

University of Nebraska

Weed Control in Sorghum I

Trial ID: L0751
Location: Havelock

Study Dir.: Kevin Horky
Investigator: Dr. Mark Bernards

GENERAL TRIAL INFORMATION

Study Director: Kevin Horky **Title:** Research Technician
Affiliation: University of Nebraska Lincoln
Postal Code: 68583
Investigator: Dr. Mark Bernards **Title:** Ext. Weed Specialist
Affiliation: University of Nebraska Lincoln
Postal Code: 68583

TRIAL LOCATION

City: Lincoln
State/Prov.: NE
Postal Code: 68583

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	ABUTH	Velvetleaf	Abutilon theophrasti
2.	AMAPA	Amaranth, Palmer	Amaranthus palmeri
3.	HELAN	Common sunflower	Helianthus annuus
4.	SETVI	Green foxtail	Setaria viridis

Crop 1: SORVU SORGHUM **Variety:** Dekalb DK 53
Planting Date: 20/Jun/2007 **Planting Method:** planted
Rate: 66000 seeds/acre **Depth:** 1.25 in
Row Spacing: 30 in **Seed Bed:** medium
Soil Temperature: 15 C **Soil Moisture:** good **Emergence Date:** 25/Jun/2007

SITE AND DESIGN

Plot Width, Unit: 10 FT **Plot Length, Unit:** 30 FT **Reps:** 3
Site Type: field
Tillage Type: conventional **Study Design:** RANDOMIZED COMPLETE BLOCK

MAINTENANCE

Field Prep./Maintenance: Anhydrous Ammonia was applied at rate of 120lbs of nitrogen/acre. Field was disked once, and field cultivated once.

SOIL DESCRIPTION

% Sand: 6 **% OM:** 3.0 **Texture:** Silty clay loam
% Silt: 65 **pH:** 6.6 **Soil Name:** Sharpesburg
% Clay: 29 **CEC:** 31 **Fert. Level:** good

APPLICATION DESCRIPTION

	A	B
Application Date:	5/Jun/2007	20/Jun/2007
Time of Day:	1:00 pm	10:00 am
Application Method:	Spray	Spray
Application Timing:	epp	pre
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	71 F	75 F
% Relative Humidity:	38	64
Wind Velocity, Unit:	6 mph	3 mph
Dew Presence (Y/N):	n	n
Soil Temp., Unit:	17 C	18 C
Soil Moisture:	good	good
% Cloud Cover:	15	30

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CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	SORVU	SORVU
Stage Scale:	pre	pre

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	ABUTH	ABUTH
Stage Scale:	pre	pre
Weed 2 Code, Stage:	AMAPA	AMAPA
Stage Scale:	pre	pre
Weed 3 Code, Stage:	HELAN	HELAN
Stage Scale:	pre	pre
Weed 4 Code, Stage:	SETVI	SETVI
Stage Scale:	pre	pre

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	IH cub	IH cub
Operating Pressure:	30	30
Nozzle Type:	Turbo Tee	Turbo Tee
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	15 in	15 in
Nozzles/Row:	2	2
Boom Length, Unit:	10 ft	10 ft
Boom Height, Unit:	24 in	24 in
Ground Speed, Unit:	3 mph	3 mph
Carrier:	water	water
Spray Volume, Unit:	15 gpa	15 gpa
Propellant:	air	air

Trial Comments

General Phyto 7, 14, 28, 42
 % Stunting 7, 14, 28, 42 days after pre
 Rate weed control 14, 28, 42
 Height 14 after pre
 Date of 50% flowering - August 6, 2007
 Yield

