

2007 Roundup Ready Corn Program with Status, Callisto, SureStart and BAS 756

Trial ID: 07CRRL-1 Protocol ID: 07CRRL-1
Location: Concord, NE Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Concord
State/Prov.: NE
Postal Code: 68728
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory **Country:** USA
Organization: University of Nebraska **Phone No:** 402-584-2261
Address 1: 57905 866 RD **Fax No:** 402-584-3859
City: Concord
State/Prov: NE
Postal Code: 68728

Crop Description

Crop 1: ZEAMX Zea mays **Corn**
Variety: Pioneer 35A34 RRL
BBCH Scale: BCOR **Planting Date:** 05-21-07
Planting Method: seeded **Rate, Unit:** 24503 s/a
Depth, Unit: 2 in
Row Spacing, Unit: 30 in
Harvest Date: 10-30-07 **Harvest Equipment:** Gleaner K
Harvested Width, Unit: 7.5 ft **Harvested Length, Unit:** 27 ft
% Standard Moisture: 15.5 **Moisture Meter:** Almaco
Weighing Equipment: Almaco

Pest Description

Pest 1 Type: W **Code:** SETVI **Setaria viridis**
Common Name: Green foxtail
Pest 2 Type: W **Code:** AMATU **Amaranthus tuberculatus**
Common Name: Tall waterhemp
Pest 3 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	Soybean	glyphosate	2006

Maintenance

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.	05-11-07	Roundup OriginalMAX	5.5	lbai/ga	sl	32	oz/A

Soil Description

% Sand: 14 **% OM:** 3.2 **Texture:** SILTY CLAY LOAM
% Silt: 56 **pH:** 6.3 **Soil Name:** Kennebec Maskell
% Clay: 30 **CEC:** 16.2 **Fert. Level:** EXCELLENT

Application Description

	A	B	C	D
Application Date:	05-23-07	06-15-07	06-23-07	07-02-07
Time of Day:	4:30 pm	12:30 pm	12:30 pm	4:00 pm
Application Method:	spray	spray	spray	spray
Application Timing:	PRE	EPOST	MPOST	LPOST
Application Placement:	surface	foliar	foliar	foliar
Air Temperature, Unit:	73 f	85 f	75 f	92 f
% Relative Humidity:	42	53	72	48
Wind Velocity, Unit:	3 mph	3 mph	3 mph	3 mph
Wind Direction:	nw	s	se	s
Dew Presence (Y/N):	n	n	n	n
Soil Temperature, Unit:	70 f	72 f	72 f	80 f
Soil Moisture:	wet	adequate	wet	dry
% Cloud Cover:	75	75	30	75

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH	BBCH
Stage Majority, Percent:		V4	V6	V9
Height, Unit:		6 in	10 in	20 in

Pest Stage At Each Application

	A		B		C		D	
Pest 1 Code, Disc., Scale:	SETVI	W	SETVI	W	SETVI	W	SETVI	W
Height, Unit:			4	in	7	in	9	in
Height Minimum, Maximum:			2	6	4	10	6	12
Density, Unit:			2	m2	2	m2	2	m2
Pest 2 Code, Disc., Scale:	AMATU	W	AMATU	W	AMATU	W	AMATU	W
Height, Unit:			6	in	12	in	18	in
Height Minimum, Maximum:			2	10	4	18		
Density, Unit:			5	m2	5	m2		
Pest 3 Code, Disc., Scale:	ABUTH	W	ABUTH	W	ABUTH	W	ABUTH	W
Height, Unit:			3	in	6	in	10	in
Height Minimum, Maximum:			2	4	3	8		
Density, Unit:			1	m2	1	m2		

Application Equipment

	A		B		C	
Appl. Equipment:	backpack		BACKPACK		BACKPACK	
Operating Pressure, Unit:	20	psi	40	PSI	40	PSI
Nozzle Type:	Turbo Tee		TURBO TEE		TURBO TEE	
Nozzle Size:	11003		11002		11002	
Nozzle Spacing, Unit:	20	IN	20	IN	20	IN
Boom Length, Unit:	10	FT	10	FT	10	FT
Boom Height, Unit:	12	IN	12	IN	12	IN
Ground Speed, Unit:	2.7 MPH		2.7 MPH		2.7 MPH	
Carrier:	WATER		WATER		WATER	
Spray Volume, Unit:	20	GPA	20	GPA	20	GPA
Mix Size, Unit:	1.8	Liters	1.8	Liters	1.8	Liters
Propellant:	co2		co2		co2	

	D
Appl. Equipment:	BACKPACK
Operating Pressure, Unit:	40 PSI
Nozzle Type:	TURBO TEE
Nozzle Size:	11002
Nozzle Spacing, Unit:	20 IN
Boom Length, Unit:	10 FT
Boom Height, Unit:	12 IN
Ground Speed, Unit:	2.7 MPH
Carrier:	WATER
Spray Volume, Unit:	20 GPA
Mix Size, Unit:	1.8 Liters
Propellant:	co2

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Trial ID: 07CRRL-1
 Location: Concord, NE

Protocol ID: 07CRRL-1
 Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description						Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	
Rating Date						10-30-07	10-30-07	06-23-07	07-02-07	07-25-07	06-23-07	
Rating Data Type						Yield@15.5%	Moisture	Stunting	Stunting	Lodge	Control	
Rating Unit						bu/A	%	%	%	%	Percent	
Days After First/Last Applic.						160 120	160 120	31 0	40 0	63 23	31 0	
Trt-Eval Interval						160 DA-A	160 DA-A					
Plant-Eval Interval						162 DP-1	162 DP-1	33 DP-1	42 DP-1	65 DP-1	33 DP-1	
Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage						
1	Nontreated Check						73.5 a	14.9 a	0.0 a	0.0 a	0.7 a	0.0 c
2	SureStart	1.75	pt/a			PRE	114.0 a	14.9 a	0.0 a	0.0 a	0.3 a	91.7 b
	Durango	24	oz/a			LPOST						
	Ammonium Sulfate	2.5	lb/a	12.5	lb/100 gal	LPOST						
3	SureStart	1.75	pt/a			EPOST	110.6 a	15.1 a	3.3 a	0.0 a	0.7 a	99.0 a
	Durango	24	oz/a			EPOST						
	Ammonium Sulfate	2.5	lb/a	12.5	lb/100 gal	EPOST						
4	Roundup WeatherMAX	22	oz/a			MPOST	116.3 a	14.9 a		0.0 a	7.7 a	
	Ammonium Sulfate	8.5	lb/100 gal			MPOST						
5	Roundup WeatherMAX	22	oz/a			LPOST	102.1 a	15.0 a		0.0 a	1.7 a	
	Ammonium Sulfate	8.5	lb/100 gal			LPOST						
6	Roundup WeatherMAX	22	oz/a			MPOST	116.6 a	15.3 a		0.0 a	2.0 a	
	Status	2.5	oz/a			MPOST						
	Ammonium Sulfate	8.5	lb/100 gal			MPOST						
7	Roundup WeatherMAX	22	oz/a			MPOST	107.3 a	15.0 a		0.0 a	3.3 a	
	Callisto	1.5	oz/a			MPOST						
	Atrazine	1	pt/a	0.5	lb a/a	MPOST						
	Ammonium Sulfate	8.5	lb/100 gal			MPOST						
8	BAS 756	2.5	pt/a			MPOST	107.3 a	14.8 a		0.0 a	5.0 a	
	Ammonium Sulfate	8.5	lb/100 gal			MPOST						
9	BAS 756	2.5	pt/a			MPOST	105.9 a	14.7 a		0.0 a	6.7 a	
	NIS	0.125	% v/v	1	pt/100 gal	MPOST						
	Ammonium Sulfate	8.5	lb/100 gal			MPOST						
LSD (P=.05)						25.67	0.54	3.78	0.00	5.23	3.78	
Standard Deviation						14.83	0.31	1.67	0.00	3.02	1.67	
CV						14.0	2.1	150.0	0.0	97.1	2.62	
Grand Mean						105.96	14.95	1.11	0.0	3.11	63.56	
Replicate F						0.485	0.747	1.000	0.000	0.146	1.000	
Replicate Prob(F)						0.6244	0.4894	0.4444	1.0000	0.8652	0.4444	
Treatment F						2.347	0.899	4.000	0.000	2.466	3286.360	
Treatment Prob(F)						0.0697	0.5398	0.1111	1.0000	0.0592	0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Description						Green foxtail	Green foxtail	Green foxtail	Waterhemp	Waterhemp	Waterhemp	
Rating Date						07-02-07	07-25-07	07-25-07	06-23-07	07-02-07	07-25-07	
Rating Data Type						Control	Control	Density	Control	Control	Control	
Rating Unit						Percent	Percent	m ² RunCH	Percent	Percent	Percent	
Days After First/Last Applic.						40 0	63 23	63 23	31 0	40 0	63 23	
Trt-Eval Interval												
Plant-Eval Interval						42 DP-1	65 DP-1	65 DP-1	33 DP-1	42 DP-1	65 DP-1	
Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage						
1	Nontreated Check						0.0 c	0.0 b	3.7 a	0.0 b	0.0 c	0.0 b
2	SureStart Durango Ammonium Sulfate	1.75	pt/a			PRE	86.7 b	99.0 a	2.0 a	96.0 a	92.7 ab	99.0 a
		24	oz/a			LPOST						
		2.5	lb/a	12.5	lb/100 gal	LPOST						
3	SureStart Durango Ammonium Sulfate	1.75	pt/a			EPOST	99.0 a	99.0 a	5.0 a	99.0 a	99.0 a	99.0 a
		24	oz/a			EPOST						
		2.5	lb/a	12.5	lb/100 gal	EPOST						
4	Roundup WeatherMAX Ammonium Sulfate	22	oz/a			MPOST	99.0 a	99.0 a	2.5 a		96.0 ab	99.0 a
		8.5	lb/100 gal			MPOST						
5	Roundup WeatherMAX Ammonium Sulfate	22	oz/a			LPOST	0.0 c	99.0 a	6.7 a		0.0 c	99.0 a
		8.5	lb/100 gal			LPOST						
6	Roundup WeatherMAX Status Ammonium Sulfate	22	oz/a			MPOST	99.0 a	99.0 a	3.0 a		99.0 a	99.0 a
		2.5	oz/a			MPOST						
		8.5	lb/100 gal			MPOST						
7	Roundup WeatherMAX Callisto Atrazine Ammonium Sulfate	22	oz/a			MPOST	99.0 a	99.0 a	4.3 a		97.7 a	99.0 a
		1.5	oz/a			MPOST						
		1	pt/a	0.5	lb a/a	MPOST						
		8.5	lb/100 gal			MPOST						
8	BAS 756 Ammonium Sulfate	2.5	pt/a			MPOST	99.0 a	99.0 a	5.7 a		97.7 a	99.0 a
		8.5	lb/100 gal			MPOST						
9	BAS 756 NIS Ammonium Sulfate	2.5	pt/a			MPOST	99.0 a	99.0 a	5.0 a		88.3 b	99.0 a
		0.125	% v/v	1	pt/100 gal	MPOST						
		8.5	lb/100 gal			MPOST						
LSD (P=.05)						3.33	0.00	4.50	6.80	8.67	0.00	
Standard Deviation						1.92	0.00	2.55	3.00	5.01	0.00	
CV						2.54	0.0	60.64	4.62	6.72	0.0	
Grand Mean						75.63	88.0	4.2	65.0	74.48	88.0	
Replicate F						1.000	0.000	2.669	1.000	0.631	0.000	
Replicate Prob(F)						0.3897	1.0000	0.1069	0.4444	0.5448	1.0000	
Treatment F						1502.403	0.000	1.096	1057.000	214.813	0.000	
Treatment Prob(F)						0.0001	1.0000	0.4239	0.0001	0.0001	1.0000	

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Description						Waterhemp	Velvetleaf	Velvetleaf	Velvetleaf	Velvetleaf	
Rating Date						07-25-07	06-23-07	07-02-07	07-25-07	07-25-07	
Rating Data Type						Density	Control	Control	Control	Density	
Rating Unit						m2 RunCH	Percent	Percent	Percent	m2 RunCH	
Days After First/Last Applic.						63 23	31 0	40 0	63 23	63 23	
Trt-Eval Interval											
Plant-Eval Interval						65 DP-1	33 DP-1	42 DP-1	65 DP-1	65 DP-1	
Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage					
1	Nontreated Check						4.3 a	0.0 b	0.0 d	0.0 b	1.0 a
2	SureStart	1.75	pt/a			PRE	3.0 a	93.0 a	93.0 b	99.0 a	1.0 a
	Durango	24	oz/a			LPOST					
	Ammonium Sulfate	2.5	lb/a	12.5	lb/100 gal	LPOST					
3	SureStart	1.75	pt/a			EPOST	8.3 a	99.0 a	99.0 a	99.0 a	1.0 a
	Durango	24	oz/a			EPOST					
	Ammonium Sulfate	2.5	lb/a	12.5	lb/100 gal	EPOST					
4	Roundup WeatherMAX	22	oz/a			MPOST	2.5 a		98.7 a	99.0 a	1.0 a
	Ammonium Sulfate	8.5	lb/100 gal			MPOST					
5	Roundup WeatherMAX	22	oz/a			LPOST	5.0 a		0.0 d	99.0 a	1.0 a
	Ammonium Sulfate	8.5	lb/100 gal			LPOST					
6	Roundup WeatherMAX	22	oz/a			MPOST	5.0 a		99.0 a	99.0 a	1.0 a
	Status	2.5	oz/a			MPOST					
	Ammonium Sulfate	8.5	lb/100 gal			MPOST					
7	Roundup WeatherMAX	22	oz/a			MPOST	5.3 a		99.0 a	99.0 a	1.0 a
	Callisto	1.5	oz/a			MPOST					
	Atrazine	1	pt/a	0.5	lb a/a	MPOST					
	Ammonium Sulfate	8.5	lb/100 gal			MPOST					
8	BAS 756	2.5	pt/a			MPOST	4.0 a		96.0 ab	99.0 a	1.0 a
	Ammonium Sulfate	8.5	lb/100 gal			MPOST					
9	BAS 756	2.5	pt/a			MPOST	3.5 a		86.7 c	99.0 a	1.0 a
	NIS	0.125	% v/v	1	pt/100 gal	MPOST					
	Ammonium Sulfate	8.5	lb/100 gal			MPOST					
LSD (P=.05)						4.43	6.80	5.65	0.00	0.00	
Standard Deviation						2.51	3.00	3.27	0.00	0.00	
CV						55.11	4.69	4.38	0.0	0.0	
Grand Mean						4.56	64.0	74.59	88.0	1.0	
Replicate F						3.733	1.000	0.222	0.000	0.000	
Replicate Prob(F)						0.0524	0.4444	0.8031	1.0000	1.0000	
Treatment F						1.391	1027.000	507.797	0.000	0.000	
Treatment Prob(F)						0.2864	0.0001	0.0001	1.0000	1.0000	

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<u>Additional Treatment Information</u>	
<u>Treatment Name</u>	
Ammonium Sulfate =	
<u>Rate Unit</u>	
PT/A = Pints Product per Acre (Metric=L/HA) P	
OZ/A = Ounces Product per Acre (Metric=ML-G/HA) O	
LB/A = Pounds Dry Product per Acre (Metric=KG/10A) AH	
LB/100 GAL = Pounds Dry Product per 100 Gallons Mix (Metric=KG/100 L)]	
% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same) Z	
<u>Other Rate Unit</u>	
LB/100 GAL = Pounds Dry Product per 100 Gallons Mix	
LB A/A = Pounds Active Ingredient per Acre	
PT/100 GAL = Pints Product per 100 Gallons Mix	

