E* | 2.0 | 85 b-d <u>1/</u> | 90 a-d | 10 b-c | 70 e | 80 b-e | 0 a |
| 2 | MoDown 2E encapsulated* | 2.0 | 83 b-d | 85 a-d | 0 a | 78 c-e | 78 b-f | 0 a |
| 3 | MoDown + Lasso 4E* | 1.5 + 2.0 | 93 a-b | 93 a-b | 20 c | 95 a-b | 93 a-b | 5.0 a |
| 4 | MoDown + Lasso * | 2.0 + 2.0 | 93 a-b | 85 b-e | 13 b-c | 93 b-c | 88 b-d | 3.0 a |
| 5 | Mobil 8475 2E* | 1.5 | 80 b-d | 68 c-f | 3.0 a-b | 73 d-e | 45 g-i | 0 a |
| 6 | Mobil + MoDown 2E* | 1.5 + 1.5 | 85 b-d | 88 a-d | 15 c | 80 c-e | 75 b-f | 8.0 a |
| 7 | Mobil 8479 2E* | 1.5 | 78 b-d | 53 e-h | 0 a | 70 e | 45 g-i | 0 a |
| 8 | Mobil 8479 + MoDown 2E* | 1.5 + 1.5 | 88 b-c | 90 a-c | 13 b-c | 78 c-e | 88 b-d | 8.0 a |
| 9 | Mobil 5714 80W* | .5 | 68 c-d | 50 f-h | 0 a | 78 c-e | 38 h-j | 0 a |
| 10 | Mobil 5714 80W* | 1.0 | 83 b-d | 65 c-g | 10 a-c | 83 c-e | 50 f-i | 3.0 a |
| 11 | Mobil 5714 80W* | 2.0 | 93 a-b | 83 b-d | 50 d | 88 b-d | 68 d-g | 10 |
| 12 | AAtrex 4L* | 2.0 | 78 b-d | 63 d-g | 0 a | 88 b-c | 90 a-c | 0 a |
| 13 | Lasso 4E* | 2.0 | 85 b-d | 68 c-f | 0 a | 80 c-e | 55 e-i | 0 a |
| 14 | Mobil 8475 2E** | .75 | 65 d | 28 h | 0 a | 70 e | 15 j | 0 a |
| 15 | Mobil 8475 2E** | 1.5 | 65 c-d | 45 f-h | 0 a | 70 e | 15 j | 0 a |
| 16 | Mobil 8475 2E + MoDown 2lbs.** | 1.5 + 1.5 | 85 b-d | 73 b-f | 10 a-c | 95 a-b | 70 c-g | 3.0 a |
| 17 | Mobil 8479 2E** | .75 | 58 d | 33 g-h | 0 a | 73 d-e | 35 i-j | 0 a |
| 18 | Mobil 8479 2E** | 1.5 | 63 d | 43 f-h | 0 a | 70 e | 33 i-j | 0 a |
| 19 | Mobil 8479 2E + MoDown 2E** | 1.5 + 1.5 | 85 b-d | 70 b-f | 3.0 a-b | 83 c-e | 73 b-f | 0 a |
| 20 | Eradicane 6E** | 3.0 | 93 a-b | 88 a-d | 0 a | 93 b-c | 65 d-h | 0 a |
| 21 | Sutan ⁺ 6.7E** | 4.0 | 90 a-b | 85 b-a | 0 a | 93 b-c | 78 b-f | 0 a |
| 22 | Check (Cultivated) | .0 | 100 a | 100 a | 0 a | 100 a | 100 a | 0 a |

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

* Preemergence

**Preplant incorporated

Location: Main Chance

Variety: 3369 A

Fertilization: 300 lbs/A 16-16-16 + 150 lbs/A N

Treated + Planted: May 13

Soil Type: Silt Loam

O.M. 3.7

Fh 5.5

CORN MOBIL COMPARISONS - 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Yield BU/AC. | CORN PLANTS 100/A at harvest |
|----------|--------------------------------|-------------------|--------------|------------------------------|
| 1 | MoDown 2E* | 2.0 | 146 a-d | 22.1 a-b |
| 2 | McDown 2E encapsulated* | 2.0 | 139 b-e | 20.9 d-f |
| 3 | McDown + Lasso 4E* | 1.5 + 2.0 | 151 a-c | 22.0 a-c |
| 4 | McDown + Lasso * | 2.0 + 2.0 | 150 a-c | 21.6 b-d |
| 5 | Mobil 8475 2E* | 1.5 | 122 e-f | 22.6 a |
| 6 | Mobil + MoDown 2E* | 1.5 + 1.5 | 146 a-d | 22.6 a |
| 7 | Mobil 8479 2E* | 1.5 | 145 a-d | 21.6 b-d |
| 8 | Mobil 8479 + MoDown 2E* | 1.5 + 1.5 | 157 a-b | 21.2 c-e |
| 9 | Mobil 5714 80W* | .5 | 141 b-e | 22.3 a-b |
| 10 | Mobil 5714 80W* | 1.0 | 133 c-e | 21.3 c-e |
| 11 | Mobil 5714 80W* | 2.0 | 130 c-f | 22.3 a-b |
| 12 | AAtrex 4L* | 2.0 | 140 b-e | 19.9 g-h |
| 13 | Lasso 4E* | 2.0 | 144 f-g | 20.6 e-g |
| 14 | Mobil 8475 2E** | .75 | 127 d-f | 20.6 e-g |
| 15 | Mobil 8475 2E** | 1.5 | 109 f | 20.2 f-h |
| 16 | Mobil 8475 2E + MoDown 2lbs.** | 1.5 + 1.5 | 167 a | 19.6 h |
| 17 | Mobil 8479 2E** | .75 | 123 e-f | 21.5 b-d |
| 18 | Mobil 8479 2E** | 1.5 | 144 b-e | 20.9 d-f |
| 19 | Mobil 8479 2E + MoDown 2E** | 1.5 + 1.5 | 147 a-d | 20.6 e-g |
| 20 | Eradicane 6E** | 3.0 | 155 a-b | 21.3 c-e |
| 21 | Sutan [†] 6.7E** | 4.0 | 140 b-e | 20.5 e-g |
| 22 | Check (Cultivated) | .0 | 167 a | 21.6 b-d |

CORN DOW & VELSICOL - 1974
Department of Agronomy
University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | VISUAL EVALUTATION | | Yield bu/A | CORN PLANTS 100/A at harvest |
|----------|------------------------|-------------------|-------------------------------|--------------------------------|------------|------------------------------|
| | | | % Control June 25 Crop Injury | % Control August 1 Crop Injury | | |
| 1 | M-3734 Dow Co. 233 3E* | 1.0 | 45 c ¹ | 0 a | 109 b-d | 17.1 a |
| 2 | M-3724 Dow Co. 233 3E | 2.0 | 63 c | 0 a | 97 d-c | 18.8 a |
| 3 | M-3724 Dow Co. 233 3E | 4.0 | 70 c | 0 a | 104 b-f | 18.3 a |
| 4 | M-4053 Dow Co. 338 2E | .5 | 0 a | 0 a | 112 b-d | 19.8 a |
| 5 | M-4053 Dow Co. 338 2E | 1.0 | 0 a | 0 a | 110 b-d | 19.6 a |
| 6 | Check (Weedy) | .0 | 0 a | 0 a | 123 a-b | 19.4 a |
| 7 | VEL 4359 50W | .5 | 3-a | 0 a | 110 b-d | 18.1 a |
| 8 | VEL 4359 50W | 1.0 | 4 a-b | 0 a | 99 d-e | 19.5 a |
| 9 | VEL 4359 50W | 2.0 | 13 a-b | 0 a | 111 b-d | 18.4 a |
| 10 | VEL 4207 2E | .5 | 0 a | 0 a | 106 b-e | 18.0 a |
| 11 | VEL 4207 2E | 1.0 | 15 a-b | 0 a | 107 b-e | 19.4 a |
| 12 | VEL 4207 2E | 2.0 | 0 | 0 a | 103 c-e | 17.9 a |
| 13 | VEL 5052 2E | .5 | 20 a-b | 0 a | 102 c-e | 16.9 a |
| 14 | VEL 5052 2E | 1.0 | 5 a-b | 0 a | 98 d-e | 19.6 a |
| 15 | VEL 5052 2E | 2.0 | 0 a | 0 a | 106 b-e | 17.0 a |
| 16 | VEL 5026 80W | .2 | 0 a | 0 a | 103 c-e | 18.3 a |
| 17 | VEL 5026 80W | .4 | 10 a-b | 0 a | 121 a-c | 19.6 a |
| 18 | VEL 5028 80W | .38 | 5 a-b | 0 a | 130 a | 20.1 a |
| 19 | VEL 5028 80W | .75 | 5 a-b | 0 a | 97 d-e | 16.0 a |
| 20 | BANVEL D 4S | 1.5 | 5 a-b | 0 a | 100 d-e | 19.9 a |
| 21 | BANVEL D 4S | 1.0 | 3 a | 0 a | 107 b-e | 18.6 a |
| 22 | BANVEL D 4S | 2.0 | 13 b-b | 0 a | 88 e | 18.3 a |
| 23 | Check (Cultivated) | .0 | 0 a | 0 a | 113 a-d | 19.4 a |

