Report of 1975 Herbicide Data

Oliver G. Russ

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Report of 1975 Herbicide Data

Keywords
Keeping up with research; SRL 134 (June 2002); Kansas Agricultural Experiment Station contribution; no. 02-412-S; Herbicide; Data; Corn; Wild cane; Soybeans; Grain sorghum

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Keeping Up with Research .... No. 22

Report of
1975 Herbicide Data

AGRICULTURAL EXPERIMENT STATION
Floyd W. Smith, director

COOPERATIVE EXTENSION SERVICE
Robert A. Bohannon, director

Kansas State University of Agriculture and Applied Science, Manhattan

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We appreciate the efforts and cooperation of those who made this work possible:

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L. D. Maddux - Rossville/Topeka
L. S. Axthelm
W. A. Moore - Hutchinson
R. J. Raney - Scandia/Belleville
R. F. Sloan - Powhattan
M. C. Lundquist - Minneola
G. R. TenEyck - St. John
P. R. Rahn

**Graduate Student**

J. L. Kugler

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The information in this report is to inform cooperators in industry, colleagues at the University, producers, and other interested persons of the results of the 1975 field evaluation of herbicides used to control weeds in corn, grain sorghum, and soybeans. The information does not constitute a recommendation or endorsement. Weed control suggestions may be found in Report of Progress 254, "Chemical Weed Control in Field Crops, 1976."

Special acknowledgment and thanks go to the following firms for supporting the research reported:

Amchem Products, Inc.
American Cyanamid Company
BASF Wyandotte Corporation
Chemagro Corporation
Chipman Chemical Company, Inc.
CIBA-Geigy Corporation
Diamond Shamrock Company
Elanco Products Company
E. I. DuPont De Nemours and Company
Gulf Oil Chemical Company
Hercules Incorporated
Hopkins Agricultural Chemical Company
Mobil Chemical Company
Monsanto Chemical Company
NOR-AM Agricultural Products, Inc.
Shell Chemical Company
Stauffer Chemical Company
US Borax Research Corporation
Velsicol Chemical Corporation
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<td>38</td>
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<td>St. John</td>
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## Weed Control Research Plot Data

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<td><strong>1. Location:</strong> Manhattan, Ks.</td>
<td><strong>Cooperator:</strong> Oliver G. Russ</td>
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<tr>
<td><strong>2. Soil:</strong> Texture Muir Silt Loam</td>
<td>pH 6.5 Organic Matter 2.5</td>
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<tr>
<td><strong>3. Planting:</strong> Date 5/7/75 Rate 1 seed/8&quot; Depth 2.0&quot;</td>
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<td><strong>4. Crop:</strong> Corn Variety Horizon KR-117</td>
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<tr>
<td><strong>5. Fertilizer Applied:</strong> N 120 P 60 K 0</td>
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<tr>
<td><strong>6. Seedbed Condition:</strong> (X) Excellent ( ) Fair ( ) Poor ( )</td>
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<td><strong>7. Replications</strong> 3 Plot Size 10 ft x 30 ft</td>
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<tr>
<td><strong>8. Gallons of Spray per Acre</strong> 20 Carrier: (X) Water ( ) Fert.</td>
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<td><strong>9. Date Herbicide Applied:</strong> Preplant Incorporated 5/7/75 Preemergent 5/7/75 Early Post 6/2/75</td>
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</tr>
<tr>
<td><strong>11. Date of Crop Injury Rating</strong> 7/8/75; Weed Control Rating 7/8/75</td>
<td></td>
</tr>
<tr>
<td><strong>12. Crop Maturity</strong> (Silking, 50% headed, etc.)</td>
<td></td>
</tr>
<tr>
<td><strong>13. Date Harvested</strong> 10/22/75</td>
<td></td>
</tr>
<tr>
<td><strong>14. Summary:</strong> (Weed Control - predominant species, etc.) The plot area was overseeded with alfalfa seed screenings. Predominant weed species were pigweed, morning glory, ragweed, velvet leaf, crabgrass, and foxtail spp. Sunflower and barnyardgrass populations were moderate to low. Weed control was adequate in all plots.</td>
<td></td>
</tr>
<tr>
<td><strong>15. Summary:</strong> (Crop Injury - stand reduction, stunting, chlorosis, etc.) Plots treated with Lasso 2.5#/A + Banvel .5#/A had a very small percentage of leaf burn. All other plots had no real detectable injury.</td>
<td></td>
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<tr>
<td><strong>16. Summary:</strong> (Crop Yield) Small amounts of precipitation through June, July, and August reduced corn yields for 1975.</td>
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<tr>
<td>NO.</td>
<td>TREATMENT</td>
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<tr>
<td>-----</td>
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<tr>
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<td>LASSO + ATRAZINE</td>
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<tr>
<td>3</td>
<td>ERADICANE + ATRAZINE</td>
</tr>
<tr>
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<td>SUTAN + CGA 18762</td>
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<td>LASSO + BLADEX</td>
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<td>10</td>
<td>ATRAZINE</td>
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<tr>
<td>11</td>
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<td>12</td>
<td>H-22734 + G-30027</td>
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<td>RAMROD/ATRAZINE</td>
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<td>16</td>
<td>LASSO + ATRAZINE</td>
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<tr>
<td>17</td>
<td>CP50144 + MC 4379(4F)</td>
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<td>CGA 24705 + G-30027</td>
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<td>19</td>
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<td>LASSO + FOX 4</td>
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<td>21</td>
<td>LASSO + 9ANVEL</td>
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<td>ELADEX + 1 GAL OIL</td>
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<td>OUTFOX 4L</td>
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<td>HAND WEED</td>
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<td>25</td>
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** TEST AVERAGES **

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* WHEN APPLIED:  
PRE (COMPLETE COVERAGE AFTER PLANTING)  
PPI (PREPLANT INCORPORATED)  
EP (EARLY POST)  

