

# FIELD RESEARCH REPORT

2003

**NEW MEXICO STATE UNIVERSITY**  
Department of Entomology, Plant Pathology and Weed Science



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## INTRODUCTION

The Annual Report is a summary of field crop research conducted by Dr. Jill Schroeder and Justin Norsworthy to study the efficacy of traditional herbicides with new chemicals or combination of chemicals used to control weeds in crops grown in the region. The results are provided to assist extension personnel, cooperators and others who have an interest in New Mexico agriculture in choosing the most economical and effective weed control for this area. It does not contain recommendations for the use of these herbicides or imply that these herbicides are registered for use on commercial crops.

The information in this report is not a formal release, it is not to be duplicated or published in any form without the written consent of Dr. Jill Schroeder, Study Director.

Disk copies of the information in this report are available upon request. Please direct any questions about this report to Dr. Jill Schroeder at (505)-646-2328.

## ACKNOWLEDGMENTS

As always, we appreciated the cooperation and assistance of the personnel at the Leyendecker Plant Science Research Center (PSRC). We owe a special thanks to Gary Lawrence, Farm Manager for his expertise and assistance in crop production. The crew working at PSRC provides the labor and machinery for field preparation, planting and irrigation. Without their assistance, we would not be able to complete our research.

MARATHON Agricultural and Environmental Consulting provide their facilities, equipment and crew as well as keeping us informed of the status of our crops to complete the research in Rincon, New Mexico.

## **PROJECT PERSONNEL**

### **Weed Science Field Station**

Leyendecker Plant Science Research Center  
6700 Leyendecker Road, Las Cruces, NM 88005  
(505)-646-1627

Dr. Jill Schroeder, Study Director  
(505)-646-2328

### **Research Assistants:**

Cheryl Fiore  
Brian Greenfield  
Justin Norsworthy

### **Undergraduate Assistants:**

Santos Barron  
Leticia Hernandez  
Ericka Luna  
Lisa Moran  
Sara Schuster

## **COOPERATORS**

### **Leyendecker Plant Science Research Center**

MSC 3LEY, Las Cruces, NM 88005  
(505)-646-2281

Dr. Rick Bottoms, Farm Superintendent

Gary Lawrence, Farm Manager  
Crisoforo Barraza  
Maurillio M. Castorena  
Roberto E. Garcia  
Ralph Trevino

Audrey M. Valdex, Records Tech  
Jose M. Castorena  
Felipe C. Flores  
Orlando Morales  
Liberato Valdes

### **MARATHON Agricultural and Environmental Consulting, Inc.**

Dr. Phil Banks, President  
Rincon Farm, Highway 140, South Rincon, New Mexico  
(505)-527-8853

Johnny Kryniz, Farm Manager

Ed Morris, Research Assistant

## TRIAL CHEMICALS

Trade Name	Common Name
Aim 40 DF	carfentrazone
Authority 75 DF	sulfentrazone
CGA 362622 75 DF	CGA 362622
Define 60 DF	flufenacet
Goal 2XL	oxyfluorfen
Maverick 75 DF	sulfosulfuron
Raptor 1 EC	imazamox
Staple	pyrithiobac
Sandea 75 DF	halosulfuron
Valor 50 WP	flumioxazin
Visor 2E	thiazopyr

### Adjuvants

Agridex	Crop oil concentrate
Latron AG-98	No foam non-ionic spray

### Crop Rating Injury Symptoms

Injury Symptoms	Code	Injury Symptoms	Code
Stunting	a	Stand reduction	f
Chlorosis	b	Necrosis	g
Crinkling	c	Bronzing	h
Epinasty	d	Necrotic spotting	I
Wilting	e	Chlorotic mottling	j

## Treatment Application Code Definitions

Code	Application Placement/Timing
POD6	POST DIRECTED, CHILE 6 INCHES
POD10	POST DIRECTED, CHILE 10 INCHES
POD	POST DIRECTED
PODI	POST DIRECTED INCORPORATED
PODIRM	POST DIRECTED IN ROW MIDDLE, INCORPORATED
PODRM	POST DIRECTED IN ROW MIDDLE
PODIT	POST DIRECTED AT THINNING, INCORPORATED
POT	POST OVER THE TOP
POT6	POST OVER THE TOP, CHILE 6 INCHES
POT10	POST OVER THE TOP, CHILE 10 INCHES
PRE	PRE EMERGENCE

**LAS CRUCES TRIAL INFORMATION**  
**Plant Science Research Center**

**2003 LAS CRUCES RAINFALL DATA**  
**Plant Science Research Center Weather Station**

Elevation 3832 Feet

Latitude: 32° 12' 4.44" N Longitude: 106° 44' 32.88" W

**Rainfall in inches<sup>1</sup>**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	--	0	0	0	0	0	0	--
2	0	0	0.04	0	--	0	0	0	0	0	0	--
3	0	0	0	0	--	0	0	0	0	0.1	0	--
4	0	0	0	0	--	0	0.1	0	0	0.05	0	--
5	0	0	0	0	--	0	0	0	0	0	0	--
6	0	0	0	0	--	0	0	0	0	0	0	--
7	0	0	0	0	0	0	0	0	0	0.02	0	--
8	0	0.28	0	0	0	0	--	0	0	0	0	--
9	0	0	0	0	0	0	--	0	0.11	0.04	0	--
10	0	0	0	0	0	0	--	0	0	0.02	0	--
11	0	0	0	0	0	0	0	0	0.02	0	0	--
12	0	0	0	0	0	0	0	0	0	0	0.02	--
13	0	0.02	0	0	0	0	0	0	0	0	0.34	--
14	0	0	0	0.01	0	0	0	0	0	0	0.38	--
15	0	0	0	0	0	0	0	0	0	0	0.01	--
16	0	0	0	0	0	0.75	0	0.03	0	0	0	--
17	0	0	0.02	0	0	0.12	0.49	0	0	0	0	--
18	0	0	0	0	0	0	0	0	0	0	0	--
19	0	0.02	0.02	0	0	0	0	0	0	0	0	--
20	0	1.16	0	0	0	0	0	0	0	0	0	--
21	0	0.16	0	0	0	0	0	0	0	0	0	--
22	0	0	0	0	0	0	0.04	0	0	0	0	--
23	0	0	0	0	0	0	0	0	0	0	0	--
24	0	0	0	0	0	0	0	0	0	0	0	--
25	0	0	0	0	0	0	0	0	0	0.01	--	--
26	0	0.02	0	0	0	0	0.01	0	0	0	--	--
27	0	0	0	0	0	0.39	0	0.08	0	0	--	--
28	0	0	0	0	0	0	0	0	0	0	--	--
29	0		0	--	0	0	0	0.07	0	0	--	--
30	0		0	--	0	0.13	0	0	0	0	--	--
31	0		0		0	0	0	0	0	0		--
<b>TOTAL</b>	0	1.66	0.08	0.01	0	1.39	0.64	0.18	0.13	0.24	0.75	0

<sup>1</sup> "--" = No data obtained for dates.