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

*All treatments are preemergence

Location: Maine Chance

Fertilization: 300 lb/A 16-16-16

Variety: 3369A

Treated & Planted: May 24

Soil Type Silt Loam

O.M. 6.1

pH 6.6

SOYBEAN - PREEMERGENCE 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation June 26 | | | Visual Evaluation July 29 | | |
|----------|---|-------------------|---------------------------|-----------|-------------|---------------------------|-----------|-------------|
| | | | % CONTROL | | Crop Injury | % CONTROL | | Crop Injury |
| | | | Grasses | Broadleaf | | Grasses | Broadleaf | |
| 1 | Lasso 4E * | 2.0 | 88 b-g ^{1/} | 73 c-i | 0 j | 85 b-e | 53 i-p | 0 i |
| 2 | Lorox 50W | .75 | 78 e-i | 78 b-h | 0 j | 80 c-g | 63 f-m | 0 i |
| 3 | Sencor 50W | .38 | 80 d-i | 75 c-i | 0 j | 80 c-g | 60 f-m | 0 i |
| 4 | Sencor 50W | .75 | 85 c-h | 83 b-g | 23 f-g | 75 d-h | 70 e-j | 20 f-g |
| 5 | Preforan 3E | 4.5 | 85 c-h | 70 d-i | 0 j | 80 c-g | 63 f-m | 0 i |
| 6 | Maloran 50W | 1.25 | 70 h-j | 73 c-i | 0 j | 73 e-h | 40 n-s | 0 i |
| 7 | Surflan 75W | 1.0 | 90 b-h | 83 b-g | 0 j | 78 c-g | 70 e-j | 0 i |
| 8 | MER 12325 4S | 2.0 | 60 i-j | 45 h-l | 0 j | 75 d-h | 23 r-v | 0 i |
| 9 | A-820 4E | 3.0 | 83 c-h | 70 d-i | 0 j | 70 e-h | 55 h-o | 0 i |
| 10 | Basagran 4E | 1.0 | 55 j | 78 b-h | 0 j | 60 h | 65 e-k | 0 i |
| 11 | Surflan 75W + Sencor 50W | 1.0 + .38 | 90 b-h | 78 b-h | 0 j | 88 b-c | 68 e-k | 0 i |
| 12 | Surflan 75W + Sencor 50 W + Basagran 4E | 1.0 + .38 + 1.0 | 98 a-b | 100 a | 0 j | 93 b | 93 b-c | 0 i |
| 13 | Surflan 75W + Basagran 4E | 1.0 + 1.0 | 88 c-h | 93 b | 0 j | 80 b-f | 95 a-b | 0 i |
| 14 | Lasso 4E + Sencor 50W | 2.0 + .25 | 95 a-c | 83 b-g | 3 i-j | 88 b-d | 70 e-j | 0 i |
| 15 | Lasso 4E + Sencor 50W | 2.0 + .38 | 93 a-e | 73 d-i | 0 j | 90 b-c | 73 d-i | 0 i |
| 16 | Lasso 4E + Sencor 50W | 2.0 + .5 | 95 a-c | 88 b-d | 25 g-h | 85 b-e | 75 f-i | 0 i |
| 17 | Lasso 4E + Sencor 50W | 2.0 + .75 | 90 b-h | 83 b-g | 28 e-g | 90 b-c | 78 d-h | 23 f-g |
| 18 | Lasso 4E + Lorox 50W + Furloe 4E | 2.0 + 1.5 + 2.0 | 93 a-e | 85 b-g | 0 j | 90 b-c | 75 d-i | 0 i |
| 19 | Furloe 4E + Lasso 4E | 2.0 + 2.0 | 93 a-e | 78 b-h | 0 j | 78 c-g | 68 e-j | 0 i |
| 20 | Bladex 4S + Lasso 4E | 1.0 + 2.0 | 90 b-h | 75 c-i | 0 j | 85 b-e | 58 g-o | 0 i |
| 21 | Destun 50W | 2.0 | 75 f-j | 60 h-k | 0 j | 75 d-h | 33 p-u | 0 i |
| 22 | Destun 50W | 3.0 | 83 c-h | 55 i-k | 0 j | 70 e-h | 33 p-u | 0 i |
| 23 | Destun 50W | 4.0 | 85 c-h | 75 c-i | 8 h-i | 88 b-d | 60 f-n | 5 h |
| 24 | Destun 50 W + Sencor 50W | 2.0 + .38 | 85 c-h | 78 b-h | 0 j | 80 c-g | 63 f-m | 0 i |
| 25 | Destun 50W + Maloran 50W | 2.0 + 1.25 | 88 c-h | 75 c-i | 0 j | 80 c-g | 58 g-o | 0 i |

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

* All treatments applied preemergence.

LOCATION: Spindletop

FERTILIZATION: 300 lbs. 16-16-16

VARIETY: Callend

TREATED & PLANTED: May 16

Soil type Silt loam

C.M 3.8

pH 6.4

SOYBEAN - PREEMERGENCE 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation June 26 | | | Visual Evaluation July 29 | | |
|-------------|---------------------------|----------------------|---------------------------|-----------|----------------|---------------------------|-----------|----------------|
| | | | % CONTROL | | | % CONTROL | | |
| | | | Grasses | Broadleaf | Crop Injury | Grasses | Broadleaf | Crop Injury |
| 26 | Destun 50W + Lorox 50W | 2.0 + .25 | 80 d-i | 80 b-h | 0 j | 80 c-g | 60 f-n | 0 i |
| 27 | Bladex 4S + Lorox 50W | 2.0 + .5 | 93 a-a | 85 b-g | 28 e-g | 83 b-f | 70 e-j | 25 d-f |
| 28 | Preforan 3E + Maloran 50W | 4.5 + 1.25 | 88 c-h | 80 b-h | 0 j | 80 c-g | 70 e-j | 0 i |
| 29 | Prowl 3E + Sencor 50W | 1.0 + .38 | 83 c-h | 80 b-h | 30 d-g | 80 c-g | 60 f-n | 28 d-f |
| 30 | Prowl 3E + Sencor 50W | 1.5 + .38 | 90 b-h | 73 c-i | 0 j | 80 c-g | 60 f-n | 0 i |
| 31 | Maloran 50W + Lasso 4E | 1.25 + 2.0 | 93 a-d | 80 b-h | 8 h-i | 90 b-c | 68 e-k | 0 i |
| 32 | Lexone 50W + Surflan 75W | .38 + 1.0 | 75 f-j | 60 h-k | 0 j | 80 c-g | 65 e-k | 0 i |
| 33 | Cobex 2E + Dyanap 2E | 1.0 + 3.0 | 95 a-c | 78 b-h | 25 e-g | 83 b-f | 63 f-n | 23 e-g |
| 34 | Surflan 75W + Dyanap 2E | 1.0 + 3.0 | 88 c-h | 78 b-h | 0 j | 83 b-f | 78 d-g | 0 i |
| 35 | Amiben 2E * | 3.0 | 75 f-j | 73 c-i | 0 j | 80 c-g | 43 l-r | 0 i |
| 36 | Amiben 2E + Sencor 50W | 2.0 + .38 | 85 c-h | 73 c-i | 0 j | 75 d-h | 63 f-m | 0 i |
| 37 | Amiben 2E + Lorox 50W | 3.0 + 1.0 | 93 a-e | 80 b-h | 0 j | 85 b-e | 65 e-l | 0 i |
| 38 | Amiben + Lasso 4E | 2.0 + .2 | 90 b-f | 75 c-i | 0 j | 80 c-g | 40 m-s | 0 i |
| 39 | A-820 4E + Sencor 50W | 3.0 + .38 | 95 a-c | 75 c-i | 0 j | 75 d-h | 68 e-k | 0 i |
| 40 | A-820 4E + Amiden 2E | 3.0 + 3.0 | 83 c-h | 68 f-i | 0 j | 85 b-e | 53 i-p | 0 i |
| 41 | Sencor 50W + Preforan 3E | .38 + 4.0 | 95 a-c | 80 b-h | 0 j | 88 b-d | 75 d-i | 0 i |
| 42 | San-9789 80W | 1.0 | 83 c-h | 75 c-i | 0 j | 75 d-h | 45 k-q | 0 i |
| 43 | San-9789 80W | 2.0 | 93 a-e | 78 b-h | 0 j | 88 b-d | 65 e-l | 0 i |
| 44 | San-9789 80W + Sencor 50W | 1.0 + .38 | 90 b-f | 83 b-f | 0 j | 80 c-g | 75 d-h | 0 i |
| 45 | San-9789 80W + Sencor 50W | 2.0 + .38 | 95 a-c | 90 b-c | 25 e-g | 90 b-c | 73 d-i | 25 d-f |
| 46 | S-6044 3E | 6.0 | 93 a-e | 83 b-g | 0 j | 85 b-e | 70 e-j | 0 i |
| 47 | RH-2512 2E | 1.0 | 95 a-c | 83 b-g | 0 j | 83 c-g | 65 e-l | 0 i |
| 48 | RH-2512 2E | 2.0 | 93 a-e | 80 b-h | 40 d-f | 90 b-c | 80 d-f | 35 c-d |
| 49 | RH-2915 2E | .38 | 93 a-e | 83 b-g | 38 d-f | 83 b-f | 80 c-f | 33 d-e |
| 50 | RH-2915 2E | .75 | 93 a-e | 88 b-e | 65 e | 85 b-e | 85 c-e | 63 b |

SOYBEAN - FREEMERGENCE 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation June 26 | | | Visual Evaluation July 29 | | |
|-------------|---------------------------|----------------------|---------------------------|-----------|----------------|---------------------------|-----------|----------------|
| | | | % CONTROL | | | % CONTROL | | |
| | | | Grasses | Broadleaf | Crop Injury | Grasses | Broadleaf | Crop Injury |
| 51 | RH 2512 2E + Lasso 4E | .75 + 2.0 | 88 c-h | 80 b-h | 20 g | 90 b-c | 78 d-h | 15 g |
| 52 | RH 2915 2E + Lasso 4E | .38 + 2.0 | 90 b-f | 88 b-e | 45 d | 90 b-c | 78 d-h | 43 c |
| 53 | RH 2915 2E | 1.0 | 90 b | 90 b-c | 70 c | 80 c-g | 90 b-d | 65 b |
| 54 | H-25893 2E | 3.0 | 90 b-h | 68 e-i | 0 j | 83 b-f | 45 k-q | 0 i |
| 55 | H-26910 4E | 3.0 | 90 b-h | 70 d-i | 0 j | 83 b-f | 53 i-p | 0 i |
| 56 | NIA 25213 4E | 1.0 | 88 c-h | 70 d-i | 0 j | 70 e-h | 43 l-h | 0 i |
| 57 | NIA 25213 4E | 2.0 | 80 d-i | 68 e-i | 0 j | 80 c-g | 48 j-q | 0 i |
| 58 | NIA 25213 4E | 3.0 | 90 b-f | 83 b-f | 0 j | 88 b-d | 78 d-g | 0 i |
| 59 | NIA 25213 4E + Sencor 50W | 1.0 + .38 | 93 a-e | 80 b-h | 0 j | 88 b-d | 70 e-j | 0 i |
| 60 | HOE 22870 3E | 1.5 | 70 h-j | 23 m | 0 j | 70 f-h | 15 u-v | 0 i |
| 61 | HOE 22870 3E | 3.0 | 78 e-i | 28 m | 0 j | 70 e-h | 13 v | 0 i |
| 62 | HOE 23408 3E | 1.5 | 75 f-j | 33 l-m | 0 j | 70 e-h | 18 t-v | 0 i |
| 63 | HOE 23408 3E | 3.0 | 80 d-i | 43 k-l | 0 j | 70 e-h | 23 s-u | 0 i |
| 64 | M-4053 Dowco 338 2E | 1.0 | 78 r-i | 65 g-j | 0 j | 68 g-h | 33 p-u | 0 i |
| 65 | Vel 5026 80W | .2 | 75 f-j | 73 c-i | 8 h-i | 68 g-h | 30 q-u | 5 h |
| 66 | Vel 5026 80W | .4 | 73 g-j | 75 c-i | 63 c | 73 d-h | 55 h-o | 58 b |
| 67 | Vel 5028 45W | .38 | 85 c-h | 83 b-f | 88 b | 75 d-h | 35 o-t | 88 a |
| 68 | Vel 5028 45W | .75 | 90 b-f | 88 b-e | 88 a | 75 d-h | 55 h-o | 88 a |
| 69 | Check (Weedy) | 0 | 0 k | 0 n | 0 j | 0 i | 0 w | 0 i |
| 70 | Check (Cultivated) | 0 | 100 a | 100 a | 0 j | 100 a | 100 a | 0 i |

