

Sd8

63
E26
D22

DOCUMENTS

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

Keeping Up with Research No. 22

Report of

1975 Herbicide Data

OLIVER G. RUSS, Weed Control Research
Agronomist, Department of Agronomy

Contribution No. 1556-S, Department of Agronomy

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

Experiment Field Superintendents

- C. W. Knight - Ottawa
- 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

Publications and public meetings by the Kansas Agricultural Experiment Station are available and open to the public regardless of race, color, national origin, sex, or religion.

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

CONTENTS

Page

Herbicide Evaluation on Corn at:

Powhattan.	4
Manhattan.	6
Scandia.	8
Topeka	12

Herbicide Evaluation on Wild Cane at:

Rossville.	14
--------------------	----

Herbicide Evaluation on Soybeans at:

Manhattan.	16
Powhattan.	18
Ottawa	20
Belleville	22
Rossville.	24

Herbicide Evaluation on Grain Sorghum at:

Manhattan.	26
Powhattan.	28
Ottawa	30
Belleville	32
Hutchinson	36
Minneola	38
St. John	40

Weed Control Research Plot Data

1. Location: Manhattan, Ks. Cooperator: Oliver G. Russ
2. Soil: Texture Muir Silt Loam pH 6.5 Organic Matter 2.5
3. Planting: Date 5/7/75 Rate 1 seed/8" Depth 2.0"
4. Crop Corn Variety Horizon KR-117
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 5/7/75
 Preemergent 5/7/75 Early Post 6/2/75
10. Precipitation after planting: 5/10 - .30" 5/14 - .20"
5/22 - .70" 5/26 - .35" 5/28 - .45"
5/29 - .22" 5/30 - .22" 6/1 - .15"
11. Date of Crop Injury Rating 7/8/75; Weed Control Rating 7/8/75
12. Crop Maturity (Silking, 50% headed, etc.) ---
13. Date Harvested 10/22/75
14. Summary: (Weed Control - predominant species, etc.)
 The plot area was overseeded with alfalfa seed screenings. Predominant weed species were pigweed, morning glory, ragweed, velvet leaf, crabgrass, and foxtail spp. Sunflower and barnyardgrass populations were moderate to low. Weed control was adequate in all plots.
15. Summary: (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.
16. Summary: (Crop Yield)
 Small amounts of precipitation through June, July, and August reduced corn yields for 1975.

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
CORN 1975
MANHATTAN

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. SUTAN + ATRAZINE	3.0 + 1.0	PPI	51.5	9.3	8.8	0.2
2. LASSO + ATRAZINE	2.5 + 1.5	PPI	57.0	8.8	5.5	0.0
3. ERADICANE + ATRAZINE	4.0 + 1.0	PPI	60.8	8.7	9.5	0.0
4. SUTAN + CGA 18762	3.0 + 1.0	PPI	61.4	8.5	8.8	0.0
5. ERADICANE + CGA 18762	4.0 + 1.0	PPI	71.7	9.0	9.8	0.0
6. CGA 24705 + CGA 18762	1.5 + 1.5	PRE	47.7	7.8	9.3	0.0
7. CGA 24705	2.5	PRE	55.0	6.3	9.3	0.0
8. AC 92,553	2.0	PRE	56.0	7.8	8.0	0.0
9. LASSO + BLADEX	2.0 + 1.6	PRE	56.9	8.3	9.7	0.0
10. ATRAZINE	2.4	PRE	56.9	9.5	6.0	0.0
11. AC 92,553 + G-30027	1.5 + 1.5	PRE	58.2	9.3	8.8	0.0
12. H-22234 + G-30027	1.5 + 1.0	PRE	58.6	8.2	8.5	0.0
13. RAMROD/ATRAZINE	4.14	PRE	58.8	8.3	8.7	0.0
14. LASSO	3.0	PRE	60.0	8.0	9.5	0.0
15. LASSO + LOROX	2.0 + 1.0	PRE	62.6	7.5	9.5	0.0
16. LASSO + ATRAZINE	2.0 + 1.5	PRE	62.7	9.5	9.3	0.2
17. CP50144 + MC 4379(4F)	2.0 + 1.5	PRE	62.7	8.2	9.3	0.2
18. CGA 24705 + G-30027	1.5 + 1.2	PRE	63.8	9.2	9.5	0.0
19. BLADEX	3.0	PRE	66.7	8.2	9.2	0.2
20. LASSO + FOX 4	2.0 + .75	PRE	70.9	8.3	9.5	0.2
21. LASSO + BANVEL	2.5 + 0.5	PRE	71.4	8.8	9.5	0.3
22. ELADEX + 1 GAL OIL	2.0	EP	45.5	5.5	8.7	0.0
23. OUTFOX 4L	.75	EP	55.8	8.0	3.5	0.0
24. HAND WEED			58.9	9.5	9.5	0.0
25. NO TREATMENT			43.6	0.0	0.0	0.0
TEST AVERAGES			59.0	8.0	8.3	0.0
L.S.D. (.05)			16.3	1.4	1.5	NS

* 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)