** WEED CONTROL RATING:  
10 - COMPLETE CONTROL  
0 - NO CONTROL  

*** CROP INJURY RATING:  
10 - COMPLETE KILL  
0 - NO INJURY
Weed Control Research Plot Data

1. Location: Scandia  
   Cooperator: R. J. Raney

2. Soil: Texture Silty Clay Loam pH 5.8  Organic Matter 2.0

3. Planting: Date 5/1  Rate 26,997  Depth 2"

4. Crop Corn  Variety NC+ 85SX

5. Fertilizer Applied: N 193  P 24  K 6

6. Seedbed Condition: (x) Excellent ( ) Fair ( ) Poor ( )

7. Replications 3  Plot Size 10' x 30'

8. Gallons of Spray per Acre 20  Carrier: (x) Water ( ) Fert.

9. Date Herbicide Applied: Preplant Incorporated 5/1
   Preemergent 5/3  Early Post 6/6

10. Precipitation after planting: May - 1.58"  June - 6.36"
    July - 0.29"  August - 3/38"  Sept. - 1.51"
    Irrigated - 7/3, 7/15, 7/25, 8/2, 8/10

11. Date of Crop Injury Rating  
    Weed Control Rating 6/17, 9/23

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested 9/23/75

14. Summary: (Weed Control - predominant species, etc.)

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)

16. Summary: (Crop Yield)
## HERBICIDE PERFORMANCE
### CORN 1975
#### SCANDIA

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<tr>
<th>No.</th>
<th>Treatment</th>
<th>LBS. A.I.</th>
<th>WHEN*</th>
<th>BU. APPLIED</th>
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<th>CROP INJURY***</th>
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<td>PRE</td>
<td>147.3</td>
<td>8.3</td>
<td>7.3</td>
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<td>7.7</td>
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**TEST AVERAGES**

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* WHEN APPLIED:
- **PRE** (COMPLETE COVERAGE AFTER PLANTING)
- **PPI** (PREPLANT INCORPORATED)
- **EP** (EARLY POST)

** WEED CONTROL RATING:
- 10 - COMPLETE CONTROL
- 0 - NO CONTROL

*** CROP INJURY RATING:
- 10 - COMPLETE KILL
- 0 - NO INJURY
Weed Control Research Plot Data

1. Location: Scandia
   Cooperator: R. J. Raney

2. Soil: Texture Silty Clay Loam pH 5.8 Organic Matter 2.0

3. Planting: Date 5/1/75 Rate 26997 Depth 2"

4. Crop Corn Variety NC+ 85SX

5. Fertilizer Applied: N 181 P 24 K 6

6. Seedbed Condition: (x) Excellent ( ) Fair ( ) Poor ( )

7. Replications 3 Plot Size 10' x 30'

8. Gallons of Spray per Acre 20 Carrier: (x) Water ( ) Fert.

9. Date Herbicide Applied: Preplant Incorporated
   Preemergent 5/3 Early Post 6/6

10. Precipitation after planting: May - 1.58" Sun 6.36"
    July - 0.29" August - 3.38" Sept - 1.51"
    Irrigated 7/7, 7/19, 7/28, 8/4

11. Date of Crop Injury Rating _____; Weed Control Rating _____

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested ___ 9/25/75

14. Summary: (Weed Control - predominant species, etc.)

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)

16. Summary: (Crop Yield)
<table>
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<tr>
<th>NO. TREATMENT</th>
<th>LBS. A.I. PER A.</th>
<th>APPLIED WHEN*</th>
<th>BU. PER A.</th>
<th>BROADLEAF</th>
<th>GRASSY</th>
<th>CROP INJURY</th>
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<tr>
<td>1. LASSO + LOROX</td>
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<td>146.7</td>
<td>8.0</td>
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<tr>
<td>14. RAMROD/ATRAZINE</td>
<td>4.14</td>
<td>PRE</td>
<td>167.7</td>
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<tr>
<td>15. CP50144 + MC 4379(4F)</td>
<td>2.0 + 1.5</td>
<td>PRE</td>
<td>170.3</td>
<td>9.3</td>
<td>10.0</td>
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<tr>
<td>16. LASSO + BANVEL</td>
<td>2.5 + 0.5</td>
<td>PRE</td>
<td>172.0</td>
<td>8.3</td>
<td>10.0</td>
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<tr>
<td>17. BLADEX + 1 GAL OIL</td>
<td>2.0</td>
<td>EP</td>
<td>158.3</td>
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<td>18. CUTFOX 4L</td>
<td>.75</td>
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<td>168.7</td>
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<td>19. HAND WEED</td>
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</table>

**TEST AVERAGES**

L.S.D. (.05) 157.4 8.3 9.9 0.0

* WHEN APPLIED:
  PRE (COMPLETE COVERAGE AFTER PLANTING)
  EP (EARLY POST)

** WEED CONTROL RATING:
  10 - COMPLETE CONTROL
  0 - NO CONTROL

*** CROP INJURY RATING:
  10 - COMPLETE KILL
  0 - NO INJURY
### Weed Control Research Plot Data

1. **Location:** Rossville  
   **Cooperator:** Larry S. Axthelm

2. **Soil:** Texture Eudora S.L.  
   **pH:** 5.8  
   **Organic Matter:** 1.9

3. **Planting:**  
   **Date:** 5/2/75  
   **Rate:** 19400  
   **Depth:** 2"

4. **Crop:** Corn  
   **Variety:** Pioneer 3369A

5. **Fertilizer Applied:**  
   - N 185  
   - P 44  
   - K  

6. **Seedbed Condition:**  
   - (x) Excellent  
   - ( ) Fair  
   - ( ) Poor

7. **Replications:** 3  
   **Plot Size:** 10' x 30'

8. **Gallons of Spray per Acre:** 20  
   **Carrier:**  
   - (x) Water  
   - ( ) Fert.

9. **Date Herbicide Applied:**  
   - Preplant Incorporated  
   - Preemergent 5/2/75  
   - Early Post 6/12/75

10. **Precipitation after planting:**  
    - May - 5.88"  
    - June - 5.75"
    - Irrigation  
      - 7/2 - 1.31"  
      - 7/8 - 1.55"  
      - 7/15 - 1.62"
      - 7/20 - 1.65"  
      - 7/28 - 1.64"  
      - 8/2 - 1.66"  
      - 8/8 - 1.62"

11. **Date of Crop Injury Rating:** 6/13/75  
    **Weed Control Rating:** 6/13/75

12. **Crop Maturity (Silking, 50% headed, etc.)**

13. **Date Harvested:** 9/17/75

14. **Summary:** (Weed Control - predominant species, etc.)