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Trial ID: L0751

Study Dir.: Kevin Horky

Location: Havelock

Investigator: Dr. Mark Bernards

Weed Code				SORVU	SORVU	ABUTH	AMAPA	SETVI	HELAN		
Crop Code				PHYGEN	PHYSTU	SORVU	SORVU	SORVU	SORVU		
Rating Data Type				%	%	%	%	%	%		
Rating Unit											
Rating Date				27/Jun/2007	27/Jun/2007	5/Jul/2007	5/Jul/2007	5/Jul/2007	5/Jul/2007		
ARM Action Codes											
# Subsamples, Dec.											
Trt	Treatment	Rate	Grow								
No.	Name	Rate	Unit	Stg	Plot	1	2	3	4	5	6
1	Check				101	0	0	0	0	0	0
					204	0	0	0	0	0	0
					316	0	0	0	0	0	0
					Mean =	0	0	0	0	0	0
2	Lumax	2 qt/a	epp		102	0	0	90	95	55	90
					207	0	0	85	95	80	99
					309	0	0	90	99	95	99
					Mean =	0	0	88	96	77	96
3	Lumax	2.5 qt/a	epp		103	0	0	95	99	85	99
					205	0	0	99	99	90	99
					304	0	0	90	99	90	99
					Mean =	0	0	95	99	88	99
4	Lumax	5 qt/a	epp		104	0	0	99	99	90	99
					213	0	0	99	99	99	99
					306	0	0	99	99	95	99
					Mean =	0	0	99	99	95	99
5	Lexar	3 qt/a	epp		105	0	0	95	95	85	99
					217	0	0	95	90	90	99
					312	0	0	95	95	95	99
					Mean =	0	0	95	93	90	99
6	Lexar	6 qt/a	epp		106	0	0	99	99	50	99
					209	0	0	99	99	99	99
					313	0	0	99	99	99	99
					Mean =	0	0	99	99	83	99
7	Bicep II Magnum	2.1 qt/a	epp		107	0	0	50	60	60	99
					206	0	0	60	95	60	99
					310	0	0	90	99	90	90
					Mean =	0	0	67	85	70	96
8	Bicep II Magnum	4.2 qt/a	epp		108	0	0	65	90	85	99
					210	0	0	70	85	90	99
					307	0	0	85	99	99	99
					Mean =	0	0	73	91	91	99
9	Lumax	1.25 qt/a	epp		109	0	0	95	99	65	99
					212	0	0	90	95	85	99
		1.25 qt/a	pre		302	0	0	95	99	80	99
					Mean =	0	0	93	98	77	99
10	Lumax	2.5 qt/a	pre		110	0	0	90	95	40	99
					201	0	0	95	99	85	99
					314	0	0	95	95	90	99
					Mean =	0	0	93	96	72	99

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Weed Code					SORVU	SORVU	ABUTH	AMAPA	SETVI	HELAN	
Crop Code					PHYGEN	PHYSTU	SORVU	SORVU	SORVU	SORVU	
Rating Data Type					%	%	CONTROL	CONTROL	CONTROL	CONTROL	
Rating Unit					%	%	%	%	%	%	
Rating Date					27/Jun/2007	27/Jun/2007	5/Jul/2007	5/Jul/2007	5/Jul/2007	5/Jul/2007	
ARM Action Codes											
# Subsamples, Dec.											
Trt	Treatment	Rate	Grow								
No.	Name	Rate	Unit	Stg	Plot	1	2	3	4	5	6
11	Lumax	5	qt/a	pre	111	0	0	80	75	40	99
					216	0	0	99	99	85	99
					308	0	0	99	99	90	99
					Mean =	0	0	93	91	72	99
12	Lexar	3	qt/a	pre	112	0	0	90	95	40	99
					215	0	0	95	95	80	99
					318	0	0	95	95	60	99
					Mean =	0	0	93	95	60	99
13	Lexar	6	qt/a	pre	113	0	0	85	95	85	99
					211	0	0	90	95	90	99
					317	0	0	99	99	80	99
					Mean =	0	0	91	96	85	99
14	Bicep II Magnum	2.1	qt/a	pre	114	0	0	75	95	50	99
					218	0	0	75	90	80	95
					305	0	0	75	90	85	99
					Mean =	0	0	75	92	72	98
15	Bicep II Magnum	4.2	qt/a	pre	115	0	0	90	95	50	99
					208	0	0	80	95	70	99
					301	0	0	95	99	75	99
					Mean =	0	0	88	96	65	99
16	Lumax	2	qt/a	pre	116	0	0	95	95	60	99
	Aatrex	0.5	lb ai/a	pre	202	0	0	99	99	80	99
					303	0	0	99	99	90	99
					Mean =	0	0	98	98	77	99
17	Lexar	2.25	qt/a	pre	117	0	0	90	95	50	99
					214	0	0	90	95	85	99
					315	0	0	90	95	80	99
					Mean =	0	0	90	95	72	99
18	Check Hand Weed				118	0	0	99	99	99	99
					203	0	0	99	99	99	99
					311	0	0	99	99	99	99
					Mean =	0	0	99	99	99	99