Trial ID: 03-L-1

WEED CONTROL IN CHILE

General Trial Information

PREVIOUS CROPS:  
1. SORGHUM SUDAN GRASS

PREVIOUS PESTICIDES

YEAR:  
2002

SOIL DESCRIPTION:

Soil Name: Texture: SANDY CLAY LOAM  
% Sand: 54 pH: 7.64  
% Silt: 19 OM: 1.3  
% Clay: 27

FERTILIZER:

No.	Date		Rate	Rate unit
1.	04/29/03	11-52-00	500	LB / A
2.	06/26/03	IRRIGATED WITH LIQUID N	½	QT

MAINTENANCE PESTICIDE APPLICATIONS:

No.	Date	Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	05/15/03	FURADAN (CARBOFURAN)	4	F	1.0	QT/A
2.	05/22/03	GLYPHOMAX	4	EC	2.0	QT/A
3.	05/22/03	COMMAND 3ME	3	ME	1.0	QT/A
4.	06/20/03	SELECT (CLETHODIM)	2	EC	0.1	LB AI/A
5.	06/20/03	AGRIDEX			1.0	%V/V

FURROW IRRIGATION SCHEDULE:

1 05/01/03  
2 05/15/03  
3 06/06/03  
4 06/26/03 URAN applied with irrigation  
5 07/08/03  
6 07/21/03  
7 08/07/03  
8 09/04/03

FIELD PREP AND MAINTENANCE:

1. 04/29/03 FIELD LISTED= BEDS SHAPED  
2. 05/13/03 ROTARY HOE CULTIVATED  
3. 05/15/03 CHILE PLANTED  
4. 05/22/03 APPLICATION A  
5. 05/23/03 DRAG CAP  
6. 05/27/03 HAND WEEDED (WEED-FREES)  
7. 06/02/03 HAND WEEDED (WEED-FREES)  
8. 06/03/03 ROTARY HOE CULTIVATED  
9. 06/10/03 HAND WEEDED (WEED-FREES)  
10. 06/16/03 HAND WEEDED (WEED-FREES)  
11. 06/24/03 HAND WEEDED (WEED-FREES)  
12. 06/24/03 LARGE WEEDS PULLED FROM ENTIRE EXPERIMENT  
13. 06/25/03 PLOTS 111-120 CULTIVATED  
14. 06/26/03 PLOTS 101-110 CULTIVATED  
15. 07/07/03 APPLICATION B, C & D  
16. 07/07/03 ROTARY HOE CULTIVATED  
17. 07/14/03 HAND WEEDED (WEED-FREES)  
18. 10/23/03 HARVESTED  
19. 10/24/03 TERMINATED

CROP AND WEED DESCRIPTION:

Crop 1:CAPAN CHILE Variety: JOE E. PARKER  
 Planting Date: 05/15/03  
 Planting Method: DIRECT SEEDED Rate: 4 LB/A  
 Depth: 1 IN Row Spacing: 40 INCH  
 Soil Moisture: GOOD Emergence Date: 05/30/03

Weed	Code	Common Name	Scientific Name
1.	PHYWR	WRIGHT GROUNDCHERRY	<i>PHYSALIS WRIGHTII</i>
2.	SORHA	JOHNSONGRASS	<i>SORGHUM HALEPENSE</i>

SITE AND DESIGN:

Plot width: 6.66 FT Plot Length: 30 FT  
 Reps: 4  
 Site Type: FIELD Tillage Type: CONVENTIONAL  
 Study Design: RANDOMIZED COMPLETE BLOCK

APPLICATION DESCRIPTION:

Application Code:	A	B	C	D
Application Date:	05/22/03	07/06/03	07/06/03	07/06/03
Time of Day:	8:55AM	8:30AM	8:30AM	8:30AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	POD	POT	PODIRM
Applic. Placement:	BROADCAST	DIRECTED	BROADCAST	ROWMIDDLE
Air Temp., Unit:	79F	76F	76F	76F
% Relative Humidity:	51	58	58	58
Wind Velocity, Unit:	1MPH	3MPH	3MPH	3MPH
Dew Presence (Y/N):	N	N	N	N
Soil Temp., Unit:	72F	82F	82F	82F
Soil Moisture:	GOOD	DRY	DRY	DRY
% Cloud Cover:	0	0	0	0

CROP STAGE AT EACH APPLICATION:

Application Code:	A	B	C	D
Crop Code:	CAPAN	CAPAN	CAPAN	CAPAN
Stage:	PRE	2-12"	2-12"	2-12"

WEED STAGE AT EACH APPLICATION:

No.	Weed Code:	A	B	C	D
1.	PHYWR	PRE	COT-2LEAF	COT-2LEAF	COT-2LEAF
2.	SORHA	PRE	COT-1LEAF	COT-1LEAF	COT-1LEAF

APPLICATION EQUIPMENT:

Application Code:	A	B	C	D
Appl. Equipment:	BCKPCK	BCKPCK	BCKPCK	BCKPCK
Operating Pressure:	20 PSI	20 PSI	20 PSI	20 PSI
Nozzle Type:	TEEJET	TEEJET	TEEJET	TEEJET
Nozzle Size:	11002VS	8002EVS	8002EVS	8002EVS
Nozzle Spacing, Unit:	18.5 INCH	20 INCH	20 INCH	20 INCH
Nozzles/Row:	2	2	2	2
Band width, Unit:	20 INCH	20 INCH	20 INCH	20 INCH
Boom Height, Unit:	19 INCH	19 INCH	19 INCH	19 INCH
Ground Speed, Unit:	2 MPH	2 MPH	2 MPH	2 MPH
Incorporation Equip.:	N/A	ROTARY HO	ROTARY HO	ROTARY HO
Incorporation Depth:	N/A	2 INCH	2 INCH	2 INCH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA
Propellant:	CO2	CO2	CO2	CO2

03-L-1 Chile Injury Codes				
Treatment	05/29/03	06/05/03	07/14/03	07/21/03
3				a
4	a	a	a	a
5	a	a	a	a
6	a	a	a	a
7	a	a	a	a
8				a
9			a	a
10			a	a
11			a	a
12			a	a
13			a	a
14				a
15				a
16			a	a
17				a

Rating for Johnsongrass on 9/17/03 reflects percentage of the plot that had no Johnsongrass present. Chile stand was uneven due to early season infestation of beet curly top virus, and possible abiotic problems such as lack of water or premature dragging of the cap. Chile yields are reported as fresh red weights. Grab samples were obtained from each treatment in the first replication, and four random samples from each of the rest of the replications at the time of harvest. Samples were dried and dry weights were calculated as a percent. The dry weights were then averaged. The average dry weights for 03-L-1 was  $15\% \pm 7$  of the fresh weights.