2007 Balance / Liberty / Option / Radius / Corn / Performance Weed Control

Trial ID: 07CRRL-2 Protocol ID: 07
Location: Concord, NE Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Concord
State/Prov.: NE
Postal Code: 68728
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory Country: USA
Organization: University of Nebraska Phone No: 402-584-2261
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City: Concord
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Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: Pioneer 35A34 RRL
BBCH Scale: BCOR Planting Date: 05-21-07
Planting Method: seeded Rate, Unit: 24503 s/a
Depth, Unit: 2 in
Row Spacing, Unit: 30 in
Harvest Date: 10-30-07 Harvest Equipment: Gleaner K
Harvested Width, Unit: 7.5 ft Harvested Length, Unit: 27 ft
% Standard Moisture: 15.5 Moisture Meter: Almaco
Weighing Equipment: Almaco

Pest Description

Pest 1 Type: W Code: SETVI Setaria viridis
Common Name: Green foxtail
Pest 2 Type: W Code: AMATU Amaranthus tuberculatus
Common Name: Tall waterhemp

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD
Plot Length, Unit: 30 FT Tillage Type: NO-TILL
Replications: 3 Study Design: Randomized Complete Block

Maintenance

Table with 8 columns: No., Date, Maintenance Treatment Name, Form Conc, Form Unit, Form Type, Rate, Rate Unit. Row 1: 1., 05-11-07, Roundup OriginalMAX, 5.5, lbai/ga, sl, 32, oz/A

Soil Description

% Sand: 14 % OM: 3.2 Texture: SILTY CLAY LOAM
% Silt: 56 pH: 6.3 Soil Name: Kennebec Maskell
% Clay: 30 CEC: 16.2 Fert. Level: EXCELLENT

Application Description

	A	B
Application Date:	05-23-07	06-23-07
Time of Day:	4:30 pm	12:30 pm
Application Method:	spray	spray
Application Timing:	PRE	MPOST
Application Placement:	surface	foliar
Air Temperature, Unit:	73 f	75 f
% Relative Humidity:	42	72
Wind Velocity, Unit:	3 mph	3 mph
Wind Direction:	nw	se
Dew Presence (Y/N):	n	n
Soil Temperature, Unit:	70 f	70 f
Soil Moisture:	wet	wet
% Cloud Cover:	75	30

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		v6
Height, Unit:		10 in

Pest Stage At Each Application

	A		B	
Pest 1 Code, Disc., Scale:	SETVI	W	SETVI	W
Height, Unit:			6	in
Height Minimum, Maximum:			4	10
Density, Unit:			1	m2
Pest 2 Code, Disc., Scale:	AMATU	W	AMATU	W
Height, Unit:			12	in
Height Minimum, Maximum:			4	18
Density, Unit:			5	m2

Application Equipment

	A		B	
Appl. Equipment:	backpack		BACKPACK	
Operating Pressure, Unit:	20	psi	40	PSI
Nozzle Type:	Turbo Tee		TURBO TEE	
Nozzle Size:	11003		11002	
Nozzle Spacing, Unit:	20	IN	20	IN
Boom Length, Unit:	10	FT	10	FT
Boom Height, Unit:	12	IN	12	IN
Ground Speed, Unit:	2.7	MPH	2.7	MPH
Carrier:	WATER		WATER	
Spray Volume, Unit:	20	GPA	20	GPA
Mix Size, Unit:	1.8	Liters	1.8	Liters
Propellant:	co2		co2	

Northeast Research & Extension Center

2007 Balance / Liberty / Option / Radius / Corn / Performance Weed Control

Trial ID: 07CRRL-2
 Location: Concord, NE

Protocol ID: 07
 Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description		Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail	Green foxtail			
Rating Date		10-30-07	10-30-07	06-23-07	07-02-07	07-25-07	06-23-07	07-02-07	07-25-07			
Rating Data Type		Yield@15.5%	Moisture	Stunting	Stunting	Stunting	Control	Control	Control			
Rating Unit		bu/A	%	%	%	%	Percent	Percent	Percent			
Days After First/Last Applic.		160 129	160 129	31 0	40 9	63 32	31 0	40 9	63 32			
Trt-Eval Interval		162 DP-1	162 DP-1	33 DP-1	42 DP-1	65 DP-1	33 DP-1	42 DP-1	65 DP-1			
Plant-Eval Interval												
Trt No.	Treatment Name	Rate	Unit	Growth Stage								
1	Nontreated Check				28.9 b	12.9 b	0.0 a	0.0 a	0.0 a	0.0 d	0.0 c	0.0 c
2	Radius	23	oz/a	PRE	127.7 a	15.4 a	3.3 a	3.3 a	0.0 a	99.0 a	99.0 a	98.7 a
3	Radius Atrazine	23 2	oz/a pt/a	PRE PRE	120.1 a	15.5 a	1.7 a	0.0 a	0.0 a	99.0 a	99.0 a	98.7 a
4	Balance Pro atrazine	2.5 1	oz/a qt/a	PRE PRE	115.1 a	15.1 a	0.0 a	0.0 a	0.0 a	97.7 ab	93.3 b	94.0 b
5	Balance Pro Liberty atrazine Ammonium Sulfate	1.5 32 1 8.5	oz/a pt/a pt/a lb/100 gal	PRE MPOST MPOST MPOST	119.0 a	15.2 a	0.0 a	0.0 a	0.0 a	80.0 c	99.0 a	99.0 a
6	Balance Pro Option MSO 28% Nitrogen	1.5 1.5 1.5 1.5	oz/a oz/a pt/a qt/a	PRE MPOST MPOST MPOST	116.2 a	15.0 a	0.0 a	0.0 a	0.0 a	86.7 c	91.7 b	96.0 ab
7	Balance Pro Laudis MSO 28% Nitrogen	2.25 3 1.5 1.5	oz/a oz/a pt/a qt/a	PRE MPOST MPOST MPOST	117.9 a	15.3 a	0.0 a	0.0 a	0.0 a	89.7 abc	94.7 b	96.0 ab
8	Balance Pro Atrazine Roundup Original MAX Ammonium Sulfate	1.5 1 22 8.5	oz/a pt/a oz/a lb/100 gal	PRE PRE MPOST MPOST	127.4 a	15.2 a	1.7 a	0.0 a	0.0 a	88.3 bc	99.0 a	99.0 a
LSD (P=.05)					13.11	0.90	4.33	3.58	0.00	9.83	3.89	3.57
Standard Deviation					7.49	0.51	2.47	2.04	0.00	5.61	2.22	2.04
CV					6.87	3.44	296.41	489.9	0.0	7.01	2.63	2.4
Grand Mean					109.03	14.96	0.83	0.42	0.0	80.04	84.46	85.17
Replicate F					6.114	1.222	1.195	1.000	0.000	2.115	0.516	3.495
Replicate Prob(F)					0.0123	0.3241	0.3317	0.3927	1.0000	0.1576	0.6076	0.0587
Treatment F					57.333	7.941	0.780	1.000	0.000	103.887	715.123	856.309
Treatment Prob(F)					0.0001	0.0006	0.6142	0.4706	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Northeast Research & Extension Center

Description	Green foxtail	Waterhemp	Waterhemp	Waterhemp	Waterhemp
Rating Date	07-25-07	06-23-07	07-02-07	07-25-07	07-25-07
Rating Data Type	Density	Control	Control	Control	Density
Rating Unit	m2 RunCH	Percent	Percent	Percent	m2 RunCH
Days After First/Last Applic.	63 32	31 0	40 9	63 32	63 32
Trt-Eval Interval					
Plant-Eval Interval	65 DP-1	33 DP-1	42 DP-1	65 DP-1	65 DP-1
Trt No.	Treatment Name	Rate	Unit	Growth Stage	
1	Nontreated Check				6.7 a
2	Radius	23	oz/a	PRE	6.7 a
3	Radius	23	oz/a	PRE	11.7 a
	Atrazine	2	pt/a	PRE	
4	Balance Pro	2.5	oz/a	PRE	10.0 a
	atrazine	1	qt/a	PRE	
5	Balance Pro	1.5	oz/a	PRE	6.7 a
	Liberty	32	pt/a	MPOST	
	atrazine	1	pt/a	MPOST	
	Ammonium Sulfate	8.5	lb/100 gal	MPOST	
6	Balance Pro	1.5	oz/a	PRE	8.3 a
	Option	1.5	oz/a	MPOST	
	MSO	1.5	pt/a	MPOST	
	28% Nitrogen	1.5	qt/a	MPOST	
7	Balance Pro	2.25	oz/a	PRE	11.7 a
	Laudis	3	oz/a	MPOST	
	MSO	1.5	pt/a	MPOST	
	28% Nitrogen	1.5	qt/a	MPOST	
8	Balance Pro	1.5	oz/a	PRE	7.3 a
	Atrazine	1	pt/a	PRE	
	Roundup Original MAX	22	oz/a	MPOST	
	Ammonium Sulfate	8.5	lb/100 gal	MPOST	
LSD (P=.05)					
Standard Deviation					
CV					
Grand Mean					
Replicate F					
Replicate Prob(F)					
Treatment F					
Treatment Prob(F)					

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Additional Treatment Information	
<u>Treatment Name</u>	
Ammonium Sulfate =	
<u>Rate Unit</u>	
OZ/A = Ounces Product per Acre (Metric=ML-G/HA) O	
PT/A = Pints Product per Acre (Metric=L/HA) P	
QT/A = Quarts Product per Acre (Metric=L/HA) Q	
LB/100 GAL = Pounds Dry Product per 100 Gallons Mix (Metric=KG/100 L)	

2007 Laudis / Liberty / Corn / Performance Weed Control

Trial ID: 07CRRL-3 Protocol ID: 07
Location: Concord, NE Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Concord
State/Prov.: NE
Postal Code: 68728
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory Country: USA
Organization: University of Nebraska Phone No: 402-584-2261
Address 1: 57905 866 RD Fax No: 402-584-3859
City: Concord
State/Prov: NE
Postal Code: 68728

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: Pioneer 35A34 RRL
BBCH Scale: BCOR Planting Date: 05-21-07
Planting Method: seeded Rate, Unit: 24503 s/a
Depth, Unit: 2 in
Row Spacing, Unit: 30 in
Harvest Date: 10-30-07 Harvest Equipment: Gleaner K
Harvested Width, Unit: 7.5 ft Harvested Length, Unit: 27 ft
% Standard Moisture: 15.5 Moisture Meter: Almaco
Weighing Equipment: Almaco

Pest Description

Pest 1 Type: W Code: SETVI Setaria viridis
Common Name: Green foxtail
Pest 2 Type: W Code: AMATU Amaranthus tuberculatus
Common Name: Tall waterhemp

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD
Plot Length, Unit: 30 FT Tillage Type: NO-TILL
Replications: 3 Study Design: Randomized Complete Block

Maintenance

Table with 8 columns: No., Date, Maintenance Treatment Name, Form Conc, Form Unit, Form Type, Rate, Rate Unit. Row 1: 1., 05-11-07, Roundup OriginalMAX, 5.5, lbai/ga, sl, 32, oz/A

Soil Description

% Sand: 14 % OM: 3.2 Texture: SILTY CLAY LOAM
% Silt: 56 pH: 6.3 Soil Name: Kennebec Maskell
% Clay: 30 CEC: 16.2 Fert. Level: EXCELLENT

Application Description

	A	B	C
Application Date:	05-23-07	06-15-07	06-23-07
Time of Day:	4:30 pm	12:30 pm	12:30 pm
Application Method:	spray	spray	spray
Application Timing:	PRE	EPOST	MPOST
Application Placement:	surface	foliar	foliar
Air Temperature, Unit:	73 f	85 f	75 f
% Relative Humidity:	42	53	72
Wind Velocity, Unit:	3 mph	3 mph	3 mph
Wind Direction:	nw	s	se
Dew Presence (Y/N):	n	n	n
Soil Temperature, Unit:	70 f	72 f	70 f
Soil Moisture:	wet	adequate	wet
% Cloud Cover:	75	75	30

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		v4	v6
Height, Unit:		6 in	10 in

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETVI W	SETVI W	SETVI W
Height, Unit:		3 in	6 in
Height Minimum, Maximum:		2 6	4 10
Density, Unit:		1 m2	1 m2
Pest 2 Code, Disc., Scale:	AMATU W	AMATU W	AMATU W
Height, Unit:		6 in	12 in
Height Minimum, Maximum:		2 10	4 18
Density, Unit:		5 m2	5 m2

Application Equipment

	A	B	C
Appl. Equipment:	backpack	BACKPACK	BACKPACK
Operating Pressure, Unit:	20 psi	40 PSI	40 PSI
Nozzle Type:	Turbo Tee	TURBO TEE	TURBO TEE
Nozzle Size:	11003	11002	11002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	12 IN	12 IN	12 IN
Ground Speed, Unit:	2.7 MPH	2.7 MPH	2.7 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA
Mix Size, Unit:	1.8 L	1.8 L	1.8 L
Propellant:	co2	co2	co2

2007 Laudis / Liberty / Corn / Performance Weed Control									
Trial ID: 07CRRL-3			Protocol ID: 07						
Location: Concord, NE			Study Director: Stevan Knezevic						
			Investigator: Stevan Knezevic						