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Weed Code				SORVU	SORVU	SORVU	ABUTH	AMAPA	SETVI		
Crop Code				PHYGEN	PHYSTU	HEIGHT	SORVU	SORVU	SORVU		
Rating Data Type				%	%	INCHES	CONTROL	CONTROL	CONTROL		
Rating Unit				%	%		%	%	%		
Rating Date				5/Jul/2007	5/Jul/2007	5/Jul/2007	17/Jul/2007	17/Jul/2007	17/Jul/2007		
ARM Action Codes											
# Subsamples, Dec.											
Trt	Treatment	Rate	Grow								
No.	Name	Rate	Unit	Stg	Plot	7	8	9	10	11	12
1	Check				101	0	0	5	0	0	0
					204	0	0	5	0	0	0
					316	0	0	6	0	0	0
					Mean =	0	0	5	0	0	0
2	Lumax	2 qt/a	epp		102	0	0	5	90	99	85
					207	0	0	5	60	99	70
					309	0	0	5	80	99	75
					Mean =	0	0	5	77	99	77
3	Lumax	2.5 qt/a	epp		103	0	0	5	85	99	85
					205	0	0	5	90	99	95
					304	0	0	5	80	95	90
					Mean =	0	0	5	85	98	90
4	Lumax	5 qt/a	epp		104	0	0	5	99	99	95
					213	0	0	5	95	99	90
					306	0	0	5	99	99	95
					Mean =	0	0	5	98	99	93
5	Lexar	3 qt/a	epp		105	0	0	5	85	99	85
					217	0	0	5	95	95	85
					312	0	0	5	95	99	85
					Mean =	0	0	5	92	98	85
6	Lexar	6 qt/a	epp		106	0	0	5	95	99	85
					209	0	0	5	85	99	95
					313	0	0	5	99	99	99
					Mean =	0	0	5	93	99	93
7	Bicep II Magnum	2.1 qt/a	epp		107	0	0	5	30	99	90
					206	0	0	6	30	99	90
					310	0	0	5	30	90	90
					Mean =	0	0	5	30	96	90
8	Bicep II Magnum	4.2 qt/a	epp		108	0	0	6	30	99	90
					210	0	0	5	40	99	90
					307	0	0	5	70	99	90
					Mean =	0	0	5	47	99	90
9	Lumax	1.25 qt/a	epp		109	0	0	5	75	99	60
	Lumax	1.25 qt/a	pre		212	0	0	5	85	99	85
					302	0	0	5	90	90	90
					Mean =	0	0	5	83	96	78
10	Lumax	2.5 qt/a	pre		110	0	0	5	75	99	50
					201	0	0	5	95	99	60
					314	0	0	5	90	99	75
					Mean =	0	0	5	87	99	62
11	Lumax	5 qt/a	pre		111	0	0	5	80	99	40
					216	0	0	6	90	99	80
					308	0	0	5	85	99	70
					Mean =	0	0	5	85	99	63

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Weed Code Crop Code Rating Data Type Rating Unit Rating Date ARM Action Codes # Subsamples, Dec.					SORVU PHYGEN %	SORVU PHYSTU %	SORVU HEIGHT INCHES	ABUTH SORVU CONTROL %	AMAPA SORVU CONTROL %	SETVI SORVU CONTROL %	
					5/Jul/2007	5/Jul/2007	5/Jul/2007	17/Jul/2007	17/Jul/2007	17/Jul/2007	
Trt	Treatment	Rate	Grow								
No.	Name	Rate	Unit	Stg	Plot	7	8	9	10	11	12
12	Lexar	3	qt/a	pre	112	0	0	6	90	95	40
					215	0	0	6	85	99	70
					318	0	0	4	80	99	40
					Mean =	0	0	5	85	98	50
13	Lexar	6	qt/a	pre	113	0	0	5	80	99	60
					211	0	0	5	90	99	90
					317	0	0	5	95	99	90
					Mean =	0	0	5	88	99	80
14	Bicep II Magnum	2.1	qt/a	pre	114	0	0	5	50	99	50
					218	0	0	5	80	95	50
					305	0	0	5	30	99	80
					Mean =	0	0	5	53	98	60
15	Bicep II Magnum	4.2	qt/a	pre	115	0	0	5	75	99	60
					208	0	0	5	85	99	50
					301	0	0	5	90	95	80
					Mean =	0	0	5	83	98	63
16	Lumax	2	qt/a	pre	116	0	0	5	85	99	50
	Aatrex	0.5	lb ai/a	pre	202	0	0	5	95	99	60
					303	0	0	5	95	99	95
					Mean =	0	0	5	92	99	68
17	Lexar	2.25	qt/a	pre	117	0	0	5	99	95	50
					214	0	0	5	70	99	70
					315	0	0	6	80	99	70
					Mean =	0	0	5	83	98	63
18	Check Hand Weed				118	0	0	5	99	99	99
					203	0	0	6	99	99	99
					311	0	0	6	99	99	99
					Mean =	0	0	6	99	99	99