Rating Date						05/29/03	06/05/03	06/05/03	07/14/03	
Crop Stage						COT	COT	2-4	5-16	
Crop Stage Scale								LEAF	INCHE	
Trt-Eval Interval						7 DA-A	14 DA-A	14 DA-A	53 DA-	
PRM Data Type						CAPAN INJURY	CAPAN INJURY	PHYWR	CAPAN INJURY	
Trt No.	Treatment Name	Form Conc	Rate Rate	Unit Unit	Grow Stg	Appl Code				
1	WEEDY CONTROL						0.0 a	0.0 a	0.0 b	0.0 c
2	HAND-WEEDED						0.0 a	0.0 a	100.0 a	0.0 c
3	PYRITHIOPAC (STAPLE) AGRIDEX	85	0.062	LB A/A	POT	B				10.0 a
4	PYRITHIOPAC (STAPLE) PYRITHIOPAC (STAPLE) AGRIDEX	85	0.042	LB A/A	PRE	A	2.5 a	22.5 a	42.5 ab	8.5 a
5	PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.042	LB A/A	PRE	A	3.8 a	21.3 a	45.0 ab	2.0 c
6	PYRITHIOPAC (STAPLE) PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.032	LB A/A	POD	B	8.8 a	27.5 a	71.3 a	0.3 c
7	PYRITHIOPAC (STAPLE) PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.042	LB A/A	PRE	A	2.5 a	13.8 a	47.5 ab	2.0 c
8	PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.062	LB A/A	POD	B				0.0 c
9	PYRITHIOPAC (STAPLE) CARFENTRAZONE (AIM) AGRIDEX	85	0.062	LB A/A	POD	B				1.3 c
10	HALOSULFURON (SANDEA) CARFENTRAZONE (AIM) AGRIDEX	75	0.032	LB A/A	POD	B				2.5 c
11	CARFENTRAZONE (AIM) AGRIDEX	40	.0168	LB A/A	POD	B				3.8 bc
12	OXYFLUORFEN (GOAL 2XL) AGRIDEX	2	0.25	LB A/A	POD	B				1.3 c
13	HALOSULFURON (SANDEA) OXYFLUORFEN (GOAL 2XL) AGRIDEX	75	0.032	LB A/A	POD	B				2.5 c
14	PYRITHIOPAC (STAPLE) OXYFLUORFEN (GOAL 2XL) AGRIDEX	85	0.062	LB A/A	POD	B				0.0 c
15	FLUMIOXAZIN (VALOR) AG-98	50	0.063	LB A/A	PODRM	B				0.0 c
16	CARFENTRAZONE (AIM) AGRIDEX	40	.0168	LB A/A	PODI	B				1.3 c
17	FLUMIOXAZIN (VALOR) AG-98	50	0.063	LB A/A	PODIRM	B				0.0 c
LSD (P=.05)							9.46	30.33	58.49	5.6
Replicate F							2.077	4.157	1.929	0.886
Replicate Prob(F)							0.1462	0.0249	0.1682	0.4559
Treatment F							1.056	0.897	2.938	2.21
Treatment Prob(F)							0.4220	0.5078	0.0481	0.019

Means followed by same letter do not significantly differ (P=.05, LSD)