15. **Summary:** (Crop Injury - stand reduction, stunting, chlorosis, etc.)

16. **Summary:** (Crop Yield)
<table>
<thead>
<tr>
<th>NO.</th>
<th>TREATMENT</th>
<th>LBS. A.I. PER A.</th>
<th>WHEN* APPLIED</th>
<th>BU. APPLIED PER A.</th>
<th>WEED CONTROL RATING**</th>
<th>CROP*** INJURY</th>
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<td>1.</td>
<td>SUTAN + ATRAZINE</td>
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<tr>
<td>3.</td>
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<td>PPI</td>
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</tr>
<tr>
<td>4.</td>
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</tr>
<tr>
<td>5.</td>
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<td>8.</td>
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<td>19.</td>
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<tr>
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<td>21.</td>
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<tr>
<td>22.</td>
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<tr>
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<td>24.</td>
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**WHEN APPLIED:**
- PRE (COMPLETE COVERAGE AFTER PLANTING)
- PPI (PREPLANT INCORPORATED)
- EP (EARLY PEST)

**TEST AVERAGES**

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<thead>
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<th>L.S.D. (0.05)</th>
<th>100.9</th>
<th>8.5</th>
<th>7.9</th>
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</table>

*WHEN APPLIED:*
- PRE (COMPLETE COVERAGE AFTER PLANTING)
- PPI (PREPLANT INCORPORATED)
- EP (EARLY PEST)

**WEED CONTROL RATING:**
- 10 - COMPLETE CONTROL
- 0 - NO CONTROL

***CROP INJURY RATING:**
- 10 - COMPLETE KILL
- 0 - NO INJURY
Weed Control Research Plot Data

1. Location: Rossville  
Cooperator: Larry S. Axthelm

2. Soil: Texture Eudora S. L.  
ph 5.8  
Organic Matter 1.9

3. Planting: Date 5/5/75  
Rate 18,300  
Depth 2"

4. Crop Corn  
Variety Pioneer Variety 3369A

5. Fertilizer Applied: N 194  
P  
K

6. Seedbed Condition: (x) Excellent ( ) Fair ( ) Poor ( )

7. Replications 4  
Plot Size 10' x 100'

8. Gallons of Spray per Acre 30  
Carrier: (x) Water ( ) Fert.

9. Date Herbicide Applied: Preplant Incorporated 5/5/75  
Preemergent  
Early Post

10. Precipitation after planting: May - 5.88"  
June - 5.75"

   Irrigation - 7/8 - 2.09"  
   7/21 - 3.16"  
   7/31 - 1.57"

   8/11 - 2.56"

11. Date of Crop Injury Rating 6/13/75; Weed Control Rating 6/13/75

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested 9/19/75

14. Summary: (Weed Control - predominant species, etc.)
Plot area was overseeded with wildcane.  
Wildcane  
No broadleaf ratings taken.

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)
No visible crop injury was noted.

16. Summary: (Crop Yield)
<table>
<thead>
<tr>
<th>No.</th>
<th>Treatment</th>
<th>Lbs. A.I. Applied per A.</th>
<th>WHEN APPLIED</th>
<th>Weed Control Rating**</th>
<th>Crop Injury Rating***</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>SUTAN+ + BLADEX</td>
<td>4.0 + 2.0</td>
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<td>SUTAN+ + CGA18762</td>
<td>4.0 + 2.0</td>
<td>PPI</td>
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<td>4.0 + 1.0</td>
<td>PPI</td>
<td>116.8 0.0</td>
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<tr>
<td>4.</td>
<td>SUTAN+ 4S + ATRAZINE</td>
<td>6.0 + 1.0</td>
<td>PPI</td>
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<td>5.8 0.0</td>
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<tr>
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<td>4.0 + 1.0</td>
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<td>7.</td>
<td>ERADICANE + CGA18762</td>
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<td>4.0 + 2.0</td>
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**Test Averages**

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<th></th>
<th>L.S.D. (1.05)</th>
<th>Test Averages</th>
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<td>118.4</td>
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<td></td>
<td>6.4</td>
<td>1.2</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

* WHEN APPLIED: PPI (PREPLANT INCORPORATED)

** Weed Control Rating:**

10 = COMPLETE CONTROL
0 = NO CONTROL

*** Crop Injury Rating:**

10 = COMPLETE KILL
0 = NO INJURY
Weed Control Research Plot Data

1. Location: Manhattan, Kansas  Cooperator: Oliver G. Russ
2. Soil: Texture Muir Silt Loam  pH 6.5  Organic Matter 2.5
3. Planting: Date 6/6/75  Rate 10 beans/ft row  Depth 2.0"
4. Crop  Soybeans  Variety Williams
5. Fertilizer Applied:  N 120  P 60  K 0
6. Seedbed Condition: (X) Excellent ( ) Fair ( ) Poor ( )
7. Replications 3  Plot Size 10 ft x 30 ft
8. Gallons of Spray per Acre 20  Carrier: (X) Water ( ) Fert.
9. Date Herbicide Applied: Preplant Incorporated 5/27/75
   Preemergent 6/6/75  Early Post 6/24/75
10. Precipitation after planting: 6/7 - .35"  6/9 - 1.85"
    6/10 - 1.40"  6/16 - .90"  6/21 - 3.20"
    6/23 - .10"
11. Date of Crop Injury Rating 7/18/75; Weed Control Rating 7/18/75
12. Crop Maturity (Silking, 50% headed, etc.)
13. Date Harvested 10/9/75
14. Summary: (Weed Control - predominant species, etc.)
The plot area was overseeded with alfalfa seed screenings. Predominant weed species were pigweed, morning glory, ragweed, crabgrass, foxtail spp. There were spare populations of sunflower and three-seeded mercury through the plot area. Weed control was adequate in all plots.
15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)
Plots treated with CP 50144 + MC 4379 both at 1.5#/A had moderate stand reduction, while plots treated with CP 50144 + RP 17623, both at 1.5#/A, had severe stand reduction.
16. Summary: (Crop Yield)
Soybean yields were above average for Kansas.
<table>
<thead>
<tr>
<th>NO. TREATMENT</th>
<th>LBS. A.I. PER A.</th>
<th>WHEN*</th>
<th>BU. A.I. APPLIED PER A.</th>
<th>BROACLEAF</th>
<th>GRASSY</th>
<th>CROP***</th>
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<td>48.4</td>
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<tr>
<td>2. AC 92,553 + BAY 94337</td>
<td>1.25 + .375</td>
<td>PPI</td>
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<tr>
<td>4. TOLBAN</td>
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** TEST AVERAGES **