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Weed Code Crop Code Rating Data Type Rating Unit Rating Date ARM Action Codes # Subsamples, Dec.					HELAN SORVU CONTROL %	SORVU PHYGEN %	SORVU PHYSTU %	ABUTH SORVU CONTROL %	AMAPA SORVU CONTROL %	SETVI SORVU CONTROL %
					17/Jul/2007	17/Jul/2007	17/Jul/2007	1/Aug/2007	1/Aug/2007	1/Aug/2007
Trt No.	Treatment Name	Rate	Grow Unit	Plot	13	14	15	16	17	18
1	Check			101	0	0	0	0	0	0
				204	0	0	0	0	0	0
				316	0	0	0	0	0	0
				Mean =	0	0	0	0	0	0
2	Lumax	2 qt/a	epp	102	90	0	0	85	99	95
				207	99	0	0	70	95	60
				309	99	0	0	85	99	70
				Mean =	96	0	0	80	98	75
3	Lumax	2.5 qt/a	epp	103	99	0	0	80	99	90
				205	99	0	0	80	99	90
				304	99	0	0	80	95	90
				Mean =	99	0	0	80	98	90
4	Lumax	5 qt/a	epp	104	99	0	0	99	99	95
				213	99	0	0	99	95	90
				306	99	0	0	99	99	90
				Mean =	99	0	0	99	98	92
5	Lexar	3 qt/a	epp	105	99	0	0	90	95	90
				217	99	0	0	90	90	70
				312	99	0	0	85	90	80
				Mean =	99	0	0	88	92	80
6	Lexar	6 qt/a	epp	106	99	0	0	95	95	90
				209	99	0	0	90	95	90
				313	99	0	0	95	95	90
				Mean =	99	0	0	93	95	90
7	Bicep II Magnum	2.1 qt/a	epp	107	99	0	0	30	80	70
				206	99	0	0	40	80	80
				310	90	0	0	35	70	90
				Mean =	96	0	0	35	77	80
8	Bicep II Magnum	4.2 qt/a	epp	108	99	0	0	40	60	75
				210	99	0	0	45	80	90
				307	99	0	0	50	90	90
				Mean =	99	0	0	45	77	85
9	Lumax	1.25 qt/a	epp	109	99	0	0	90	95	60
	Lumax	1.25 qt/a	pre	212	99	0	0	85	90	80
				302	99	0	0	90	95	80
				Mean =	99	0	0	88	93	73
10	Lumax	2.5 qt/a	pre	110	99	0	0	80	95	60
				201	99	0	0	80	99	65
				314	99	0	0	80	90	70
				Mean =	99	0	0	80	95	65
11	Lumax	5 qt/a	pre	111	99	0	0	75	90	55
				216	99	0	0	80	90	70
				308	99	0	0	75	90	70
				Mean =	99	0	0	77	90	65

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Weed Code Crop Code Rating Data Type Rating Unit Rating Date ARM Action Codes # Subsamples, Dec.					HELAN SORVU CONTROL %	SORVU PHYGEN %	SORVU PHYSTU %	ABUTH SORVU CONTROL %	AMAPA SORVU CONTROL %	SETVI SORVU CONTROL %	
					17/Jul/2007	17/Jul/2007	17/Jul/2007	1/Aug/2007	1/Aug/2007	1/Aug/2007	
Trt	Treatment	Rate	Grow								
No.	Name	Rate	Unit	Stg	Plot	13	14	15	16	17	18
12	Lexar	3	qt/a	pre	112	99	0	0	75	85	50
					215	99	0	0	70	85	60
					318	99	0	0	80	85	50
					Mean =	99	0	0	75	85	53
13	Lexar	6	qt/a	pre	113	99	0	0	90	95	70
					211	99	0	0	90	95	90
					317	99	0	0	90	95	80
					Mean =	99	0	0	90	95	80
14	Bicep II Magnum	2.1	qt/a	pre	114	99	0	0	50	90	60
					218	95	0	0	70	85	60
					305	99	0	0	45	80	80
					Mean =	98	0	0	55	85	67
15	Bicep II Magnum	4.2	qt/a	pre	115	99	0	0	70	90	60
					208	99	0	0	65	95	50
					301	99	0	0	70	85	70
					Mean =	99	0	0	68	90	60
16	Lumax	2	qt/a	pre	116	99	0	0	90	95	60
	Aatrex	0.5	lb ai/a	pre	202	99	0	0	90	99	65
					303	99	0	0	95	99	90
					Mean =	99	0	0	92	98	72
17	Lexar	2.25	qt/a	pre	117	99	0	0	95	95	60
					214	99	0	0	85	95	60
					315	99	0	0	90	90	70
					Mean =	99	0	0	90	93	63
18	Check Hand Weed				118	99	0	0	99	99	99
					203	99	0	0	99	99	90
					311	99	0	0	99	99	90
					Mean =	99	0	0	99	99	93