Description	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail	Green foxtail				
Rating Date	10-30-07	10-30-07	06-23-07	07-02-07	07-25-07	06-23-07	07-02-07	07-25-07				
Rating Data Type	Yield@15.5%	Moisture	Stunting	Stunting	Lodge	Control	Control	Control				
Rating Unit	bu/A	%	%	%	%	Percent	Percent	Percent				
Days After First/Last Applic.	160 129	160 129	31 0	40 9	63 32	31 0	40 0	63 23				
Trt-Eval Interval	162 DP-1	162 DP-1	33 DP-1	42 DP-1	65 DP-1	33 DP-1	42 DP-1	65 DP-1				
Plant-Eval Interval												
Trt No.	Treatment Name	Rate	Unit	Growth Stage								
1	Nontreated Check				67.8 c	14.7 c	0.0 a	0.0 a	0.3 a	0.0 d	0.0 d	0.0 e
2	Balance Pro	1.5 oz/a	PRE		134.7 a	15.5 a	0.0 a	0.0 a	0.0 a	85.0 b	88.3 b	81.7 b
	Laudis	3 oz/a	MPOST									
	Atrazine	1 qt/a	MPOST									
	COC	1 % v/v	MPOST									
	28% Nitrogen	1.5 qt/a	MPOST									
3	Balance Pro	1.5 oz/a	PRE		127.1 ab	15.3 ab	0.0 a	0.0 a	0.0 a	92.5 ab	97.7 a	98.3 a
	Atrazine	1 qt/a	PRE									
	Laudis	3 oz/a	MPOST									
	MSO	1 % v/v	MPOST									
	28% Nitrogen	1.5 qt/a	MPOST									
4	Laudis	2 oz/a	MPOST		120.3 ab	15.3 ab	0.0 a	0.0 a	4.0 a	99.0 a	98.7 a	97.3 a
	Liberty	32 oz/a	MPOST									
	Ammonium Sulfate	8.5 lb/100 gal	MPOST									
5	Liberty	32 oz/a	MPOST		111.5 b	15.4 ab		0.0 a	0.7 a		99.0 a	98.7 a
	Atrazine	1 qt/a	MPOST									
	Ammonium Sulfate	8.5 lb/100 gal	MPOST									
6	Laudis	3 oz/a	MPOST		122.3 ab	15.4 ab		0.0 a	3.7 a		99.0 a	99.0 a
	Roundup Original MAX	22 oz/a	MPOST									
	Ammonium Sulfate	8.5 lb/100 gal	MPOST									
7	Roundup Original MAX	22 oz/a	MPOST		124.0 ab	15.3 b		0.0 a	1.0 a		99.0 a	98.7 a
	Atrazine	1 qt/a	MPOST									
	Ammonium Sulfate	8.5 lb/100 gal	MPOST									
8	Laudis	3 oz/a	EPOST		130.1 a	15.4 ab	0.0 a	0.0 a	0.3 a	53.3 c	85.0 b	71.7 c
	Accent	0.33 oz/a	EPOST									
	MSO	1 % v/v	EPOST									
	28% Nitrogen	1.5 qt/a	EPOST									
9	Laudis	3 oz/a	EPOST		121.5 ab	15.3 ab	0.0 a	0.0 a	0.0 a	53.3 c	63.3 c	53.3 d
	MSO	1 % v/v	EPOST									
	28% Nitrogen	1.5 qt/a	EPOST									
LSD (P=.05)					17.69	0.22	0.00	0.00	4.53	11.27	5.14	8.41
Standard Deviation					10.22	0.12	0.00	0.00	2.62	5.64	2.97	4.86
CV					8.68	0.82	0.0	0.0	235.74	8.83	3.66	6.26
Grand Mean					117.69	15.3	0.0	0.0	1.11	63.86	81.11	77.63
Replicate F					1.941	1.854	0.000	0.000	1.231	0.076	0.202	0.735
Replicate Prob(F)					0.1759	0.1887	1.0000	1.0000	0.3183	0.9274	0.8195	0.4948
Treatment F					11.277	10.796	0.000	0.000	1.093	128.218	361.616	140.142
Treatment Prob(F)					0.0001	0.0001	1.0000	1.0000	0.4161	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Northeast Research & Extension Center

Description	Green foxtail	Waterhemp	Waterhemp	Waterhemp	Waterhemp
Rating Date	07-25-07	06-23-07	07-02-07	07-25-07	07-25-07
Rating Data Type	Density	Control	Control	Control	Density
Rating Unit	m2 RunCH	Percent	Percent	Percent	m2 RunCH
Days After First/Last Applic.	63 23	31 0	40 0	63 23	63 32
Trt-Eval Interval					
Plant-Eval Interval	65 DP-1	33 DP-1	42 DP-1	65 DP-1	65 DP-1
Trt No.	Treatment Name	Rate	Unit	Growth Stage	
1	Nontreated Check				5.0 bc
2	Balance Pro	1.5	oz/a	PRE	15.0 a
	Laudis	3	oz/a	MPOST	97.7 a
	Atrazine	1	qt/a	MPOST	99.0 a
	COC	1	% v/v	MPOST	99.0 a
	28% Nitrogen	1.5	qt/a	MPOST	99.0 a
3	Balance Pro	1.5	oz/a	PRE	10.0 ab
	Atrazine	1	qt/a	PRE	99.0 a
	Laudis	3	oz/a	MPOST	99.0 a
	MSO	1	% v/v	MPOST	99.0 a
	28% Nitrogen	1.5	qt/a	MPOST	25.0 a
4	Laudis	2	oz/a	MPOST	5.0 bc
	Liberty	32	oz/a	MPOST	99.0 a
	Ammonium Sulfate	8.5	lb/100 gal	MPOST	95.0 bc
5	Liberty	32	oz/a	MPOST	5.0 bc
	Atrazine	1	qt/a	MPOST	93.3 c
	Ammonium Sulfate	8.5	lb/100 gal	MPOST	96.0 ab
6	Laudis	3	oz/a	MPOST	3.7 c
	Roundup Original MAX	22	oz/a	MPOST	98.7 a
	Ammonium Sulfate	8.5	lb/100 gal	MPOST	99.0 a
7	Roundup Original MAX	22	oz/a	MPOST	6.7 bc
	Atrazine	1	qt/a	MPOST	97.3 ab
	Ammonium Sulfate	8.5	lb/100 gal	MPOST	98.3 ab
8	Laudis	3	oz/a	EPOST	6.7 bc
	Accent	0.33	oz/a	EPOST	60.0 b
	MSO	1	% v/v	EPOST	98.7 a
	28% Nitrogen	1.5	qt/a	EPOST	99.0 a
9	Laudis	3	oz/a	EPOST	5.0 bc
	MSO	1	% v/v	EPOST	56.7 b
	28% Nitrogen	1.5	qt/a	EPOST	99.0 a
	LSD (P=.05)				5.91
	Standard Deviation				3.40
	CV				49.31
	Grand Mean				6.89
	Replicate F				11.98
	Replicate Prob(F)				0.860
	Treatment F				0.264
	Treatment Prob(F)				2.294
					4.07
					2.35
					1.95
					2.25
					2.73
					48.05
					86.67
					86.3
					20.37
					0.068
					0.9349
					1.887
					0.1376

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Additional Treatment Information	
Treatment Name	Ammonium Sulfate =
Rate Unit	
OZ/A = Ounces Product per Acre (Metric=ML-G/HA) O	
QT/A = Quarts Product per Acre (Metric=L/HA) Q	
% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same) Z	
LB/100 GAL = Pounds Dry Product per 100 Gallons Mix (Metric=KG/100 L) J	

Application Description

	A	B
Application Date:	05-23-07	06-15-07
Time of Day:	4:30 pm	12:30 pm
Application Method:	spray	spray
Application Timing:	PRE	EPOST
Application Placement:	surface	foliar
Air Temperature, Unit:	73 f	85 f
% Relative Humidity:	42	53
Wind Velocity, Unit:	3 mph	3 mph
Wind Direction:	nw	s
Dew Presence (Y/N):	n	n
Soil Temperature, Unit:	70 f	72 f
Soil Moisture:	wet	adequate
% Cloud Cover:	75	75

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		v4
Height, Unit:		6 in

Pest Stage At Each Application

	A		B	
Pest 1 Code, Disc., Scale:	SETVI	W	SETVI	W
Height, Unit:			3	in
Height Minimum, Maximum:			2	6
Density, Unit:			1	m2
Pest 2 Code, Disc., Scale:	AMATU	W	AMATU	W
Height, Unit:			6	in
Height Minimum, Maximum:			2	10
Density, Unit:			5	m2

Application Equipment

	A		B	
Appl. Equipment:	backpack		BACKPACK	
Operating Pressure, Unit:	20	psi	40	PSI
Nozzle Type:	Turbo Tee		TURBO TEE	
Nozzle Size:	11003		11002	
Nozzle Spacing, Unit:	20	IN	20	IN
Boom Length, Unit:	10	FT	10	FT
Boom Height, Unit:	12	IN	12	IN
Ground Speed, Unit:	2.7	MPH	2.7	MPH
Carrier:	WATER		WATER	
Spray Volume, Unit:	20	GPA	20	GPA
Mix Size, Unit:	1.8	Liters	1.8	Liters
Propellant:	co2		co2	

Date **By** **Notes**

There was no crop injury in this trial. Slight lodging occurred. Reported percent plants root lodged at least 30%.

2007 Conventional Corn herbicide Programs												
Trial ID: 07CRRL-4			Protocol ID: 07									
Location: Concord, NE			Study Director: Stevan Knezevic									
			Investigator: Stevan Knezevic									
Description	Corn, field		Corn, field		Corn, field		Green foxtail		Green foxtail		Green foxtail	
Rating Date	10-30-07		10-30-07		07-25-07		06-23-07		07-02-07		07-25-07	
Rating Data Type	Yield@15.5%		Moisture		Lodge		Control		Control		Control	
Rating Unit	bu/A		%		percent		percent		percent		m2 RunCH	
Days After First/Last Applic.	160	137	160	137	63	40	31	8	40	17	63	40
Trt-Eval Interval	162 DP-1		162 DP-1		65 DP-1		33 DP-1		42 DP-1		65 DP-1	
Plant-Eval Interval	162 DP-1		162 DP-1		65 DP-1		33 DP-1		42 DP-1		65 DP-1	
Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Growth Stage							
1	Nontreated Check					63.6 c	15.0 a	0.0 a	0.0 b	0.0 b	0.0 b	8.3 a
2	Lexar	3 qt/a			PRE	123.4 b	15.5 a	0.0 a	93.3 a	91.7 a	91.7 a	6.7 a
3	Lumax	2.5 qt/a			PRE	126.8 ab	15.5 a	0.0 a	97.7 a	96.3 a	95.0 a	6.7 a
	Atrazine	1 pt/a	0.5 lb a/a		PRE							
4	Bicep II Magnum	2.1 qt/a			PRE	136.4 a	15.6 a	0.7 a	96.3 a	94.7 a	93.0 a	5.0 a
	Callisto	3 oz/a			EPOST							
	Atrazine	1 pt/a	0.5 lb a/a		EPOST							
	COC	1 % v/v			EPOST							
5	Lexar	2 qt/a			PRE	133.7 ab	15.6 a	1.0 a	96.0 a	91.3 a	92.7 a	8.3 a
	Lexar	1 qt/a			EPOST							
6	Degree Xtra	3 qt/a			PRE	135.9 ab	15.5 a	0.3 a	96.3 a	88.3 a	96.3 a	6.7 a
	Hornet	3.2 qt/a			PRE							
7	Bicep II Magnum	2.1 qt/a			PRE	132.2 ab	15.4 a	1.0 a	93.0 a	91.3 a	93.0 a	8.3 a
	Spirit	1 oz/a			EPOST							
	Atrazine	1 pt/a	0.5 lb a/a		EPOST							
	COC	1 % v/v			EPOST							
	Ammonium Sulfate	2 lb/a	10 lb/100 gal		EPOST							
LSD (P=.05)						12.90	0.41	1.75	6.11	9.21	9.50	6.14
Standard Deviation						7.25	0.23	0.98	3.44	5.17	5.34	3.45
CV						5.96	1.5	229.6	4.2	6.54	6.66	48.3
Grand Mean						121.72	15.43	0.43	81.81	79.1	80.24	7.14
Replicate F						0.765	1.442	1.918	0.633	1.207	0.482	0.300
Replicate Prob(F)						0.4869	0.2746	0.1893	0.5478	0.3328	0.6289	0.7462
Treatment F						38.725	2.316	0.656	331.323	137.028	131.850	0.400
Treatment Prob(F)						0.0001	0.1017	0.6862	0.0001	0.0001	0.0001	0.8652

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

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

Northeast Research & Extension Center

Description						Waterhemp	Waterhemp	Waterhemp	Waterhemp
Rating Date						06-23-07	07-02-07	07-25-07	07-25-07
Rating Data Type						Control	Control	Control	Density
Rating Unit						percent	percent	percent	m2 RunCH
Days After First/Last Applic.						31 8	40 17	63 40	63 40
Trt-Eval Interval									
Plant-Eval Interval						33 DP-1	42 DP-1	65 DP-1	65 DP-1
Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Growth Stage				
1	Nontreated Check					0.0 b	0.0 b	0.0 b	21.7 ab
2	Lexar	3 qt/a			PRE	99.0 a	99.0 a	99.0 a	25.0 a
3	Lumax	2.5 qt/a			PRE	99.0 a	99.0 a	99.0 a	16.7 bc
	Atrazine	1 pt/a	0.5 lb a/a		PRE				
4	Bicep II Magnum	2.1 qt/a			PRE	99.0 a	99.0 a	99.0 a	26.7 a
	Callisto	3 oz/a			EPOST				
	Atrazine	1 pt/a	0.5 lb a/a		EPOST				
	COC	1 % v/v			EPOST				
5	Lexar	2 qt/a			PRE	99.0 a	99.0 a	99.0 a	13.3 c
	Lexar	1 qt/a			EPOST				
6	Degree Xtra	3 qt/a			PRE	99.0 a	99.0 a	99.0 a	21.7 ab
	Hornet	3.2 oz/a			PRE				
7	Bicep II Magnum	2.1 qt/a			PRE	99.0 a	99.0 a	99.0 a	21.7 ab
	Spirit	1 oz/a			EPOST				
	Atrazine	1 pt/a	0.5 lb a/a		EPOST				
	COC	1 % v/v			EPOST				
	Ammonium Sulfate	2 lb/a	10 lb/100 gal		EPOST				
LSD (P=.05)						0.00	0.00	0.00	7.09
Standard Deviation						0.00	0.00	0.00	3.98
CV						0.0	0.0	0.0	19.02
Grand Mean						84.86	84.86	84.86	20.95
Replicate F						0.000	0.000	0.000	0.300
Replicate Prob(F)						1.0000	1.0000	1.0000	0.7462
Treatment F						0.000	0.000	0.000	4.000
Treatment Prob(F)						1.0000	1.0000	1.0000	0.0197

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Additional Treatment Information	
<u>Treatment Name</u>	
Ammonium Sulfate =	
<u>Rate Unit</u>	
QT/A = Quarts Product per Acre (Metric=L/HA) Q	
PT/A = Pints Product per Acre (Metric=L/HA) P	
OZ/A = Ounces Product per Acre (Metric=ML-G/HA) O	
% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same) Z	
LB/A = Pounds Dry Product per Acre (Metric=KG/10A) AH	
<u>Other Rate Unit</u>	
LB A/A = Pounds Active Ingredient per Acre	
LB/100 GAL = Pounds Dry Product per 100 Gallons Mix	

2007 Program approaches with new isoxadifen product blends with Steadfast, Stout, Resolve and Rim/dicamba blends.
 Trial ID: 07 CRR-5 Protocol ID:
 Location: Concord, NE Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Concord
State/Prov.: NE
Postal Code: 68728
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory Country: USA
 Organization: University of Nebraska Phone No: 402-584-2261
 Address 1: 57905 866 RD Fax No: 402-584-3859
 City: Concord
 State/Prov: NE
 Postal Code: 68728

Crop Description

Crop 1: ZEAMX Zea mays Corn
 Variety: Dekalb DK 60-19 RR
 BBCH Scale: BCOR Planting Date: 05-19-07
 Planting Method: seeded Rate, Unit: 24503 s/a
 Depth, Unit: 2 in
 Row Spacing, Unit: 30 in
 Harvest Date: 10-31-07 Harvest Equipment: Gleaner K
 Harvested Width, Unit: 7.5 ft Harvested Length, Unit: 27 ft
 % Standard Moisture: 15.5 Moisture Meter: Almaco
 Weighing Equipment: Almaco

Pest Description

Pest 1 Type: W Code: SETVI Setaria viridis
 Common Name: Green foxtail
 Pest 2 Type: W Code: AMATU Amaranthus tuberculatus
 Common Name: Tall waterhemp
 Pest 3 Type: W Code: ABUTH Abutilon theophrasti
 Common Name: Velvetleaf

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 30 FT Tillage Type: NO-TILL
 Replications: 3 Study Design: Randomized Complete Block

Maintenance

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.	05-11-07	Roundup OriginalMAX	5.5	lbai/ga	SL	32	oz/A

Soil Description

% Sand: 12 % OM: 3.6 Texture: SILTY CLAY LOAM
 % Silt: 58 pH: 7 Soil Name: COLO
 % Clay: 30 CEC: 22.7 Fert. Level: FAIR

Application Description

	A	B
Application Date:	05-23-07	06-10-07
Time of Day:	5:45 pm	2 pm
Application Method:	spray	spray
Application Timing:	PRE	POST
Application Placement:	surface	foliar
Air Temperature, Unit:	73 f	94 f
% Relative Humidity:	50	34
Wind Velocity, Unit:	2.5 mph	8 mph
Wind Direction:	w	sw
Dew Presence (Y/N):	n	n
Soil Temperature, Unit:	68 f	
Soil Moisture:	wet	adequate
% Cloud Cover:	95	10

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		v2-v3
Stage Minimum, Percent:		v2 50
Stage Maximum, Percent:		v3 50
Height, Unit:		4 in
Height Minimum, Maximum:		3 5

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETVI W	SETVI W
Stage Majority, Percent:		4L 40
Stage Minimum, Percent:		2L 30
Stage Maximum, Percent:		8L 30
Height, Unit:		3 in
Height Minimum, Maximum:		1 5
Density, Unit:		20 m2
Pest 2 Code, Disc., Scale:	AMATU W	AMATU W
Stage Majority, Percent:		4t1
Height, Unit:		2 in
Height Minimum, Maximum:		1 3
Density, Unit:		1 m2
Pest 3 Code, Disc., Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:		2t1
Height, Unit:		2 in
Height Minimum, Maximum:		1 3
Density, Unit:		1 m2

Application Equipment

	A	B
Appl. Equipment:	backpack	BACKPACK
Operating Pressure, Unit:	20 psi	40 PSI
Nozzle Type:	Turbo Tee	TURBO TEE
Nozzle Size:	11003	11002
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	12 IN	12 IN
Ground Speed, Unit:	2.7 MPH	2.7 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA
Mix Size, Unit:	1.8 L	1.8 L
Propellant:	co2	co2

Date By Deviations
 06-10-07 js Treatments 9 and 14 were changed from Liberty to Roundup
 Reasons: Irrigation specialist requested extra fertilizer that shorted the corn herb area. To ensure even fertilizer the trial was changed to a different field without the RRLl stack.