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* WHEN APPLIED:  
PRE (COMPLETE COVERAGE IMMEDIATELY AFTER PLANTING)  
PPI (PREPLANT INCORPORATED)  
EP (EARLY POST)  

** WEED CONTROL RATING:  
10 - COMPLETE CONTROL  
0 - NO CONTROL  

*** CROP INJURY RATING:  
10 - COMPLETE KILL  
0 - NO INJURY
Weed Control Research Plot Data

1. Location: Powhattan       Cooperator: R. F. Sloan

2. Soil: Texture Silty Clay Loam pH 6.3 Organic Matter 2.8

3. Planting: Date 5/14 Rate 70#/A Depth 2"

4. Crop Soybeans        Variety Williams

5. Fertilizer Applied: N— P— K—

6. Seedbed Condition: (X) Excellent ( ) Fair ( ) Poor ( )

7. Replications _______ 3 Plot Size _______ 10' X 30'

8. Gallons of Spray per Acre 20 Carrier: (X) Water ( ) Fert.

     Preemergent 5/14 Early Post 6/5

    5/29 - .43", 5/30 - 1.50", 5/31 - .18", 6/3 - .38"
    6/4 - .01", 6/12 - 2.11", 6/11 - .99", 6/12 - .01"

11. Date of Crop Injury Rating _______; Weed Control Rating 6/12, 10/20

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested

14. Summary: (Weed Control - predominant species, etc.)
    Velvetleaf was predominant broadleaf.
    Giant foxtail was predominant grass.

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)
    Treatment 20: After a brief, extremely high wind June 16, 25% of plants
    were broken off at grown level.

16. Summary: (Crop Yield)
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<tr>
<th>L.S.O.</th>
<th>A.I.</th>
<th>WHEN*</th>
<th>BU.</th>
<th>WEED CONTROL RATING**</th>
<th>CROP***</th>
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** TEST AVERAGES **
L.S.O. (.05) | 18.5 | 8.9 | 8.5 | 2.3 |
| | 2.6 | NS | NS | |

* WHEN APPLIED:  
PPI (PREPLANT INCORPORATED)  
PRF (COMPLETE COVERAGE IMMEDIATELY AFTER PLANTING)  
EP (EARLY POST)  

** WEED CONTROL RATING:  
10 - COMPLETE CONTROL  
0 - NO CONTROL  

*** CROP INJURY RATING:  
10 - COMPLETE KILL  
0 - NO INJURY
Weed Control Research Plot Data

1. Location: Ottawa, Kansas  Cooperator: Charles Knight

2. Soil: Texture Sicl  pH  Organic Matter

3. Planting: Date 5/14/75  Rate 60#/A  Depth 1.5"

4. Crop Soybeans  Variety Columbus

5. Fertilizer Applied: N 27#  P 30#  K

6. Seedbed Condition: (X) Excellent ( ) Fair ( ) Poor ( )

7. Replications 3  Plot Size 10' X 50' (harvested 5' X 50')

8. Gallons of Spray per Acre 20  Carrier: (X) Water ( ) Fert.

9. Date Herbicide Applied: Preplant Incorporated 5/14/75
   Preemergent 5/14/75  Early Post 6/30/75


11. Date of Crop Injury Rating  ---  Weed Control Rating 8/7/75

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested 10/13/75

14. Summary: (Weed Control - predominant species, etc.)
   All plots were overseeded with alfalfa screenings at planting time.
   Predominant weed species were pigweed, velvet leaf, venice mallow,
   foxtail, barnyardgrass, fall panicum, and prickly sida.

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)
   Heavy rains after planting resulted in plants emerging during three weeks.
   A good stand was finally obtained, but waterlogged soil and nonuniform
   emergence made it impossible to determine if plant stress resulted from
   chemical injury or growing conditions.

16. Summary: (Crop Yield)
   Plot yields appeared to respond well to weed control this year. July and
   early August were dry and some moisture stress occurred, but their early
   planting and early growth permitted the soybeans to become sufficiently
   established to survive the dry weather and yield relatively well.
# Herbicide Performance

## Soybeans 1975

**OTTAWA**

<table>
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<tr>
<th>No. Treatments</th>
<th>Lbs. A.I. Per A.</th>
<th>When*</th>
<th>Bu. Applied Per A.</th>
<th>Weed Control Rating**</th>
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<th>Grassy Injury</th>
<th>Crop***</th>
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**Test Averages**

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*When Applied:*  
(1) Complete Coverage After Planting  
(2) Preplant Incorporated  
(3) Early Post

**Weed Control Rating:**  
10 = Complete Control  
0 = No Control

***Crop Injury Rating:**  
10 = Complete Kill  
0 = No Injury
Weed Control Research Plot Data

1. Location: Belleville  
   Cooperator: R. J. Raney

2. Soil: Texture Silt Loam  
   pH 7.1  
   Organic Matter 1.8

3. Planting: Date 5/29  
   Rate 1 1/2 inches apart  
   Depth 2"

4. Crop Soybeans  
   Variety Cutler 71

5. Fertilizer Applied: N ——  
   P ——  
   K ——

6. Seedbed Condition: (x) Excellent ( ) Fair ( ) Poor ( )

7. Replications 3  
   Plot Size 10' x 30'

8. Gallons of Spray per Acre 20  
   Carrier: (x) Water ( ) Fert.

9. Date Herbicide Applied: Preplant Incorporated 5/19  
   Preemergent 6/5  
   Early Post 7/2

10. Precipitation after planting: May - 1.58  
    June - 6.36
    July - 0.29  
    August - 3.38  
    Sept. - 1.51

11. Date of Crop Injury Rating  
    Weed Control Rating 7/22, 10/13

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested 10/13

14. Summary: (Weed Control - predominant species, etc.)

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)