% CONTROL

| Trt. No. | Herbicide Formulation | Rate lbs/A Active | % CONTROL | | |
|-------------|--|----------------------|-----------|------------|------------|
| | | | Pigweed | Jimsonweed | Velvetleaf |
| 1 | Lasso 4E* | 2.0 | 88 a-g | 10 h | 10 r |
| 2 | Lorox 50W | .75 | 90 a-f | 20 f-h | 50 e-m |
| 3 | Sencor 50W | .38 | 73 f-j | 25 e-h | 70 b-h |
| 4 | Sencor 50W | .75 | 83 f-g | 40 c-h | 70 b-h |
| 5 | Preforan 3E | 4.5 | 95 a-d | 38 c-h | 18 n-r |
| 6 | Maloran 50W | 1.25 | 75 e-i | 28 d-h | 23 l-r |
| 7 | Surflan 75W | 1.0 | 85 b-g | 28 d-h | 68 b-i |
| 8 | MER 12325 4S | 2.0 | 10 m | 10 h | 10 r |
| 9 | A-820 4E | 3.0 | 80 d-i | 15 g-h | 58 d-j |
| 10 | Basagran 4E | 1.0 | 70 f-j | 80 a-b | 78 b-e |
| 11 | Surflan 75W + Sencor 50W | 1.0 + .38 | 93 a-f | 23 e-h | 58 d-j |
| 12 | Surflan 75W + Sencor 50W + Basagran 4E | 1.0 + .38 + 1.0 | 90 a-g | 90 a | 90 b |
| 13 | Surflan 75W + Basagran 4E | 1.0 + 1.0 | 90 a-g | 85 a | 85 b-c |
| 14 | Lasso 4E + Sencor 50W | 2.0 + .25 | 95 a-c | 33 d-h | 60 c-i |
| 15 | Lasso 4E + Sencor 50W | 2.0 + .38 | 95 a-d | 33 d-h | 75 b-f |
| 16 | Lasso 4E + Sencor 50W | 2.0 + .5 | 95 a-d | 35 d-h | 68 b-i |
| 17 | Lasso 4E + Sencor 50W | 2.0 + .75 | 88 a-g | 48 e-f | 78 b-e |
| 18 | Lasso 4E + Lorox 50W + Furloe 4E | 2.0 + 1.5 + 2.0 | 95 a-d | 28 d-h | 68 b-i |
| 19 | Furloe 4E + Lasso 4E | 2.0 + 2.0 | 90 a-f | 25 e-h | 50 e-m |
| 20 | Bladex 4S + Lasso 4E | 1.0 + 2.0 | 90 a-g | 23 e-h | 23 l-r |
| 21 | Destun 50W | 2.0 | 53 i-k | 28 d-h | 23 l-r |
| 22 | Destun 50W | 3.0 | 45 j-k | 20 f-h | 43 h-o |
| 23 | Destun 50W | 4.0 | 75 c-i | 35 d-h | 48 f-m |
| 24 | Destun 50W + Sencor 50W | 2.0 + .38 | 88 a-g | 13 g-h | 33 j-r |
| 25 | Destun 50W + Maloran 50W | 2.0 + 1.25 | 85 b-g | 23 e-h | 70 b-h |
| 26 | Destun 50W + Lorox 50W | 2.0 + .25 | 80 c-i | 28 d-h | 65 b-i |
| 27 | Bladex 4S + Lorox 50W | 2.0 + .5 | 73 f-j | 58 b-d | 65 c-i |
| 28 | Preforan 3E + Maloran 50W | 4.5 + 1.25 | 90 a-f | 25 d-h | 50 d-l |
| 29 | Prowl 3E + Sencor 50W | 1.0 + .38 | 80 b-h | 30 d-h | 55 d-j |
| 30 | Prowl 3E + Sencor 50W | 1.5 + .38 | 78 d-i | 30 d-h | 68 b-i |
| 31 | Maloran 50 W + Lasso 4E | 1.25 + 2.0 | 95 a-d | 33 d-h | 55 d-j |
| 32 | Lexone 50W + Surflan 75W | .38 + 1.0 | 73 d-i | 20 f-h | 40 h-q |
| 33 | Cobex 2E + Dyanap 2E | 1.0 + 3.0 | 78 d-i | 23 e-h | 40 h-q |
| 34 | Surflan 75W + Dyanap 2E | 1.0 + 3.0 | 93 e-f | 30 d-h | 60 c-j |
| 35 | Amiben 2E * | 3.0 | 78 e-h | 15 g-h | 18 n-r |

SOYBEAN - PREEMERGENCE 1974

Visual Evaluation July 29

| Trt. No. | Herbicide Formulation | Rate lbs/A Active | % CONTROL | | |
|-------------|---------------------------|----------------------|-----------|------------|------------|
| | | | Pigweed | Jimsonweed | Velvetleaf |
| 36 | Amiben 2E + Sencor 50W | 2.0 + .38 | 70 f-j | 38 c-h | 58 d-j |
| 37 | Amiben 2E + Lorox 50W | 3.0 + 1.0 | 85 b-g | 23 e-h | 70 b-h |
| 38 | Amiben + Lasso 4E | 2.0 + .2 | 93 a-f | 15 g-h | 35 i-r |
| 39 | A-820 4E + Sencor 50W | 3.0 + .38 | 85 b-g | 18 f-h | 55 d-j |
| 40 | A-820 4E + Amiden 2E | 3.0 + 3.0 | 80 c-i | 13 g-h | 70 b-h |
| 41 | Sencor 50W + Preforan 3E | .38 + 4.0 | 95 a-d | 23 e-h | 70 b-h |
| 42 | San-9789 80W | 1.0 | 58 h-j | 53 b-f | 50 d-l |
| 43 | San-9789 80W | 2.0 | 88 a-g | 38 c-h | 55 d-j |
| 44 | San-9789 80W + Sencor 50W | 1.0 + .38 | 92 a-e | 50 c-f | 78 b-c |
| 45 | San-9789 80W + Sencor 50W | 2.0 + .38 | 90 a-g | 40 c-g | 65 c-i |
| 46 | S-6044 3E | 6.0 | 98 a-b | 20 f-h | 45 g-n |
| 47 | RH 2512 2E | 1.0 | 93 a-f | 30 d-h | 65 c-i |
| 48 | RH 2512 2E | 2.0 | 95 a-d | 35 c-h | 73 b-g |
| 49 | RH-2915 2E | .38 | 85 b-h | 90 a | 90 b |
| 50 | RH 2915 2E | .75 | 90 a-b | 65 a-c | 78 b-d |
| 51 | RH 2512 2E + Lasso 4E | .75 + 2.0 | 93 a-f | 40 c-h | 63 c-i |
| 52 | RH 2915 2E + Lasso 4E | .38 + 2.0 | 90 a-b | 43 c-g | 68 b-i |
| 53 | RH 2915 2E | 1.0 | 93 a-f | 88 a | 90 b |
| 54 | H-25893 2E | 3.0 | 88 a-g | 30 d-h | 18 o-r |
| 55 | H-26910 4E | 3.0 | 85 b-h | 25 e-h | 20 n-r |
| 56 | NIA 25213 4E | 1.0 | 90 a-g | 10 h | 10 r |
| 57 | NIA 25213 4E | 2.0 | 90 a-g | 13 g-h | 28 k-r |
| 58 | NIA 25213 4E | 3.0 | 98 a-b | 40 c-h | 43 h-p |
| 59 | NIA 25213 4E + Sencor 50W | 1.0 + .38 | 83 b-g | 28 d-h | 60 c-i |
| 60 | HOE 22870 3E | 1.5 | 10 m | 10 h | 10 r |
| 61 | HOE 22870 3E | 3.0 | 10 m | 10 h | 10 r |
| 62 | HOE 23408 3E | 1.5 | 15 m | 20 f-h | 20 n-r |
| 63 | HOE 23408 3E | 3.0 | 10 m | 10 h | 10 r |
| 64 | M-4053 Dowco 338 2E | 1.0 | 53 i-k | 15 g-h | 15 q-r |
| 65 | Vel 5026 80W | .2 | 25 b-m | 15 g-h | 15 p-r |
| 66 | Vel 5026 80W | .4 | 65 g-j | 40 e-h | 53 d-k |
| 67 | Vel 5028 45W | .38 | 30 k-m | 40 c-h | 40 i-q |
| 68 | Vel 5028 45W | .75 | 53 i-k | 58 b-d | 58 d-j |
| 69 | Check (Weedy) | 0 | 10 m | 10 h | 10 r |
| 70 | Check (Cultivated) | 0 | 100 a | 100 a | 100 a |