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
CGRN 1975
SCANDIA

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. SUTAN + CGA 18762	3.0 + 1.0	PPI	130.7	8.3	6.7	2.3
2. LASSO + ATRAZINE	2.5 + 1.5	PPI	134.0	10.0	7.3	0.0
3. SUTAN + ATRAZINE	3.0 + 1.0	PPI	144.7	9.3	7.0	0.0
4. ERADICANE + ATRAZINE	4.0 + 1.0	PPI	148.3	9.0	8.3	0.0
5. ERADICANE + CGA 18762	4.0 + 1.0	PPI	148.3	9.3	9.3	0.0
6. BLADEX	3.0	PRE	136.3	4.3	6.0	0.0
7. LASSO	3.0	PRE	140.7	8.0	4.0	0.0
8. H-22234 + G-30027	1.5 + 1.0	PRE	141.7	8.0	6.7	1.7
9. LASSO + FOX 4	2.0 + .75	PRE	144.3	8.0	5.7	0.0
10. AC 92,553 + G-30027	1.5 + 1.5	PRE	146.7	9.0	7.3	0.0
11. CGA 24705 + G-30027	1.5 + 1.2	PRE	147.3	8.3	5.7	0.0
12. AC 92,553	2.0	PRE	147.3	8.3	7.3	0.0
13. CP50144 + MC 4379(4F)	2.0 + 1.5	PRE	150.7	8.3	6.7	3.3
14. CGA 24705 + CGA 18762	1.5 + 1.5	PRE	150.7	7.3	7.7	0.0
15. LASSO + LOROX	2.0 + 1.0	PRE	152.3	8.0	7.0	0.0
16. LASSO + BLADEX	2.0 + 1.6	PRE	153.0	8.0	6.7	0.0
17. LASSO + BANVEL	2.5 + 0.5	PRE	161.3	9.7	7.3	0.0
18. CGA 24705	2.5	PRE	166.0	6.3	6.0	0.0
19. ATRAZINE	2.4	PRE	167.3	9.0	4.0	0.0
20. LASSO + ATRAZINE	2.0 + 1.5	PRE	170.7	8.0	7.3	0.0
21. RAMROD/ATRAZINE	4.14	PRE	177.0	8.7	7.0	0.0
22. BLADEX + 1 GAL OIL	2.0	EP	143.7	5.0	4.3	0.0
23. OUTFOX 4L	.75	EP	161.0	6.0	5.7	0.0
24. HAND WEED			132.7	9.7	6.0	0.0
25. NO TREATMENT			156.7	6.3	3.3	0.0
TEST AVERAGES			150.1	8.0	6.4	0.3
L.S.D. (.05)			NS	2.5	2.4	NS

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

** 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" June - 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)

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

NO TILL
CCRN 1975
SCANDIA

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. LASSO + LOROX	2.0 + 1.0	PRE	134.3	8.3	10.0	0.0
2. LASSO + FCX 4	2.0 + .75	PRE	143.3	9.3	10.0	0.0
3. CGA 24705 + G-30027	1.5 + 1.2	PRE	146.7	8.0	10.0	0.0
4. AC 92,553	2.0	PRE	147.7	7.7	9.7	0.0
5. CGA 24705	2.5	PRE	152.0	7.7	10.0	0.0
6. LASSO	3.0	PRE	154.0	6.0	10.0	0.0
7. LASSO + BLADEX	2.0 + 1.6	PRE	156.3	7.7	10.0	0.0
8. LASSO + ATRAZINE	2.0 + 1.5	PRE	157.0	9.0	10.0	0.0
9. ATRAZINE	2.4	PRE	157.0	10.0	10.0	0.0
10. CGA 24705 + CGA 18762	1.5 + 1.5	PRE	160.7	9.0	10.0	0.0
11. AC 92,553 + G-30027	1.5 + 1.5	PRE	163.7	8.0	10.0	0.0
12. BLADEX	3.0	PRE	166.7	8.3	10.0	0.0
13. I-22234 + G-30027	1.5 + 1.0	PRE	167.3	8.7	10.0	0.0
14. RAMROD/ATRAZINE	4.14	PRE	167.7	9.7	9.7	0.0
15. CP50144 + MC 4379(4F)	2.0 + 1.5	PRE	170.3	9.3	10.0	0.0
16. LASSO + BANVEL	2.5 + 0.5	PRE	172.0	8.3	10.0	0.0
17. BLADEX + 1 GAL OIL	2.0	EP	158.3	9.3	10.0	0.0
18. CUTFOX 4L	.75	EP	168.7	9.0	10.0	0.0
19. HAND WEED			158.0	6.0	9.7	0.0
20. NO TREATMENT			146.7	7.3	10.0	0.0
TEST AVERAGES			157.4	8.3	9.9	0.0
L.S.D. (.05)			NS	2.6	NS	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 5/2/75
 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)

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
CORN 1975
KANSAS RIVER VALLEY

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. SUTAN + ATRAZINE	3.0 + 1.0	PPI	85.3	10.0	10.0	0.3
2. ERADICANE + CGA 18762	4.0 + 1.0	PPI	86.7	10.0	9.7	0.7
3. SUTAN + CGA 18762	3.0 + 1.0	PPI	91.3	10.0	9.7	1.0
4. ERADICANE + ATRAZINE	4.0 + 1.0	PPI	101.3	9.7	9.3	1.7
5. LASSO + ATRAZINE	2.5 + 1.5	PPI	104.3	10.0	8.3	1.0
6. LASSO + LOPOX	2.0 + 1.0	PRE	71.0	9.7	8.7	0.0
7. RAMRCD/ATRAZINE	4.14	PRE	71.0	10.0	7.0	0.0
8. CGA 24705 + G-30027	1.5 + 1.2	PRE	82.7	10.0	9.3	0.0
9. LASSO + FCX 4	2.0 + .75	PRE	86.3	10.0	8.0	0.0
10. AC 92,553	2.0	PRE	88.3	8.3	8.0	0.0
11. CGA 24705 + CGA 18762	1.5 + 1.5	PRE	91.7	10.0	10.0	0.3
12. LASSO + BANVEL	2.5 + 0.5	PRE	98.7	10.0	8.0	1.3
13. LASSO + BLADEX	2.0 + 1.6	PRE	100.7	10.0	9.3	0.0
14. AC 92,553 + G-30027	1.5 + 1.5	PRE	101.0	10.0	8.3	0.3
15. LASSO	3.0	PRE	102.7	10.0	8.3	0.0
16. CP50144 + MC 4379 (4F)	2.0 + 1.5	PRE	104.3	8.3	8.0	1.3
17. H-22234 + G-30027	1.5 + 1.0	PRE	115.3	10.0	8.3	0.0
18. BLADEX	3.0	PRE	129.7	9.0	10.0	0.7
19. CGA 24705	2.5	PRE	138.0	6.3	9.7	0.0
20. LASSO + ATRAZINE	2.0 + 1.5	PRE	149.7	9.3	9.7	0.0
21. ATRAZINE	2.4	PRE	160.0	10.0	6.7	0.0
22. BLADEX + 1 GAL OIL	2.0	EP	91.3	0.0	0.0	0.0
23. CUTFOX 4L	.75	EP	100.3	0.0	0.0	0.0
24. HAND WEED			82.0	10.0	10.0	0.0
25. NO TREATMENT			90.0	2.0	3.0	0.0
TEST AVERAGES			100.9	8.5	7.9	0.3
L.S.D. (.05)			NS	NS	NS	NS

* 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: 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)