16. Summary: (Crop Yield)
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<th>BU. PER A.</th>
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<th>GRASSY</th>
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** TEST AVERAGES **

| L.S.D. (.05) | 18.3 | 7.1 | 9.1 | 0.0 |

* WHEN APPLIED:  
PRE (COMPLETE COVERAGE AFTER PLANTING)  
PPI (PREPLANT INCORPORATED)  
EP (EARLY POST)  

** WEED CONTROL RATING:**  
10 - COMPLETE CONTROL  
0 - NO CONTROL  

*** CROP INJURY RATING:**  
10 - COMPLETE KILL  
0 - NO INJURY  

23
Weed Control Research Plot Data

1. Location: Rossville Cooperator: Jerry Axthelm

2. Soil: Texture Sandy loam pH 5.5 Organic Matter 1.0

3. Planting: Date 6/12/75 Rate 60 lb/A Depth 1 1/2"

4. Crop Soybeans Variety Williams

5. Fertilizer Applied: N —— P —— K ——

6. Seedbed Condition: (X) Excellent ( ) Fair ( ) Poor ( )

7. Replications ______ 3 ______ Plot Size 10' X 30'

8. Gallons of Spray per Acre 20 Carrier: (X) Water ( ) Fert.

9. Date Herbicide Applied: Preplant Incorporated ______

Preemergent ______ Early Post ______


Irrigation: 7/8 - 1.22" 7/17 - 1.50"

7/29 - 1.50" 8/5 - 1.54"

7/23 - 1.59" 8/12 - 1.51"

11. Date of Crop Injury Rating ______ 6/24/75; Weed Control Rating ______ 7/14/75

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested ______ 10/20/75

14. Summary: (Weed Control - predominant species, etc.)

Both grassy and broadleaf weed stands were extremely light with considerable variation.

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)

Crop injury was generally light with no reduction in stand. Crop injury was not reflected in yield.

16. Summary: (Crop Yield)

Soybean yield was good with a test average of 49 bu/A. There were no highly significant differences in yield other than the no-treatment plot where yield was reduced slightly.
## Herbicide Performance Soybeans 1975
### Kansas River Valley

<table>
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<tr>
<th>No. Treatment</th>
<th>A.I. (Per A.)</th>
<th>When Applied</th>
<th>BU (Per A.)</th>
<th>Broadleaf Control Rating</th>
<th>Grass Control Rating</th>
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**Test Averages**

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<th>PRE</th>
<th>FP</th>
<th>(Complete Coverage Immediately After Planting)</th>
<th>(Preplant Incorporation)</th>
<th>(Early Post)</th>
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<td>49.4</td>
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<td>(NS)</td>
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* WHEN APPLIED:  
PPI (Preplant Incorporation)  
PRE (Complete Coverage Immediately After Planting)  
FP (Early Post)

** Weed Control Rating:**  
10 - Complete Control  
0 - No Control

*** Crop Injury Rating:**  
10 - Complete Kill  
0 - No Injury
Weed Control Research Plot Data

1. Location: Manhattan, Kansas  Cooperator: Oliver G. Russ

2. Soil: Texture Muir Silt Loam  pH 6.5  Organic Matter 2.5

3. Planting: Date 6/26/75  Rate 1 seed/4"  Depth 2.0"

4. Crop Grain Sorghum  Variety

5. Fertilizer Applied: N 120  P 60  K 0

6. Seedbed Condition: (X) Excellent  ( ) Fair  ( ) Poor

7. Replications 3  Plot Size 10' x 30'

8. Gallons of Spray per Acre 20  Carrier: (X) Water  ( ) Fert.

9. Date Herbicide Applied: Preplant Incorporated 6/26/75
   Preemergent 6/26/75  Early Post 7/19/75

10. Precipitation after planting:
    7/29 - .15"  8/12 - .10"
    8/13 - 1.60"  8/14 - .80"  8/17 - .90"
    8/25 - .70"  8/27 - .65"  9/29 - .30"

11. Date of Crop Injury Rating 8/18/75; Weed Control Rating 8/18/75

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested 9/25/74

14. Summary: (Weed Control - predominant species, etc.)

   Plot area was overseeded with alfalfa seed screenings. Predominant weed
   species were pigweed, morningglory, crabgrass, and foxtail spp. Lack of
   precipitation after planting and treating resulted in poor weed populations
   and poor weed control.

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)

   There was no detectable crop injury.

16. Summary: (Crop Yield)

   Yields were below normal for Kansas from lack of precipitation during
   the first months of growth.
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<th>LBS. A.I. PER A. applyed</th>
<th>WHEN* APPLIED</th>
<th>BU. PER A.</th>
<th>BROADLEAF</th>
<th>GRASSY</th>
<th>CROP*** INJURY</th>
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<td>PRE</td>
<td>56.0</td>
<td>6.0</td>
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**TEST AVERAGES**

L.S.D. (.05) 55.2 6.5 4.9 0.0

* WHEN APPLIED:
  - PRE (COMPLETE COVERAGE AFTER PLANTING)
  - PPI (PREPLANT INCORPORATED)
  - EP (EARLY POST)

** WEED CONTROL RATING: 10 - COMPLETE CONTROL
  0 - NO CONTROL

*** CROP INJURY RATING: 10 - COMPLETE KILL
  0 - NO INJURY
Weed Control Research Plot Data

1. Location: Powhatan  Cooperator: R. F. Sloan
2. Soil: Texture Silty clay loam pH 6.2 Organic Matter 2.8
3. Planting: Date 6/6 Rate 1 seed every 4" Depth 1.5"
4. Crop Grain Sorghum Variety Pioneer 8311
5. Fertilizer Applied: N 91 P 27 K 
6. Seedbed Condition: (X) Excellent ( ) Fair ( ) Poor ( )
7. Replications 3 Plot Size 10 x 30
8. Gallons of Spray per Acre 20 Carrier: (X) Water ( ) Fert.
9. Date Herbicide Applied: Preplant Incorporated 6/5
    Preemercent 6/6 Early Post 6/27
    6/16 - .13" 6/17 - .09" 6/18 - 2.27"
    6/19 - .03" 6/22 - 1.26" 6/23 - .03"
11. Date of Crop Injury Rating: Weed Control Rating 6/30, 10/24
12. Crop Maturity (Silking, 50% headed, etc.)
13. Date Harvested
14. Summary: (Weed Control - predominant species, etc.) Pigweed, velvetleaf, crabgrass, foxtail spp. were present.
15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)
16. Summary: (Crop Yield)
<table>
<thead>
<tr>
<th>LBS. A.I. PER A.</th>
<th>WHEN* APPLIED</th>
<th>BU. PER A. BROADLEAF</th>
<th>GRASSY</th>
<th>CROP*** INJURY</th>
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<tr>
<td>1. IGRAN</td>
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<td>7. SD15418(WP) + GS30028</td>
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<td>82.6</td>
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</tr>
<tr>
<td>8. PROPZINE</td>
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<td>85.2</td>
<td>5.8</td>
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<td>9. H LOLI (FL + ATRAZINE)</td>
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<td>PRE</td>
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<td>10.0</td>
</tr>
<tr>
<td>11. IGRAN + ATRAZINE</td>
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<td>9.8</td>
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<td>12. MC 4379(80WP) + RAMROD</td>
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<td>13. RAMROD</td>
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<td>14. LUXO + RAMROD</td>
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<td>24. HAND WEED</td>
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** TEST AVERAGES **