Rating Date						07/14/03	07/21/03	07/21/03	07/28/03	
Crop Stage						COT-14	8-22	COT-BLOO	10-24	
Crop Stage Scale						INCHES	INCHES		INCHES	
Trt-Eval Interval						53 DA-A	60 DA-A	60 DA-A	67 DA-A	
PRM Data Type						PHYWR	CAPAN	PHYWR	CAPAN	
							INJURY	CONTROL	INJURY	
Trt No.	Treatment Name	Form Conc	Rate Rate	Unit	Grow Stg	Appl Code				
1	WEEDY CONTROL						0.0 a-d	0.0 ab	0.0 c	0.0 a
2	HAND-WEEDED						100.0 ab	0.0 b	100.0 a	0.0 a
3	PYRITHIOPAC (STAPLE) AGRIDEX	85	0.062	LB A/A	POT	B	100.0 ab	5.0 a	97.5 a	0.0 A
			1.0	% V/V	POT	B				
4	PYRITHIOPAC (STAPLE) PYRITHIOPAC (STAPLE) AGRIDEX	85	0.042	LB A/A	PRE	A	62.2 a-d	3.5 ab	64.6 ab	0.0 A
		85	0.062	LB A/A	POT	B				
			1.0	% V/V	POT	B				
5	PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.042	LB A/A	PRE	A	7.6 d	2.0 ab	39.6 abc	0.0 a
		75	0.032	LB A/A	POD	B				
			1.0	% V/V	POD	B				
6	PYRITHIOPAC (STAPLE) PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.042	LB A/A	PRE	A	102.6 a	2.0 ab	69.6 ab	0.0 a
		85	0.062	LB A/A	POD	B				
		75	0.032	LB A/A	POD	B				
			1.0	% V/V	POD	B				
7	PYRITHIOPAC (STAPLE) PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.042	LB A/A	PRE	A	40.9 bcd	3.6 ab	71.3 ab	0.0 a
		85	0.033	LB A/A	POD	B				
		75	0.027	LB A/A	POD	B				
			1.0	% V/V	POD	B				
8	PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.062	LB A/A	POD	B	42.5 bcd	2.5 ab	22.5 bc	0.0 a
		75	0.032	LB A/A	POD	B				
			1.0	% V/V	POD	B				
9	PYRITHIOPAC (STAPLE) CARFENTRAZONE (AIM) AGRIDEX	85	0.062	LB A/A	POD	B	92.5 ab	3.8 ab	72.5 ab	0.0 a
		40	.0168	LB A/A	POD	B				
			1.0	% V/V	POD	B				
10	HALOSULFURON (SANDEA) CARFENTRAZONE (AIM) AGRIDEX	75	0.032	LB A/A	POD	B	73.8 abc	5.0 a	73.8 ab	0.0 a
		40	.0168	LB A/A	POD	B				
			1.0	% V/V	POD	B				
11	CARFENTRAZONE (AIM) AGRIDEX	40	.0168	LB A/A	POD	B	75.0 abc	2.5 ab	48.8 abc	0.0 a
			1.0	% V/V	POD	B				
12	OXYFLUORFEN (GOAL 2XL) AGRIDEX	2	0.25	LB A/A	POD	B	75.0 abc	2.5 ab	72.5 ab	0.0 a
			1.0	% V/V	POD	B				
13	HALOSULFURON (SANDEA) OXYFLUORFEN (GOAL 2XL) AGRIDEX	75	0.032	LB A/A	POD	B	75.0 abc	3.8 ab	75.0 ab	0.0 a
		2	0.25	LB A/A	POD	B				
			1.0	% V/V	POD	B				
14	PYRITHIOPAC (STAPLE) OXYFLUORFEN (GOAL 2XL) AGRIDEX	85	0.062	LB A/A	POD	B	50.0 a-d	2.5 ab	47.5 abc	0.0 a
		2	0.25	LB A/A	POD	B				
			1.0	% V/V	POD	B				
15	FLUMIOXAZIN (VALOR) AG-98	50	0.063	LB A/A	PODRM	B	50.0 a-d	3.8 ab	47.5 abc	0.0 a
			0.25	% V/V	PODRM	B				
16	CARFENTRAZONE (AIM) AGRIDEX	40	.0168	LB A/A	PODI	B	18.8 cd	2.5 ab	0.0 c	0.0 a
			1.0	% V/V	PODI	B				
17	FLUMIOXAZIN (VALOR) AG-98	50	0.063	LB A/A	PODIRM	B	75.0 abc	3.8 ab	75.0 ab	0.0 a
			0.25	% V/V	PODIRM	B				
LSD (P=.05)							60.03	3.83	62.40	0.00
Replicate F							2.947	3.387	2.061	0.000
Replicate Prob(F)							0.0431	0.0262	0.1191	1.0000
Treatment F							1.758	0.914	1.777	0.000
Treatment Prob(F)							0.0705	0.5592	0.0667	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Rating Date						07/28/03	08/04/03	08/04/03	
Crop Stage						COT-30	POD FORM	2-36	
Crop Stage Scale						INCHES		INCHES	
Trt-Eval Interval						67 DA-A	74 DA-A	74 DA-A	
PRM Data Type						PHYWR CONTROL	CAPAN INJURY	PHYWR CONTROL	
Trt No.	Treatment Name	Form	Rate	Grow Unit	Appl Stg	Code			
1	WEEDY CONTROL						0.0 d	0.0 a	0.0 d
2	HAND-WEEDED						100.0 a	0.0 a	100.0 a
3	PYRITHIOPAC (STAPLE) AGRIDEX	85	0.062	LB A/A	POT	B	90.0 ab	0.0 a	87.5 ab
4	PYRITHIOPAC (STAPLE) PYRITHIOPAC (STAPLE) AGRIDEX	85	0.042	LB A/A	PRE	A	60.4 a-d	0.0 a	55.0 a-d
5	PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.042	LB A/A	PRE	A	27.9 cd	0.0 a	27.9 cd
6	PYRITHIOPAC (STAPLE) PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.042	LB A/A	PRE	A	32.9 bcd	0.0 a	34.6 bcd
7	PYRITHIOPAC (STAPLE) PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.042	LB A/A	PRE	A	59.5 a-d	0.0 a	61.3 abc
8	PYRITHIOPAC (STAPLE) HALOSULFURON (SANDEA) AGRIDEX	85	0.062	LB A/A	POD	B	33.8 bcd	0.0 a	61.3 abc
9	PYRITHIOPAC (STAPLE) CARFENTRAZONE (AIM) AGRIDEX	85	0.062	LB A/A	POD	B	71.3 abc	0.0 a	66.3 abc
10	HALOSULFURON (SANDEA) CARFENTRAZONE (AIM) AGRIDEX	75	0.032	LB A/A	POD	B	72.5 abc	0.0 a	67.5 abc
11	CARFENTRAZONE (AIM) AGRIDEX	40	.0168	LB A/A	POD	B	42.5 a-d	0.0 a	58.8 abc
12	OXYFLUORFEN (GOAL 2XL) AGRIDEX	2	0.25	LB A/A	POD	B	68.8 abc	0.0 a	67.5 abc
13	HALOSULFURON (SANDEA) OXYFLUORFEN (GOAL 2XL) AGRIDEX	75	0.032	LB A/A	POD	B	71.3 abc	0.0 a	68.8 abc
14	PYRITHIOPAC (STAPLE) OXYFLUORFEN (GOAL 2XL) AGRIDEX	85	0.062	LB A/A	POD	B	67.5 abc	0.0 a	68.8 abc
15	FLUMIOXAZIN (VALOR) AG-98	50	0.063	LB A/A	PODIRM	B	42.5 a-d	0.0 a	41.3 bcd
16	CARFENTRAZONE (AIM) AGRIDEX	40	.0168	LB A/A	PODI	B	0.0 d	0.0 a	0.0 d
17	FLUMIOXAZIN (VALOR) AG-98	50	0.063	LB A/A	PODIRM	B	73.8 abc	0.0 a	73.8 abc
LSD (P=.05)							60.57	0.00	56.78
Replicate F							0.870	0.000	1.351
Replicate Prob(F)							0.4643	1.0000	0.2702
Treatment F							1.788	0.000	1.857
Treatment Prob(F)							0.0658	1.0000	0.0532

Means followed by same letter do not significantly differ (P=.05, LSD)

Rating Date					09/10/03	09/10/03	09/17/03
Crop Stage					MATURE	28	6.5
Crop Stage Scale					PODS	INCHES	FT
Trt-Eval Interval					111 DA-A	111 DA-A	118 DA-A
PRM Data Type					CAPSAN INJURY	PHYWR CONTROL	SORHA
Trt No.	Treatment Name	Form Conc	Rate Rate	Grow Unit	Stg	Appl Code	
1	WEEDY CONTROL						0.0 a
2	HAND-WEEDED						0.0 a
3	PYRITHIOBAC (STAPLE)	85	0.062	LB A/A	POT	B	0.0 a
	AGRIDEX		1.0	% V/V	POT	B	51.3 abc
4	PYRITHIOBAC (STAPLE)	85	0.042	LB A/A	PRE	A	0.0 a
	PYRITHIOBAC (STAPLE)	85	0.062	LB A/A	POT	B	18.6 bcd
	AGRIDEX		1.0	% V/V	POT	B	60.6 a
5	PYRITHIOBAC (STAPLE)	85	0.042	LB A/A	PRE	A	0.0 a
	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	10.2 cd
	AGRIDEX		1.0	% V/V	POD	B	62.3 a
6	PYRITHIOBAC (STAPLE)	85	0.042	LB A/A	PRE	A	0.0 a
	PYRITHIOBAC (STAPLE)	85	0.062	LB A/A	POD	B	26.8 bcd
	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	95.6 a
	AGRIDEX		1.0	% V/V	POD	B	
7	PYRITHIOBAC (STAPLE)	85	0.042	LB A/A	PRE	A	0.0 a
	PYRITHIOBAC (STAPLE)	85	0.033	LB A/A	POD	B	46.8 bcd
	HALOSULFURON (SANDEA)	75	0.027	LB A/A	POD	B	95.6 a
	AGRIDEX		1.0	% V/V	POD	B	
8	PYRITHIOBAC (STAPLE)	85	0.062	LB A/A	POD	B	0.0 a
	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	28.8 bcd
	AGRIDEX		1.0	% V/V	POD	B	98.8 a
9	PYRITHIOBAC (STAPLE)	85	0.062	LB A/A	POD	B	0.0 a
	CARFENTRAZONE (AIM)	40	.0168	LB A/A	POD	B	60.0 abc
	AGRIDEX		1.0	% V/V	POD	B	96.3 a
10	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	0.0 a
	CARFENTRAZONE (AIM)	40	.0168	LB A/A	POD	B	40.0 bcd
	AGRIDEX		1.0	% V/V	POD	B	98.8 a
11	CARFENTRAZONE (AIM)	40	.0168	LB A/A	POD	B	0.0 a
	AGRIDEX		1.0	% V/V	POD	B	20.0 bcd
12	OXYFLUORFEN (GOAL 2XL)	2	0.25	LB A/A	POD	B	0.0 a
	AGRIDEX		1.0	% V/V	POD	B	62.5 ab
13	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	0.0 a
	OXYFLUORFEN (GOAL 2XL)	2	0.25	LB A/A	POD	B	27.5 bcd
	AGRIDEX		1.0	% V/V	POD	B	66.3 a
14	PYRITHIOBAC (STAPLE)	85	0.062	LB A/A	POD	B	0.0 a
	OXYFLUORFEN (GOAL 2XL)	2	0.25	LB A/A	POD	B	41.3 bcd
	AGRIDEX		1.0	% V/V	POD	B	97.5 a
15	FLUMIOXAZIN (VALOR)	50	0.063	LB A/A	PODRM	B	0.0 a
	AG-98		0.25	% V/V	PODRM	B	45.0 bcd
16	CARFENTRAZONE (AIM)	40	.0168	LB A/A	PODI	B	0.0 a
	AGRIDEX		1.0	% V/V	PODI	B	0.0 d
17	FLUMIOXAZIN (VALOR)	50	0.063	LB A/A	PODIRM	B	0.0 a
	AG-98		0.25	% V/V	PODIRM	B	68.8 ab
LSD (P=.05)							0.00
Replicate F							51.13
Replicate Prob(F)							40.78
Treatment F							0.000
Treatment Prob(F)							1.0000
							0.672
							0.5738
							0.0897
							2.124
							0.989
							0.0248
							0.4849