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

WILD CANE CONTROL
CORN 1975
KANSAS RIVER VALLEY

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. SUTAN+ + BLADEX	4.0 + 2.0	PPI	112.0	0.0	5.0	0.0
2. SUTAN+ + CGA18762	4.0 + 2.0	PPI	112.5	0.0	4.8	0.0
3. SUTAN+ + ATRAZINE	4.0 + 1.0	PPI	116.8	0.0	6.3	0.0
4. SUTAN+ 4S + ATRAZINE	6.0 + 1.0	PPI	116.8	0.0	5.8	0.0
5. SUTAN+ 4S + ATRAZINE	4.0 + 1.0	PPI	121.5	0.0	4.9	0.0
6. ERADICANE + ATRAZINE	6.0 + 1.0	PPI	122.0	0.0	8.4	0.0
7. ERADICANE + CGA18762	4.0 + 2.0	PPI	123.0	0.0	8.5	0.0
8. ERADICANE + BLADEX	4.0 + 2.0	PPI	130.8	0.0	8.5	0.0
9. ERADICANE + ATRAZINE	4.0 + 1.0	PPI	144.8	0.0	8.3	0.0
10. NO TREATMENT			83.8	0.0	3.1	0.0
TEST AVERAGES			118.4	0.0	6.4	0.0
L.S.D. (.05)			33.3	NS	1.2	NS

* 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 sparse 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.

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
SOYBEAN 1975
MANHATTAN

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. COBEX	0.5	PPI	48.4	4.7	8.7	0.2
2. AC 92,553 + BAY 94337	1.25 + .375	PPI	50.7	6.8	9.3	0.0
3. CGA 10832 + BAY 94337	1.0 + .375	PPI	53.2	9.5	9.5	0.0
4. TOLBAN	1.0	PPI	55.3	6.8	9.8	0.2
5. R-16C7 + BAY 94337	2.5 + .375	PPI	57.0	9.5	9.5	0.5
6. TREFLAN	1.0	PPI	57.9	6.3	9.8	0.0
7. BAS 3921H + 3517H(EP)	1.0 + 1.0	PPI	58.1	8.8	9.5	0.0
8. TREFLAN + SENCOR(PRE)	.75 + .50	PPI	58.4	9.5	10.0	0.2
9. TREFLAN + SENCOR	.75 + .375	PPI	59.5	9.5	9.7	0.0
10. A-820 + BAY 94337	1.5 + .357	PPI	61.0	9.0	8.8	0.8
11. CGA10832 + C6313(PRE)	1.0 + 1.5	PPI	61.3	5.3	10.0	0.0
12. CP 50144 + RP 17623	1.5 + 1.5	PRE	22.3	8.3	9.5	8.8
13. SENCOR	0.5	PRE	39.4	6.5	6.2	0.0
14. CGA 24705	2.5	PRE	40.7	5.2	6.5	0.0
15. AMIBEN	3.0	PRE	49.2	7.0	8.8	0.3
16. CP 50144 + MC 4379	1.5 + 1.5	PRE	56.0	6.0	9.3	2.5
17. LASSO + LOROX	1.5 + 1.0	PRE	58.7	5.2	9.5	0.0
18. LASSO	2.5	PRE	58.9	8.0	9.8	0.0
19. LASSO + SENCOR	2.0 + .375	PRE	59.9	9.8	9.7	0.0
20. AC 92,558 + BAY 94337	1.25 + .375	PRE	59.9	9.5	9.3	0.3
21. EL 119 + BAY 94337	1.0 + .375	PRE	60.2	9.7	9.5	0.0
22. LASSO + BASAGRAN(EP)	2.5 + 1.0	PRE	60.3	5.5	9.7	0.0
23. H 22234 + BAY 94337	1.5 + .375	PRE	60.7	9.3	9.7	0.2
24. HAND WEED			57.3	7.2	8.0	0.2
25. NO TREATMENT			0.0	0.0	0.0	0.0
TEST AVERAGES						
L.S.D. (.05)			52.2	7.9	8.8	0.6
			17.5	2.5	2.6	0.4

* 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.
9. Date Herbicide Applied: Preplant Incorporated 5/9
Preemergent 5/14 Early Post 6/5
10. Precipitation after planting: 5/23 - .69" 5/26 - .71", 5/28 - .53"
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)

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
SOYBEANS 1975
POWHATAN

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. COBEX	C.5	PPI	10.5	8.5	8.7	1.3
2. A-820 + BAY 94337	1.5 + .357	PPI	14.1	9.2	9.2	3.0
3. AC 92,553 + EAY 94337	1.25 + .375	PPI	17.5	9.7	8.7	2.3
4. TOLBAN	1.0	PPI	18.3	9.2	9.3	1.7
5. CGA10832 + C6313 (PRF)	1.0 + 1.5	PPI	18.7	9.2	9.2	2.0
6. CGA 10832 + BAY 94337	1.0 + .375	PPI	19.5	10.0	9.0	2.3
7. TREFLAN	1.0	PPI	20.0	9.5	9.3	1.3
8. TREFLAN + SENCOR	.75 + .375	PPI	21.6	9.2	9.5	3.0
9. TREFLAN + SENCOR (PRF)	.75 + .50	PPI	22.0	10.0	9.7	1.7
10. R-1607 + BAY 94337	2.5 + .375	PPI	22.8	10.0	10.0	4.7
11. PAS 3921H + 3517H (EP)	1.0 + 1.0	PPI	23.2	10.0	9.3	2.0
12. SENCOR	0.5	PRE	11.6	9.7	5.5	1.7
13. AMIBEN	3.0	PRE	12.5	6.7	5.5	1.7
14. LASSO	2.5	PRE	14.4	8.7	9.5	2.0
15. CP 50144 + MC 4379	1.5 + 1.5	PRE	15.4	10.0	9.2	4.7
16. CGA 24705	2.5	PRE	16.4	8.0	9.7	1.7
17. F 22234 + BAY 94337	1.5 + .375	PRE	19.6	9.0	9.3	2.7
18. LASSO + LURIX	1.5 + 1.0	PRE	20.5	9.7	9.7	2.0
19. LASSO + BASAGRAN (EP)	2.5 + 1.0	PRE	21.0	9.7	9.5	2.3
20. AC 92,558 + BAY 94337	1.25 + .375	PRE	21.8	10.0	8.5	2.3
21. LASSO + SENCOR	2.0 + .375	PRE	22.2	8.3	9.7	1.7
22. EL 119 + BAY 94337	1.0 + .375	PRE	22.8	10.0	8.7	2.3
23. CP 50144 + RP 17623	1.5 + 1.5	PRE	23.6	10.0	10.0	5.0
24. HAND WEED			27.0	7.5	6.8	1.7
25. NO TREATMENT			4.8	0.0	0.0	1.0
TEST AVERAGES			18.5	8.9	8.5	2.3
L.S.D. (.05)			7.9	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 Sic1 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
10. Precipitation after planting: 5/23 - 2.90", 5/26 - .85", 5/27 - .55"
5/28 - 1.97", 5/29 - .06", 6/1 - .04", 6/3 - .61", 6/8 - .80", 6/10 - .60"
6/16 - 2.20", 6/18 - .15", 6/21 - .25", 6/22 - 1.45", 7/8 - .02"
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.