| L.S.D. (.05) | 86.7 | 6.4 | 7.3 | 1.5 |

* WHEN APPLIED:  
PRE (COMPLETE COVERAGE IMMEDIATELY AFTER PLANTING)  
PPi (PREPLANT INCORPORATED)  
EP (EARLY POST)  

** WEED CONTROL RATING:  
10 - COMPLETE CONTROL  
0 - NO CONTROL  

*** CROP INJURY RATING:  
10 - COMPLETE KILL  
0 - NO INJURY  

29
<table>
<thead>
<tr>
<th>1. Location: Ottawa, Kansas</th>
<th>Cooperator: Charles Knight</th>
</tr>
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<tbody>
<tr>
<td>2. Soil: Texture Sicl</td>
<td>pH</td>
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<tr>
<td>3. Planting: Date 6/30/75</td>
<td>Rate 4.5#/A</td>
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<tr>
<td>4. Crop</td>
<td>Grain Sorghum</td>
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<tr>
<td>5. Fertilizer Applied: N127#</td>
<td>P 30#</td>
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<tr>
<td>6. Seedbed Condition:</td>
<td>Excellent ( ) Fair ( ) Poor (X) dry</td>
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<tr>
<td>7. Replications 3</td>
<td>Plot Size 10' x 50' (harvested 5' x 50')</td>
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<td>8. Gallons of Spray per Acre</td>
<td>20</td>
</tr>
<tr>
<td>9. Date Herbicide Applied:</td>
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<td>Preemergent 7/1/75</td>
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<td>10. Precipitation after planting:</td>
<td>7/8 - .02&quot;, 7/19 - .32&quot;, 7/24 - .06&quot;</td>
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<tr>
<td></td>
<td>8/13 - .75&quot;</td>
</tr>
<tr>
<td></td>
<td>8/19 - .02&quot;</td>
</tr>
<tr>
<td>11. Date of Crop Injury Rating</td>
<td>---; Weed Control Rating 10/10/75</td>
</tr>
<tr>
<td>12. Crop Maturity (Silking, 50% headed, etc.)</td>
<td>---</td>
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<tr>
<td>13. Date Harvested 11/18/75</td>
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<tr>
<td>14. Summary: (Weed Control - predominant species, etc.)</td>
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<tr>
<td>All plots were overseeded with alfalfa screenings at planting time, but dry weather prevented weeds from appearing until late August.</td>
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<tr>
<td>15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)</td>
<td></td>
</tr>
<tr>
<td>Dry weather caused poor emergence and a very poor stand of grain sorghum in most of the plots. No stand reduction could be directly attributed to chemical damage.</td>
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</tr>
<tr>
<td>16. Summary: (Crop Yield)</td>
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<tr>
<td>Crop yields were very low and variable as a result of poor stand and dry soil conditions. About 1/3 of the seed did not germinate until after the first good rain August 13, too late to produce seed.</td>
<td></td>
</tr>
<tr>
<td>NO. TREATMENT</td>
<td>LBS. A.I. PER A.</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------</td>
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<tr>
<td>1. PROPZINE</td>
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<tr>
<td>3. IGRAN + PROPZINE</td>
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<tr>
<td>4. IGRAN + ATRAZINE</td>
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<td>9. MC4379(80WP) +RAMROD</td>
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<td>10. RAMROD/ATRAZINE</td>
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<td>13. IGRAN + ATRAZINE</td>
<td>1.6 + 0.8</td>
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<td>15. LOROX + RAMROD</td>
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<td>16. PRCZINE</td>
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<td>17. SD15418(WP) + GS30028</td>
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<td>18. RAMROD</td>
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<tr>
<td>19. MC4379(4F) + RAMROD</td>
<td>1.5 + 3.0</td>
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<tr>
<td>20. MC4379(80WP) + RAMROD</td>
<td>3.0 + 5.0</td>
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<td>21. H 100(WP) (ATRAZINE)</td>
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<tr>
<td>22. ATRAZINE (4L)</td>
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** TEST AVERAGES **

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<th>PPI</th>
<th>EP</th>
<th>NS</th>
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<td>8.7</td>
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</tbody>
</table>

* WHEN APPLIED:  
PRE (COMPLETE COVERAGE AFTER PLANTING)  
PPI (PREPLANT INCORPORATED)  
EP (EARLY Pest)  

** WEED CONTROL RATING:  
10 - COMPLETE CONTROL  
0 - NO CNTROL  

*** CROP INJURY RATING:  
10 - COMPLETE KILL  
0 - NO INJURY
### Weed Control Research Plot Data

1. **Location:** Belleville  
   **Cooperator:** R. J. Raney

2. **Soil:** Texture: Silt Loam  
   **pH:** 7.1  
   **Organic Matter:** 1.8

3. **Planting:**  
   **Date:** 5/27  
   **Rate:** 6 inches apart  
   **Depth:** 1 inch

4. **Crop:** Grain Sorghum  
   **Variety:** Pioneer 8311

5. **Fertilizer Applied:**  
   **N:** 73  
   **P:** 24  
   **K:** 6

6. **Seedbed Condition:**  
   (x) Excellent  
   ( ) Fair  
   ( ) Poor

7. **Replications:** 3  
   **Plot Size:** 10' x 30'

8. **Gallons of Spray per Acre:** 20  
   **Carrier:** (x) Water  
   ( ) Fert.