Means followed by same letter do not significantly differ (P=.05, LSD)

Crop Code						CAPAN	
Part Rated						POD	
Rating Data Type						RED FR WT	
Rating Unit						KG/HA	
Rating Date						10/23/03	
Tri-Eval Interval						154 DA-A	
Crop Stage						MATURE	
Trt No.	Treatment Name	Form Conc	Rate Rate	Grow Unit	Stg	Appl Code	
1	WEEDY CONTROL					10921.5 b-e	
2	HAND-WEEDED					9891.1 cde	
3	PYRITHIOPAC (STAPLE)	85	0.062	LB A/A	POT	B	16170.0 a-d
	AGRIDEX		1.0	% V/V	POT	B	
4	PYRITHIOPAC (STAPLE)	85	0.042	LB A/A	PRE	A	9213.0 de
	PYRITHIOPAC (STAPLE)	85	0.062	LB A/A	POT	B	
	AGRIDEX		1.0	% V/V	POT	B	
5	PYRITHIOPAC (STAPLE)	85	0.042	LB A/A	PRE	A	7959.6 e
	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	
	AGRIDEX		1.0	% V/V	POD	B	
6	PYRITHIOPAC (STAPLE)	85	0.042	LB A/A	PRE	A	11520.6 b-e
	PYRITHIOPAC (STAPLE)	85	0.062	LB A/A	POD	B	
	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	
	AGRIDEX		1.0	% V/V	POD	B	
7	PYRITHIOPAC (STAPLE)	85	0.042	LB A/A	PRE	A	13416.9 a-e
	PYRITHIOPAC (STAPLE)	85	0.033	LB A/A	POD	B	
	HALOSULFURON (SANDEA)	75	0.027	LB A/A	POD	B	
	AGRIDEX		1.0	% V/V	POD	B	
8	PYRITHIOPAC (STAPLE)	85	0.062	LB A/A	POD	B	13955.9 a-e
	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	
	AGRIDEX		1.0	% V/V	POD	B	
9	PYRITHIOPAC (STAPLE)	85	0.062	LB A/A	POD	B	17547.9 abc
	CARFENTRAZONE (AIM)	40	.0168	LB A/A	POD	B	
	AGRIDEX		1.0	% V/V	POD	B	
10	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	16368.0 a-d
	CARFENTRAZONE (AIM)	40	.0168	LB A/A	POD	B	
	AGRIDEX		1.0	% V/V	POD	B	
11	CARFENTRAZONE (AIM)	40	.0168	LB A/A	POD	B	15984.2 a-d
	AGRIDEX		1.0	% V/V	POD	B	
12	OXYFLUORFEN (GOAL 2XL)	2	0.25	LB A/A	POD	B	17814.5 ab
	AGRIDEX		1.0	% V/V	POD	B	
13	HALOSULFURON (SANDEA)	75	0.032	LB A/A	POD	B	12258.9 a-e
	OXYFLUORFEN (GOAL 2XL)	2	0.25	LB A/A	POD	B	
	AGRIDEX		1.0	% V/V	POD	B	
14	PYRITHIOPAC (STAPLE)	85	0.062	LB A/A	POD	B	11955.8 a-e
	OXYFLUORFEN (GOAL 2XL)	2	0.25	LB A/A	POD	B	
	AGRIDEX		1.0	% V/V	POD	B	
15	FLUMIOXAZIN (VALOR)	50	0.063	LB A/A	PODRM	B	14267.0 a-e
	AG-98		0.25	% V/V	PODRM	B	
16	CARFENTRAZONE (AIM)	40	.0168	LB A/A	PODI	B	9038.6 de
	AGRIDEX		1.0	% V/V	PODI	B	
17	FLUMIOXAZIN (VALOR)	50	0.063	LB A/A	PODIRM	B	19228.7 a
	AG-98		0.25	% V/V	PODIRM	B	
LSD (P=.05)						7704.36	
Replicate F						1.553	
Replicate Prob(F)						0.2142	
Treatment F						1.603	
Treatment Prob(F)						0.1083	

Means followed by same letter do not significantly differ (P=.05, LSD)



**RINCON TRIAL INFORMATION**  
**MARATHON Agricultural and environmental consulting, Inc. Rincon Farm**  
**2003 RINCON RAINFALL DATA**