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Weed Code Crop Code Rating Data Type Rating Unit Rating Date ARM Action Codes # Subsamples, Dec.				HELAN SORVU CONTROL %	SORVU PHYGEN %	SORVU YIELD LB	SORVU MOICON %	SORVU YIELD bu/ac	
				1/Aug/2007	1/Aug/2007	1/Nov/2007	1/Nov/2007	1/Nov/2007 TY1 1	
Trt	Treatment	Rate	Grow	Plot	19	20	21	22	23
No.	Name	Rate	Unit	Stg					
1	Check			101	0	0	5	16	11.4
				204	0	0	1	16	3.0
				316	0	0	2	16	4.5
				Mean =	0	0	3	16	6.3
2	Lumax	2 qt/a	epp	102	90	0	30	16	74.5
				207	95	0	23	17	58.9
				309	95	0	30	16	76.6
				Mean =	93	0	28	16	70.0
3	Lumax	2.5 qt/a	epp	103	99	0	27	16	69.1
				205	99	0	29	17	73.8
				304	99	0	25	16	63.5
				Mean =	99	0	27	16	68.8
4	Lumax	5 qt/a	epp	104	99	0	33	16	84.2
				213	99	0	36	16	90.6
				306	99	0	37	16	93.9
				Mean =	99	0	35	16	89.5
5	Lexar	3 qt/a	epp	105	99	0	25	17	62.6
				217	99	0	16	17	40.7
				312	95	0	34	16	85.2
				Mean =	98	0	25	16	62.9
6	Lexar	6 qt/a	epp	106	99	0	34	16	86.6
				209	99	0	35	16	88.8
				313	99	0	41	16	102.6
				Mean =	99	0	37	16	92.7
7	Bicep II Magnum	2.1 qt/a	epp	107	99	0	1	17	3.3
				206	90	0	2	17	4.5
				310	90	0	3	17	8.3
				Mean =	93	0	2	17	5.4
8	Bicep II Magnum	4.2 qt/a	epp	108	95	0	4	17	9.3
				210	90	0	13	16	33.1
				307	90	0	23	17	57.4
				Mean =	92	0	13	17	33.3
9	Lumax	1.25 qt/a	epp	109	95	0	32	16	81.5
	Lumax	1.25 qt/a	pre	212	90	0	30	16	77.1
				302	95	0	38	16	96.5
				Mean =	93	0	34	16	85.0
10	Lumax	2.5 qt/a	pre	110	95	0	23	16	57.7
				201	90	0	36	16	90.5
				314	90	0	27	16	67.5
				Mean =	92	0	28	16	71.9
11	Lumax	5 qt/a	pre	111	95	0	29	16	72.6
				216	90	0	29	16	73.7
				308	90	0	27	17	67.1
				Mean =	92	0	28	16	71.1

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Weed Code Crop Code Rating Data Type Rating Unit Rating Date ARM Action Codes # Subsamples, Dec.					HELAN SORVU CONTROL %	SORVU PHYGEN %	SORVU YIELD LB	SORVU MOICON %	SORVU YIELD bu/ac	
					1/Aug/2007	1/Aug/2007	1/Nov/2007	1/Nov/2007	1/Nov/2007 TY1 1	
Trt No.	Treatment Name	Rate	Unit	Grow Stg	Plot	19	20	21	22	23
12	Lexar	3	qt/a	pre	112	95	0	30	16	74.7
					215	90	0	30	16	74.7
					318	90	0	7	16	17.2
					Mean =	92	0	22	16	55.5
13	Lexar	6	qt/a	pre	113	99	0	34	16	87.0
					211	95	0	32	16	81.5
					317	99	0	14	17	36.3
					Mean =	98	0	27	16	68.2
14	Bicep II Magnum	2.1	qt/a	pre	114	95	0	4	17	10.6
					218	90	0	4	16	9.6
					305	90	0	19	17	48.8
					Mean =	92	0	9	17	23.0
15	Bicep II Magnum	4.2	qt/a	pre	115	95	0	16	16	41.0
					208	90	0	16	17	41.2
					301	90	0	35	16	88.0
					Mean =	92	0	22	16	56.7
16	Lumax	2	qt/a	pre	116	99	0	27	16	67.1
	Aatrex	0.5	lb ai/a	pre	202	99	0	29	16	74.2
					303	99	0	34	16	84.9
					Mean =	99	0	30	16	75.4
17	Lexar	2.25	qt/a	pre	117	99	0	25	16	62.6
					214	99	0	26	16	66.1
					315	95	0	23	16	56.8
					Mean =	98	0	24	16	61.8
18	Check Hand Weed				118	99	0	29	16	74.3
					203	99	0	29	16	73.3
					311	99	0	29	16	72.2
					Mean =	99	0	29	16	73.2
Column 23: TY1 = 2.592857*[21]*(100-[22])/86										