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
SOYBEANS 1975
OTTAWA

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. BAS 3921H + 3517H(EP)	1.0 + 1.0	PPI	41.8	5.3	8.8	0.0
2. TOLBAN	1.0	PPI	43.4	4.3	6.3	0.0
3. COBEX	0.5	PPI	49.2	4.3	8.3	0.0
4. A-820 + BAY 94337	1.5 + .357	PPI	49.7	6.0	7.3	0.0
5. TREFLAN	1.0	PPI	51.6	5.0	9.8	0.0
6. AC 92,553 + BAY 94337	1.25 + .375	PPI	53.1	8.8	9.7	0.0
7. CGA10832 + C6313(PRE)	1.0 + 1.5	PPI	53.6	6.7	8.8	0.0
8. CGA 10832 + BAY 94337	1.0 + .375	PPI	54.0	7.3	8.0	0.0
9. TREFLAN + SENCOR	.75 + .375	PPI	54.2	7.5	9.0	0.0
10. TREFLAN + SENCOR(PRE)	.75 + .50	PPI	59.7	7.7	10.0	0.0
11. R-1607 + BAY 94337	2.5 + .375	PPI	60.0	8.7	9.3	0.0
12. LASSO + LCROX	1.5 + 1.0	PRE	45.7	7.3	5.0	0.0
13. CGA 24705	2.5	PRE	45.7	6.0	9.0	0.0
14. CP 50144 + MC 4379	1.5 + 1.5	PRE	45.7	6.0	6.7	0.0
15. AMIBEN	3.0	PRE	46.6	5.7	7.7	0.0
16. SENCOR	0.5	PRE	47.1	5.0	7.7	0.0
17. LASSO + BASAGRAN(EP)	2.5 + 1.0	PRE	47.6	9.0	7.0	0.0
18. CP 50144 + RP 17623	1.5 + 1.5	PRE	50.7	7.7	9.0	0.0
19. H 22234 + BAY 94337	1.5 + .375	PRE	50.8	8.2	8.8	0.0
20. AC 92,558 + BAY 94337	1.25 + .375	PRE	51.0	7.0	6.3	0.0
21. LASSO	2.5	PRE	51.3	6.7	7.3	0.0
22. LASSO + SENCOR	2.0 + .375	PRE	52.6	8.8	8.2	0.0
23. EL 119 + BAY 94337	1.0 + .375	PRE	54.0	8.5	6.0	0.0
24. HAND WEED			52.4	10.0	10.0	0.0
25. NO TREATMENT			30.3	0.0	0.0	0.0
TEST AVERAGES			49.7	6.7	7.8	0.0
L.S.D. (.05)			8.1	3.2	2.9	NS

* 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

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
SOYBEANS 1975
BELLEVILLE

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. TREFLAN + SENCOR(PRE)	.75 + .50	PPI	12.5	7.0	9.7	0.0
2. CGA10832 + C6313(PRE)	1.0 + 1.5	PPI	13.3	7.3	10.0	0.0
3. R-1607 + BAY 94337	2.5 + .375	PPI	13.3	8.0	9.0	0.0
4. AC 92,553 + BAY 94337	1.25 + .375	PPI	15.0	7.7	10.0	0.0
5. CGA 10832 + BAY 94337	1.0 + .375	PPI	15.8	6.7	9.7	0.0
6. TREFLAN + SENCOR	.75 + .375	PPI	18.3	8.0	10.0	0.0
7. TREFLAN	1.0	PPI	18.3	7.0	9.3	0.0
8. BAS 3921H + 3517H(EP)	1.0 + 1.0	PPI	18.3	7.3	9.3	0.0
9. COBEX	0.5	PPI	20.0	6.0	9.0	0.0
10. A-820 + BAY 94337	1.5 + .357	PPI	20.0	8.0	10.0	0.0
11. TOLBAN	1.0	PPI	26.6	6.0	9.3	0.0
12. SENCOR	0.5	PRE	10.8	8.0	9.0	0.0
13. LASSO + SENCOR	2.0 + .375	PRE	12.5	8.0	9.3	0.0
14. AC 92,558 + BAY 94337	1.25 + .375	PRE	14.1	7.0	9.3	0.0
15. EL 119 + BAY 94337	1.0 + .375	PRE	15.0	8.3	9.7	0.0
16. H 22234 + BAY 94337	1.5 + .375	PRE	15.8	8.0	9.3	0.0
17. LASSO	2.5	PRE	18.3	6.7	9.3	0.0
18. CP 50144 + RP 17623	1.5 + 1.5	PRE	18.3	7.3	9.3	0.0
19. LASSO + LOROX	1.5 + 1.0	PRE	20.8	7.0	9.3	0.0
20. CP 50144 + MC 4379	1.5 + 1.5	PRE	20.8	7.0	9.3	0.0
21. LASSO + BASAGRAN(EP)	2.5 + 1.0	PRE	20.8	8.3	8.3	0.0
22. CGA 24705	2.5	PRE	25.8	6.3	9.3	0.0
23. AMIBEN	3.0	PRE	26.6	7.0	8.3	0.0
24. HAND WEED			15.8	8.0	8.7	0.0
25. NO TREATMENT			29.9	1.0	4.3	0.0
TEST AVERAGES			18.3	7.1	9.1	0.0
L.S.D. (.05)			NS	1.7	1.0	0.0

* WHEN APPLIED:

PRE (COMPLETE COVERAGE AFTER PLANTING)
PPI (PREPLANT INCORPORATED)
EP (EARLY PCST)

** 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 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 6/12/75
Preemergent 6/12/75 Early Post 7/3/75
10. Precipitation after planting: 6/17 - .37" 6/19 - .06", 6/22 - 2.00"
Irrigation: 7/8 - 1.22" 7/17 - 1.50" 7/23 - 1.59"
7/29 - 1.50" 8/5 - 1.54" 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.