Rainfall in inches<sup>1</sup>

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	0	0	0	0	--
2	0	0	0	0	0	0	0	0.75	0	0	0	--
3	0	0	0	0	0	0	0	0	0	0	0	--
4	0	0	0	0	0	0	0	0	0	0	0	--
5	0	0	0	0	0	0	0	0	0	0	0	--
6	0	0	0	0	0	0	0	0	0	0	0	--
7	0	0	0	0	0	0	0	0	0	0	0	--
8	0	0	0	0	0	0	0	0	0	0	0	--
9	0	0	0	0	0	0	0	0	0	0	0	--
10	0	0	0	0	0	0	0	0.02	0	0	0	--
11	0	0	0	0	0	0	0	0	0	0	0	--
12	0	0	0	0	0	0	0	0	0	0	0	--
13	0	0	0	0	0	0	0	0	0	0	0	--
14	0	0	0	0	0	0	0	0	0	0	0	--
15	0	0	0	0	0	0	0	0.16	0	0	0	--
16	0	0	0	0	0	0.1	0	0.16	0	0	0	--
17	0	0	0	0	0	0.13	0.01	0	0	0	0	--
18	0	0	0	0	0	0.03	0	0	0	0	0	--
19	0	0	0	0	0	0	0	0	0	0	0	--
20	0	0	0	0	0	0	0	0	0	0	0	--
21	0	0	0	0	0	0	0	0.04	0.43	0	0	--
22	0	0	0	0	0	0	0	0	0	0	0	--
23	0	0	0	0	0	0	0.03	0	0	0	0	--
24	0	0	0	0	0	0	0	0.12	0.03	0	0	--
25	0	0	0	0	0	0	0	0.11	0	0	0	--
26	0	0	0	0	0	0	0	0.01	0	0	0	--
27	0	0	0	0	0	0.06	0	0	0	0	0	--
28	0	0	0	0	0	0	0.12	0	0	0	0	--
29	0	0	0	0	0	0	0	0.02	0	0	0	--
30	0	0	0	0	0	0	0	0	0	0	0	--
31	0	0	0	0	0	0	0	0	0	0	0	--
<b>TOTAL</b>	0	0	0	0	0	0.32	0.17	1.39	0.46	0	0	--

<sup>1</sup> "--" = No data obtained for dates.

GENERAL TRIAL INFORMATION

PREVIOUS CROPS:	PREVIOUS PESTICIDES:	YEAR:
1. Wheat	2,4-D 1.0 7b AI/A	2003
	Dicamba 0.5 7b AI/A	
2. Cotton	Trifluralin 0.5 7b AI/A	2002
	Caparol 1.0 7b AI/A	
	CGA 276854 0.067 7b AI/A	
	Polyfoliant 5 4.38 7b AI/A	

SOIL DESCRIPTION

Soil Name: AQUA LOAM	Texture: LOAM
% Sand: 36	pH: 8.1
% Silt: 46	% OM: 1.3
% Clay: 18	CEC: 25.1

FERTILIZER:

No.	Date:		Rate	Rate unit
1.	04/21/03	FERTILIZED 11-52-00	300	LB/A
2.	07/03/03	FERTILIZED (URAN)	20	GAL/A
3.	07/22/03	FERTILIZED (URAN)	15	GAL/A
4.	08/27/03	FERTILIZED (URAN)	15	GAL/A

MAINTENANCE PESTICIDE APPLICATIONS:

No.	Date	Treatment name	Form conc	Form type	Rate	Rate unit
1.	05/05/03	COMMAND 3ME	3	ME	0.75	LB A/A
2.	05/05/03	ROUNDUP ULTRA MAX	5	EC	2	QT/A

FURROW IRRIGATION SCHEDULE:

1.	04/05/03	6 INCHES
2.	05/08/03	6 INCHES
3.	05/20/03	6 INCHES
4.	06/04/03	6 INCHES
5.	06/22/03	6 INCHES
5.	07/03/03	6 INCHES
6.	07/14/03	6 INCHES
7.	07/22/03	6 INCHES
8.	07/31/03	6 INCHES
9.	08/12/03	6 INCHES
10.	08/27/03	6 INCHES

FIELD PREP AND MAINTENANCE:

1.	04/23/03	CHILE PLANTED	4	LB/A
2.	05/08/03	DRAGGED CAP		
3.	05/28/03	CULTIVATED		
4.	06/10/03	CULTIVATED		
5.	06/17/03	CHILE THINNED		
6.	07/01/03	CULTIVATED		
7.	07/03/03	HAND WEEDED (ALL PLOTS)		
8.	07/08/03	HAND WEEDED (ALL PLOTS)		
9.	07/10/03	HAND WEEDED (ALL PLOTS)		
10.	07/17/03	HAND WEEDED (ALL PLOTS)		
11.	07/24/03	HAND WEEDED (ALL PLOTS)		
12.	07/28/03	HAND WEEDED (ALL PLOTS)		
13.	07/31/03	HAND WEEDED (ALL PLOTS)		
14.	08/07/03	HAND WEEDED (ALL PLOTS)		
15.	08/12/03	CULTIVATED		
16.	08/26/03	HAND WEEDED (ALL PLOTS)		
17.	09/10/03	HAND WEEDED (ALL PLOTS)		
18.	10/30/03	RED CHILE PODS HARVESTED		
19.	10/31/03	FIELD TERMINATED		

## CROP AND WEED DESCRIPTION:

Crop 1:CAPAN CHILE Variety: SANDIA Planting Date: 04/23/03  
 Planting Method: DIRECT SEEDED Rate: 4 B/A Depth: 1IN Row  
 Spacing: 40IN  
 Soil Moisture: GOOD Emergence Date: 05/17/03

## WEEDS:

No weeds were present due to cultivation, and hand weeding.

## SITE AND DESIGN:

Plot width: 6.66 FT Plot Length: 30 FT  
 Reps: 4  
 Site Type: Field Tillage Type: CONVENTIONAL  
 Study Design: RANDOMIZED COMPLETE BLOCK

TRIAL INITIATION COMMENTS: INITIATED IN LAS CRUCES NM USING CHILE CV. 'JOE E. PARKER'. AFTER FAILED CHILE STAND DUE TO BEET CURLY TOP INFECTION, AND OVERALL LACK OF STAND ESTABLISHMENT, THE EXPERIMENT WAS RE-ESTABLISHED ON EMERGED CHILE CV. 'SANDIA' IN RINCON 6/26/03. APPLICATION A REFERS TO THE PRE TREATMENTS APPLIED TO CHILE IN LAS CRUCES. TABLE 1 SHOWS INITIAL RATINGS FOR PRE TREATMENTS PRIOR TO MOVING EXPERIMENT TO RINCON. APPLICATION B-D REFER TO POT, POD, AND PODIT TREATMENTS APPLIED IN RINCON. TABLE 2 SHOWS POSTEMERGENCE TREATMENT DATA FROM EXPERIMENT INITIATED IN RINCON.