9. **Date Herbicide Applied:**  
   Preplant Incorporated 5/19  
   Preemergent 6/12*  
   Early Post 6/12

10. **Precipitation after planting:**  
    May - 2.90  
    June - 6.36  
    July - 0.29  
    August - 3.38  
    Sept. - 0.56

11. **Date of Crop Injury Rating:** 10/16  
    ** Weed Control Rating:** 7/7

12. **Crop Maturity (Silking, 50% headed, etc.)**

13. **Date Harvested:** 10/16

14. **Summary:** (Weed Control - predominant species, etc.)  
   *Wet weather delayed application. Plants were up.*

15. **Summary:** (Crop Injury - stand reduction, stunting, chlorosis, etc.)

16. **Summary:** (Crop Yield)
<table>
<thead>
<tr>
<th>NO. TREATMENT</th>
<th>LBS. A.I. PER A. WHEN APPLIED</th>
<th>WEED CONTROL RATING**</th>
<th>CROP***</th>
</tr>
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<tbody>
<tr>
<td>1. IGRAH</td>
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<td>PPI 6.7</td>
<td>2.7</td>
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<td>2. PROPAZINE</td>
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<td>25. NO TREATMENT</td>
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</table>

**TEST AVERAGES**

| L.S.D. (0.05) | 23.5 | 8.0 | 4.2 | 0.0 |

* WHEN APPLIED:
- PRE (COMPLETE COVERAGE AFTER PLANTING)
- PPI (PREPLANT INCORPORATED)
- EP (EARLY POST)

** WEED CONTROL RATING:
- 10 - COMPLETE CONTROL
- 0 - NO CONTROL

*** CROP INJURY RATING:
- 10 - COMPLETE KILL
- 0 - NO INJURY
Weed Control Research Plot Data

1. Location: Belleville  Cooperator: R. J. Raney
2. Soil: Texture Silt Loam  pH 7.1  Organic Matter 1.8
3. Planting: Date 6/12  Rate 6 inches apart  Depth 1"
4. Crop Grain Sorghum  Variety DeKalb F-61
5. Fertilizer Applied: N 73  P 24  K 0
6. Seedbed Condition: (x) Excellent  ( ) Fair  ( ) Poor  ( )
7. Replications 3  Plot Size 10' x 30'
8. Gallons of Spray per Acre 20  Carrier: (x) Water  ( ) Fert.
9. Date Herbicide Applied: Preplant Incorporated  None  
   Preemergent 6/13  Early Post  None
10. Precipitation after planting: June - 3.81  July - 0.29
    August - 3.38  Sept. - 1.51
11. Date of Crop Injury Rating 10/20; Weed Control Rating 7/21
12. Crop Maturity (Silking, 50% headed, etc.)
13. Date Harvested 10/20
14. Summary: (Weed Control - predominant species, etc.)
15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)
16. Summary: (Crop Yield)
<table>
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<th>lbs. A.I.</th>
<th>WHEN*</th>
<th>BUS. PER A.</th>
<th>WEED CONTROL RATING**</th>
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<td>BROADLEAF</td>
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<td>PRE</td>
<td>48.7</td>
<td>6.3</td>
<td>5.3</td>
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<tr>
<td>11. MC4379(80WP) + RAMROD</td>
<td>3.0 + 5.0</td>
<td>PRE</td>
<td>50.0</td>
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<td>PRE</td>
<td>50.4</td>
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<td>13. IGRAN</td>
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<td>15. LOROX + RAMROD</td>
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<td>55.0</td>
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<tr>
<td>16. ATRAZINE (4L)</td>
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<td>32.8</td>
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<td>19. * AND WEED</td>
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<td></td>
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** TEST AVERAGES **

| L.S.D. (1.05) | 39.6 | 7.5 | 7.1 | 0.0 |

* WHEN APPLIED:

<table>
<thead>
<tr>
<th>PRE</th>
<th>(COMPLETE COVERAGE AFTER PLANTING)</th>
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<td>EP</td>
<td>(EARLY POST)</td>
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** WEED CONTROL RATING:

<table>
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<tr>
<th>10</th>
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*** CROP INJURY RATING:

<table>
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<tr>
<th>10</th>
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</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>NO INJURY</td>
</tr>
</tbody>
</table>

35
Weed Control Research Plot Data

1. Location: Hutchinson  
   Cooperator: W. A. Moore  

2. Soil: Texture Clark-Ost Cl  
   pH 6.2  
   Organic Matter 2.1

3. Planting: Date 6/30/75  
   Rate 3.0 lb/A  
   Depth 1.5"  

4. Crop Grain Sorghum  
   Variety ACCO 1019  

5. Fertilizer Applied: N 0  
   P 0  
   K 0

6. Seedbed Condition: (x) Excellent ( ) Fair ( ) Poor ( )

7. Replications 3  
   Plot Size 10' x 30'

8. Gallons of Spray per Acre 20  
   Carrier: (x) Water ( ) Fert.

9. Date Herbicide Applied: Preplant Incorporated 6/30/75  
   Freemerget 6/30/75  
   Early Post

10. Precipitation after planting: July - .25"  
    August - 3.71"  
    Sept. - 1.07"

11. Date of Crop Injury Rating 10/30/75; Weed Control Rating 10/30/75

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested 10/30/75

14. Summary: (Weed Control - predominant species, etc.)
   Population of weeds was extremely low.  
   Weed control was excellent.

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)
   No detectable injury.