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
SOYBEANS 1975
KANSAS RIVER VALLEY

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. COREX	0.5	PPI	46.3	8.7	9.0	2.0
2. RAS 3921H + 3517H(EP)	1.0 + 1.0	PPI	47.8	9.3	9.3	0.0
3. TREFLAN	1.0	PPI	48.0	8.7	9.7	0.7
4. AC 92,553 + BAY 94337	1.25 + .375	PPI	48.4	9.0	9.7	0.3
5. R-1607 + BAY 94337	2.5 + .375	PPI	48.6	9.0	10.0	3.0
6. TREFLAN + SENCOR(PRE)	.75 + .50	PPI	49.0	9.3	9.7	0.0
7. A-820 + BAY 94337	1.5 + .357	PPI	49.3	9.7	10.0	1.3
8. CGA10832 + C6313(PRE)	1.0 + 1.5	PPI	49.6	10.0	10.0	0.0
9. TREFLAN + SENCOR	.75 + .375	PPI	51.3	9.3	9.3	1.3
10. TOLBAN	1.0	PPI	52.1	9.7	10.0	0.7
11. CGA 10832 + RAY 94337	1.0 + .375	PPI	53.1	9.0	9.7	1.3
12. AMIBEN	3.0	PRE	47.7	8.7	9.7	0.0
13. LASSO	2.5	PRE	49.0	9.0	9.0	0.0
14. LASSO + LOPOX	1.5 + 1.0	PRE	49.3	9.0	9.7	0.3
15. AC 92,558 + RAY 94337	1.25 + .375	PRE	49.5	9.3	8.7	0.3
16. H 22234 + BAY 94337	1.5 + .375	PRE	49.6	8.7	9.7	0.7
17. SENCOR	0.5	PRE	49.6	8.7	9.7	0.0
18. LASSO + SENCOR	2.0 + .375	PRE	49.9	9.0	9.7	0.0
19. LASSO + BASAGRAN(EP)	2.5 + 1.0	PRE	50.1	8.7	9.7	0.0
20. CP 50144 + RP 17623	1.5 + 1.5	PRE	50.1	9.0	10.0	4.3
21. CP 50144 + MC 4379	1.5 + 1.5	PRE	50.8	9.0	9.3	2.3
22. EL 119 + BAY 94337	1.0 + .375	PRE	54.0	9.0	10.0	0.0
23. NO TREATMENT			40.0	5.3	4.3	0.0
24. HAND WEED			52.6	8.0	9.3	0.3
25. CGA 24705	2.5	PRE	49.9	8.7	10.0	0.0
TEST AVERAGES			49.4	8.8	9.4	0.8
L.S.D. (.05)			5.4	NS	NS	NS

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

** 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.

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
GRAIN SORGHUM 1975
MANHATTAN

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. PROPAZINE	2.5	PPI	54.4	8.3	7.8	0.0
2. ATRAZINE	2.0	PPI	57.2	8.8	8.7	0.0
3. IGRAN	2.4	PPI	58.6	8.5	8.8	0.0
4. IGRAN + PROPAZINE	1.6 + 0.8	PPI	60.1	8.8	8.8	0.0
5. IGRAN + ATRAZINE	1.6 + 0.8	PPI	62.2	8.5	8.8	0.0
6. H 101(FL) (ATRAZINE)	2.0	PRE	50.3	7.3	0.0	0.0
7. IGRAN	2.4	PRE	50.5	4.2	3.5	0.0
8. SD15418(WP) + RAMROD	1.4 + 3.5	PRE	51.3	4.0	8.2	0.0
9. RAMROD	4.0	PRE	52.4	5.3	7.7	0.0
10. H 100(WP) (ATRAZINE)	2.0	PRE	53.1	8.5	1.7	0.0
11. MC 4379(4F) + RAMROD	1.5 + 3.0	PRE	53.6	5.3	6.5	0.0
12. MC4379(80WP) +RAMROD	3.0 + 5.0	PRE	55.7	7.5	8.5	0.0
13. IGRAN + PROPAZINE	1.6 + 0.8	PRE	56.0	6.0	3.8	0.0
14. ATRAZINE	2.0	PRE	57.0	8.0	1.0	0.0
15. MC4379(80WP) +RAMROD	1.6 + 3.0	PRE	57.6	4.8	7.5	0.0
16. PROPAZINE	2.4	PRE	57.9	5.2	3.3	0.0
17. SD15418(WP) + GS30028	1.25 + 1.25	PRE	58.1	5.3	0.7	0.0
18. IGRAN + ATRAZINE	1.6 + 0.8	PRE	58.4	6.7	3.7	0.0
19. RAMROD/ATRAZINE	4.14	PRE	59.8	7.2	7.3	0.0
20. LOROX + RAMROD	1.0 + 3.0	PRE	60.3	7.7	7.7	0.0
21. H 100(WP) (ATRAZINE)	2.0	EP	50.8	6.0	0.0	0.0
22. ATRAZINE (4L)	2.0	EP	51.8	4.8	0.0	0.0
23. H 101(FL) (ATRAZINE)	2.0	PRE	48.6	7.7	1.0	0.0
24. HAND WEED			56.5	6.8	6.8	0.0
25. NO TREATMENT			47.2	0.0	0.0	0.0
TEST AVERAGES			55.2	6.5	4.9	0.0
L.S.D. (.05)			9.1	3.0	2.6	NS

* 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: Powhattan 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
 Preemergent 6/6 Early Post 6/27
10. Precipitation after planting: 6/9 - 2.11" 6/11 - .99", 6/12 - .01"
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)

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
GRAIN SORGHUM 1975
POWHATTAN