University of Nebraska

Weed Control in Sorghum I

Trial ID: L0751

Study Dir.: Kevin Horkey

Location: Havelock

Investigator: Dr. Mark Bernards

Weed Code				ABUTH	AMAPA	SETVI	HELAN		
Crop Code		SORVU	SORVU	SORVU	SORVU	SORVU	SORVU		
Rating Data Type		PHYGEN	PHYSTU	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit		%	%	%	%	%	%		
Rating Date		27/Jun/2007	27/Jun/2007	5/Jul/2007	5/Jul/2007	5/Jul/2007	5/Jul/2007		
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Grow Stg	1	2	3	4	5	6
1	Check			0 a	0 a	0 c	0 b	0 d	0 b
2	Lumax	2 qt/a	epp	0 a	0 a	88 a	96 a	77 abc	96 a
3	Lumax	2.5 qt/a	epp	0 a	0 a	95 a	99 a	88 abc	99 a
4	Lumax	5 qt/a	epp	0 a	0 a	99 a	99 a	95 ab	99 a
5	Lexar	3 qt/a	epp	0 a	0 a	95 a	93 a	90 abc	99 a
6	Lexar	6 qt/a	epp	0 a	0 a	99 a	99 a	83 abc	99 a
7	Bicep II Magnum	2.1 qt/a	epp	0 a	0 a	67 b	85 a	70 abc	96 a
8	Bicep II Magnum	4.2 qt/a	epp	0 a	0 a	73 b	91 a	91 abc	99 a
9	Lumax	1.25 qt/a	epp	0 a	0 a	93 a	98 a	77 abc	99 a
	Lumax	1.25 qt/a	pre						
10	Lumax	2.5 qt/a	pre	0 a	0 a	93 a	96 a	72 abc	99 a
11	Lumax	5 qt/a	pre	0 a	0 a	93 a	91 a	72 abc	99 a
12	Lexar	3 qt/a	pre	0 a	0 a	93 a	95 a	60 c	99 a
13	Lexar	6 qt/a	pre	0 a	0 a	91 a	96 a	85 abc	99 a
14	Bicep II Magnum	2.1 qt/a	pre	0 a	0 a	75 b	92 a	72 abc	98 a
15	Bicep II Magnum	4.2 qt/a	pre	0 a	0 a	88 a	96 a	65 bc	99 a
16	Lumax	2 qt/a	pre	0 a	0 a	98 a	98 a	77 abc	99 a
	Aatrex	0.5 lb ai/a	pre						
17	Lexar	2.25 qt/a	pre	0 a	0 a	90 a	95 a	72 abc	99 a
18	Check Hand Weed			0 a	0 a	99 a	99 a	99 a	99 a
	LSD (P=.05)			0.0	0.0	10.4	10.3	18.4	3.1
	Standard Deviation			0.0	0.0	6.3	6.2	11.1	1.9
	CV			0.0	0.0	7.36	6.9	14.82	2.0
	Grand Mean			0.0	0.0	85.0	89.93	74.59	93.09
	Bartlett's X2			0.0	0.0	19.719	30.646	19.189	1.343
	P(Bartlett's X2)			.	.	0.032*	0.001*	0.205	0.511
	Replicate F			0.000	0.000	4.190	2.504	22.160	0.134
	Replicate Prob(F)			1.0000	1.0000	0.0236	0.0967	0.0001	0.8753
	Treatment F			0.000	0.000	40.986	40.300	11.281	468.451
	Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Nebraska