2007 Program approaches with new isoxadifen product blends with Steadfast, Stout, Resolve and Rim/dicamba blends.

Trial ID: 07 CRR-5

Protocol ID:

Location: Concord, NE

Study Director: Stevan Knezevic

Investigator: Stevan Knezevic

Description	Corn 10-31-07 Yield@15.5% bu/A		Corn 10-31-07 Moisture %		Corn 06-10-07 Injury Percent		Corn 06-24-07 Injury Percent		Corn 07-08-07 Injury Percent		Green Foxtail 06-10-07 Control Percent	Green Foxtail 07-08-07 Control Percent
Rating Date	161 143		161 143		18 0		32 14		46 28		18 0	46 28
Rating Data Type	165 DP-1		165 DP-1		22 DP-1		36 DP-1		50 DP-1		22 DP-1	50 DP-1
Rating Unit												
Days After First/Last Applic.												
Trt-Eval Interval												
Plant-Eval Interval												
Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Growth Stage							
1	DPX-E9636	0.25 oz/a	1 oz/a		POST	160.2 a	13.5 a	0.0 a	0.0 a	0.0 a	0.0 d	86.3 a
	Accent	0.375 oz/a	0.5 oz/a		POST							
	Isoxadifen-ethyl	0.125 oz/a	0.25 oz/a		POST							
	Impact	0.175 oz/a	0.5 oz/a		POST							
	Atrazine	8 oz/a	8.9 oz/a		POST							
	MSO	1 % v/v	25.6 oz/a		POST							
	Ammonium Sulfate	32 oz/a	32 oz/a		POST							
2	Dual II Magnum	15.28 oz/a	15.3 oz/a		PRE	163.0 a	13.4 a	0.0 a	0.0 a	0.0 a	60.0 bc	95.0 a
	DPX-E9636	0.25 oz/a	1 oz/a		POST							
	Accent	0.375 oz/a	0.5 oz/a		POST							
	Isoxadifen-ethyl	0.125 oz/a	0.25 oz/a		POST							
	Impact	0.175 oz/a	0.5 oz/a		POST							
	Atrazine	8 oz/a	8.9 oz/a		POST							
	MSO	1 % v/v	25.6 oz/a		POST							
	Ammonium Sulfate	32 oz/a	32 oz/a		POST							
3	Accent	0.5 oz/a	0.67 oz/a		POST	160.2 a	13.4 a	0.0 a	0.0 a	0.0 a	0.0 d	91.7 a
	Harmony GT	0.06 oz/a	0.12 oz/a		POST							
	Isoxadifen-ethyl	0.1 oz/a	0.2 oz/a		POST							
	Impact	0.175 oz/a	0.5 oz/a		POST							
	Atrazine	8 oz/a	8.9 oz/a		POST							
	MSO	1 % v/v	25.6 oz/a		POST							
	Ammonium Sulfate	32 oz/a	32 oz/a		POST							
4	Dual II Magnum	15.28 oz/a	15.3 oz/a		PRE	164.6 a	13.5 a	0.0 a	0.0 a	0.0 a	60.0 bc	86.7 a
	Accent	0.5 oz/a	0.67 oz/a		POST							
	Harmony GT	0.06 oz/a	0.12 oz/a		POST							
	Isoxadifen-ethyl	0.1 oz/a	0.2 oz/a		POST							
	Impact	0.175 oz/a	0.5 oz/a		POST							
	Atrazine	8 oz/a	8.9 oz/a		POST							
	MSO	1 % v/v	25.6 oz/a		POST							
	Ammonium Sulfate	32 oz/a	32 oz/a		POST							
5	DPX-E9636	0.19 oz/a	0.76 oz/a		POST	169.2 a	13.6 a	0.0 a	0.0 a	0.0 a	0.0 d	96.0 a
	Harmony GT	0.041 oz/a	0.082 oz/a		POST							
	Isoxadifen-ethyl	0.095 oz/a	0.19 oz/a		POST							
	Roundup Original MAX	15.13 oz/a	22 oz/a		POST							
	NIS	0.25 % v/v	6.4 oz/a		POST							
	Ammonium Sulfate	32 oz/a	32 oz/a		POST							
6	Dual II Magnum	15.28 oz/a	15.3 oz/a		PRE	157.4 a	13.5 a	0.0 a	0.0 a	0.0 a	50.0 bc	97.7 a
	DPX-E9636	0.19 oz/a	0.76 oz/a		POST							
	Harmony GT	0.041 oz/a	0.082 oz/a		POST							
	Isoxadifen-ethyl	0.095 oz/a	0.19 oz/a		POST							
	Roundup Original MAX	15.13 oz/a	22 oz/a		POST							
	NIS	0.25 % v/v	6.4 oz/a		POST							
	Ammonium Sulfate	32 oz/a	32 oz/a		POST							
7	DPX-E9636	0.229 oz/a	0.92 oz/a		POST	167.9 a	13.4 a	0.0 a	0.0 a	0.0 a	0.0 d	91.7 a
	Harmony GT	0.05 oz/a	0.1 oz/a		POST							
	Isoxadifen-ethyl	0.115 oz/a	0.23 oz/a		POST							
	Roundup Original MAX	15.13 oz/a	22 oz/a		POST							
	NIS	0.25 % v/v	6.4 oz/a		POST							
	Ammonium Sulfate	32 oz/a	32 oz/a		POST							

Northeast Research & Extension Center

Description						Corn	Corn	Corn	Corn	Corn	Green Foxtail	Green Foxtail	
Rating Date						10-31-07	10-31-07	06-10-07	06-24-07	07-08-07	06-10-07	07-08-07	
Rating Data Type						Yield@15.5%	Moisture	Injury	Injury	Injury	Control	Control	
Rating Unit						bu/A	%	Percent	Percent	Percent	Percent	Percent	
Days After First/Last Applic.						161 143	161 143	18 0	32 14	46 28	18 0	46 28	
Trt-Eval Interval													
Plant-Eval Interval						165 DP-1	165 DP-1	22 DP-1	36 DP-1	50 DP-1	22 DP-1	50 DP-1	
Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Growth Stage							
8	Dual II Magnum	15.28	oz/a	15.3	oz/a	PRE	172.7 a	13.6 a	0.0 a	0.0 a	0.0 a	40.0 c	96.3 a
	DPX-E9636	0.229	oz/a/a	0.92	oz/a	POST							
	Harmony GT	0.05	oz/a/a	0.1	oz/a	POST							
	Isoxadifen-ethyl	0.115	oz/a/a	0.23	oz/a	POST							
	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST							
	NIS	0.25	% v/v	6.4	oz/a	POST							
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST							
9	DPX-E9636	0.19	oz/a/a	0.76	oz/a	POST	168.3 a	13.6 a	0.0 a	0.0 a	0.0 a	0.0 d	94.7 a
	Harmony GT	0.041	oz/a/a	0.082	oz/a	POST							
	Isoxadifen-ethyl	0.095	oz/a/a	0.19	oz/a	POST							
	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST							
	Atrazine	12	oz/a/a	13.3	oz/a	POST							
	NIS	0.25	% v/v	6.4	oz/a	POST							
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST							
10	DPX-E9636	0.25	oz/a/a	1	oz/a	POST	152.9 a	13.6 a	0.0 a	0.0 a	0.0 a	0.0 d	45.0 b
	dicamba	1.93	oz/a/a	2.76	oz/a	POST							
	Isoxadifen-ethyl	0.125	oz/a/a	0.25	oz/a	POST							
	Impact	0.175	oz/a/a	0.5	oz/a	POST							
	Atrazine	8	oz/a/a	8.9	oz/a	POST							
	MSO	1	% v/v	25.6	oz/a	POST							
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST							
11	Dual II Magnum	15.28	oz/a	15.3	oz/a	PRE	165.6 a	13.5 a	0.0 a	0.0 a	0.0 a	53.3 bc	55.0 b
	DPX-E9636	0.25	oz/a/a	1	oz/a	POST							
	dicamba	1.93	oz/a/a	2.76	oz/a	POST							
	Isoxadifen-ethyl	0.125	oz/a/a	0.25	oz/a	POST							
	Impact	0.175	oz/a/a	0.5	oz/a	POST							
	Atrazine	8	oz/a/a	8.9	oz/a	POST							
	MSO	1	% v/v	25.6	oz/a	POST							
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST							
12	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST	163.4 a	13.5 a	0.0 a	0.0 a	0.0 a	0.0 d	93.0 a
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST							
13	Dual II Magnum	15.28	oz/a/a	15.3	oz/a	PRE	162.7 a	13.6 a	0.0 a	0.0 a	0.0 a	63.3 b	97.7 a
	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST							
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST							
	DPX-E9636	0.25	oz/a/a	1	oz/a	POST							
14	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST	165.0 a	13.5 a	0.0 a	0.0 a	0.0 a	0.0 d	94.7 a
	Atrazine	12	oz/a/a	13.3	oz/a	POST							
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST							
15	DPX-E9636	0.25	oz/a/a	1	oz/a	PRE	170.2 a	13.8 a	0.0 a	0.0 a	0.0 a	88.3 a	93.0 a
	Atrazine	8	oz/a/a	8.9	oz/a	PRE							
	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST							
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST							
16	Nontreated Check						117.3 b	13.4 a	0.0 a	0.0 a	0.0 a	0.0 d	0.0 c
	LSD (P=.05)						23.58	0.33	0.00	0.00	0.00	21.04	16.02
	Standard Deviation						14.14	0.20	0.00	0.00	0.00	12.62	9.61
	CV						8.77	1.45	0.0	0.0	0.0	48.66	11.7
	Grand Mean						161.28	13.53	0.0	0.0	0.0	25.94	82.15
	Replicate F						0.862	1.236	0.000	0.000	0.000	1.795	1.597
	Replicate Prob(F)						0.4325	0.3049	1.0000	1.0000	1.0000	0.1835	0.2192
	Treatment F						2.439	0.604	0.000	0.000	0.000	19.080	23.111
	Treatment Prob(F)						0.0184	0.8482	1.0000	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Northeast Research & Extension Center

Description						Waterhemp	Waterhemp	Velvetleaf	Velvetleaf	
Rating Date						06-10-07	07-08-07	06-10-07	07-08-07	
Rating Data Type						Control	Control	Control	Control	
Rating Unit						Percent	Percent	Percent	Percent	
Days After First/Last Applic.						18 0	46 28	18 0	46 28	
Trt-Eval Interval										
Plant-Eval Interval						22 DP-1	50 DP-1	22 DP-1	50 DP-1	
Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage				
1	DPX-E9636	0.25	oz/a/a	1	oz/a	POST	0.0 c	92.0 ab	0.0 a	99.0 a
	Accent	0.375	oz/a/a	0.5	oz/a	POST				
	Isoxadifen-ethyl	0.125	oz/a/a	0.25	oz/a	POST				
	Impact	0.175	oz/a/a	0.5	oz/a	POST				
	Atrazine	8	oz/a/a	8.9	oz/a	POST				
	MSO	1	% v/v	25.6	oz/a	POST				
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST				
2	Dual II Magnum	15.28	oz/a	15.3	oz/a	PRE	86.7 a	99.0 a	0.0 a	99.0 a
	DPX-E9636	0.25	oz/a/a	1	oz/a	POST				
	Accent	0.375	oz/a/a	0.5	oz/a	POST				
	Isoxadifen-ethyl	0.125	oz/a/a	0.25	oz/a	POST				
	Impact	0.175	oz/a/a	0.5	oz/a	POST				
	Atrazine	8	oz/a/a	8.9	oz/a	POST				
	MSO	1	% v/v	25.6	oz/a	POST				
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST				
3	Accent	0.5	oz/a/a	0.67	oz/a	POST	0.0 c	92.5 ab	0.0 a	88.0 abc
	Harmony GT	0.06	oz/a/a	0.12	oz/a	POST				
	Isoxadifen-ethyl	0.1	oz/a/a	0.2	oz/a	POST				
	Impact	0.175	oz/a/a	0.5	oz/a	POST				
	Atrazine	8	oz/a/a	8.9	oz/a	POST				
	MSO	1	% v/v	25.6	oz/a	POST				
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST				
4	Dual II Magnum	15.28	oz/a	15.3	oz/a	PRE	90.0 a	92.5 ab	0.0 a	80.0 bc
	Accent	0.5	oz/a/a	0.67	oz/a	POST				
	Harmony GT	0.06	oz/a/a	0.12	oz/a	POST				
	Isoxadifen-ethyl	0.1	oz/a/a	0.2	oz/a	POST				
	Impact	0.175	oz/a/a	0.5	oz/a	POST				
	Atrazine	8	oz/a/a	8.9	oz/a	POST				
	MSO	1	% v/v	25.6	oz/a	POST				
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST				
5	DPX-E9636	0.19	oz/a/a	0.76	oz/a	POST	0.0 c	96.0 ab	0.0 a	99.0 a
	Harmony GT	0.041	oz/a/a	0.082	oz/a	POST				
	Isoxadifen-ethyl	0.095	oz/a/a	0.19	oz/a	POST				
	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST				
	NIS	0.25	% v/v	6.4	oz/a	POST				
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST				
6	Dual II Magnum	15.28	oz/a	15.3	oz/a	PRE	83.3 ab	96.0 ab	0.0 a	99.0 a
	DPX-E9636	0.19	oz/a/a	0.76	oz/a	POST				
	Harmony GT	0.041	oz/a/a	0.082	oz/a	POST				
	Isoxadifen-ethyl	0.095	oz/a/a	0.19	oz/a	POST				
	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST				
	NIS	0.25	% v/v	6.4	oz/a	POST				
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST				
7	DPX-E9636	0.229	oz/a/a	0.92	oz/a	POST	0.0 c	94.5 ab	0.0 a	96.0 ab
	Harmony GT	0.05	oz/a/a	0.1	oz/a	POST				
	Isoxadifen-ethyl	0.115	oz/a/a	0.23	oz/a	POST				
	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST				
	NIS	0.25	% v/v	6.4	oz/a	POST				
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST				
8	Dual II Magnum	15.28	oz/a	15.3	oz/a	PRE	85.0 a	65.7 b	0.0 a	74.5 c
	DPX-E9636	0.229	oz/a/a	0.92	oz/a	POST				
	Harmony GT	0.05	oz/a/a	0.1	oz/a	POST				
	Isoxadifen-ethyl	0.115	oz/a/a	0.23	oz/a	POST				
	Roundup Original MAX	15.13	oz/a/a	22	oz/a	POST				
	NIS	0.25	% v/v	6.4	oz/a	POST				
	Ammonium Sulfate	32	oz/a/a	32	oz/a	POST				