## APPLICATION DESCRIPTION:

	A	B	C	D
Application Code:				
Application Date:	05/22/03	06/26/03	06/26/03	07/03/03
Time of Day:	8:45 AM	4:30PM	4:30PM	10:00 AM
Application Method:	BROADCAST	BROADCAST	DIRECTED	DIRECTED
Application Timing:	PRE	POT	POD	10" CHILE
Applic Placement:	BROADCAST	BROADCAST	DIRECTED	DIRECTED
Air Temp, Unit:	79F	98F	98F	98F
% Relative Humidity:	51	6	6	12
Wind Velocity, Unit:	10 MPH	5 MPH	5 MPH	28 MPH
Dew Presence (Y/N):	N	N	N	N
Soil Temp, Unit:	72F	27C	27C	79F
Soil Moisture:	GOOD	VERY GOOD	VERY GOOD	DRY
% Cloud Cover:	0	10	10	10

## CROP STAGE AT EACH APPLICATION:

	A	B	C	D
Application Code:				
Crop Code:	CAPAN	CAPAN	CAPAN	CAPAN
Stage:	PRE	2-8"	2-8"	8-10"

## APPLICATION EQUIPMENT:

	A	B	C	D
Application Code:				
Appl. Equipment:	BACKPAC	BACKPAC	BACKPAC	BACKPAC
Operating Pressure:	20	20	20	20
Nozzle Type:	TEEJET	TEEJET	TEEJET	TEEJET
Nozzle Size:	11002	11002	8002EVS	8002EVS
Nozzle Spacing, Unit:	18.5IN	18.5 IN		
Nozzles/Row:	2	2	2	2
Band Width, Unit:	18IN	18IN	18IN	18IN
Boom Length, Unit:	4NOZ	4NOZ	1NOZ	1NOZ
Boom Height, Unit:	18IN	18IN	18IN	18IN
Ground Speed, Unit:	2MPH	2MPH	2MPH	2MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	20GPA	20GPA	20GPA	20GPA
Propellant:	CO2	CO2	CO2	CO2
Tank Mix (Y/N):	N	N	N	N

03-L-2 Chile Injury Codes									
TREATMENT	05/29	06/05	07/03	07/10	07/17	07/24	07/31	08/07	9/10
3	ab	ab		a	a	a	a	a	
4			A	a	a	a	a	a	
5					a				
6			A	a	a	a	a	a	a
7			Af	af	af	af	af	af	a
8				a	a	a	a	a	
9					a	a	a	a	
10			A	a	a	a	a	a	a
11				a	a	a	a	a	
12			A	a	a	a	a	a	a
13				a	a	a	a	a	a
14				a	a	a	a	a	
15			A	a	a	a	a	a	a
16				a	a	a	a	a	a
17			A	a	a	a	a	a	a
18				a	a	a	a	a	a
19			A			a			
20			A		a	a	a	a	a

Chile yields are reported as fresh red weights. Grab samples were obtained from each treatment in the first replication, and four random samples from each of the rest of the replications at the time of harvest. Samples were dried and dry weights were calculated as a percent. The dry weights were then averaged. The average dry weights for 03-L-2 was  $35\% \pm 5$  of the fresh weights.

TABLE 1. INITIAL RATINGS FOR PRE TREATMENTS PRIOR TO MOVING EXPERIMENT TO RINCON, N.M.

Rating Date						05/29/03	06/05/03	06/05/03	
Crop Stage						COT	COT	2-4	
Crop Stage Scale								LEAF	
PRM Data Type						CAPAN	CAPAN	PHYWR	
						INJURY	INJURY	CONTROL	
Trt No.	Treatment Name	Form Conc	Rate	Grow Unit	Stg	Appl Code			
1	WEEDY CONTROL						0.0 b	0.0 b	
2	HAND-WEEDED CONTROL						0.0 b	0.0 b	
3	SULFENTRAZONE (AUTHORITY)	75	0.15	LB A/A	PRE	A	22.5 a	65.0 a	
LSD (P=.05)							4.99	42.41	46.68
Replicate F							1.000	0.632	1.000
Replicate Prob(F)							0.4547	0.6206	0.4547
Treatment F							81.000	4.644	14.473
Treatment Prob(F)							0.0001	0.0605	0.0051

Means followed by same letter do not significantly differ (P=.05, LSD)

TABLE 2. POST-EMERGENCE TREATMENT DATA FROM EXPERIMENT INITIATED IN RINCON, N.M.

Rating Date						07/03/03	07/10/03	07/17/03
Crop Stage						6-12	8-16	8-18
Crop Stage Scale						INCHES	INCHES	INCHES
PRM Data Type						CAPAN INJURY	CAPAN INJURY	CAPAN INJURY
Trt No.	Treatment Name	Form Conc	Rate Rate	Grow Unit	Appl Stg Code			
1	CONTROL					0.0 f	0.0 e	0.0 e
2	CONTROL					0.0 f	0.0 e	0.0 e
3	CGA 362622	75	0.005	LB A/A	POT10 D	0.0 f	3.8 de	2.5 de
4	SULFENTRAZONE (AUTHORITY)	75	0.15	LB A/A	POD6 C	3.8 ef	1.3 de	3.8 de
5	SULFENTRAZONE (AUTHORITY)	75	0.15	LB A/A	POD10 D	0.0 f	0.0 e	2.5 de
6	IMAZAMOX (RAPTOR)	1	0.018	LB A/A	POT6 C	17.5 a	31.3 a	28.0 b
	AG-98		0.25	% V/V	POT6 C			
7	IMAZAMOX (RAPTOR)	1	0.024	LB A/A	POT6 C	16.3 ab	37.5 a	45.0 a
	AG-98		0.25	% V/V	POT6 C			
8	IMAZAMOX (RAPTOR)	1	0.018	LB A/A	POT10 D	0.0 f	8.8 cde	12.5 cd
	AG-98		0.25	% V/V	POT10 D			
9	IMAZAMOX (RAPTOR)	1	0.024	LB A/A	POD10 D	0.0 f	0.0 e	3.8 de
	AG-98		0.25	% V/V	POD10 D			
10	CGA 362622	75	0.010	LB A/A	POT6 C	6.3 de	5.0 de	5.0 de
	AG-98		0.25	% V/V	POT6 C			
11	CGA 362622	75	0.010	LB A/A	POT10 D	0.0 f	7.5 de	6.3 cde
	AG-98		0.25	% V/V	POT10 D			
12	CGA 362622	75	0.014	LB A/A	POT6 C	10.0 cd	10.0 bcd	7.5 cde
	AG-98		0.25	% V/V	POT6 C			
13	CGA 362622	75	0.014	LB A/A	POT10 D	0.0 f	7.5 de	7.5 cde
	AG-98		0.25	% V/V	POT10 D			
14	CGA 362622	75	0.014	LB A/A	POD10 D	0.0 f	2.5 de	2.5 de
	AG-98		0.25	% V/V	POD10 D			
15	SULFOSULFURON (MAVERICK)	75	0.045	LB A/A	POT6 C	15.0 ab	18.8 b	17.3 bc
	AG-98		0.25	% V/V	POT6 C			
16	SULFOSULFURON (MAVERICK)	75	0.045	LB A/A	POT10 D	0.0 f	18.8 b	13.8 cd
	AG-98		0.25	% V/V	POT10 D			
17	SULFOSULFURON (MAVERICK)	75	0.06	LB A/A	POT6 C	12.5 bc	17.5 bc	17.5 bc
	AG-98		0.25	% V/V	POT6 C			
18	SULFOSULFURON (MAVERICK)	75	0.06	LB A/A	POD10 D	0.0 f	7.5 de	11.3 cde
	AG-98		0.25	% V/V	POD10 D			
19	FLUFENACET (DEFINE)	60	0.5	LB A/A	PODIT B	3.8 ef	0.0 e	0.0 e
20	THIAZOPYR (VISOR)	2	1.0	LB A/A	PODIT B	1.3 f	0.0 e	10.0 cde
LSD (P=.05)						4.79	9.55	11.30
Replicate F						1.191	1.908	0.840
Replicate Prob(F)						0.3212	0.1385	0.4774
Treatment F						13.756	10.191	7.515
Treatment Prob(F)						0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

TABLE 2 (CONTINUED).