16. Summary: (Crop Yield)
   The crop yield was about average for this area of Kansas.
<table>
<thead>
<tr>
<th>Treatment</th>
<th>LBS. A.I. PER A.</th>
<th>WHEN* APPLIED</th>
<th>WEED CONTROL RATING**</th>
<th>CROP*** INJURY</th>
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<tr>
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<tr>
<td>9. H 101(FL) (ATRAZINE)</td>
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<td>10.0</td>
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<td>14. IGRAN</td>
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<td>10.0</td>
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<tr>
<td>15. IGRAN + ATRAZINE</td>
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<td>18. MC4379(80WP) + RAMROD</td>
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<td>19. RAMROD</td>
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<tr>
<td>24. HAND WEED</td>
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<tr>
<td>25. NO TREATMENT</td>
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<td>80.1</td>
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</tbody>
</table>

**TEST AVERAGES**

| L.S.D. (.05) | 84.8 | 9.5 | 9.7 | 0.0 |

* WHEN APPLIED:
- PRE (COMPLETE COVERAGE AFTER PLANTING)
- PPI (PREPLANT INCORPORATED)
- EP (EARLY POST)

** WEED CONTROL RATING:
- 10 - COMPLETE CONTROL
- 0 - NO CONTROL

*** CROP INJURY RATING:
- 10 - COMPLETE KILL
- 0 - NO INJURY
Weed Control Research Plot Data

1. Location: **Southwest Kansas**  
Cooperator: **Marvin Lundquist**

2. Soil: Texture **Silty Clay Loam**  
*PH*: 6.8  
*Organic Matter*: 1.5

3. Planting:  
*Date*: 6/4/75  
*Rate*: 20,000/A  
*Depth*: 1"

4. Crop **Grain Sorghum**  
Variety **Dorado M**

5. Fertilizer Applied:  
*N*: 45  
*P*  
*K*  

6. Seedbed Condition:  
*(X)* Excellent  
*( )* Fair  
*( )* Poor  
*( )* 

7. Replications 3  
Plot Size 10' x 40'

8. Gallons of Spray per Acre 20  
Carrier: *(X)* Water  
*( )* Fert.

9. Date Herbicide Applied:  
*Preplant Incorporated*  
*Preemergent* 6/4/75  
*Early Post* 6/20/75

10. Precipitation after planting:  
6/6 - 1.52  
6/7 - .10  
6/8 - .04  
6/19 - .22  
6/20 - .03  
6/21 - 1.04  
6/22 - 1.00  
6/23 - .10  
6/24 - .31

11. Date of Crop Injury Rating  
Weed Control Rating 10/21/75

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested 10/21/75

14. Summary:  
(Weed Control - predominant species, etc.)  
Predominant grass was annual Lovegrass
Predominant broadleafs were smooth and rough pigweed.

15. Summary:  
(Crop Injury - stand reduction, stunting, chlorosis, etc.)  
Ramrod: some emergence difficulty; emergence problem in conjunction with crusting.
Banvel caused onion top twisting.

16. Summary:  
(Crop Yield)  
Yields average due to lack of rainfall from mid-July on. Also a reflection of weed competition and herbicide injury.
### Kansas State University
Agronomy Department

**Herbicide Performance**
Grain Sorghum 1975
Southwest Kansas

<table>
<thead>
<tr>
<th>No.</th>
<th>Treatment</th>
<th>Lbs. A.I. Per A.</th>
<th>When Applied</th>
<th>Weed Control Rating**</th>
<th>Crop Injury</th>
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<tr>
<td>8.</td>
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<tr>
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<tr>
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<td>1.5 + 1 QT. EP</td>
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<td>HAND WEED</td>
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**Test Averages**

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<td></td>
<td>7.5</td>
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<tr>
<td></td>
<td>2.0</td>
</tr>
</tbody>
</table>

* When applied:
- PRE (Complete coverage after planting)
- EP (Early post)

** Weed Control Rating:**
- 10 - Complete control
- 0 - No control

** Crop Injury Rating:**
- 10 - Complete kill
- 0 - No injury

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Weed Control Research Plot Data

1. Location: Sandyland Cooperator: TenEyck and Rahn

2. Soil: Texture pH Organic Matter

3. Planting: Date 6/5 Rate seed every 2" Depth

4. Crop Grain Sorghum Variety DeKalb E59

5. Fertilizer Applied: N 78 P 46 K 0

6. Seedbed Condition: (X) Excellent ( ) Fair ( ) Poor ( )

7. Replications 3 Plot Size 10' x 30'

8. Gallons of Spray per Acre 20 Carrier: (X) Water ( ) Fert.

9. Date Herbicide Applied: Preplant Incorporated
   Preemergent June 5 Early Post

10. Precipitation after planting: 6/6 - .35" 6/8 - .85"
    6/12 - .13" 6/16 - .87" 6/21 - .70"
    6/22 - .46" 6/24 - .51" 6/27 - .14"

11. Date of Crop Injury Rating; Weed Control Rating

12. Crop Maturity (Silking, 50% headed, etc.)

13. Date Harvested October 16, 1975

14. Summary: (Weed Control - predominant species, etc.)
   Predominant species were crabgrass and pigweed.

15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)
   First cultivation when crabgrass in two-leaf stage. Second cultivation
   two weeks later.

16. Summary: (Crop Yield)
<table>
<thead>
<tr>
<th>NO. TREATMENT</th>
<th>WEEED CONTROL RATING**</th>
<th>CROP***</th>
</tr>
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<td>PER A. BROADLEAF</td>
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<td>2.0 + 4.0 PRE 67.9 2.0</td>
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<td>2.0 + 4.0 PRE 84.5 6.2</td>
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<td>6. IGRAN W/1</td>
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<td>2.0 + 4.0 PRE 39.4 7.2</td>
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<td>5.3 0.0</td>
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<td>9. IGRAN + ATRA. W/1</td>
<td>2.0 + 4.0 PRE 92.3 8.5</td>
<td>9.2 0.0</td>
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<tr>
<td>10. IGRAN + ATRA. W/0</td>
<td>2.0 + 4.0 PRE 54.7 8.0</td>
<td>6.8 0.0</td>
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<td>11. IGRAN + BLADEX W/2</td>
<td>1.6 + 4.0 PRE 94.9 3.3</td>
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<td>9.5 0.0</td>
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<td>7.8 0.0</td>
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<tr>
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<tr>
<td>18. HAND WEED w/2</td>
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<tr>
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<tr>
<td>21. NO TREATMENT W/2</td>
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</table>

** TEST AVERAGES
L.S.D. (.05) 41.1 6.2 5.6 0.0

WHEN APPLIED:
PRE (COMPLICATE COVERAGE IMMEDIATELY AFTER PLANTING

** WEED CONTROL RATING:
10 - COMPLETE CONTROL
0 - NO CONTROL

** CROP INJURY RATING:
10 - COMPLETE KILL
0 - NO INJURY