SOYBEAN - PREPLANT INCORPORATED & OVERLAY - 1994
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| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation June 26 | | Crop Injury |
|----------|--------------------------------|-------------------|---------------------------|---------------------|-------------|
| | | | Grass | % CONTROL Broadleaf | |
| 1 | Treflan 4E** | .75 | 93 a-c 1/ | 68 h-1 | 0 m |
| 2 | Treflan 4E** | 1.0 | 93 a-c | 70 g-1 | 0 m |
| 3 | Vernam 6.7E** | 2.5 | 93 a-c | 68 h-1 | 18 g-j |
| 4 | A-820 4E** | 2.5 | 93 a-c | 73 f-1 | 0 m |
| 5 | Lasso 4E** | 2.5 | 95 a-c | 80 d-1 | 0 m |
| 6 | Treflan 4E** + Maloran 50W* | .75 + 1.25 | 100 a | 63 i-1 | 0 m |
| 7 | Treflan 4E** + Maloran 50W* | 1.5 + 1.25 | 100 a | 83 c-k | 28 d-h |
| 8 | Treflan 4E** + Bladex 4S* | .75 + 1.0 | 98 a-b | 78 d-1 | 0 m |
| 9 | Treflan 4E** + Bladex 4S* | 1.0 + 1.0 | 93 a-c | 75 e-1 | 0 m |
| 10 | Treflan 4E** + Amiben 4E* | .75 + 3.0 | 95 a-c | 78 e-1 | 0 m |
| 11 | Treflan 4E** + Dyanap 2 + 1E** | 1.0 + 4.0 | 98 a-b | 89 b-h | 35 c-f |
| 12 | Vernam 6.7E** + Dyanap 2+ 1E** | 2.5 + 4.0 | 93 a-c | 80 d-1 | 28 d-h |
| 13 | Vernam 6.7E** + Basagran 4E*** | 2.5 + 1.0 | 88 b-d | 90 b-f | 15 j-l |
| 14 | Vernam 6.7E** + Bladex 4S* | 2.5 + 1.0 | 93 a-c | 83 b-h | 38 c-f |
| 15 | Vernam 6.7E** + R-31401 2E* | 2.5 + 1.0 | 100 a | 100 a | 100 a |
| 16 | Basagran 4E*** | 1.0 | 23 f | 78 d-1 | 0 m |
| 17 | Prowl 3E** | 1.5 | 95 a-c | 78 e-1 | 20 e-j |
| 18 | Prowl 3E** + Sencor 50W* | 1.5 + .38 | 100 a | 93 a-c | 18 g-j |
| 19 | Cobex 2E** | .5 | 85 c-e | 68 h-1 | 18 g-j |
| 20 | Cobex 2E** + Lorox 50W* | .5 + .5 | 93 a-c | 78 d-1 | 0 m |
| 21 | Cobex 2E** + Maloran 50W* | .5 + 1.25 | 93 a-c | 78 d-1 | 13 h-k |
| 22 | Cobex 2E** + MoDown 2E* | .5 + 2.0 | 90 a-c | 83 c-k | 25 d-i |
| 23 | Cobex 2E** + Bladex 4S* | .5 + 2.0 | 75 c-e | 65 h-1 | 5 l-m |
| 24 | Treflan 4E + Basagran 4E*** | .75 + 1.0 | 90 a-c | 93 b-d | 0 m |
| 25 | Cobex 2E** + Vernam 6.7E** | .38 + 2.5 | 95 a-c | 83 b-i | 20 f-j |
| 26 | Cobex 2E** + Dyanap** | .5 + 3.0 | 93 a-b | 85 b-j | 10 k-m |
| 27 | Tolban 4E** | 1.0 | 95 a-c | 95 a-c | 0 m |
| 28 | Tolban 4E** + Maloran 50W* | 1.0 + 1.25 | 93 a-c | 93 a-c | 18 g-j |
| 29 | Tolban 4E** + Maloran 50W* | 2.0 + 2.5 | 100 a | 90 b-e | 18 g-j |
| 30 | Lexone 50W* + Cobex 2E** | .38 + .38 | 90 b-d | 78 d-1 | 0 m |
| 31 | Lexone 50W* + Cobex 2E** | .38 + .5 | 85 c-e | 93 b-d | 0 m |
| 32 | Lexone 50W* + Cobex 2E** | .75 + .5 | 93 a-c | 93 b-d | 53 c |
| 33 | Lexone 50W* + Treflan 4E** | .38 + .75 | 98 a-b | 85 b-g | 13 h-k |
| 34 | Lexone 50W* + Treflan 4E** | .75 + .75 | 90 a-c | 90 b-e | 8 l-m |
| 35 | Lexone 50W* + Treflan 4E** | .38 + .75 | 95 a-c | 83 c-k | 0 m |
| 36 | Lexone 50W* + Treflan 4E** | .75 + .75 | 98 a-b | 89 b-tr | 40 c-d |

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Department of Agronomy
University of Kentucky

Visual Evaluation June 26

| Trt. No. | Herbicide Formulation | Rate lbs/A active | % CONTROL | | |
|----------|------------------------------|-------------------|-----------|-----------|-------------|
| | | | Grass | Broadleaf | Crop Injury |
| 37 | Lexone 50W* + Cobex 2E** | .38 + .5 | 95 a-c | 85 b-j | 32 d-f |
| 38 | Lexone 50W* + Cobex 2E** | .75 + .5 | 88 b-d | 75 e-l | 0 m |
| 39 | Furloe 4E * + Treflan 4E** | 2.0 + .75 | 93 a-c | 78 e-l | 0 m |
| 40 | Furloe 4E** + Treflan 4E** | 2.0 + .75 | 95 a-c | 70 g-l | 0 m |
| 41 | Furloe 4E** + Vernam 6.7E** | 2.0 + 2.5 | 98 a-b | 83 c-k | 38 c-e |
| 42 | Furloe 4E** + Tolban 4E** | 2.0 + 1.0 | 92 a-c | 73 f-l | 0-m |
| 43 | Furloe 4E** + Cobex 2E** | 2.0 + .5 | 93 a-c | 78 e-l | 30 d-f |
| 44 | Furloe 4E** + Lasso 4E** | 2.0 + 2.5 | 95 a-c | 80 d-l | 15 i-k |
| 45 | San 9789* 80W + Treflan 4E** | 2.0 + .75 | 95 a-c | 93 b-d | 5 l-m |
| 46 | San 9789* 80W + Cobex 2E** | 2.0 + .5 | 95 a-c | 90 b-e | 8 l-m |
| 47 | M-4053 2E "Dow Co. 338"*** | 1.0 | 65 e | 25 m | 0 m |
| 48 | M-4053 2E "Dow Co. 338"*** | 2.0 | 80 c-e | 60 k-l | 0 m |
| 49 | Planavin 4E** + Bladex 4S* | 1.0 + 1.6 | 90 b-d | 73 f-l | 0 m |
| 50 | RH 2915 2E** | .75 | 90 b-d | 95 a-b | 33 d-f |
| 51 | RH 2915 2E** | 1.5 | 93 a-c | 85 b-j | 73 b |
| 52 | RH 2915 2E** + Vernam 6.7E** | .75 + 2.0 | 95 a-c | 90 b-e | 78 b |
| 53 | Vel 5026 80W** | .2 | 70 d-e | 65 i-l | 10 k-m |
| 54 | Vel 5026 80W** | .4 | 90 b-d | 80 d-l | 28 d-h |
| 55 | Vel 5028 45W** | .38 | 78 c-e | 68 h-l | 70 b |
| 56 | Vel 5028 45W** | .75 | 93 a-c | 93 b-d | 100 a |
| 57 | R-31401 2E* | 1.0 | 100 a | 100 a | 100 a |
| 58 | Check (Cultivated) | .0 | 100 a | 100 a | 0 m |

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

*Preemergence

**Preplant

***Post

Location: Spindletop

Fertilization: 300 lbs/A 16-16-16

Variety: Calland

Treated & Planted: May 17

Soil type: Silt Loam

O.M. 3-2

pH 6.2

SOYBEAN - PREPLANT INCORPORATED & OVERLAY - 1974
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 University of Kentucky

Visual Evaluation July 30

| Trt. No. | Herbicide Formulation | Rate lbs/A active | % CONTROL | | |
|----------|--------------------------------|-------------------|-----------|-----------|-------------|
| | | | Grass | Broadleaf | Crop Injury |
| 1 | Treflan 4E** | .75 | 85 b-g | 58 f-p | 0 e |
| 2 | Treflan 4E** | 1.0 | 88 b-f | 60 e-o | 0 e |
| 3 | Vernam 6.7E** | 2.5 | 85 b-f | 55 g-g | 0 e |
| 4 | A-820 4E** | 2.5 | 83 b-g | 45 j-g | 0 e |
| 5 | Lasso 4E** | 2.5 | 90 a-f | 60 e-o | 0 e |
| 6 | Treflan 4E** + Maloran 50W* | .75 + 1.25 | 83 b-f | 50 g-g | 0 a |
| 7 | Treflan 4E** + Maloran 50W* | 1.5 + 1.25 | 93 a-c | 78 b-i | 0 e |
| 8 | Treflan 4E** + Bladex 4S* | .75 + 1.0 | 88 b-f | 65 d-n | 0 e |
| 9 | Treflan 4E** + Bladex 4S* | 1.0 + 1.0 | 90 a-f | 55 g-g | 0 e |
| 10 | Treflan 4E** + Amiben 4E* | .75 + 3.0 | 85 a-f | 60 e-o | 0 e |
| 11 | Treflan 4E** + Dyanap 2 + 1E** | 1.0 + 4.0 | 90 a-f | 68 d-d | 8 d-a |
| 12 | Vernam 6.7E** + Dyanap 2+ 1E** | 2.5 + 4.0 | 90 a-d | 60 e-o | 0 e |
| 13 | Vernam 6.7E** + Basagran 4E*** | 2.5 + 1.0 | 88 b-f | 88 b-d | 0 e |
| 14 | Vernam 6.7E** + Bladex 4S* | 2.5 + 1.0 | 93 a-e | 75 b-j | 0 e |
| 15 | Vernam 6.7E** + R-31401 2E* | 2.5 + 1.0 | 100 a | 100 a | 100-a |
| 16 | Basagran 4E*** | 1.0 | 35 h | 48 i-g | 0 e |
| 17 | Prowl 3E** | 1.5 | 88 b-f | 63 l-n | 0 e |
| 18 | Prowl 3E** + Sencor 50W* | 1.5 + .38 | 90 a-f | 78 b-h | 5 d-e |
| 19 | Cobex 2E** | .5 | 70 e-g | 40 m-g | 0 e |
| 20 | Cobex 2E** + Lorox 50W* | .5 + .5 | 87 b-f | 63 e-n | 0 e |
| 21 | Cobex 2E** + Maloran 50W* | .5 + 1.25 | 85 b-f | 55 g-g | 0 e |
| 22 | Cobex 2E** + MoDown 2E* | .5 + 2.0 | 88 b-f | 78 b-i | 0 e |
| 23 | Cobex 2E** + Bladex 4S* | .5 + 2.0 | 85 b-f | 50 h-g | 0 e |
| 24 | Treflan 4E + Basagran 4E*** | .75 + 1.0 | 88 b-f | 88 a-c | 0 e |
| 25 | Cobex 2E** + Vernam 6.7E** | .38 + 2.5 | 80 b-g | 58 f-p | 0 e |
| 26 | Cobex 2E** + Dyanap** | .5 + 3.0 | 80 b-g | 65 d-n | 0 e |
| 27 | Tolban 4E** | 1.0 | 85 b-f | 50 g-g | 0 e |
| 28 | Tolban 4E** + Maloran 50W* | 1.0 + 1.25 | 85 b-f | 43 m-g | 0 e |
| 29 | Tolban 4E** + Maloran 50W* | 2.0 + 2.5 | 93 a-e | 80 b-g | 0 e |
| 30 | Lexone 50W* + Cobex 2E** | .38 + .38 | 88 b-f | 70 c-1 | 0 e |
| 31 | Lexone 50W* + Cobex 2E** | .38 + .5 | 85 b-g | 60 e-o | 0 e |
| 32 | Lexone 50W* + Cobex 2E** | .75 + .5 | 88 b-f | 80 b-g | 40.-f |
| 33 | Lexone 50W* + Treflan 4E** | .38 + .75 | 88 b-f | 78 b-h | 20. c-d |
| 34 | Lexone 50W* + Treflan 4E** | .75 + .75 | 90 e-r | 70 c-1 | 0 e |
| 35 | Lexone 50W* + Treflan 4E** | .38 + .75 | 83 b-g | 63 e-n | 15 d-e |