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY	
				BROADLEAF	GRASSY		
1. IGRAN	2.4	PPI	82.6	10.0	3.7	1.0	
2. ATRAZINE	2.0	PPI	85.2	10.0	9.5	2.0	
3. IGRAN + ATRAZINE	1.6 + 0.8	PPI	85.5	8.5	9.1	1.0	
4. IGRAN + PROPAZINE	1.6 + 0.8	PPI	87.4	10.0	7.2	1.0	
5. PROPAZINE	2.5	PPI	87.4	10.0	9.5	1.7	
6. IGRAN	2.4	PRE	80.0	10.0	7.3	1.0	
7. SD15418(WP) + GS30028	1.25 + 1.25	PRE	82.6	9.8	10.0	3.3	
8. PROPAZINE	2.4	PRE	85.2	9.8	10.0	1.0	
9. H 101(FL) (ATRAZINE)	2.0	PRE	88.4	10.0	10.0	2.7	
10. MC 4379(4F) + RAMROD	1.5 + 3.0	PRE	88.5	10.0	9.7	1.3	
11. IGRAN + ATRAZINE	1.6 + 0.8	PRE	88.8	9.8	10.0	1.0	
12. MC4379(80WP) + RAMROD	1.6 + 3.0	PRE	88.8	9.8	9.6	1.3	
13. RAMROD	4.0	PRE	89.1	9.9	8.8	1.3	
14. LURON + RAMROD	1.0 + 3.0	PRE	89.5	10.0	9.6	1.0	
15. RAMROD/ATRAZINE	4.14	PRE	89.6	10.0	10.0	1.7	
16. H 100(WP) (ATRAZINE)	2.0	PRE	89.9	10.0	10.0	1.3	
17. IGRAN + PROPAZINE	1.6 + 0.8	PRE	90.0	10.0	9.8	1.0	
18. SD15418(WP) + RAMROD	1.4 + 3.5	PRE	90.0	10.0	10.0	2.7	
19. ATRAZINE	2.0	PRE	90.4	10.0	10.0	2.3	
20. MC4379(80WP) + RAMROD	3.0 + 5.0	PRE	93.4	10.0	10.0	2.3	
21. ATRAZINE (4L)	2.0	EP	80.7	0.0	0.0	1.0	
22. H 100(WP) (ATRAZINE)	2.0	EP	80.9	0.0	0.0	1.0	
23. H 101(FL) (ATRAZINE)	2.0	PRE	85.8	0.0	0.0	1.0	
24. HAND WEED			90.9	10.0	10.0	1.3	
25. NO TREATMENT			77.0	3.3	2.0	1.0	
TEST AVERAGES				86.7	8.4	7.3	1.5
L.S.D. (.05)				7.0	2.1	NS	NS

* 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
C - NO INJURY

Weed Control Research Plot Data

1. Location: Ottawa, Kansas Cooperator: Charles Knight
2. Soil: Texture Sic1 pH -- Organic Matter --
3. Planting: Date 6/30/75 Rate 4.5#/A Depth 1.0"
4. Crop Grain Sorghum Variety Pioneer 878
5. Fertilizer Applied: N 127# P 30# K 0
6. Seedbed Condition: () Excellent () Fair () Poor (X) dry
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 6/30/75
Preemergent 7/1/75 Early Post 7/28/75
10. Precipitation after planting: 7/8 - .02", 7/19 - .32", 7/24 - .06"
8/13 - .75" 8/14 - 2.80" 8/17 - .15"
8/19 - .02" 8/28 - .55"
11. Date of Crop Injury Rating --; Weed Control Rating 10/10/75
12. Crop Maturity (Silking, 50% headed, etc.) --
13. Date Harvested 11/18/75
14. Summary: (Weed Control - predominant species, etc.)
All plots were overseeded with alfalfa screenings at planting time, but dry weather prevented weeds from appearing until late August.
15. Summary: (Crop Injury - stand reduction, stunting, chlorosis, etc.)
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.
16. Summary: (Crop Yield)
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.

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
GRAIN SORGHUM 1975
OTTAWA

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. PROPAZINE	2.5	PPI	15.4	8.0	7.3	0.0
2. ATRAZINE	2.0	PPI	20.7	8.7	8.7	0.0
3. IGRAN + PROPAZINE	1.6 + 0.8	PPI	21.8	7.0	7.3	0.0
4. IGRAN + ATRAZINE	1.6 + 0.8	PPI	21.8	7.7	9.3	0.0
5. IGRAN	2.4	PPI	22.5	5.0	8.3	0.0
6. IGRAN	2.4	PRE	18.0	6.7	9.0	0.0
7. SD15418(WP) + RAMROD	1.4 + 3.5	PRE	18.7	7.0	9.0	0.0
8. ATRAZINE	2.0	PRE	20.6	9.0	9.0	0.0
9. MC4379(80WP) +RAMROD	1.6 + 3.0	PRE	20.9	7.3	9.7	0.0
10. RAMROD/ATRAZINE	4.14	PRE	21.3	7.7	9.3	0.0
11. H 100(WP) (ATRAZINE)	2.0	PRE	24.4	9.0	9.7	0.0
12. IGRAN + PROPAZINE	1.6 + 0.8	PRE	25.1	7.7	9.3	0.0
13. IGRAN + ATRAZINE	1.6 + 0.8	PRE	28.7	8.0	8.7	0.0
14. H 101(FL) (ATRAZINE)	2.0	PRE	29.4	5.3	9.0	0.0
15. LOROX + RAMROD	1.0 + 3.0	PRE	31.6	7.0	9.3	0.0
16. PROPAZINE	2.4	PRE	32.3	8.7	9.3	0.0
17. SD15418(WP) + GS30028	1.25 + 1.25	PRE	32.8	7.7	9.0	0.0
18. RAMROD	4.0	PRE	36.6	6.0	9.3	0.0
19. MC 4379(4F) + RAMROD	1.5 + 3.0	PRE	42.9	7.7	9.3	0.0
20. MC4379(80WP) +RAMROD	3.0 + 5.0	PRE	49.9	8.3	10.0	0.0
21. H 100(WP) (ATRAZINE)	2.0	EP	35.3	9.3	9.7	0.0
22. ATRAZINE (4L)	2.0	EP	37.7	8.7	10.0	0.0
23. H 101(FL) (ATRAZINE)	2.0	PRE	25.4	6.7	9.0	0.0
24. HAND WEED			44.8	8.0	9.3	0.0
25. NO TREATMENT			28.9	0.0	0.0	0.0
TEST AVERAGES			28.3	7.3	8.7	0.0
L.S.D. (.05)			NS	2.4	1.5	NS

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

** 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 5/27 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. - .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)

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
GRAIN SORGHUM 1975
BELLEVILLE