Rating Date						07/24/03	07/31/03	08/07/03
Crop Stage						12-24	POD FORM	POD FORM
Crop Stage Scale						INCHES		
PRM Data Type						CAPAN INJURY	CAPAN INJURY	CAPAN INJURY
Trt No.	Treatment Name	Form Conc	Rate Rate	Grow Unit	Appl Stg Code			
1	CONTROL					0.0 d	0.0 c	0.0 d
2	CONTROL					0.0 d	0.0 c	0.0 d
3	CGA 362622	75	0.005	LB A/A	POT10 D	1.3 d	1.3 c	2.5 cd
4	SULFENTRAZONE (AUTHORITY)	75	0.15	LB A/A	POD6 C	1.3 d	1.3 c	1.3 d
5	SULFENTRAZONE (AUTHORITY)	75	0.15	LB A/A	POD10 D	0.0 d	0.0 c	0.0 d
6	IMAZAMOX (RAPTOR) AG-98	1	0.018	LB A/A	POT6 C	30.0 b	23.8 b	15.0 b
7	IMAZAMOX (RAPTOR) AG-98	1	0.024	LB A/A	POT6 C	45.0 a	40.0 a	38.8 a
8	IMAZAMOX (RAPTOR) AG-98	1	0.018	LB A/A	POT10 D	8.8 cd	5.0 c	5.0 bcd
9	IMAZAMOX (RAPTOR) AG-98	1	0.024	LB A/A	POD10 D	6.3 cd	1.3 c	1.3 d
10	CGA 362622 AG-98	75	0.010	LB A/A	POT6 C	3.8 cd	2.5 c	3.8 cd
11	CGA 362622 AG-98	75	0.010	LB A/A	POT10 D	3.8 cd	2.5 c	1.3 d
12	CGA 362622 AG-98	75	0.014	LB A/A	POT6 C	6.3 cd	3.8 c	3.8 cd
13	CGA 362622 AG-98	75	0.014	LB A/A	POT10 D	5.0 cd	2.5 c	1.3 d
14	CGA 362622 AG-98	75	0.014	LB A/A	POD10 D	5.0 cd	1.3 c	1.3 d
15	SULFOSULFURON (MAVERICK) AG-98	75	0.045	LB A/A	POT6 C	10.0 cd	11.3 c	12.5 bc
16	SULFOSULFURON (MAVERICK) AG-98	75	0.045	LB A/A	POT10 D	8.8 cd	3.8 c	2.5 cd
17	SULFOSULFURON (MAVERICK) AG-98	75	0.06	LB A/A	POT6 C	12.5 c	8.8 c	7.5 bcd
18	SULFOSULFURON (MAVERICK) AG-98	75	0.06	LB A/A	POD10 D	7.5 cd	3.8 c	2.5 cd
19	FLUFENACET (DEFINE)	60	0.5	LB A/A	PODIT B	2.5 cd	0.0 c	0.0 d
20	THIAZOPYR (VISOR)	2	1.0	LB A/A	PODIT B	7.5 cd	6.3 c	7.5 bcd
LSD (P=.05)						10.58	11.60	10.83
Replicate F						3.055	2.209	2.308
Replicate Prob(F)						0.0356	0.0969	0.0861
Treatment F						8.475	5.611	5.373
Treatment Prob(F)						0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

TABLE 2 (CONTINUED)

Crop Code	Part Rated	Rating Data Type	Rating Unit	Rating Date	Crop Stage	PRM Data Type		09/10/03 MATURE CAPAN INJURY	CAPAN POD RED FR WT KG/HA 10/30/03 MATURE TY1
Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code			
1	CONTROL							0.0 c	9842.6 ab
2	CONTROL							0.0 c	12056.8 ab
3	CGA 362622	75	0.005	LB A/A	POT10	D		0.0 c	12622.5 a
4	SULFENTRAZONE (AUTHORITY)	75	0.15	LB A/A	POD6	C		0.0 c	9264.8 ab
5	SULFENTRAZONE (AUTHORITY)	75	0.15	LB A/A	POD10	D		0.0 c	10307.3 ab
6	IMAZAMOX (RAPTOR) AG-98	1	0.018	LB A/A	POT6	C		3.8 abc	9240.6 ab
7	IMAZAMOX (RAPTOR) AG-98	1	0.024	LB A/A	POT6	C		2.5 abc	8788.1 ab
8	IMAZAMOX (RAPTOR) AG-98	1	0.018	LB A/A	POT10	D		0.0 c	10998.2 ab
9	IMAZAMOX (RAPTOR) AG-98	1	0.024	LB A/A	POD10	D		0.0 c	12792.2 a
10	CGA 362622 AG-98	75	0.010	LB A/A	POT6	C		1.3 bc	11091.2 ab
11	CGA 362622 AG-98	75	0.010	LB A/A	POT10	D		0.0 c	11129.1 ab
12	CGA 362622 AG-98	75	0.014	LB A/A	POT6	C		2.5 abc	9798.2 ab
13	CGA 362622 AG-98	75	0.014	LB A/A	POT10	D		1.3 bc	12004.3 ab
14	CGA 362622 AG-98	75	0.014	LB A/A	POD10	D		0.0 c	8921.4 ab
15	SULFOSULFURON (MAVERICK) AG-98	75	0.045	LB A/A	POT6	C		6.3 a	9737.6 ab
16	SULFOSULFURON (MAVERICK) AG-98	75	0.045	LB A/A	POT10	D		1.3 bc	12917.5 a
17	SULFOSULFURON (MAVERICK) AG-98	75	0.06	LB A/A	POT6	C		2.5 abc	9854.8 ab
18	SULFOSULFURON (MAVERICK) AG-98	75	0.06	LB A/A	POD10	D		1.3 bc	12068.9 ab
19	FLUFENACET (DEFINE)	60	0.5	LB A/A	PODIT	B		0.0 c	12650.8 a
20	THIAZOPYR (VISOR)	2	1.0	LB A/A	PODIT	B		5.0 ab	7984.0 b
LSD (P=.05)								4.50	4506.25
Replicate F								2.020	1.280
Replicate Prob(F)								0.1214	0.2899
Treatment F								1.360	0.920
Treatment Prob(F)								0.1847	0.5623

Means followed by same letter do not significantly differ (P=.05, LSD)