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University of Kentucky

Visual Evaluation July 30

| Trt. No. | Herbicide Formulation | Rate lbs/A active | % CONTROL | | |
|-------------|------------------------------|----------------------|-----------|-----------|-------------|
| | | | Grass | Broadleaf | Crop Injury |
| 37 | Lexone 50W* + Cobex 2E** | .38 + .5 | 83 b-g | 75 b-j | 0 e |
| 38 | Lexone 50W* + Cobex 2E** | .75 + .5 | 75 c-g | 50 g-g | 0 e |
| 39 | Furloa 4E* + Treflan 4E** | 2.0 + .75 | 88 b-f | 63 e-n | 0 e |
| 40 | Furloa 4E** + Treflan 4E** | 2.0 + .75 | 85 b-f | 40 n-g | 0 e |
| 41 | Furloa 4E** + Vernam 6.7E** | 2.0 + 2.5 | 85 a-f | 60 e-o | 0 e |
| 42 | Furloa 4E** + Tolban 4E** | 2.0 + 1.0 | 78 c-g | 60 e-o | 0 e |
| 43 | Furloa 4E** + Cobex 2E** | 2.0 + .5 | 85 b-f | 65 d-m | 5 d-e |
| 44 | Furloa 4E** + Lasso 4E** | 2.0 + 2.5 | 88 b-f | 50 g-g | 0 e |
| 45 | San 9789* 80W + Treflan 4E** | 2.0 + .75 | 93 a-e | 80 b-h | 0 e |
| 46 | San 9789* 80W + Cobex 2E** | 2.0 + .5 | 93 a-a | 80 b-h | 0 e |
| 47 | M-4053 2E "Dow Co. 338"*** | 1.0 | 73 d-g | 28 g | 0 e |
| 48 | M-4053 2E "Dow Co. 338"*** | 2.0 | 60 g | 28 p-q | 0 e |
| 49 | Planavin 4E** + Bladex 48* | 1.0 + 1.6 | 83 b-g | 50 g-q | 0 e |
| 50 | RH 2915 2E** | .75 | 85 b-f | 88 b-d | 8.0 d-e |
| 51 | RH 2915 2E** | 1.5 | 88 b-f | 88 b-e | 30 b-c |
| 52 | RH 2915 2E** + Vernam 6.7E** | .75 + 2.0 | 95 a-b | 85 b-f | 8 d-e |
| 53 | Vel 5026 80W** | .2 | 70 f-g | 35 m-q | 0 a |
| 54 | Vel 5026 80W** | .4 | 75 d-g | 43 l-q | 13.0 d-e |
| 55 | Vel 5028 45W** | .38 | 70 f-g | 30 o-q | 40 b |
| 56 | Vel 5028 45W** | .75 | 75 c-g | 53 g-q | 100 a |
| 57 | R-31401 2E* | 1.0 | 93 a-c | 93 a-b | 100 a |
| 58 | Check (Cultivated) | .0 | 100 a | 100 a | 0 a |

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Visual Evaluation - July 30

| Trt. No. | Herbicide Formulation | Rate lbs/A active | % CONTROL | | |
|----------|---------------------------------|-------------------|-----------|------------|------------|
| | | | Pigweed | Limsonweed | Velvetleaf |
| 1 | Treflan 4E** | .75 | 83 a-e | 28 i-n | 40 i-r |
| 2 | Treflan 4E** | 1.0 | 88 a-e | 23 i-n | 48 g-p |
| 3 | Vernam 6.7E** | 2.5 | 78 b-e | 25 i-n | 50 f-o |
| 4 | A-820 4E** | 2.5 | 93 a-e | 23 i-n | 23 o-r |
| 5 | Lasso 4E** | 2.5 | 95 a-c | 33 i-n | 43 h-r |
| 6 | Treflan 4E** + Maloran 50W* | .75 + 1.25 | 75 b-e | 33 i-n | 48 g-p |
| 7 | Treflan 4E** + Maloran 50W* | 1.5 + 1.25 | 100 a | 20 k-n | 70 e-l |
| 8 | Treflan 4E** + Bladex 4S* | .75 + 1.0 | 98 a-b | 48 f-k | 40 i-r |
| 9 | Treflan 4E** + Bladex 4S* | 1.0 + 1.0 | 83 b-e | 23 i-n | 20 o-r |
| 10 | Treflan 4E** + Amiben 4E* | .75 + 3.0 | 98 a-b | 25 i-n | 55 e-n |
| 11 | Treflan 4E** + Dyanap 2 + 1E** | 1.0 + 4.0 | 93 a-e | 35 h-n | 60 e-l |
| 12 | Vernam 6.7E** + Dyanap 2 + 1E** | 2.5 + 4.0 | 73 c-f | 28 i-n | 60 e-l |
| 13 | Vernam 6.7E** + Basagran 4E*** | 2.5 + 1.0 | 88 a-e | 83 b-d | 90 a-c |
| 14 | Vernam 6.7E** + Bladex 4S* | 2.5 + 1.0 | 88 a-e | 65 c-h | 70 c-i |
| 15 | Vernam 6.7E** + R-31401 2E* | 2.5 + 1.0 | 100 a | 100 a | 100 a |
| 16 | Basagran 4E*** | 1.0 | 33-g | 70 c-g | 70 c-j |
| 17 | Prowl 3E** | 1.5 | 93 a-e | 40 g-n | 43 h-r |
| 18 | Prowl 3E** + Sencor 50W* | 1.5 + .38 | 93 a-d | 48 f-k | 70 c-i |
| 19 | Cobex 2E** | .5 | 70 d-f | 15 i-n | 15 q-r |
| 20 | Cobex 2E** + Lorox 50W* | .5 + .5 | 88 a-e | 35 h-n | 43 h-r |
| 21 | Cobex 2E** + Maloran 50W* | .5 + 1.25 | 78 b-e | 20 j-n | 25 n-r |
| 22 | Cobex 2E** + MoDown 2E* | .5 + 2.0 | 90 a-e | 30 i-n | 67 c-i |
| 23 | Cobex 2E** + Bladex 4S* | .5 + 2.0 | 68 d-f | 40 g-n | 60 e-l |
| 24 | Treflan 4E + Basagran 4E*** | .75 + 1.0 | 95 a-c | 88 b-c | 85 b-e |
| 25 | Cobex 2E** + Vernam 6.7E** | .38 + 2.5 | 90 a-e | 10 l-n | 65 d-k |
| 26 | Cobex 2E** + Dyanap** | .5 + 3.0 | 83 b-e | 22 i-n | 35 j-r |
| 27 | Tolban 4E** | 1.0 | 73 c-f | 28 i-n | 33 k-r |
| 28 | Tolban 4E** + Maloran 50W* | 1.0 + 1.25 | 93 a-e | 12 m-n | 50 f-p |
| 29 | Tolban 4E** + Maloran 50W* | 2.0 + 2.5 | 100 a | 50 e-k | 78 c-g |
| 30 | Lexone 50W* + Cobex 2E** | .38 + .38 | 88 a-e | 38 g-n | 70 c-i |
| 31 | Lexone 50W* + Cobex 2E** | .38 + .5 | 83 b-e | 28 i-n | 58 e-m |
| 32 | Lexone 50W* + Cobex 2E** | .75 + .5 | 95 a-c | 53 d-j | 70 c-i |
| 33 | Lexone 50W* + Treflan 4E** | .38 + .75 | 95 a-c | 38 g-n | 70 c-i |
| 34 | Lexone 50W* + Treflan 4E** | .75 + .75 | 93 a-d | 53 d-j | 70 c-g |
| 35 | Lexone 50W* + Treflan 4E** | .38 + .75 | 85 a-e | 43 g-m | 40 i-r |
| 36 | Lexone 50W* + Treflan 4E** | .75 + .75 | 93 a-d | 33 i-n | 68 c-j |

SOYBEAN - PREPLANT INCORPORATED & OVERLAY - 1974

Department of Agronomy

University of Kentucky

| Treat. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation - July 30 | | |
|---------------|------------------------------|----------------------|-----------------------------|------------|------------|
| | | | % CONTROL | | |
| | | | Pigweed | Jimsonweed | Velverleaf |
| 37 | Lexone 50W* + Cobex 2E** | .38 + .5 | 88 a-e | 33 h-m | 73 c-h |
| 38 | Lexone 50W* + Cobex 2E** | .75 + .5 | 68 e-f | 23 i-n | 28 m-r |
| 39 | Furloe 4E* + Treflan 4E** | 2.0 + .75 | 93 a-c | 33 h-n | 67 i-j |
| 40 | Furloe 4E** + Treflan 4E** | 2.0 + .75 | 83 b-e | 20 j-n | 25 m-r |
| 41 | Furloe 4E** + Vernam 6.7E** | 2.0 + 2.5 | 90 a-e | 40 g-n | 70 c-i |
| 42 | Furloe 4E** + Tolban 4E** | 2.0 + 1.0 | 75 c-f | 30 i-n | 45 h-q |
| 43 | Furloe 4E** + Cobex 2E** | 2.0 + .5 | 93 a-c | 40 q-m | 45 h-r |
| 44 | Furloe 4E** + Labso 4E** | 2.0 + 2.5 | 90 a-e | 20 j-n | 35 j-r |
| 45 | San 9789* 80W + Treflan 4E** | 2.0 + .75 | 98 a-b | 55 d-i | 68 c-j |
| 46 | San 9789* 80W + Cobex 2E** | 2.0 + .5 | 90 a-b | 48 f-k | 50 f-o |
| 47 | H-4053 2E "Dow Co. 338"*** | 1.0 | 15 g | 15 m-n | 15 r |
| 48 | H-4053 2E "Dow Co. 338"*** | 2.0 | 70 d-f | 28 i-n | 25 n-r |
| 49 | Plansvin 4E** + Bladex 43* | 1.0 + 1.6 | 78 c-e | 25 i-n | 28 l-r |
| 50 | RH 2915 2E** | .75 | 95 a-c | 90 a-c | 90 b-d |
| 51 | RH 2915 2E** | 1.5 | 93 a-c | 73 b-f | 88 b-d |
| 52 | RH 2915 2E** + Vernam 6.7E** | .75 + 2.0 | 98 a-b | 80 b-c | 80 b-f |
| 53 | Vel 5026 80W** | .2 | 25 g | 18 k-n | 18 p-r |
| 54 | Vel 5026 80W** | .4 | 43 f-g | 27 i-n | 30 l-r |
| 55 | Vel 5028 45W** | .38 | 20 g | 10 n | 30 l-r |
| 56 | Vel 5028 45W** | .75 | 63 e-f | 100 a | 68 c-i |
| 57 | R-31401 2E* | 1.0 | 95 a-c | 95 a-b | 95 a-f |
| 58 | Check (Cultivated) | .0 | 100 a | 100 a | 100 a |