Northeast Research & Extension Center

Description						Waterhemp	Waterhemp	Velvetleaf	Velvetleaf	
Rating Date						06-10-07	07-08-07	06-10-07	07-08-07	
Rating Data Type						Control	Control	Control	Control	
Rating Unit						Percent	Percent	Percent	Percent	
Days After First/Last Applic.						18 0	46 28	18 0	46 28	
Trt-Eval Interval										
Plant-Eval Interval						22 DP-1	50 DP-1	22 DP-1	50 DP-1	
Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage				
9	DPX-E9636	0.19	oz a/a	0.76	oz/a	POST	0.0 c	94.5 ab	0.0 a	94.5 ab
	Harmony GT	0.041	oz a/a	0.082	oz/a	POST				
	Isoxadifen-ethyl	0.095	oz a/a	0.19	oz/a	POST				
	Roundup Original MAX	15.13	oz a/a	22	oz/a	POST				
	Atrazine	12	oz a/a	13.3	oz/a	POST				
	NIS	0.25	% v/v	6.4	oz/a	POST				
	Ammonium Sulfate	32	oz a/a	32	oz/a	POST				
10	DPX-E9636	0.25	oz a/a	1	oz/a	POST	0.0 c	90.0 ab	0.0 a	94.5 ab
	dicamba	1.93	oz a/a	2.76	oz/a	POST				
	Isoxadifen-ethyl	0.125	oz a/a	0.25	oz/a	POST				
	Impact	0.175	oz a/a	0.5	oz/a	POST				
	Atrazine	8	oz a/a	8.9	oz/a	POST				
	MSO	1	% v/v	25.6	oz/a	POST				
	Ammonium Sulfate	32	oz a/a	32	oz/a	POST				
11	Dual II Magnum	15.28	oz/a	15.3	oz/a	PRE	80.0 ab	94.7 ab	0.0 a	92.0 ab
	DPX-E9636	0.25	oz a/a	1	oz/a	POST				
	dicamba	1.93	oz a/a	2.76	oz/a	POST				
	Isoxadifen-ethyl	0.125	oz a/a	0.25	oz/a	POST				
	Impact	0.175	oz a/a	0.5	oz/a	POST				
	Atrazine	8	oz a/a	8.9	oz/a	POST				
	MSO	1	% v/v	25.6	oz/a	POST				
	Ammonium Sulfate	32	oz a/a	32	oz/a	POST				
12	Roundup Original MAX	15.13	oz a/a	22	oz/a	POST	0.0 c	92.5 ab	0.0 a	97.0 a
	Ammonium Sulfate	32	oz a/a	32	oz/a	POST				
13	Dual II Magnum	15.28	oz/a	15.3	oz/a	PRE	70.0 b	99.0 a	0.0 a	97.0 a
	Roundup Original MAX	15.13	oz a/a	22	oz/a	POST				
	Ammonium Sulfate	32	oz a/a	32	oz/a	POST				
	DPX-E9636	0.25	oz a/a	1	oz/a	POST				
14	Roundup Original MAX	15.13	oz a/a	22	oz/a	POST	0.0 c	99.0 a	0.0 a	99.0 a
	Atrazine	12	oz a/a	13.3	oz/a	POST				
	Ammonium Sulfate	32	oz a/a	32	oz/a	POST				
15	DPX-E9636	0.25	oz a/a	1	oz/a	PRE	70.0 b	99.0 a		
	Atrazine	8	oz a/a	8.9	oz/a	PRE				
	Roundup Original MAX	15.13	oz a/a	22	oz/a	POST				
	Ammonium Sulfate	32	oz a/a	32	oz/a	POST				
16	Nontreated Check						0.0 c	0.0 c	0.0 a	0.0 d
LSD (P=.05)						14.51	32.32	0.00	16.69	
Standard Deviation						8.42	18.84	0.00	9.53	
CV						23.84	21.58	0.0	10.92	
Grand Mean						35.31	87.3	0.0	87.23	
Replicate F						1.256	0.629	0.000	2.600	
Replicate Prob(F)						0.3098	0.5444	1.0000	0.1096	
Treatment F						73.430	5.104	0.000	21.033	
Treatment Prob(F)						0.0001	0.0007	1.0000	0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Additional Treatment Information	
Treatment Name	Ammonium Sulfate =
Rate Unit	
OZ A/A = Ounces Active Ingredient per Acre (Metric=G A/HA) B	
% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same) Z	
OZ/A = Ounces Product per Acre (Metric=ML-G/HA) O	
Other Rate Unit	
OZ/A = Ounces Product per Acre	

2007 Weed Control and Corn Yield with Halex GT (A15189)

Trial ID: 07CRR-6
Location: Concord, NE

Protocol ID:
Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Concord
State/Prov.: NE
Postal Code: 68728
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory
Organization: University of Nebraska
Address 1: 57905 866 RD
City: Concord
State/Prov: NE
Postal Code: 68728
Country: USA
Phone No: 402-584-2261
Fax No: 402-584-3859

Crop Description

Crop 1: ZEAMX Zea mays
Variety: Dekalb DK 60-19 RR
BBCH Scale: BCOR
Planting Method: seeded
Depth, Unit: 2 in
Row Spacing, Unit: 30 in
Harvest Date: 10-31-07
Harvested Width, Unit: 7.5 ft
% Standard Moisture: 15.5
Weighing Equipment: Almaco
Planting Date: 05-19-07
Rate, Unit: 24503 s/a
Harvest Equipment: Gleaner K
Harvested Length, Unit: 27 ft
Moisture Meter: Almaco

Pest Description

Pest 1 Type: W **Code:** SETVI **Setaria viridis**
Common Name: Green foxtail
Pest 2 Type: W **Code:** AMATU **Amaranthus tuberculatus**
Common Name: Tall waterhemp

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 30 FT
Replications: 3
Site Type: FIELD
Tillage Type: NO-TILL
Study Design: Randomized Complete Block

	Previous Crops	Previous Pesticides	Year
1.	Soybean	glyphosate	2006

Maintenance

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.	05-11-07	Roundup OriginalMAX	5.5	lbai/ga	SL	32	oz/A

Soil Description

Description Name: 06 SB Herb
% Sand: 12 **% OM:** 3.6 **Texture:** SILTY CLAY LOAM
% Silt: 58 **pH:** 7 **Soil Name:** colo
% Clay: 30 **CEC:** 22.7 **Fert. Level:** FAIR

Application Description

	A	B	C	D
Application Date:	05-23-07	06-10-07	06-10-07	07-02-07
Time of Day:	5:45 pm	3 pm	2 pm	3:45 pm
Application Method:	spray	spray	spray	spray
Application Timing:	PRE	EPOST	POST	V8
Application Placement:	surface	foliar	foliar	foliar
Air Temperature, Unit:	73 f	94 f	94 f	92 f
% Relative Humidity:	50	34	34	48
Wind Velocity, Unit:	2.5 mph	8 mph	8 mph	3 mph
Wind Direction:	w	sw	sw	s
Dew Presence (Y/N):	n	n	n	n
Soil Temperature, Unit:	68 f			80 f
Soil Moisture:	wet	adequate	adequate	dry
% Cloud Cover:	95	10	10	75

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH	BBCH
Stage Majority, Percent:		V2-V3	V2-V3	V9
Stage Minimum, Percent:		V2 50	V2 50	
Stage Maximum, Percent:		V3 50	V3 50	
Height, Unit:		4 IN	4 IN	20 IN
Height Minimum, Maximum:		3 5	3 5	15 30

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	SETVI W	SETVI W	SETVI W	SETVI W
Stage Majority, Percent:		3 in 40	3 in 40	
Stage Minimum, Percent:		1 in 30	1 in 30	
Stage Maximum, Percent:		5 in 30	5 in 30	
Height, Unit:		3 in	3 in	6 in
Height Minimum, Maximum:		1 5	1 5	4 10
Density, Unit:		20 m2	20 m2	20 m2
Pest 2 Code, Disc., Scale:	AMATU W	AMATU W	AMATU W	AMATU W
Height, Unit:		3 in	3 in	8 in
Height Minimum, Maximum:		2 4	2 4	4 12
Density, Unit:		1 m2	1 m2	1 m2

Application Equipment

	A	B	C
Appl. Equipment:	backpack	BACKPACK	BACKPACK
Operating Pressure, Unit:	20 psi	40 PSI	40 PSI
Nozzle Type:	Turbo Tee	TURBO TEE	TURBO TEE
Nozzle Size:	11003	11002	11002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	12 IN	12 IN	12 IN
Ground Speed, Unit:	2.7 MPH	2.7 MPH	2.7 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA
Mix Size, Unit:	1.8 Liters	1.8 Liters	1.8 Liters
Propellant:	co2	co2	co2

	D
Appl. Equipment:	BACKPACK
Operating Pressure, Unit:	40 PSI
Nozzle Type:	TURBO TEE
Nozzle Size:	11002
Nozzle Spacing, Unit:	20 IN
Boom Length, Unit:	10 FT
Boom Height, Unit:	12 IN
Ground Speed, Unit:	2.7 MPH
Carrier:	WATER
Spray Volume, Unit:	20 GPA
Mix Size, Unit:	1.8 Liters
Propellant:	co2

Northeast Research & Extension Center

2007 Weed Control and Corn Yield with Hallex GT (A15189)

Trial ID: 07CRR-6
 Location: Concord, NE

Protocol ID:
 Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description	Corn, field	Corn, field	Green foxtail	Green foxtail	Green foxtail	Green foxtail	Green foxtail				
Rating Date	10-31-07	10-31-07	06-10-07	07-02-07	07-08-07	08-28-07	08-28-07				
Rating Data Type	Yield@15.5%	Moisture	Control	Control	Control	Control	Density				
Rating Unit	bu/A	%	percent	percent	percent	percent	m2 RunCH				
Days After First/Last Applic.	161 121	161 121	18 0	40 0	46 6	97 57	97 57				
Trt-Eval Interval											
Plant-Eval Interval	165 DP-1	165 DP-1	22 DP-1	44 DP-1	50 DP-1	101 DP-1	101 DP-1				
Trt No.	Treatment Name	Rate	Growth Stage								
1	Nontreated Check			144.1 e	13.4 c	0.0 c	0.0 e	0.0 d	0.0 d	94.3 ab	21.7 a
2	Hallex GT	4 pt/a	EPOST	167.2 abc	13.4 bc	0.0 c	98.7 a	98.3 a	94.3 ab	6.7 bc	
	NIS	0.25 % v/v	EPOST								
	Ammonium Sulfate	8.5 lb/100 gal	EPOST								
3	Hallex GT	4 pt/a	EPOST	171.6 a	13.6 a	0.0 c	96.0 ab	97.7 ab	96.7 ab	4.7 c	
	atrazine	1 pt/a	EPOST								
	NIS	0.25 % v/v	EPOST								
	Ammonium Sulfate	8.5 lb/100 gal	EPOST								
4	Lumax	2 qt/a	PRE	163.2 a-d	13.4 c	88.3 a	83.3 bcd	95.7 ab	99.0 a	9.0 bc	
	Touchdown Total	24 oz/a	V8 4*reg								
	Ammonium Sulfate	8.5 lb/100 gal	V8 4*reg								
5	Harness Xtra	1.5 qt/a	PRE	164.8 a-d	13.3 cd	91.7 a	78.3 cd	93.3 b	99.0 a	8.3 bc	
	Roundup Original Max	22 oz/a	V8 4*reg								
	Ammonium Sulfate	8.5 lb/100 gal	V8 4*reg								
6	Roundup Original Max	22 oz/a	POST	160.0 bcd	13.2 d	0.0 c	96.0 ab	96.3 ab	94.0 b	5.0 c	
	Ammonium Sulfate	8.5 lb/100 gal	POST								
7	Roundup Original Max	22 oz/a	POST	155.9 d	13.3 cd	0.0 c	93.0 ab	97.7 ab	99.0 a	10.0 bc	
	Ammonium Sulfate	8.5 lb/100 gal	POST								
	Roundup Original Max	22 oz/a	V8 4*reg								
	Ammonium Sulfate	8.5 lb/100 gal	V8 4*reg								
8	Lumax	1.5 qt/a	PRE	157.0 cd	13.4 bc	83.3 ab	70.0 d	80.0 c	81.7 c	23.3 a	
	Lumax	1 qt/a	EPOST								
9	Bicep II Magnum	1.3 qt/a	PRE	168.4 ab	13.4 bc	86.7 ab	99.0 a	99.0 a	97.7 ab	8.3 bc	
	Hallex GT	4 pt/a	EPOST								
	NIS	0.25 % v/v	EPOST								
10	Steadfast	1.5 oz/a	EPOST	155.4 d	13.4 c		89.7 abc	94.7 ab	93.0 b	15.0 ab	
	Callisto	2 oz/a	EPOST								
	COC	1 % v/v	EPOST								
	Ammonium Sulfate	8.5 lb/100 gal	EPOST								
11	Bicep II Magnum	1.3 qt/a	PRE	168.9 ab	13.5 ab	78.3 b	99.0 a	99.0 a	96.3 ab	6.7 bc	
	Callisto	3 oz/a	EPOST								
	Touchdown Total	24 oz/a	EPOST								
	Ammonium Sulfate	8.5 lb/100 gal	EPOST								
12	Bicep II Magnum	1.3 qt/a	PRE	161.9 a-d	13.5 abc	78.3 b	97.7 a	99.0 a	97.0 ab	5.0 c	
	Laudis	3 oz/a	EPOST								
	Touchdown Total	24 oz/a	EPOST								
	Ammonium Sulfate	8.5 lb/100 gal	EPOST								
LSD (P=.05)				11.23	0.15	8.46	13.35	4.44	4.87	8.86	
Standard Deviation				6.63	0.09	4.97	7.88	2.62	2.88	5.23	
CV				4.1	0.67	10.79	9.45	2.99	3.29	50.74	
Grand Mean				161.54	13.39	46.06	83.39	87.56	87.31	10.31	
Replicate F				1.476	4.667	0.123	0.164	2.719	1.414	0.495	
Replicate Prob(F)				0.2502	0.0204	0.8852	0.8497	0.0881	0.2644	0.6164	
Treatment F				4.004	3.454	238.037	37.455	343.609	282.331	4.438	
Treatment Prob(F)				0.0027	0.0064	0.0001	0.0001	0.0001	0.0001	0.0014	