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. IGRAN	2.4	PPI	6.7	2.7	3.3	0.0
2. PROPAZINE	2.5	PPI	8.5	7.7	1.3	0.0
3. IGRAN + PROPAZINE	1.6 + 0.8	PPI	10.1	5.0	1.0	0.0
4. IGRAN + ATRAZINE	1.6 + 0.8	PPI	11.6	4.7	3.3	0.0
5. ATRAZINE	2.0	PPI	12.3	9.0	2.0	0.0
6. ATRAZINE	2.0	PRE	15.5	9.0	1.7	0.0
7. MC4379(80WP) + RAMROD	1.6 + 3.0	PRE	17.1	9.0	2.0	0.0
8. RAMROD	4.0	PRE	19.8	6.7	3.3	0.0
9. IGRAN + PROPAZINE	1.6 + 0.8	PRE	24.5	9.0	8.0	0.0
10. IGRAN	2.4	PRE	26.5	8.0	9.0	0.0
11. PROPAZINE	2.4	PRE	27.7	9.0	3.7	0.0
12. H 100(WP) (ATRAZINE)	2.0	PRE	29.2	7.7	1.3	0.0
13. RAMROD/ATRAZINE	4.14	PRE	31.4	9.0	4.0	0.0
14. LOROX + RAMROD	1.0 + 3.0	PRE	31.5	8.3	8.7	0.0
15. IGRAN + ATRAZINE	1.6 + 0.8	PRE	32.0	8.0	9.3	0.0
16. MC 4379(4F) + RAMROD	1.5 + 3.0	PRE	32.2	10.0	4.0	0.0
17. SD15418(WP) + GS30028	1.25 + 1.25	PRE	33.0	9.0	4.3	0.0
18. H 101(FL) (ATRAZINE)	2.0	PRE	34.2	9.0	3.0	0.0
19. MC4379(80WP) + RAMROD	3.0 + 5.0	PRE	34.9	9.7	4.3	0.0
20. SD15418(WP) + RAMROD	1.4 + 3.5	PRE	38.7	9.0	7.0	0.0
21. H 100(WP) (ATRAZINE)	2.0	EP	20.5	9.0	2.7	0.0
22. ATRAZINE (4L)	2.0	EP	24.6	9.3	3.0	0.0
23. H 101(FL) (ATRAZINE)	2.0	PRE	22.6	9.0	4.3	0.0
24. HAND WEED			33.6	9.7	8.7	0.0
25. NO TREATMENT			10.0	4.3	2.3	0.0
TEST AVERAGES			23.5	8.0	4.2	0.0
L.S.D. (.05)			15.7	2.2	2.7	NS

* 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
C - 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: () Excellent () Fair () Poor () _____
7. Replications 3 Plot Size 10' x 30'
8. Gallons of Spray per Acre 20 Carrier: () 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)

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

NO-TILL
GRAIN SORGHUM 1975
BELLEVILLE

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. SD15418(WP) + GS30028	1.25 + 1.25	PRE	26.4	8.0	5.0	0.0
2. SD15418(WP) + RAMROD	1.4 + 3.5	PRE	28.8	4.0	9.3	0.0
3. PROPAZINE	2.4	PRE	34.7	9.7	5.7	0.0
4. MC4379(80WP) +RAMROD	1.6 + 3.0	PRE	35.5	6.7	7.7	0.0
5. ATRAZINE	2.0	PRE	35.9	7.7	7.7	0.0
6. H 101(FL) (ATRAZINE)	2.0	PRE	37.4	9.7	6.3	0.0
7. IGRAN + ATRAZINE	1.6 + 0.8	PRE	40.2	9.3	8.0	0.0
8. RAMROD/ATRAZINE	4.14	PRE	43.1	8.7	5.7	0.0
9. IGRAN + PROPAZINE	1.6 + 0.8	PRE	43.4	9.7	7.3	0.0
10. MC 4379(4F) + RAMROD	1.5 + 3.0	PRE	48.7	6.3	5.3	0.0
11. MC4379(80WP) +RAMROD	3.0 + 5.0	PRE	50.0	9.7	8.3	0.0
12. H 100(WP) (ATRAZINE)	2.0	PRE	50.4	8.3	8.0	0.0
13. IGRAN	2.4	PRE	51.6	6.7	8.3	0.0
14. RAMROD	4.0	PRE	54.1	8.0	7.0	0.0
15. LOROX + RAMROD	1.0 + 3.0	PRE	55.0	7.3	9.0	0.0
16. ATRAZINE (4L)	2.0	EP	32.8	5.7	7.3	0.0
17. H 100(WP) (ATRAZINE)	2.0	EP	34.5	9.0	5.3	0.0
18. H 101(FL) (ATRAZINE)	2.0	PRE	23.8	6.3	6.0	0.0
19. HAND WEED			38.3	8.0	9.3	0.0
20. NO TREATMENT			27.7	2.0	6.0	0.0
TEST AVERAGES			39.6	7.5	7.1	0.0
L.S.D. (.05)			17.6	NS	NS	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: 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
 Preemergent 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.

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
GRAIN SORGHUM 1975
HUTCHINSON

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. PROPAZINE	2.5	PPI	67.9	9.2	9.8	0.0
2. IGRAN	2.4	PPI	71.8	9.7	9.8	0.0
3. IGRAN + PROPAZINE	1.6 + 0.8	PPI	73.7	9.3	9.8	0.0
4. IGRAN + ATRAZINE	1.6 + 0.8	PPI	75.4	10.0	10.0	0.0
5. ATRAZINE	2.0	PPI	82.5	9.5	9.8	0.0
6. SD15418(WP) + GS30C28	1.25 + 1.25	PRE	79.7	9.7	9.8	0.0
7. H 100(WP) (ATRAZINE)	2.0	PRE	83.3	10.0	9.8	0.0
8. MC4379(80WP) +RAMROD	3.0 + 5.0	PRE	83.5	10.0	10.0	0.0
9. H 101(FL) (ATRAZINE)	2.0	PRE	86.1	10.0	9.8	0.0
10. IGRAN + PROPAZINE	1.6 + 0.8	PRE	86.5	10.0	10.0	0.0
11. LOROX + RAMROD	1.0 + 3.0	PRE	86.7	10.0	9.8	0.0
12. ATRAZINE	2.0	PRE	87.2	10.0	10.0	0.0
13. MC 4379(4F) + RAMROD	1.5 + 3.0	PRE	87.6	10.0	10.0	0.0
14. IGRAN	2.4	PRE	87.9	10.0	10.0	0.0
15. IGRAN + ATRAZINE	1.6 + 0.8	PRE	88.0	9.8	10.0	0.0
16. PROPAZINE	2.4	PRE	90.5	9.8	10.0	0.0
17. SD15418(WP) + RAMROD	1.4 + 3.5	PRE	90.9	9.8	10.0	0.0
18. MC4379(80WP) +RAMROD	1.6 + 3.0	PRE	91.3	9.8	9.8	0.0
19. RAMROD	4.0	PRE	92.4	9.7	10.0	0.0
20. RAMROD/ATRAZINE	4.14	PRE	94.7	10.0	10.0	0.0
21. ATRAZINE (4L)	2.0	EP	87.6	9.8	10.0	0.0
22. H 100(WP) (ATRAZINE)	2.0	EP	89.2	9.5	9.8	0.0
23. H 101(FL) (ATRAZINE)	2.0	PRE	86.1	10.0	10.0	0.0
24. HAND WEED			88.6	10.0	10.0	0.0
25. NO TREATMENT			80.1	3.0	3.3	0.0
TEST AVERAGES			84.8	9.5	9.7	0.0
L.S.D. (.05)			10.2	1.8	1.9	NS