SOYBEAN - METRIBUZIN COMBINATIONS - 1974

Department of Agronomy
University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation June 27 | | | Visual Evaluation July 30 | | |
|----------|---------------------------------|-------------------|---------------------------|-----------|-------------|---------------------------|-----------|-------------|
| | | | % CONTROL | | | % CONTROL | | |
| | | | Grass | Broadleaf | Crop Injury | Grass | Broadleaf | Crop Injury |
| 1 | Metribuzin 50W + Tolban 4E** | .38 + 1.0 | 98 a-b 1/ | 85 d-h | 5.0 a-b | 88 a-d | 75 a-f | 0 a |
| 2 | Metribuzin 50W + Tolban 4E** | .5 + 1.0 | 90 a-b | 88 c-f | 28 b-d | 83 a-d | 78 a-d | 0 a |
| 3 | Metribuzin 50W + Tolban 4E** | .75 + 1.0 | 98 a-b | 88 c-h | 35 c-d | 88 a-d | 70 b-f | 3.0 a |
| 4 | Metribuzin 50W**+ Tolban 4E** | .38 + 1.0 | 90 b | 83 d-h | 5.0 a-b | 88 a-d | 68 b-f | 0 a |
| 5 | Metribuzin 50W**+ Tolban 4E** | .38 + 2.0 | 90 b | 83 d-h | 0 a | 85 a-d | 70 a-f | 0 a |
| 6 | Metribuzin 50W + Treflan 4E** | .38 + .75 | 90 b-c | 80 e-h | 0 a | 88 a-c | 70 b-f | 0 a |
| 7 | Metribuzin 50W**+ Treflan 4E** | .38 + 1.5 | 95 a-b | 88 c-h | 0 a | 93 a-b | 80 c-d | 0 a |
| 8 | Metribuzin 50W + Treflan 4E** | .75 + .75 | 98 a-b | 90 c-e | 28 b-d | 88 a-d | 73 a-f | 0 a |
| 9 | Metribuzin 50W + A-820 4E** | .38 + 2.5 | 100 a | 83 c-h | 5.0 a-b | 90 a-b | 75 a-f | 0 a |
| 10 | Metribuzin 50W**+ A-820 4E** | .38 + 2.5 | 98 a-b | 83 d-h | 8.0 a-b | 86 a-d | 83 a-d | 0 a |
| 11 | Metribuzin 50W + Cobex 2E** | .38 + .38 | 93 a-b | 88 e-g | 15 a-c | 80 c-e | 68 b-f | 0 a |
| 12 | Metribuzin 50W**+ Cobex 2E** | .38 + .5 | 73 d | 73 h-i | 0 a | 75 d-e | 50 f | 0 a |
| 13 | Metribuzin 50W + Cobex 2E** | .38 + .5 | 95 a-b | 83 d-h | 8.0 a-b | 83 b-e | 70 a-f | 0 a |
| 14 | Metribuzin 50W**+ Cobex 2E** | .38 + .38 | 73 d | 80 e-h | 0 a | 78 c-e | 63 b-f | 0 a |
| 15 | Metribuzin 50W + Cobex 2E** | .38 + 2.0 | 100 a | 95 a-c | 90 a | 88 a-c | 68 b-f | 80 c |
| 16 | Metribuzin 50W**+ Lasso 4E** | .38 + 2.0 | 98 a-b | 88 c-g | 5.0 a-b | 90 a-b | 73 a-f | 0 a |
| 17 | Metribuzin 50W + Lasso 4E** | .38 + 2.0 | 95 a-b | 80 e-h | 0 a | 90 a-b | 75 a-f | 0 a |
| 18 | Metribuzin 50W + Lasso 4E** | .5 + 2.0 | 93 a-b | 85 d-h | 13 a-c | 63 e | 58 d-f | 0 a |
| 19 | Metribuzin 50W**+ Planavin 4S** | .38 + 1.0 | 100 a | 75 g-h | 5.0 a-b | 88 a-d | 80 a-d | 0 a |
| 20 | Metribuzin 50W**+ Planavin 4S** | .75 + 2.0 | 100 a | 90 c-e | 23 b-d | 93 a-b | 83 a-b | 0 a |
| 21 | Metribuzin 50W + Planavin 4S** | .38 + 1.0 | 90 a-b | 88 c-g | 20 a-c | 85 a-d | 78 a-d | 0 a |
| 22 | Metribuzin 50W + Planavin 4S** | .75 + 2.0 | 95 a-b | 95 a-c | 25 b-d | 90 a-b | 78 a-d | 3.0 a |
| 23 | Metribuzin 50W + Vernam 6.7E | .38 + 2.5 | 98 a-b | 83 c-g | 45 d | 80 c-e | 60 c-f | 10 a-b |
| 24 | Metribuzin 50W + Surflan 75W** | .38 + 1.0 | 95 a-b | 85 d-h | 5.0 a-b | 88 a-d | 75 a-f | 0 a |
| 25 | Metribuzin 50W + Surflan 75W** | .5 + 1.0 | 100 a | 93 b-d | 23 b-d | 90 a-b | 73 a-f | 5 a-b |
| 26 | Metribuzin 50W**+ Treflan 4E** | .38 + .74 + 1 | 93 a-b | 98 a-b | 5.0 a-b | 85 a-d | 83 a-d | 0 a |
| | + Basagran 4E** | | | | | | | |
| 27 | Metribuzin 50W** | .38 | 75 c-d | 80 e-h | 0 a | 65 e | 55 e-f | 0 a |
| 28 | Metribuzin 50W* | .38 | 70 d | 78 f-h | 0 a | 75 d-a | 58 c-f | 0 a |
| 29 | Basagran 4E** | 1.0 | 20 e | 58 i | 0 a | 13 f | 13 g | 0 a |
| 30 | Check (cultivated) | 0 | 100 a | 100 a | 0 a | 100 a | 100 a | 0 a |

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

LOCATION: Spindletop

Variety: CALLAND

SOYBEAN - METRIBUZIN COMBINATIONS - 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation July 30 | | |
|----------|---|-------------------|---------------------------|------------|------------|
| | | | Pigweed | Jimsonweed | Velvetleaf |
| 1 | Metribuzin 50W + Tolban 4E** | .38 + 1.0 | 90 a-c | 33 c-f | 75 a-e |
| 2 | Metribuzin 50W + Tolban 4E** | .5 + 1.0 | 98 a | 68 b-c | 80 a-d |
| 3 | Metribuzin 50W + Tolban 4E** | .75 + 1.0 | 93 a-d | 20 d-f | 70 b-f |
| 4 | Metribuzin 50W**+ Tolban 4E** | .38 + 1.0 | 88 a-d | 38 c-f | 70 b-f |
| 5 | Metribuzin 50W**+ Tolban 4E** | .38 + 2.0 | 90 a-c | 15 e-f | 48 e-f |
| 6 | Metribuzin 50W + Treflan 4E** | .38 + .75 | 85 a-f | 50 c-e | 70 b-f |
| 7 | Metribuzin 50W**+ Treflan 4E** | .38 + 1.5 | 95 a-c | 63 b-c | 85 a-b |
| 8 | Metribuzin 50W + Treflan 4E** | .75 + .75 | 95 a-c | 45 c-f | 73 a-f |
| 9 | Metribuzin 50W + A-820 4E** | .38 + 2.5 | 95 a-c | 20 d-f | 70 b-f |
| 10 | Metribuzin 50W**+ A-820 4E** | .38 + 2.5 | 98 a | 55 b-c | 75 a-e |
| 11 | Metribuzin 50W + Cobex 2E** | .38 + .38 | 98 a | 20 d-f | 58 c-f |
| 12 | Metribuzin 50W**+ Cobex 2E** | .38 + .5 | 68 d-f | 15 e-f | 43 f |
| 13 | Metribuzin 50W + Cobex 2E** | .38 + .5 | 98 a | 20 d-f | 73 a-f |
| 14 | Metribuzin 50W**+ Cobex 2E** | .38 + .38 | 58 f | 15 e-f | 70 b-f |
| 15 | Metribuzin 50W + Cobex 2E** | .38 + 2.0 | 88 a-c | 45 c-f | 63 b-f |
| 16 | Metribuzin 50W**+ Lasso 4E** | .38 + 2.0 | 98 a | 48 c-f | 70 b-f |
| 17 | Metribuzin 50W + Lasso 4E** | .38 + 2.0 | 95 a-c | 45 c-f | 75 a-e |
| 18 | Metribuzin 50W + Lasso 4E** | .5 + 2.0 | 70 c-f | 35 c-f | 63 b-f |
| 19 | Metribuzin 50W**+ Planavin 4S** | .38 + 1.0 | 98 a | 45 c-f | 63 b-f |
| 20 | Metribuzin 50W**+ Planavin 4S** | .75 + 2.0 | 95 a-c | 66 b-c | 83 a-c |
| 21 | Metribuzin 50W + Planavin 4S** | .38 + 1.0 | 88 a-d | 53 c-e | 68 b-f |
| 22 | Metribuzin 50W + Planavin 4S** | .75 + 2.0 | 93 a-c | 53 c-e | 75 a-e |
| 23 | Metribuzin 50W + Vernam 6.7E | .38 + 2.5 | 98 a | 20 d-f | 50 e-f |
| 24 | Metribuzin 50W + Surflan 75W** | .38 + 1.0 | 93 a-d | 40 c-f | 70 b-f |
| 25 | Metribuzin 50W + Surflan 75W** | .5 + 1.0 | 98 a | 25 d-f | 58 c-f |
| 26 | Metribuzin 50W**+ Treflan 4E** + Basagran 4E** | .38 + .74 + 1 | 90 a-e | 90 a-b | 90 a-b |
| 27 | Metribuzin 50W** | .38 | 63 e-f | 10 f | 53 d-f |
| 28 | Metribuzin 50* | .38 | 78 b-f | 35 c-f | 70 b-f |
| 29 | Basagran 4E*** | 1.0 | 20 g | 10 f | 50 e-f |
| 30 | Check (cultivated) | 0 | 100 a | 100 a | 100 a |

METHOD OF APPLICATION *Preemergence ***Post **Preplant incorporated Fertilization: 300 lbs/A 16-16-16
 Soil type - silt loam Treated & Planted: May 17 O.M. 3.2 pH 6.0