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Northeast Research & Extension Center

Description		Waterhemp 06-10-07	Waterhemp 07-02-07	Waterhemp 07-08-07	Waterhemp 08-28-07	Waterhemp 08-28-07
Rating Date		Control	Control	Control	Control	Density
Rating Data Type		percent	percent	percent	percent	m2 RunCH
Rating Unit		18 0	40 0	46 6	97 57	97 57
Days After First/Last Applic.						
Trt-Eval Interval						
Plant-Eval Interval		22 DP-1	44 DP-1	50 DP-1	101 DP-1	101 DP-1
Trt No.	Treatment Name	Rate	Growth Stage			
		Rate Unit				
1	Nontreated Check			0.0 b	0.0 b	0.0 c
2	Halex GT	4 pt/a	EPOST	0.0 b	99.0 a	99.0 a
	NIS	0.25 % v/v	EPOST			
	Ammonium Sulfate	8.5 lb/100 gal	EPOST			
3	Halex GT	4 pt/a	EPOST	0.0 b	99.0 a	99.0 a
	atrazine	1 pt/a	EPOST			
	NIS	0.25 % v/v	EPOST			
	Ammonium Sulfate	8.5 lb/100 gal	EPOST			
4	Lumax	2 qt/a	PRE	99.0 a	99.0 a	99.0 a
	Touchdown Total	24 oz/a	V8 4*reg			
	Ammonium Sulfate	8.5 lb/100 gal	V8 4*reg			
5	Harness Xtra	1.5 qt/a	PRE	99.0 a	99.0 a	99.0 a
	Roundup Original Max	22 oz/a	V8 4*reg			
	Ammonium Sulfate	8.5 lb/100 gal	V8 4*reg			
6	Roundup Original Max	22 oz/a	POST	0.0 b	99.0 a	99.0 a
	Ammonium Sulfate	8.5 lb/100 gal	POST			97.7 a
7	Roundup Original Max	22 oz/a	POST	0.0 b	99.0 a	99.0 a
	Ammonium Sulfate	8.5 lb/100 gal	POST			
	Roundup Original Max	22 oz/a	V8 4*reg			
	Ammonium Sulfate	8.5 lb/100 gal	V8 4*reg			
8	Lumax	1.5 qt/a	PRE	99.0 a	99.0 a	99.0 a
	Lumax	1 qt/a	EPOST			
9	Bicep II Magnum	1.3 qt/a	PRE	99.0 a	99.0 a	99.0 a
	Halex GT	4 pt/a	EPOST			
	NIS	0.25 % v/v	EPOST			
10	Steadfast	1.5 oz/a	EPOST		99.0 a	94.5 b
	Callisto	2 oz/a	EPOST			
	COC	1 % v/v	EPOST			
	Ammonium Sulfate	8.5 lb/100 gal	EPOST			
11	Bicep II Magnum	1.3 qt/a	PRE	99.0 a	99.0 a	99.0 a
	Callisto	3 oz/a	EPOST			
	Touchdown Total	24 oz/a	EPOST			
	Ammonium Sulfate	8.5 lb/100 gal	EPOST			
12	Bicep II Magnum	1.3 qt/a	PRE	99.0 a	99.0 a	99.0 a
	Laudis	3 oz/a	EPOST			
	Touchdown Total	24 oz/a	EPOST			
	Ammonium Sulfate	8.5 lb/100 gal	EPOST			
LSD (P=.05)				0.00	0.00	2.26
Standard Deviation				0.00	0.00	1.33
CV				0.0	0.0	1.47
Grand Mean				54.0	90.75	90.38
Replicate F				0.000	0.000	0.955
Replicate Prob(F)				1.0000	1.0000	0.4011
Treatment F				0.000	0.000	1377.409
Treatment Prob(F)				1.0000	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Additional Treatment Information	
<u>Treatment Name</u>	Ammonium Sulfate =
<u>Rate Unit</u>	
PT/A = Pints Product per Acre (Metric=L/HA) P	
% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same) Z	
LB/100 GAL = Pounds Dry Product per 100 Gallons Mix (Metric=KG/100 L) J	
QT/A = Quarts Product per Acre (Metric=L/HA) Q	
OZ/A = Ounces Product per Acre (Metric=ML-G/HA) O	

2007 Laudis / Corn / Efficacy Key Weed / Timing / UNL Sandbur

Trial ID: 07CRR-7 Protocol ID:
Location: Brunswick, NE Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Brunswick
State/Prov.: NE
Postal Code: 68720
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory Country: USA
Organization: University of Nebraska Phone No: 402-584-2261
Address 1: 57905 866 RD Fax No: 402-584-3859
City: Concord
State/Prov: NE
Postal Code: 68728

Crop Description

Crop 1: ZEAMX Zea mays Corn
BBCH Scale: BCOR Planting Date: 05-02-07
Planting Method: seeded Rate, Unit: 28000 s/a
Depth, Unit: 2 in

Pest Description

Pest 1 Type: W Code: CCHSP Cenchrus longispinus
Common Name: Field sandbur

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD
Plot Length, Unit: 30 FT Tillage Type: NO-TILL
Replications: 3 Study Design: Randomized Complete Block

Maintenance

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.	05-12-07	Roundup Weather MAX	5.5	lba/gal	SL	32	oz/A

Soil Description

Description Name: 2005 0-6" sample
% Sand: 88 % OM: 1.2 Texture: LOAMY SAND
% Silt: 4 pH: 5.9
% Clay: 8 CEC: 5.2 Fert. Level: GOOD

Application Description

	A	B	C
Application Date:	05-04-07	06-01-07	06-08-07
Time of Day:	5pm	11:30 am	4:30 pm
Application Method:	spray	spray	spray
Application Timing:	PRE	EPOST	MPOST
Application Placement:	surface	foliar	foliar
Air Temperature, Unit:	74 f	62 f	73 f
% Relative Humidity:	80	67	27
Wind Velocity, Unit:	8 mph	5 mph	5 mph
Wind Direction:	w	sw	w
Dew Presence (Y/N):	n	y	n
Soil Temperature, Unit:	60 f	57 f	70 f
Soil Moisture:	adequate	wet	adequate
% Cloud Cover:	80	100	75

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		v4-v5	v5-v6
Height, Unit:		6 in	8 in

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	CCHSP W	CCHSP W	CCHSP W
Stage Majority, Percent:		2-4LF	4-6LF
Height, Unit:		2 in	3 in
Height Minimum, Maximum:		1 3	2 4
Density, Unit:		20 m2	20 m2

Application Equipment

	A	B	C
Appl. Equipment:	backpack	BACKPACK	BACKPACK
Operating Pressure, Unit:	18 psi	40 PSI	40 PSI
Nozzle Type:	Turbo Tee	TURBO TEE	TURBO TEE
Nozzle Size:	11003	11002	11002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	12 IN	12 IN	12 IN
Ground Speed, Unit:	2.7 MPH	2.7 MPH	2.7 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA
Mix Size, Unit:	1.8 Liters	1.8 Liters	1.8 Liters
Propellant:	co2	co2	co2

Northeast Research & Extension Center

2007 Laudis / Corn / Efficacy Key Weed / Timing / UNL Sandbur

Trial ID: 07CRR-7
 Location: Brunswick, NE

Protocol ID:
 Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Sandbur	Sandbur	Sandbur	Sandbur				
Rating Date	05-24-07	06-05-07	06-14-07	06-22-07	07-18-07	06-05-07	06-14-07	06-22-07	07-18-07				
Rating Data Type	Injury	Injury	Injury	Injury	Injury	Control	Control	Control	Control				
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent				
Days After First/Last Applic.	20 20	32 4	41 6	49 14	75 40	32 4	41 6	49 14	75 40				
Trt-Eval Interval	22 DP-1	34 DP-1	43 DP-1	51 DP-1	77 DP-1	34 DP-1	43 DP-1	51 DP-1	77 DP-1				
Plant-Eval Interval	22 DP-1	34 DP-1	43 DP-1	51 DP-1	77 DP-1	34 DP-1	43 DP-1	51 DP-1	77 DP-1				
Trt No.	Treatment Name	Rate	Growth Unit	Stage									
1	Nontreated Check				0.0 b	0.0 b	5.0 c	0.0 a	0.0 a	0.0 b	0.0 f	0.0 e	0.0 f
2	Laudis	3 oz/a	EPOST		0.0 b	0.0 b	5.0 c	0.0 a	0.0 a	66.7 a	97.7 ab	99.0 a	81.7 bc
	Atrazine	1 pt/a	EPOST										
	COC	1 % v/v	EPOST										
	28% Nitrogen	1.5 qt/a	EPOST										
3	Laudis	3 oz/a	EPOST		0.0 b	0.0 b	5.0 c	0.0 a	0.0 a	73.3 a	99.0 a	99.0 a	88.3 ab
	Atrazine	1 pt/a	EPOST										
	MSO	1 % v/v	EPOST										
	28% Nitrogen	1.5 qt/a	EPOST										
4	Laudis	3 oz/a	EPOST		0.0 b	0.0 b	5.0 c	0.0 a	0.0 a	56.7 a	93.0 abc	94.3 ab	90.0 a
	MSO	1 % v/v	EPOST										
	28% Nitrogen	1.5 qt/a	EPOST										
5	Laudis	3 oz/a	EPOST		0.0 b	0.0 b	15.0 ab	0.0 a	0.0 a	73.3 a	94.3 abc	99.0 a	88.3 ab
	Accent	0.5 oz/a	EPOST										
	MSO	1 % v/v	EPOST										
	28% Nitrogen	1.5 qt/a	EPOST										
6	Laudis	3 oz/a	MPOST		0.0 b	0.0 b	5.0 c	0.0 a	0.0 a		68.3 d	94.3 ab	80.0 c
	Atrazine	1 pt/a	MPOST										
	COC	1 % v/v	MPOST										
	28% Nitrogen	1.5 qt/a	MPOST										
7	Laudis	3 oz/a	MPOST		0.0 b		5.0 c	0.0 a	0.0 a		50.0 e	96.0 a	68.3 e
	Atrazine	1 pt/a	MPOST										
	MSO	1 % v/v	MPOST										
	28% Nitrogen	1.5 qt/a	MPOST										
8	Laudis	3 oz/a	MPOST		0.0 b		5.0 c	0.0 a	0.0 a		46.7 e	66.7 d	70.0 de
	MSO	1 % v/v	MPOST										
	28% Nitrogen	1.5 qt/a	MPOST										
9	Laudis	3 oz/a	MPOST		0.0 b	0.0 b	8.3 bc	0.0 a	0.0 a		40.0 e	76.7 cd	76.7 cd
	Accent	0.5 oz/a	MPOST										
	MSO	1 % v/v	MPOST										
	28% Nitrogen	1.5 qt/a	MPOST										
10	Radius	4.5 oz/a	PRE		0.0 b	1.7 b	5.0 c	0.0 a	0.0 a	71.7 a	78.3 cd	94.7 ab	83.3 abc
	Laudis	3 oz/a	MPOST										
	Atrazine	1 pt/a	MPOST										
	MSO	1.5 pt/a	MPOST										
	28% Nitrogen	1.5 qt/a	MPOST										
11	Balance Pro	1 oz/a	PRE		7.3 a	26.7 a	23.3 a	6.7 a	0.0 a	65.0 a	81.7 bcd	83.0 bc	65.0 e
	atrazine	1 pt/a	PRE										
	Laudis	3 oz/a	MPOST										
	MSO	1.5 pt/a	MPOST										
	28% Nitrogen	1.5 qt/a	MPOST										
LSD (P=.05)					1.29	11.04	9.78	5.93	0.00	23.15	16.17	11.94	8.07
Standard Deviation					0.76	6.14	5.74	3.48	0.00	13.01	9.50	7.01	4.74
CV					113.82	195.06	72.86	574.46	0.0	22.39	13.95	8.54	6.58
Grand Mean					0.67	3.15	7.88	0.61	0.0	58.1	68.09	82.06	71.97
Replicate F					1.000	0.908	1.126	1.000	0.000	1.041	0.602	3.468	0.034
Replicate Prob(F)					0.3855	0.4314	0.3439	0.3855	1.0000	0.3829	0.5574	0.0509	0.9668
Treatment F					25.474	6.212	3.241	1.000	0.000	12.251	32.073	52.005	85.831
Treatment Prob(F)					0.0001	0.0035	0.0121	0.4755	1.0000	0.0002	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

2007 Laudis / Corn / Efficacy Key Weed / Timing / UNL Sandbur

Trial ID: 07CRR-7

Protocol ID:

Location: Brunswick, NE

Study Director: Stevan Knezevic

Investigator: Stevan Knezevic

Additional Treatment Information

Rate Unit

OZ/A = Ounces Product per Acre (Metric=ML-G/HA)|O

PT/A = Pints Product per Acre (Metric=L/HA)|P

% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same)|Z

QT/A = Quarts Product per Acre (Metric=L/HA)|Q

2007 Preemergence mixtures of rimsulfuron, isoxaflutole, and atrazine for broad-spectrum weed control in conventional corn.

Trial ID: 07CRR-8 Protocol ID:
Location: Brunswick, NE Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory Country: USA
Organization: University of Nebraska Phone No: 402-584-2261
Address 1: 57905 866 RD Fax No: 402-584-3859
City: Concord
State/Prov: NE
Postal Code: 68728

Crop Description

Crop 1: ZEAMX Zea mays Corn
BBCH Scale: BCOR Planting Date: 05-02-07
Planting Method: seeded Rate, Unit: 28000 s/a
Depth, Unit: 2 in

Pest Description

Pest 1 Type: W Code: CCHSP Cenchrus longispinus
Common Name: Field sandbur

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD
Plot Length, Unit: 30 FT Tillage Type: NO-TILL
Replications: 3 Study Design: Randomized Complete Block

Soil Description

Description Name: 2005 0-6" sample
% Sand: 88 % OM: 1.2 Texture: LOAMY SAND
% Silt: 4 pH: 5.9
% Clay: 8 CEC: 5.2 Fert. Level: GOOD

Application Description

A	
Application Date:	05-04-07
Time of Day:	5pm
Application Method:	spray
Application Timing:	PRE
Application Placement:	surface
Air Temperature, Unit:	74 f
% Relative Humidity:	80
Wind Velocity, Unit:	8 mph
Wind Direction:	w
Dew Presence (Y/N):	n
Soil Temperature, Unit:	60 f
Soil Moisture:	adequate
% Cloud Cover:	80

Crop Stage At Each Application

A	
Crop 1 Code, BBCH Scale:	ZEAMX BCOR

Pest Stage At Each Application

A	
Pest 1 Code, Disc., Scale:	CCHSP W

Application Equipment

	A
Appl. Equipment:	backpack
Operating Pressure, Unit:	18 psi
Nozzle Type:	Turbo Tee
Nozzle Size:	11003
Nozzle Spacing, Unit:	20 IN
Boom Length, Unit:	10 FT
Boom Height, Unit:	12 IN
Ground Speed, Unit:	2.7 MPH
Carrier:	WATER
Spray Volume, Unit:	20 GPA
Mix Size, Unit:	1.8 L
Propellant:	co2

2007 Preemergence mixtures of rimsulfuron, isoxaflutole, and atrazine for broad-spectrum weed control in conventional corn.