* WHEN APPLIED:

PRE (COMPLETE COVERAGE AFTER PLANTING)
PPI (PREPLANT INCORPORATED)
EP (EARLY PCST)

** 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 broadleaves 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

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	RU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. IGRAN	2.0	PRE	13.6	3.7	4.0	1.3
2. IGRAN + PROPAZINE	1.6 + .4	PRE	26.8	5.0	4.7	1.0
3. RAMROD + 2,4-D(EP)	4.0 + .5	PRE	34.7	8.3	9.7	3.0
4. IGRAN 1	2.0	PRE	37.7	7.7	8.7	1.3
5. IGRAN + PROPAZINE 1	1.6 + .4	PRE	41.3	9.0	9.0	1.0
6. RAMROD + 2,4-D(EP) 1	4.0 + .5	PRE	42.2	9.7	10.0	3.0
7. PROPAZINE	2.0	PRE	46.5	8.0	7.0	1.0
8. RAMROD/ATRAZINE	3.45	PRE	48.7	8.0	10.0	2.0
9. RAMROD/ATRAZINE 1	3.45	PRE	49.2	9.7	10.0	2.0
10. RAMROD 1	4.0	PRE	49.6	9.7	7.0	2.0
11. RAMROD	4.0	PRE	50.6	5.7	8.3	2.0
12. PROPAZINE 1	2.0	PRE	53.7	10.0	10.0	4.0
13. BANVEL	.25	EP	17.4	6.0	2.3	5.0
14. 2,4-D	.5	EP	25.0	5.0	5.3	2.0
15. BANVEL 1	.25	EP	37.4	8.7	5.3	5.0
16. 2,4-D 1	.5	EP	40.3	9.0	6.7	2.0
17. ATRAZINE + OIL	1.5 + 1 QT.	EP	46.7	9.3	6.3	1.3
18. ATRAZINE + OIL 1	1.5 + 1 QT.	EP	47.0	10.0	10.0	1.3
19. NO TREATMENT			6.6	1.3	5.0	1.0
20. NO TREATMENT 1			30.8	4.0	7.7	1.0
21. HAND WEED 1			48.4	9.3	9.7	1.0
22. HAND WEED			49.4	9.3	9.3	1.0
TEST AVERAGES			38.3	7.6	7.5	2.0
L.S.D. (.05)			12.4	2.3	3.6	NS

* 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: 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 - .113" 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)

KANSAS STATE UNIVERSITY
AGRONOMY DEPARTMENT

HERBICIDE PERFORMANCE
GRAIN SORGHUM 1975
ST JOHN

NO. TREATMENT	LBS. A.I. PER A.	WHEN* APPLIED	BU. PER A.	WEED CONTROL RATING**		CROP*** INJURY
				BROADLEAF	GRASSY	
1. IGRAN W/O	2.0	PRE	56.2	3.0	0.0	0.0
2. IGRAN + BLADEX W/O	2.0 + 4.0	PRE	67.9	2.0	5.0	0.0
3. IGRAN + PROP. W/O	2.0 + 4.0	PRE	72.6	5.0	2.3	0.0
4. IGRAN + BLADEX W/O	1.6 + 4.0	PRE	77.1	2.3	3.0	0.0
5. IGRAN + BLADEX W/2	2.0 + 4.0	PRE	84.5	8.2	7.7	0.0
6. IGRAN W/1	2.0	PRE	86.1	5.3	7.3	0.0
7. IGRAN + BLADEX W/1	2.0 + 4.0	PRE	89.4	7.2	8.3	0.0
8. IGRAN + ATRA. W/2	2.0 + 4.0	PRE	91.6	8.7	5.3	0.0
9. IGRAN + ATRA. W/1	2.0 + 4.0	PRE	92.3	8.5	8.2	0.0
10. IGRAN + ATRA. W/O	2.0 + 4.0	PRE	94.7	8.0	6.8	0.0
11. IGRAN + BLADEX W/2	1.6 + 4.0	PRE	94.9	8.3	8.0	0.0
12. IGRAN + PROP. W/2	2.0 + 4.0	PRE	96.8	10.0	9.5	0.0
13. IGRAN + PROP. W/1	2.0 + 4.0	PRE	96.8	8.3	5.5	0.0
14. IGRAN + BLADEX W/1	1.6 + 4.0	PRE	99.9	7.5	7.8	0.0
15. IGRAN W/2	2.0	PRE	101.6	8.8	6.0	0.0
16. HAND WEED W/O			102.7	10.0	9.2	0.0
17. HAND WEED W/1			106.1	10.0	9.2	0.0
18. HAND WEED W/2			100.8	10.0	8.8	0.0
19. NO TREATMENT W/O			22.6	C.C	0.0	0.0
20. NO TREATMENT W/1			23.3	C.C	0.0	0.0
21. NO TREATMENT W/2			44.2	C.C	0.0	0.0
TEST AVERAGES			81.1	6.2	5.6	0.0
L.S.D. (.05)			19.5	3.7	3.8	NS

* WHEN APPLIED: PRE (COMPLETE COVERAGE IMMEDIATELY AFTER PLANTING)

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

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