SOYBEAN STUDIES - 1974
 Department of Agronomy
 University of Kentucky

Visual Evaluation August 7

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation August 7 | | |
|----------|---|-----------------------|----------------------------|---------------------|------------|
| | | | Grass | % CONTROL Broadleaf | Crop Injur |
| 1 | Bladex 4S + Roundup 3E* | 1.0 + 2.0 | 63 c-e 1/ | 35 e | 0 b |
| 2 | Bladex 4S + Paraquat 2E + X-77 | 1.0 + .25 + .5% | 70 a-d | 53 d-e | 0 b |
| 3 | Lasso 4E | 2.0 | 30 g | 65 b-d | 0 b |
| 4 | Lasso 4E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 53 c-d | 75 a-d | 0 b |
| 5 | Lasso 4E + Roundup 3E + Dyanap 3E | 2.0 + 2.0 + 4.0 | 90 a | 85 a-b | 5 b |
| 6 | Lasso 4E + Lorox 50W + Roundup 3E | 2.0 + 1.0 + 2.0 | 88 a-b | 90 a | 0 b |
| 7 | Lasso 4E + Maloran 50W + Roundup 3E | 2.0 + 1.25 + 2.0 | 88 a-b | 88 a-b | 0 b |
| 8 | Lasso 4E + Sencor 50W + Roundup 3E | 2.0 + .38 " " | 83 a-c | 80 a-b | 0 b |
| 9 | Lasso 4E + Sencor 50W + Roundup 3E | 2.0 + .25 " " | 80 a-d | 88 a-b | 0 b |
| 10 | Lasso 4E + Sencor 50W + Roundup 3E | 2.0 + .5 " " | 83 a-c | 90 a | 0 b |
| 11 | Roundup 3E | 2.0 | 30 g | 35 e | 0 b |
| 12 | Surflan 75W + Paraquat 2E + X-77 | 1.0 + .25 + .5% | 65 b-c | 80 a-b | 5 b |
| 13 | Surflan 75W + Roundup 3E | 1.0 + 1.0 | 83 a-c | 85 a-b | 0 b |
| 14 | Surflan 75W + Paraquat 2E + X-77 | 1.5 + .25 + .5% | 65 b-e | 85 a-b | 20-a |
| 15 | Surflan 75W + Roundup 3E | 1.5 + 1.0 | 88 a-b | 78 a-c | 0 b |
| 16 | Surflan 75W + Lorox 50W + Paraquat 2E + X-77 | 1.0 + 1.0 + .25 + .5% | 88 a-b | 90 a | 0 b |
| 17 | Surflan 75W + Lorox 50W + Roundup 3E | 1.0 + 1.0 + 1.0 | 90 a | 90 a | 0 b |
| 18 | Surflan 75W + Lorox 50W + Paraquat 2E + X-77 | 1.5 + 1.0 + .25 + .5% | 83 a-c | 88 a-b | 0 b |
| 19 | Surflan 75W + Lorox 50W + Roundup 3E | 1.5 + 1.0 + 1.0 | 90 a | 90 a | 0 b |
| 20 | Surflan 75W + Sencor 50W + Paraquat 2E + X-77 | 1.0 + .38 + .25 + .5% | 75 a-e | 83 a-b | 8 b |
| 21 | Surflan 75W + Sencor 50W + Roundup 3E | 1.0 + .38 + 1.0 | 85 a-c | 88 a | 5 b |
| 22 | Surflan 75W + Sencor 50W + Paraquat 2E + X-77 | 1.5 + .38 + .25 + .5% | 88 a-b | 90 a | 8 b |
| 23 | Surflan 75W + Sencor 50W + Roundup 3E | 1.5 + .38 + 1.0 | 88 a-b | 88 a-b | 3 b |
| 24 | Lexone 50W + Paraquat 3E + X-77 | .38 + .25 + .5% | 68 a-e | 85 a-b | 0 b |
| 25 | Lexone 50W + X-77 | .38 + .5% | 25 g | 55 c-e | 0 b |
| 26 | Lexone 50W + Lasso 4E + Roundup 3E | .38 + 2.0 + 1.0 | 80 a-d | 85 a-e | 0 b |
| 27 | Lexone 50W + Lasso 4E + Roundup 3E | .75 + 2.0 + 2.0 | 80 a-d | 88 a-b | 0 b |
| 28 | Maloran 50W + Paraquat 2E + X-77 | 1.25 + .25 + .5% | 80 a-d | 85 a-b | 0 b |
| 29 | RH-2512 2E + Paraquat 2E + X-77 | 1.0 + .25 + .5% | 58 d-f | 78 a-c | 0 b |
| 30 | RH-2915 2E + Paraquat 2E + X-77 | .5 + .25 + .5% | 70 a-e | 78 a-c | 0 b |
| 31 | NIA - 25213 4E | 2.0 | 20 g | 40 e | 0 b |
| 32 | Desiccate .5E | 1.0 | 25 g | 53 d-e | 0 b |
| 33 | Desiccate .5E + Lasso 4E | 1.0 + 2.0 | 35 f-g | 80 a-b | 0 b |
| 34 | Lasso 4E + Bladex 4S + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 83 a-c | 85 a-b | 0 b |

1/ Mean values within a column are not significantly different at 5% level probability if followed by one or more of the same letters. All Treatments are preemergence Location: Maine Chance Variety: Calland Tracked & Planted: July 1

SOYBEAN STUBBLE - 1974
 Department of Agronomy
 University of Kentucky

| Treat. No. | Herbicide Formulation | Rate lbs/A active | VISUAL EVALUATION SEPTEMBER 7 | |
|---------------|---|-----------------------|-------------------------------|---------------|
| | | | % CONTROL Grass | Yield BU/A |
| 1 | Bladex 4S + Roundup 3E* | 1.0 + 2.0 | 85 a-d | 24 a-d |
| 2 | Bladex 4S + Paraquat 2E + X-77 | 1.0 + .25 + .5% | 60 f-e | 23 a-e |
| 3 | Lasso 4E | 2.0 | 28 k-l | 14 e-h |
| 4 | Lasso 4E + Paraquat 2E + X-77 | 2.0 + .25 + .5% | 40 j-k | 17 c-g |
| 5 | Lasso 4E + Roundup 3E + Dyanap 3E | 2.0 + 2.0 + 4.0 | 63 e-j | 20 b-f |
| 6 | Lasso 4E + Lorox 50W + Roundup 3E | 2.0 + 1.0 + 2.0 | 85 g-e | 26 a-d |
| 7 | Lasso 4E + Maloran 50W + Roundup 3E | 2.0 + 1.25 + 2.0 | 90 a-b | 27 a-c |
| 8 | Lasso 4E + Sencor 50W + Roundup 3E | 2.0 + .38 " " | 83 a-e | 24 a-d |
| 9 | Lasso 4E + Sencor 50W + Roundup 3E | 2.0 + .25 " " | 70 c-i | 30 a |
| 10 | Lasso 4E + Sencor 50W + Roundup 3E | 2.0 + .5 " " | 78 b-i | 28 a-b |
| 11 | Roundup 3E | 2.0 | 28 k-l | 15 d-h |
| 12 | Surflan 75W + Paraquat 2E + X-77 | 1.0 + .25 + .5% | 53 i-j | 18 c-g |
| 13 | Surflan 75W + Roundup 3E | 1.0 + 1.0 | 80 b-g | 22 a-f |
| 14 | Surflan 75W + Paraquat 2E + X-77 | 1.5 + .25 + .5% | 58 g-i | 16 c-g |
| 15 | Surflan 75W + Roundup 3E | 1.5 + 1.0 | 90 a-b | 25 a-d |
| 16 | Surflan 75W + Lorox 50W + Paraquat 2E + X-77 | 1.0 + 1.0 + .25 + .5% | 83 a-g | 25 a-d |
| 17 | Surflan 75W + Lorox 50W + Roundup 3E | 1.0 + 1.0 + 1.0 | 95 a | 27 a-c |
| 18 | Surflan 75W + Lorox 50W + Paraquat 2E + X-77 | 1.5 + 1.0 + .25 + .5% | 83 a-f | 24 a-d |
| 19 | Surflan 75W + Lorox 50W + Roundup 3E | 1.5 + 1.0 + 1.0 | 85 a-f | 21 a-f |
| 20 | Surflan 75W + Sencor 50W + Paraquat 2E + X-77 | 1.0 + .38 + .25 + .5% | 63 e-j | 22 a-c |
| 21 | Surflan 75W + Sencor 50W + Roundup 3E | 1.0 + .38 + 1.0 | 83 a-f | 20 a-f |
| 22 | Surflan 75W + Sencor 50W + Paraquat 2E + X-77 | 1.5 + .38 + .25 + .5% | 88 a-c | 21 a-f |
| 23 | Surflan 75W + Sencor 50W + Roundup 3E | 1.5 + .38 + 1.0 | 85 a-f | 25 a-d |
| 24 | Lexone 50W + Paraquat 3E + X-77 | .38 + .25 + .5% | 43 i-k | 22 a-e |
| 25 | Lexone 50W + X-77 | .38 + .5% | 15 l | 12 f-h |
| 26 | Lexone 50W + Lasso 4E + Roundup 3E | .38 + 2.0 + 1.0 | 73 b-i | 23 a-e |
| 27 | Lexone 50W + Lasso 4E + Roundup 3E | .75 + 2.0 + 2.0 | 80 b-h | 24 a-e |
| 28 | Maloran 50W + Paraquat 2E + X-77 | 1.25 + .25 + .5% | 68 d-i | 22 a-e |
| 29 | RH-2512 2E + Paraquat 2E + X-77 | 1.0 + .25 + .5% | 55 h-j | 20 c-f |
| 30 | RH-2915 2E + Paraquat 2E + X-77 | .5 + .25 + .5% | 70 b-i | 22 a-e |
| 31 | NIA - 25213 4E | 2.0 | 10 l | 8 g-h |
| 32 | Desiccate .5E | 1.0 | 20 h-l | 6 h |
| 33 | Desiccate .5E + Lasso 4E | 1.0 + 2.0 | 15 l | 10 g-h |
| 34 | Lasso 4E + Bladex 4S + Paraquat 2E + X-77 | 2.0 + 1.0 + .25 + .5% | 83 a-1 | 27 a-c |

Soil Type Silty Loam O.M. 3.7 pH 5.6

SOYBEAN - POST 1974
Department of Agronomy
University of Kentucky

| Tt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation Aug. 8 | | | Visual Evaluation Sept. 20 | | | Yield bu/A |
|------------|--|----------------------|--------------------------|----------------|----------------|----------------------------|----------------|----------------|---------------|
| | | | % CONTROL | | | % CONTROL | | | |
| | | | Grass | Broad- leaf | Crop Injury | Grass | Broad- leaf | Crop Injury | |
| 1 | Amiben 2E ^{oo} | 3.0 | 100 a | 1/ 95 a-b | 0 c | 100 a | 93 a-b | 0 c | 30.1 a-b |
| 2 | Amiben 2E* | 3.0 | 100 a | 78 d-f | 0 c | 100 a | 63 d-e | 0 c | 26.4 a-d |
| 3 | Butrac 200 4E ^{ooo} | .2 | 100 a | 93 a-c | 0 c | 100 a | 90 a-c | 0 c | 26.1 a-d |
| 4 | Butrac 200 4E ^{ooo} | .2 | 100 a | 73 d-f | 0 c | 100 a | 68 d-e | 0 c | 26.4 a-d |
| 5 | Butrac 200 4E ^{ooo} + Lorox 50 ^{ooo} | .2 + .25 | 100 a | 73 d-f | 0 c | 100 a | 63 d-e | 0 c | 34.9 a |
| 6 | Ethrel 2E 1st bloom | .5 | 100 a | 73 d-f | 0 c | 100 a | 63 d-e | 0 c | 30.1 a-b |
| 7 | Ethrel 2E 1st bloom | 1.0 | 100 a | 58 f | 0 c | 100 a | 53 d-e | 0 c | 34.1 a |
| 8 | Bas-3924 4E ^o | 1.0 | 100 a | 75 d-f | 0 c | 100 a | 65 d-e | 0 c | 18.8 d |
| 9 | Bas-3924 4E ^o | 1.5 | 100 a | 78 d-f | 0 c | 100 a | 68 d-e | 0 c | 31 a-b |
| 10 | Bas-3924 4E ^o + Basagran 4E** | 1.0 + .75 | 100 a | 63 e-f | 0 c | 100 a | 60 d-e | 0 c | 32.8 a-b |
| 11 | Bas-3924 4E ^o + Basagran 4E** | 1.5 + .75 | 100 a | 80 d-f | 0 c | 100 a | 73 d-e | 0 c | 28.9 a-c |
| 12 | Mbr-12325 4S*** | .5 | 100 a | 73 d-f | 28 a-b | 100 a | 58 d-e | 18 b | 18.9 d |
| 13 | Mbr-12325 4S*** | .75 | 100 a | 83 c-e | 3 c | 100 a | 73 d-e | 0 c | 28.3 a-c |
| 14 | Mbr-12325 4S*** | 1.0 | 100 a | 73 d-f | 35 a | 100 a | 65 d-e | 25 a | 24.3 b-d |
| 15 | Mbr-12325 4S**** | .5 | 100 a | 83 b-d | 3 c | 100 a | 75 b-d | 0 c | 17.3 d |
| 16 | Mbr-12325 4S**** | .75 | 100 a | 60 e-f | 23 b | 100 a | 50 e | 20 a | 20.1 c-d |
| 17 | Mbr-12325 4S**** | 1.0 | 100 a | 85 b-d | 28 a-b | 100 a | 80 c-d | 20 a | 23.7 b-d |
| 18 | Check (cultivated) | 0 | 100 a | 100 a | 0 c | 100 a | 100 a | 0 c | 24.9 b-d |