Trial ID: 07CRR-8

Protocol ID:

Location: Brunswick, NE

Study Director: Stevan Knezevic

Investigator: Stevan Knezevic

Description	Crop Injury	Crop Injury	Crop Injury	Crop Injury	Sandbur	Sandbur	Sandbur			
Rating Date	05-24-07	06-05-07	06-22-07	06-30-07	06-05-07	06-22-07	06-30-07			
Rating Data Type	Injury	Injury	Injury	Injury	Control	Control	Control			
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent	Percent			
Days After First/Last Applic.	20 20	32 32	49 49	57 57	32 32	49 49	57 57			
Trt-Eval Interval	20 DA-A	32 DA-A	49 DA-A	57 DA-A	32 DA-A	49 DA-A	57 DA-A			
Plant-Eval Interval	22 DP-1	34 DP-1	51 DP-1	59 DP-1	34 DP-1	51 DP-1	59 DP-1			
Trt No.	Treatment Name	Rate	Growth Stage							
1	Atrazine	16 oz/a	PRE	0.0 g	0.0 j	0.0 f	0.0 c	36.7 g	0.0 e	26.7 g
2	DPX-E9636	1 oz/a	PRE	0.0 g	0.0 j	0.0 f	0.0 c	60.0 ef	63.3 a-d	53.3 b-f
3	DPX-E9636	1.5 oz/a	PRE	0.0 g	0.0 j	0.0 f	3.3 bc	73.3 b-e	70.0 a-d	68.3 abc
4	Balance Pro	0.75 oz/a	PRE	0.0 g	1.7 ij	0.0 f	0.0 c	68.3 c-f	58.3 bcd	46.7 def
5	Balance Pro	1 oz/a	PRE	0.0 g	3.3 ij	1.7 ef	0.0 c	73.3 b-e	56.7 bcd	46.7 def
6	Balance Pro	1.25 oz/a	PRE	25.0 cde	46.7 a	18.3 ab	2.5 c	85.0 ab	56.7 bcd	50.0 c-f
7	Balance Pro	1.5 oz/a	PRE	23.3 cde	21.7 c-g	10.0 b-f	3.3 bc	85.0 ab	61.7 bcd	46.7 def
8	DPX-E9636	1 oz/a	PRE	1.7 g	5.0 hij	0.0 f	2.5 c	78.3 abc	71.7 a-d	60.0 a-e
	Balance Pro	0.75 oz/a	PRE							
9	DPX-E9636	1 oz/a	PRE	16.7 ef	16.7 e-i	11.7 b-e	0.0 c	80.0 abc	60.0 bcd	56.7 a-f
	Balance Pro	1 oz/a	PRE							
10	DPX-E9636	1 oz/a	PRE	25.0 cde	36.7 abc	18.3 ab	0.0 c	83.3 abc	66.7 a-d	63.3 a-d
	Balance Pro	1.25 oz/a	PRE							
11	DPX-E9636	1 oz/a	PRE	33.3 abc	25.0 b-f	13.3 bcd	1.7 c	81.7 abc	81.7 ab	73.3 a
	Balance Pro	1.5 oz/a	PRE							
12	DPX-E9636	1 oz/a	PRE	1.7 g	3.3 ij	0.0 f	0.0 c	75.0 b-e	76.7 a-d	66.7 abc
	Balance Pro	0.75 oz/a	PRE							
	Atrazine	16 oz/a	PRE							
13	DPX-E9636	1 oz/a	PRE	8.3 fg	6.7 g-j	0.0 f	0.0 c	73.3 b-e	63.3 a-d	56.7 a-f
	Balance Pro	1 oz/a	PRE							
	Atrazine	16 oz/a	PRE							
14	DPX-E9636	1 oz/a	PRE	25.0 cde	30.0 b-e	3.3 def	0.0 c	80.0 abc	66.7 a-d	66.7 abc
	Balance Pro	1.25 oz/a	PRE							
	Atrazine	16 oz/a	PRE							
15	DPX-E9636	1 oz/a	PRE	30.0 bcd	28.3 b-e	13.3 bcd	0.0 c	83.3 abc	78.3 abc	71.7 ab
	Balance Pro	1.5 oz/a	PRE							
	Atrazine	16 oz/a	PRE							
16	DPX-E9636	1.5 oz/a	PRE	1.7 g	3.3 ij	6.7 c-f	0.0 c	83.3 abc	90.0 a	65.0 a-d
	Balance Pro	0.75 oz/a	PRE							
17	DPX-E9636	1.5 oz/a	PRE	8.3 fg	11.7 f-j	13.3 bcd	0.0 c	78.3 abc	76.7 a-d	66.7 abc
	Balance Pro	1 oz/a	PRE							
18	DPX-E9636	1.5 oz/a	PRE	23.3 cde	26.7 b-f	16.7 abc	0.0 c	83.3 abc	73.3 a-d	65.0 a-d
	Balance Pro	1.25 oz/a	PRE							
19	DPX-E9636	1.5 oz/a	PRE	38.3 ab	33.3 a-d	20.0 ab	10.0 ab	91.7 a	83.3 ab	75.0 a
	Balance Pro	1.5 oz/a	PRE							
20	DPX-E9636	1.5 oz/a	PRE	1.7 g	3.3 ij	0.0 f	0.0 c	85.0 ab	80.0 ab	61.7 a-e
	Balance Pro	0.75 oz/a	PRE							
	Atrazine	16 oz/a	PRE							
21	DPX-E9636	1.5 oz/a	PRE	18.3 def	20.0 d-h	13.3 bcd	1.7 c	80.0 abc	70.0 a-d	75.0 a
	Balance Pro	1 oz/a	PRE							
	Atrazine	16 oz/a	PRE							
22	DPX-E9636	1.5 oz/a	PRE	31.7 bc	25.0 b-f	13.3 bcd	5.0 bc	83.3 abc	73.3 a-d	66.7 abc
	Balance Pro	1.25 oz/a	PRE							
	Atrazine	16 oz/a	PRE							
23	DPX-E9636	1.5 oz/a	PRE	45.0 a	40.0 ab	25.0 a	5.0 bc	91.7 a	76.7 a-d	68.3 abc
	Balance Pro	1.5 oz/a	PRE							
	Atrazine	16 oz/a	PRE							
24	Balance Pro	1.5 oz/a	PRE	30.0 bcd	38.3 ab	16.7 abc	15.0 a	85.0 ab	56.7 bcd	50.0 c-f
	Atrazine	16 oz/a	PRE							
25	Keystone	1.3 qt/a	PRE	0.0 g	0.0 j	3.3 def	0.0 c	56.7 f	51.7 cd	43.3 efg
26	Keystone	2.6 qt/a	PRE	0.0 g	0.0 j	3.3 def	0.0 c	61.7 def	50.0 d	40.0 fg

Northeast Research & Extension Center

Description	Crop Injury	Crop Injury	Crop Injury	Crop Injury	Sandbur	Sandbur	Sandbur		
Rating Date	05-24-07	06-05-07	06-22-07	06-30-07	06-05-07	06-22-07	06-30-07		
Rating Data Type	Injury	Injury	Injury	Injury	Control	Control	Control		
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent	Percent		
Days After First/Last Applic.	20 20	32 32	49 49	57 57	32 32	49 49	57 57		
Trt-Eval Interval	20 DA-A	32 DA-A	49 DA-A	57 DA-A	32 DA-A	49 DA-A	57 DA-A		
Plant-Eval Interval	22 DP-1	34 DP-1	51 DP-1	59 DP-1	34 DP-1	51 DP-1	59 DP-1		
Trt Treatment	Rate	Growth							
No. Name	Rate Unit	Stage							
27 Lumax	1.5 qt/a	PRE	0.0 g	0.0 j	0.0 f	0.0 c	71.7 b-f	73.3 a-d	56.7 a-f
28 Lumax	3 qt/a	PRE	0.0 g	0.0 j	0.0 f	0.0 c	78.3 abc	73.3 a-d	61.7 a-e
29 Nontreated Check			0.0 g	0.0 j	0.0 f	0.0 c	0.0 h	0.0 e	0.0 h
30 DPX-E9636	1.5 oz/a	PRE	0.0 g	0.0 j	0.0 f	0.0 c	76.7 a-d	76.7 a-d	63.3 a-d
Atrazine	16 oz a/a	PRE							
LSD (P=.05)			12.53	16.56	11.15	6.73	16.42	27.38	19.49
Standard Deviation			7.67	10.14	6.83	4.08	10.05	16.77	11.93
CV			59.27	71.29	92.42	244.64	13.57	25.98	20.92
Grand Mean			12.94	14.22	7.39	1.67	74.11	64.56	57.06
Replicate F			1.718	3.829	6.386	0.802	1.091	0.280	0.318
Replicate Prob(F)			0.1885	0.0274	0.0031	0.4555	0.3427	0.7571	0.7289
Treatment F			10.736	6.740	4.039	2.066	9.550	4.306	5.156
Treatment Prob(F)			0.0001	0.0001	0.0001	0.0168	0.0001	0.0001	0.0001

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

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

Additional Treatment Information

Rate Unit

OZ A/A = Ounces Active Ingredient per Acre (Metric=G A/HA) B
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OZ/A = Ounces Product per Acre (Metric=ML-G/HA) O

QT/A = Quarts Product per Acre (Metric=L/HA) Q
--

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V6
Height, Unit:		15 in

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	CCHSS W	CCHSS W
Height, Unit:		5 in
Height Minimum, Maximum:		3 6
Density, Unit:		30 m2

Application Equipment

	A	B
Appl. Equipment:	backpack	BACKPACK
Operating Pressure, Unit:	20 psi	40 PSI
Nozzle Type:	Turbo Tee	TURBO TEE
Nozzle Size:	11003	11002
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	12 IN	12 IN
Ground Speed, Unit:	2.7 MPH	2.7 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA
Mix Size, Unit:	1.8 Liters	1.8 Liters
Propellant:	co2	co2

Northeast Research & Extension Center

2007 KIH-485 Protocol (Low organic sandy soils) with post sequential

Trial ID: 07CRR-9
 Location: Brunswick, NE

Protocol ID: 07 KIH Brunswick POST
 Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field
Rating Date	10-04-07	10-04-07	10-04-07	05-24-07	05-31-07	06-05-07	06-22-07
Rating Data Type	%Yield Red	Yield@15.5	Moisture	Stunting	Stunting	Stunting	Stunting
Rating Unit	%	bu/A	%	percent	percent	percent	percent
Days After First/Last Applic.	153 118	153 118	153 118	20 20	27 27	32 32	49 14
Trt-Eval Interval							
Plant-Eval Interval	155 DP-1	155 DP-1	155 DP-1	22 DP-1	29 DP-1	34 DP-1	51 DP-1
Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Growth Stage		
1	Nontreated Check					20.0 b-e	180.7 b-e
2	KIH-485	0.42 oz/a	25 g a/ha		PRE	20.2 b-e	180.3 b-e
3	KIH-485	1.4 oz/a	83 g a/ha		PRE	20.4 b-e	179.8 b-e
4	KIH-485	1.76 oz/a	105 g a/ha		PRE	36.3 ab	144.0 ef
5	KIH-485	2.52 oz/a	150 g a/ha		PRE	35.2 ab	146.5 ef
6	KIH-485	3.02 oz/a	180 g a/ha		PRE	32.9 abc	151.7 def
7	KIH-485	3.5 oz/a	209 g a/ha		PRE	39.6 a	136.5 f
8	KIH-485	4.2 oz/a	250 g a/ha		PRE	28.4 abc	161.7 def
9	KIH-485	6.3 oz/a	375 g a/ha		PRE	31.1 abc	155.7 def
10	KIH-485	8.4 oz/a	500 g a/ha		PRE	39.7 a	136.4 f
11	KIH-485	0.42 oz/a	25 g a/ha		PRE	7.7 def	208.7 abc
	Roundup Original MAX	22 oz/a			POST		
12	KIH-485	1.4 oz/a	83 g a/ha		PRE	2.7 ef	219.9 ab
	Roundup Original MAX	22 oz/a			POST		
13	KIH-485	1.76 oz/a	105 g a/ha		PRE	15.8 c-f	190.3 a-d
	Roundup Original MAX	22 oz/a			POST		
14	KIH-485	2.52 oz/a	150 g a/ha		PRE	26.4 abc	166.4 def
	Roundup Original MAX	22 oz/a			POST		
15	KIH-485	3.02 oz/a	180 g a/ha		PRE	17.0 c-f	187.6 a-d
	Roundup Original MAX	22 oz/a			POST		
16	KIH-485	3.5 oz/a	209 g a/ha		PRE	25.1 a-d	169.4 c-f
	Roundup Original MAX	22 oz/a			POST		
17	KIH-485	4.2 oz/a	250 g a/ha		PRE	25.7 abc	167.9 def
	Roundup Original MAX	22 oz/a			POST		
18	KIH-485	6.3 oz/a	375 g a/ha		PRE	22.7 a-d	174.8 c-f
	Roundup Original MAX	22 oz/a			POST		
19	KIH-485	8.4 oz/a	500 g a/ha		PRE	25.7 abc	168.0 def
	Roundup Original MAX	22 oz/a			POST		
20	Roundup Original MAX	22 oz/a			POST	-0.1 f	226.2 a
LSD (P=.05)						17.95	40.57
Standard Deviation						10.88	24.58
CV						46.06	14.24
Grand Mean						23.62	172.62
Replicate F						2.910	2.911
Replicate Prob(F)						0.0667	0.0666
Treatment F						3.181	3.181
Treatment Prob(F)						0.0012	0.0012

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Northeast Research & Extension Center