Weed Code				SORVU	SORVU	SORVU	ABUTH	AMAPA	SETVI	
Crop Code				PHYGEN	PHYSTU	HEIGHT	SORVU	SORVU	SORVU	
Rating Data Type				%	%	INCHES	CONTROL	CONTROL	CONTROL	
Rating Unit				%	%		%	%	%	
Rating Date				5/Jul/2007	5/Jul/2007	5/Jul/2007	17/Jul/2007	17/Jul/2007	17/Jul/2007	
ARM Action Codes										
# Subsamples, Dec.										
Trt	Treatment	Rate	Grow							
No.	Name	Rate	Unit	Stg	7	8	9	10	11	12
1	Check				0 a	0 a	5 a	0 d	0 b	0 e
2	Lumax	2 qt/a	epp		0 a	0 a	5 a	77 a	99 a	77 a-d
3	Lumax	2.5 qt/a	epp		0 a	0 a	5 a	85 a	98 a	90 abc
4	Lumax	5 qt/a	epp		0 a	0 a	5 a	98 a	99 a	93 ab
5	Lexar	3 qt/a	epp		0 a	0 a	5 a	92 a	98 a	85 abc
6	Lexar	6 qt/a	epp		0 a	0 a	5 a	93 a	99 a	93 ab
7	Bicep II Magnum	2.1 qt/a	epp		0 a	0 a	5 a	30 c	96 a	90 abc
8	Bicep II Magnum	4.2 qt/a	epp		0 a	0 a	5 a	47 bc	99 a	90 abc
9	Lumax	1.25 qt/a	epp		0 a	0 a	5 a	83 a	96 a	78 a-d
	Lumax	1.25 qt/a	pre							
10	Lumax	2.5 qt/a	pre		0 a	0 a	5 a	87 a	99 a	62 bcd
11	Lumax	5 qt/a	pre		0 a	0 a	5 a	85 a	99 a	63 bcd
12	Lexar	3 qt/a	pre		0 a	0 a	5 a	85 a	98 a	50 d
13	Lexar	6 qt/a	pre		0 a	0 a	5 a	88 a	99 a	80 abc
14	Bicep II Magnum	2.1 qt/a	pre		0 a	0 a	5 a	53 b	98 a	60 cd
15	Bicep II Magnum	4.2 qt/a	pre		0 a	0 a	5 a	83 a	98 a	63 bcd
16	Lumax	2 qt/a	pre		0 a	0 a	5 a	92 a	99 a	68 bcd
	Aatrex	0.5 lb ai/a	pre							
17	Lexar	2.25 qt/a	pre		0 a	0 a	5 a	83 a	98 a	63 bcd
18	Check Hand Weed				0 a	0 a	6 a	99 a	99 a	99 a
LSD (P=.05)					0.0	0.0	0.5	17.8	3.6	18.1
Standard Deviation					0.0	0.0	0.3	10.7	2.2	10.9
CV					0.0	0.0	6.51	14.13	2.34	14.96
Grand Mean					0.0	0.0	5.03	75.52	92.72	72.52
Bartlett's X2					0.0	0.0	11.637	19.071	4.406	10.895
P(Bartlett's X2)					.	.	0.635	0.162	0.732	0.538
Replicate F					0.000	0.000	1.263	0.549	1.275	6.935
Replicate Prob(F)					1.0000	1.0000	0.2958	0.5824	0.2925	0.0030
Treatment F					0.000	0.000	0.914	18.133	342.010	13.554
Treatment Prob(F)					1.0000	1.0000	0.5648	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Nebraska

Weed Code				HELAN	SORVU	SORVU	ABUTH	AMAPA	SETVI	
Crop Code				SORVU	SORVU	SORVU	SORVU	SORVU	SORVU	
Rating Data Type				CONTROL	PHYGEN	PHYSTU	CONTROL	CONTROL	CONTROL	
Rating Unit				%	%	%	%	%	%	
Rating Date				17/Jul/2007	17/Jul/2007	17/Jul/2007	1/Aug/2007	1/Aug/2007	1/Aug/2007	
ARM Action Codes										
# Subsamples, Dec.										
Trt	Treatment	Rate	Grow							
No.	Name	Rate	Unit	Stg	13	14	15	16	17	18
1	Check				0 b	0 a	0 a	0 h	0 c	0 e
2	Lumax	2 qt/a	epp		96 a	0 a	0 a	80 bcd	98 a	75 a-d
3	Lumax	2.5 qt/a	epp		99 a	0 a	0 a	80 bcd	98 a	90 ab
4	Lumax	5 qt/a	epp		99 a	0 a	0 a	99 a	98 a	92 a
5	Lexar	3 qt/a	epp		99 a	0 a	0 a	88 abc	92 a	80 abc
6	Lexar	6 qt/a	epp		99 a	0 a	0 a	93 a	95 a	90 ab
7	Bicep II Magnum	2.1 qt/a	epp		96 a	0 a	0 a	35 g	77 b	80 abc
8	Bicep II Magnum	4.2 qt/a	epp		99 a	0 a	0 a	45 f	77 b	85 abc
9	Lumax	1.25 qt/a	epp		99 a	0 a	0 a	88 abc	93 a	73 a-d
	Lumax	1.25 qt/a	pre							
10	Lumax	2.5 qt/a	pre		99 a	0 a	0 a	80 bcd	95 a	65 bcd
11	Lumax	5 qt/a	pre		99 a	0 a	0 a	77 cd	90 a	65 bcd
12	Lexar	3 qt/a	pre		99 a	0 a	0 a	75 d	85 ab	53 d
13	Lexar	6 qt/a	pre		99 a	0 a	0 a	90 ab	95 a	80 abc
14	Bicep II Magnum	2.1 qt/a	pre		98 a	0 a	0 a	55 e	85 ab	67 bcd
15	Bicep II Magnum	4.2 qt/a	pre		99 a	0 a	0 a	68 d	90 a	60 cd
16	Lumax	2 qt/a	pre		99 a	0 a	0 a	92 ab	98 a	72 a-d
	Aatrex	0.5 lb ai/a	pre							
17	Lexar	2.25 qt/a	pre		99 a	0 a	0 a	90 ab	93 a	63 cd
18	Check Hand Weed				99 a	0 a	0 a	99 a	99 a	93 a
LSD (P=.05)					3.1	0.0	0.0	8.1	7.9	14.8
Standard Deviation					1.9	0.0	0.0	4.8	4.7	8.9
CV					2.0	0.0	0.0	6.52	5.45	12.43
Grand Mean					93.09	0.0	0.0	74.15	86.44	71.28
Bartlett's X2					1.343	0.0	0.0	12.608	18.197	9.695
P(Bartlett's X2)					0.511	.	.	0.32	0.077	0.784
Replicate F					0.134	0.000	0.000	0.139	0.250	2.462
Replicate Prob(F)					0.8753	1.0000	1.0000	0.8708	0.7802	0.1003
Treatment F					468.451	0.000	0.000	84.729	69.016	17.355
Treatment Prob(F)					0.0001	1.0000	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Nebraska