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

TIME OF APPLICATION: ^o Preplant incorporated
^{oo} Cracking
^{ooo} 8-10" directed
* 1st Trifoliolate
** 3rd Trifoliolate post
*** 2-3 Trifoliolate
**** 5-6 Trifoliolate

LOCATION: Spindletop
VARIETY: Calland
PLANTED: May 22
Soil Type Silt Loam
O.M 6.1
pH 6.6

* 1.0 BAS 3924 4E was applied preplant incorporated on all treatments except 9 & 11.

SOYBEAN MOBIL COMPARISONS - 1974

Department of Agronomy
University of Kentucky

| Trt. No. | Herbicide Formulation | Method of Application | Rate lbs/A AI | Visual Evaluation June 25 | | | Visual Evaluation Aug. 13 | | |
|----------|---------------------------|-----------------------|---------------|---------------------------|------------|-------------|---------------------------|------------|-------------|
| | | | | % Control | | | % Control | | |
| | | | | Grass | Broad-leaf | Crop Injury | Grass | Broad-leaf | Crop Injury |
| 1 | Modown 2E | PRE | 2.0 | 83 b-d | 83 b-c | 13 a | 75 b | 48 a-e | 0 a |
| 2 | Modown 2E Encapsulated | PRE | 2.0 | 75 c-d | 75 b-e | 5.0 a | 78 b | 48 a-e | 0 a |
| 3 | Modown 2E + Lasso 4E | PRE | 1.5 + 2.0 | 90 b-c | 73 b-e | 5.0 a | 70 b | 48 a-e | 0 a |
| 4 | Modown 2E + Lasso 4E | PRE | 2.0 + 2.0 | 90 b-c | 88 b | 10 a | 75 b | 65 a | 0 a |
| 5 | Mobil 8475 2E | PRE | 1.5 | 70 d-e | 70 c-f | 5.0 a | 73 b | 20 c-e | 0 a |
| 6 | Mobil 8475 2E + Modown 2E | PRE | 1.5 + 1.5 | 78 c-d | 78 b-d | 5.0 a | 73 b | 40 a-e | 0 a |
| 7 | Mobil 8479 2E | PRE | 1.5 | 85 b-d | 63 d-f | 5.0 a | 70 b | 25 a-e | 0 a |
| 8 | Mobil 8479 2E + Modown 2E | PRE | 1.5 + 1.5 | 78 c-d | 78 b-d | 5.0 a | 75 b | 50 a-d | 0 a |
| 9 | Lasso 4E | PRE | 2.0 | 88 b-c | 73 b-e | 0 a | 73 b | 20 b-e | 0 a |
| 10 | Mobil 8475 2E | PPI | .75 | 78 c-d | 57 e-g | 0 a | 75 b | 28 a-e | 0 a |
| 11 | Mobil 8475 2E | PPI | 1.5 | 78 c-d | 63 d-f | 0 a | 73 b | 15 d-e | 0 a |
| 12 | Mobil 8475 2E + Modown 2E | PPI + PRE | 1.5 + 1.5 | 85 b-d | 83 b-c | 5.0 a | 73 b | 33 a-e | 0 a |
| 13 | Mobil 8479 2E | PPI | .75 | 53 e | 40 g | 0 a | 65 b | 10 e | 0 a |
| 14 | Mobil 8479 2E | PPI | 1.5 | 83 b-d | 53 f-g | 0 a | 70 b | 10 e | 0 a |
| 15 | Mobil 8479 2E + Modown 2E | PPI + PRE | 1.5 + 1.5 | 83 b-d | 83 b-c | 3.0 a | 73 b | 55 a-c | 0 a |
| 16 | Treflan 4E | PPI | .75 | 90 b-c | 68 c-f | 0 a | 73 b | 28 a-e | 0 a |
| 17 | Cobex 2E | PPI | .5 | 85 b-c | 73 b-e | 5.0 a | 70 b | 13 d-e | 0 a |
| 18 | Modown 2E + Treflan 4E | PRE + PPI | 1.5 + .75 | 93 b | 85 b-c | 10 a | 75 b | 45 a-e | 0 a |
| 19 | Modown 2E + Cobex 2E | PRE + PPI | 2.0 + .5 | 83 b-d | 80 b-d | 25 a | 75 b | 60 a-b | 0 a |
| 20 | Check (cultivated) | --- | 0 | 100 a | 100 a | 0 a | 100 a | 100 a | 0 a |

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

LOCATION: Spindletop
 VARIETY: Calland
 FERTILIZATION: 300 lbs/A 16-16-16
 TREATED & PLANTED: May 17

Soil type - silt loam
 0. m 3.8
 pH 6.4

ALFALFA ESTABLISHMENT - 1974
 Department of Agronomy
 University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A active | Visual Evaluation | Yield July 10 |
|-------------|--------------------------|----------------------|--------------------------|----------------------|
| | | | % CONTROL Crop Injury | Tons/A at harvest |
| 1 | Treflan 4E* | .75 | 0 a 1/ | 1.33 b |
| 2 | Surflan 75W | 1.0 | 38 c | 1.13 e |
| 3 | Balan 1.5E | 1.5 | 0 a | 1.4 a |
| 4 | Tolban 4E | 1.0 | 3 a-b | 1.25 c-d |
| 5 | Tolban 4E | 2.0 | 3 a-b | 1.43 a |
| 6 | Cobex 2E | .5 | 18 a-b | 1.22 d |
| 7 | Cobex 2E | 1.0 | 20 a-c | 1.24 c-d |
| 8 | Gulf-6044 6E | 3.0 | 15 b-c | 1.24 c-d |
| 9 | Gulf-6044 6E | 6.0 | 65 c | 1.01 f |
| 10 | Eptam 6E | 3.0 | 8 a-b | 1.27 b-d |
| 11 | CHECK | 0 | 0 a | 1.3 b-c |

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

LOCATION: Haine Chance
 VARIETY: Narragansett

TREATED & PLANTED: May 1

Soil Type silt loam
 O.M 6.1
 pH 6.6

* All treatments preemergence

BURLEY Tobacco 1974
Department of Agronomy
University of Kentucky

| Trt. No. | Herbicide Formulation | Rate lbs/A AI | Visual Evaluation July 13 | | | Visual Evaluation Aug. 22 | | |
|----------|--------------------------------|---------------|---------------------------|------------|-------------|---------------------------|------------|-------------|
| | | | % Control | | | % Control | | |
| | | | Grass | Broad-leaf | Crop Injury | Grass | Broad-leaf | Crop Injury |
| 1 | Enide 50W * | 4.0 | 85 b-c ^{1/} | 68 e-f | 0 a | 85 c | 73 c-d | 0 a |
| 2 | Enide 50W * | 6.0 | 85 b-c | 65 f | 0 a | 90 b | 75 c-d | 0 a |
| 3 | Enide 50W ** | 6.0 | 78 c | 68 d-f | 0 a | 88 b-c | 73 c-d | 0 a |
| 4 | Tillam 6E ** | 4.0 | 80 c | 75 c-f | 0 a | 88 b-c | 70 d | 0 a |
| 5 | Devironal 2E ** | 1.0 | 80 c | 83 b-d | 0 a | 90 b | 80 b-d | 0 a |
| 6 | Devironol 2E ** + Tillam 6E ** | 1.0 + 4.0 | 88 b-c | 83 b-d | 0 a | 90 b | 83 b-d | 0 a |
| 7 | Surflan 75W *** | .5 | 85 b-c | 75 c-f | 0 a | 90 b | 80 b-d | 0 a |
| 8 | Surflan *** | 1.0 | 88 b-c | 78 b-f | 0 a | 90 b | 83 b-d | 0 a |
| 9 | Surflan *** | 1.5 | 88 b-c | 88 b-c | 0 a | 90 b | 85 b-d | 0 a |
| 10 | Surflan *** | 2.0 | 90 b | 90 b | 0 a | 90 b | 90 b | 0 a |
| 11 | Surflan *** | 3.0 | 90 b | 90 b | 0 a | 90 b | 88 b-c | 0 a |
| 12 | Surflan *** | 4.0 | 90 b | 90 b | 0 a | 90 b | 90 b | 0 a |
| 13 | Destun 4S *** | 3.0 | 88 b-c | 80 b-c | 0 a | 90 b | 75 b-d | 0 a |
| 14 | Destun 4S *** | 4.0 | 90 b | 90 b | 0 a | 90 b | 85 b-d | 0 a |
| 15 | Destun 4S *** | 3.0 | 90 b | 78 b-f | 0 a | 90 b | 73 c-d | 0 a |
| 16 | Destun 4S * | 4.0 | 85 b-c | 75 c-f | 0 a | 90 b | 70 d | 0 a |
| 17 | Destun 4S ** | 3.0 | 90 b | 75 c-f | 0 a | 90 b | 78 b-d | 0 a |
| 18 | Destun 4S ** | 4.0 | 88 b-c | 83 b-d | 0 a | 90 b | 73 c-d | 0 a |
| 19 | Balan 1.5E ** | 1.5 | 88 b-c | 83 b-d | 0 a | 90 b | 75 b-d | 0 a |
| 20 | U-27267 75W ** | 1.5 | 83 b-c | 85 b-c | 0 a | 90 b | 80 b-d | 0 a |
| 21 | U-27267 75W * | 2.25 | 83 b-c | 70 d-f | 0 a | 90 b | 73 c-d | 0 a |
| 22 | Check (cultivated) | 0 | 100 a | 100 a | 0 a | 100 a | 100 a | 0 a |

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

* Preemergence
** Preplant incorporated
*** POST Transplanted

LOCATION: Spindletop
VARIETY: KY 21
TREATED & SET: June 5

0.m 3.8
pH 6.2