Weed Code				HELAN	SORVU	SORVU	SORVU	SORVU	SORVU
Crop Code				SORVU	PHYGEN	YIELD	MOICON	YIELD	
Rating Data Type				CONTROL	PHYGEN	YIELD	MOICON	YIELD	
Rating Unit				%	%	LB	%	bu/ac	
Rating Date				1/Aug/2007	1/Aug/2007	1/Nov/2007	1/Nov/2007	1/Nov/2007	
ARM Action Codes									
# Subsamples, Dec.									TY1
									1
Trt	Treatment	Rate	Grow						
No.	Name	Rate	Unit	Stg	19	20	21	22	23
1	Check				0 c	0 a	3 d	16 a	6.3 d
2	Lumax	2	qt/a	epp	93 ab	0 a	28 ab	16 a	70.0 ab
3	Lumax	2.5	qt/a	epp	99 a	0 a	27 ab	16 a	68.8 ab
4	Lumax	5	qt/a	epp	99 a	0 a	35 a	16 a	89.5 a
5	Lexar	3	qt/a	epp	98 ab	0 a	25 abc	16 a	62.9 abc
6	Lexar	6	qt/a	epp	99 a	0 a	37 a	16 a	92.7 a
7	Bicep II Magnum	2.1	qt/a	epp	93 b	0 a	2 d	17 a	5.4 d
8	Bicep II Magnum	4.2	qt/a	epp	92 b	0 a	13 bcd	17 a	33.3 bcd
9	Lumax	1.25	qt/a	epp	93 ab	0 a	34 a	16 a	85.0 a
	Lumax	1.25	qt/a	pre					
10	Lumax	2.5	qt/a	pre	92 b	0 a	28 ab	16 a	71.9 ab
11	Lumax	5	qt/a	pre	92 b	0 a	28 ab	16 a	71.1 ab
12	Lexar	3	qt/a	pre	92 b	0 a	22 abc	16 a	55.5 abc
13	Lexar	6	qt/a	pre	98 ab	0 a	27 ab	16 a	68.2 ab
14	Bicep II Magnum	2.1	qt/a	pre	92 b	0 a	9 cd	17 a	23.0 cd
15	Bicep II Magnum	4.2	qt/a	pre	92 b	0 a	22 abc	16 a	56.7 abc
16	Lumax	2	qt/a	pre	99 a	0 a	30 ab	16 a	75.4 ab
	Aatrex	0.5	lb ai/a	pre					
17	Lexar	2.25	qt/a	pre	98 ab	0 a	24 abc	16 a	61.8 abc
18	Check Hand Weed				99 a	0 a	29 ab	16 a	73.2 ab
LSD (P=.05)					3.5	0.0	11.0	0.4	28.00
Standard Deviation					2.1	0.0	6.6	0.3	16.80
CV					2.36	0.0	28.11	1.64	28.23
Grand Mean					89.87	0.0	23.54	16.24	59.49
Bartlett's X2					2.289	0.0	37.155	17.573	36.738
P(Bartlett's X2)					0.997	.	0.003*	0.416	0.004*
Replicate F					7.465	0.000	0.504	0.226	0.503
Replicate Prob(F)					0.0021	1.0000	0.6086	0.7991	0.6090
Treatment F					343.642	0.000	7.228	1.341	7.181
Treatment Prob(F)					0.0001	1.0000	0.0001	0.2272	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Column 23: TY1 = 2.592857*[21]*(100-[22])/86