Description						Corn, field	Corn, field	Sandbur	Sandbur	Sandbur	Sandbur
Rating Date						07-18-07	09-14-07	06-05-07	06-22-07	07-18-07	09-14-07
Rating Data Type						Stunting	Stunting	Control	Control	Control	Control
Rating Unit						percent	percent	percent	percent	percent	percent
Days After First/Last Applic.						75 40	133 98	32 32	49 14	75 40	133 98
Trt-Eval Interval											
Plant-Eval Interval						77 DP-1	135 DP-1	34 DP-1	51 DP-1	77 DP-1	135 DP-1
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage						
		Rate Unit	Rate Unit	Rate Unit							
1	Nontreated Check				PRE	0.0 e	0.0 c	0.0 f	0.0 e	0.0 j	0.0 j
2	KIH-485	0.42 oz/a	25 g a/ha		PRE	0.0 e	0.0 c	30.0 e	10.0 e	20.0 i	30.0 i
3	KIH-485	1.4 oz/a	83 g a/ha		PRE	0.0 e	0.0 c	50.0 d	46.7 d	26.7 hi	40.0 h
4	KIH-485	1.76 oz/a	105 g a/ha		PRE	1.7 e	0.0 c	50.0 d	40.0 d	30.0 h	53.3 g
5	KIH-485	2.52 oz/a	150 g a/ha		PRE	6.7 d	0.0 c	66.7 c	50.0 d	46.7 g	63.3 ef
6	KIH-485	3.02 oz/a	180 g a/ha		PRE	10.0 d	10.0 bc	70.0 c	66.7 c	61.7 f	63.3 ef
7	KIH-485	3.5 oz/a	209 g a/ha		PRE	25.0 c	23.3 ab	81.7 b	80.0 b	66.7 ef	66.7 de
8	KIH-485	4.2 oz/a	250 g a/ha		PRE	26.7 c	23.3 ab	90.0 ab	90.0 ab	78.3 cd	70.0 de
9	KIH-485	6.3 oz/a	375 g a/ha		PRE	50.0 b	23.3 ab	94.3 a	89.7 ab	86.7 bc	80.0 bc
10	KIH-485	8.4 oz/a	500 g a/ha		PRE	60.0 a	36.7 a	99.7 a	98.0 a	98.0 a	93.3 a
11	KIH-485	0.42 oz/a	25 g a/ha		PRE				99.0 a	60.0 f	40.0 h
	Roundup Original MAX	22 oz/a			POST						
12	KIH-485	1.4 oz/a	83 g a/ha		PRE				99.0 a	66.7 ef	43.3 h
	Roundup Original MAX	22 oz/a			POST						
13	KIH-485	1.76 oz/a	105 g a/ha		PRE				99.0 a	66.7 ef	56.7 fg
	Roundup Original MAX	22 oz/a			POST						
14	KIH-485	2.52 oz/a	150 g a/ha		PRE				99.0 a	73.3 de	63.3 ef
	Roundup Original MAX	22 oz/a			POST						
15	KIH-485	3.02 oz/a	180 g a/ha		PRE				99.0 a	80.0 cd	66.7 de
	Roundup Original MAX	22 oz/a			POST						
16	KIH-485	3.5 oz/a	209 g a/ha		PRE				99.0 a	86.7 bc	73.3 cd
	Roundup Original MAX	22 oz/a			POST						
17	KIH-485	4.2 oz/a	250 g a/ha		PRE				99.0 a	93.3 ab	73.3 cd
	Roundup Original MAX	22 oz/a			POST						
18	KIH-485	6.3 oz/a	375 g a/ha		PRE				99.0 a	98.3 a	86.7 ab
	Roundup Original MAX	22 oz/a			POST						
19	KIH-485	8.4 oz/a	500 g a/ha		PRE				99.0 a	100.0 a	93.3 a
	Roundup Original MAX	22 oz/a			POST						
20	Roundup Original MAX	22 oz/a			POST				99.0 a		0.0 j
LSD (P=.05)						4.34	13.65	10.59	10.17	9.37	9.98
Standard Deviation						2.53	7.96	6.18	6.16	5.68	6.05
CV						14.04	68.21	9.77	7.9	8.7	10.46
Grand Mean						18.0	11.67	63.23	78.05	65.25	57.83
Replicate F						2.739	5.737	1.052	2.426	0.825	1.036
Replicate Prob(F)						0.0915	0.0118	0.3696	0.1020	0.4464	0.3647
Treatment F						226.609	9.035	77.461	79.547	77.340	56.300
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Additional Treatment Information
Rate Unit
OZ/A = Ounces Product per Acre (Metric=ML-G/HA) O
Other Rate Unit
G A/HA = Grams Active Ingredient per Hectare

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V6
Height, Unit:		15 in

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETVI W	SETVI W
Height, Unit:		12 in
Height Minimum, Maximum:		6 15
Density, Unit:		20 m2

Application Equipment

	A	B
Appl. Equipment:	backpack	BACKPACK
Operating Pressure, Unit:	18 psi	40 PSI
Nozzle Type:	Turbo Tee	TURBO TEE
Nozzle Size:	11003	11002
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	12 IN	12 IN
Ground Speed, Unit:	2.7 MPH	2.7 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA
Mix Size, Unit:	1.8 Liters	1.8 Liters
Propellant:	co2	co2

Northeast Research & Extension Center

2007 KIH-485 Protocol (Low organic sandy soils)

Trial ID: 07CRR-10
Location: Concord, NE

Protocol ID: 07 KIH Corn Low OM
Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Description					Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail	
Rating Date					10-29-07	10-29-07	06-21-07	07-08-07	06-21-07	07-08-07	
Rating Data Type					Yield@15.5%	Moisture	Stunting	Stunting	Control	Control	
Rating Unit					bu/A	%	percent	percent	percent	percent	
Days After First/Last Applic.					161 128	161 128	31 31	48 15	31 31	48 15	
Trt-Eval Interval											
Plant-Eval Interval					163 DP-1	163 DP-1	33 DP-1	50 DP-1	33 DP-1	50 DP-1	
Trt No.	Treatment Name	Rate	Other Rate	Other Unit	Growth Stage						
1	Nontreated Check					46.8 e	14.2 c	0.0 b	0.0 d	0.0 h	0.0 i
2	KIH-485	0.42 oz/a	25 g a/ha		PRE	129.4 d	15.8 ab	0.0 b	0.0 d	28.3 g	23.3 h
3	KIH-485	1.4 oz/a	83 g a/ha		PRE	179.3 bc	16.5 a	0.0 b	0.0 d	63.3 de	60.0 f
4	KIH-485	1.76 oz/a	105 g a/ha		PRE	181.7 abc	16.4 a	0.0 b	0.0 d	79.7 a-d	66.7 ef
5	KIH-485	2.52 oz/a	150 g a/ha		PRE	188.6 abc	16.5 a	0.0 b	0.0 d	80.0 a-d	68.3 ef
6	KIH-485	3.02 oz/a	180 g a/ha		PRE	194.6 ab	16.4 a	0.0 b	0.0 d	80.0 a-d	73.3 de
7	KIH-485	3.5 oz/a	209 g a/ha		PRE	195.2 ab	16.5 a	0.0 b	0.0 d	92.7 a	83.3 bcd
8	KIH-485	4.2 oz/a	250 g a/ha		PRE	185.5 abc	16.5 a	0.0 b	3.3 cd	86.3 ab	76.7 cde
9	KIH-485	6.3 oz/a	375 g a/ha		PRE	192.3 abc	16.2 a	3.3 ab	3.3 cd	99.0 a	88.0 abc
10	KIH-485	8.4 oz/a	500 g a/ha		PRE	187.2 abc	16.3 a	6.7 a	8.3 bc	97.7 a	90.0 ab
11	KIH-485	0.42 oz/a	25 g a/ha		PRE	203.5 a	16.5 a	0.0 b	0.0 d	35.0 fg	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
12	KIH-485	1.4 oz/a	83 g a/ha		PRE	199.7 ab	16.4 a	0.0 b	0.0 d	60.0 e	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
13	KIH-485	1.76 oz/a	105 g a/ha		PRE	192.6 abc	16.2 a	0.0 b	0.0 d	66.7 cde	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
14	KIH-485	2.52 oz/a	150 g a/ha		PRE	196.8 ab	15.8 ab	0.0 b	0.0 d	83.0 abc	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
15	KIH-485	3.02 oz/a	180 g a/ha		PRE	183.7 abc	16.0 ab	0.0 b	0.0 d	91.7 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
16	KIH-485	3.5 oz/a	209 g a/ha		PRE	202.9 a	16.0 ab	0.0 b	0.0 d	91.3 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
17	KIH-485	4.2 oz/a	250 g a/ha		PRE	187.1 abc	16.3 a	0.0 b	0.0 d	88.3 ab	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
18	KIH-485	6.3 oz/a	375 g a/ha		PRE	184.9 abc	16.2 a	0.0 b	10.0 b	95.7 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
19	KIH-485	8.4 oz/a	500 g a/ha		PRE	178.9 bc	15.9 ab	3.3 ab	18.3 a	95.7 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
20	Dual II Magnum	1.3 pt/a	1400 g a/ha		PRE	170.2 c	15.9 ab	0.0 b	0.0 d	53.3 ef	46.7 g
21	Dual II Magnum	1.3 pt/a	1400 g a/ha		PRE	201.2 ab	16.0 ab	0.0 b	0.0 d	70.0 b-e	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
22	Roundup Original MAX	22 oz/a	1060 g a/ha		POST	141.5 d	15.1 bc	0.0 b	0.0 d	0.0 h	99.0 a
	Ammonium Sulfate	17 lb/100 gal			POST						
LSD (P=.05)					23.32	0.99	3.49	6.23	19.53	11.80	
Standard Deviation					14.13	0.60	2.12	3.77	11.83	7.15	
CV					7.92	3.74	348.98	191.53	16.93	8.91	
Grand Mean					178.34	16.07	0.61	1.97	69.89	80.24	
Replicate F					1.846	9.994	1.355	2.422	0.016	2.564	
Replicate Prob(F)					0.1718	0.0003	0.2690	0.1010	0.9841	0.0890	
Treatment F					17.896	2.444	1.871	4.441	18.995	43.670	
Treatment Prob(F)					0.0001	0.0068	0.0417	0.0001	0.0001	0.0001	

Northeast Research & Extension Center

Description	Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail
Rating Date	10-29-07	10-29-07	06-21-07	07-08-07	06-21-07	07-08-07
Rating Data Type	Yield@15.5%	Moisture	Stunting	Stunting	Control	Control
Rating Unit	bu/A	%	percent	percent	percent	percent
Days After First/Last Applic.	161 128	161 128	31 31	48 15	31 31	48 15
Trt-Eval Interval						
Plant-Eval Interval	163 DP-1	163 DP-1	33 DP-1	50 DP-1	33 DP-1	50 DP-1

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

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

Northeast Research & Extension Center

Description						Green foxtail	Green foxtail	Green foxtail
Rating Date						07-18-07	07-18-07	09-13-07
Rating Data Type						Control	Density	Control
Rating Unit						percent	m2 RunCH	percent
Days After First/Last Applic.						58 25	58 25	115 82
Trt-Eval Interval								
Plant-Eval Interval						60 DP-1	60 DP-1	117 DP-1
Trt No.	Treatment Name	Rate	Other Rate	Other Unit	Growth Stage			
1	Nontreated Check					0.0 h	23.3 a	0.0 h
2	KIH-485	0.42 oz/a	25 g a/ha		PRE	16.7 gh	23.3 a	13.3 gh
3	KIH-485	1.4 oz/a	83 g a/ha		PRE	43.3 ef	21.7 a	35.0 f
4	KIH-485	1.76 oz/a	105 g a/ha		PRE	70.0 cd	8.0 a	71.7 cde
5	KIH-485	2.52 oz/a	150 g a/ha		PRE	60.0 de	23.3 a	56.7 e
6	KIH-485	3.02 oz/a	180 g a/ha		PRE	76.7 cd	21.7 a	63.3 de
7	KIH-485	3.5 oz/a	209 g a/ha		PRE	81.7 bc	23.3 a	83.3 a-d
8	KIH-485	4.2 oz/a	250 g a/ha		PRE	71.7 cd	14.0 a	63.3 de
9	KIH-485	6.3 oz/a	375 g a/ha		PRE	96.7 ab	15.0 a	91.7 abc
10	KIH-485	8.4 oz/a	500 g a/ha		PRE	95.0 ab	20.0 a	86.7 abc
11	KIH-485	0.42 oz/a	25 g a/ha		PRE	98.3 ab	15.0 a	97.7 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
12	KIH-485	1.4 oz/a	83 g a/ha		PRE	95.0 ab	18.3 a	94.7 ab
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
13	KIH-485	1.76 oz/a	105 g a/ha		PRE	96.7 ab	13.7 a	97.7 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
14	KIH-485	2.52 oz/a	150 g a/ha		PRE	95.0 ab	6.7 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
15	KIH-485	3.02 oz/a	180 g a/ha		PRE	96.7 ab	16.7 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
16	KIH-485	3.5 oz/a	209 g a/ha		PRE	96.7 ab	7.3 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
17	KIH-485	4.2 oz/a	250 g a/ha		PRE	96.7 ab	20.0 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
18	KIH-485	6.3 oz/a	375 g a/ha		PRE	100.0 a	14.0 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
19	KIH-485	8.4 oz/a	500 g a/ha		PRE	99.7 a	18.3 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
20	Dual II Magnum	1.3 pt/a	1400 g a/ha		PRE	26.7 fg	23.3 a	25.0 fg
21	Dual II Magnum	1.3 pt/a	1400 g a/ha		PRE	95.0 ab	10.3 a	96.3 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST			
	Ammonium Sulfate	17 lb/100 gal			POST			
22	Roundup Original MAX	22 oz/a	1060 g a/ha		POST	95.0 ab	16.7 a	75.0 b-e
	Ammonium Sulfate	17 lb/100 gal			POST			
LSD (P=.05)						16.87	12.28	21.31
Standard Deviation						10.23	7.44	12.91
CV						13.21	43.78	17.27
Grand Mean						77.41	17.0	74.79
Replicate F						2.194	1.287	0.302
Replicate Prob(F)						0.1241	0.2869	0.7409
Treatment F						25.510	1.621	17.091
Treatment Prob(F)						0.0001	0.0916	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Additional Treatment Information	
Treatment Name	

<p><u>Additional Treatment Information</u> Ammonium Sulfate = <u>Rate Unit</u> OZ/A = Ounces Product per Acre (Metric=ML-G/HA)O LB/100 GAL = Pounds Dry Product per 100 Gallons Mix (Metric=KG/100 L)] PT/A = Pints Product per Acre (Metric=L/HA)P <u>Other Rate Unit</u> G A/HA = Grams Active Ingredient per Hectare</p>

2007 KIH-485 Protocol (Higher organic soils)

Trial ID: 07CRR-11	Protocol ID: 07 KIH Corn Higher OM
Location: Concord, NE	Study Director: Stevan Knezevic
	Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Concord
State/Prov.: NE
Postal Code: 68728
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory	Country: USA
Organization: University of Nebraska	Phone No: 402-584-2261
Address 1: 57905 866 RD	Fax No: 402-584-3859
City: Concord	
State/Prov: NE	
Postal Code: 68728	

Crop Description

Crop 1: ZEAMX Zea mays	Corn
Variety: Dekalb DK60-19 RR	
BBCH Scale: BCOR	Planting Date: 05-19-07
Planting Method: seeded	Rate, Unit: 24503 s/a
Depth, Unit: 2 in	
Row Spacing, Unit: 30 in	
Seed Bed: FINE/TRASHY	
Soil Moisture: NORMAL	Emergence Date: 05-28-07

Pest Description

Pest 1 Type: W	Code: SETVI	Setaria viridis
	Common Name:	Green foxtail
Pest 2 Type: W	Code: AMATU	Amaranthus tuberculatus
	Common Name:	Tall waterhemp

Site and Design

Plot Width, Unit: 10 FT	Site Type: FIELD
Plot Length, Unit: 30 FT	Tillage Type: CONVENTIONAL-TILL
Replications: 3	Study Design: Randomized Complete Block

Trial Initiation Comments:

Trial was field cultivated before planting.
Note larger weeds in trial that were missed by field cultivator.

Field Prep./Maintenance:

Field cultivated twice.
Approx. 30 dayw before planting and on May 17, 2007

Soil Description

% Sand: 16	% OM: 3.1	Texture: SILTY CLAY LOAM
% Silt: 54	pH: 7.5	Soil Name: Kennebec
% Clay: 30	CEC: 18.1	

Application Description

	A	B
Application Date:	05-21-07	06-23-07
Time of Day:	9:30 am	3:30 pm
Application Method:	spray	spray
Application Timing:	PRE	POST
Application Placement:	surface	foliar
Air Temperature, Unit:	70 f	80 f
% Relative Humidity:	70	50
Wind Velocity, Unit:	10 mph	3 mph
Wind Direction:	s	se
Dew Presence (Y/N):	n	n
Soil Temperature, Unit:	61 f	74 f
Soil Moisture:	adequate	adequate
% Cloud Cover:	90	30
Next Rain Occurred On:	05-23-07	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V6
Height, Unit:		15 in

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETVI W	SETVI W
Height, Unit:		9 in
Height Minimum, Maximum:		6 12
Density, Unit:		5 m2
Pest 2 Code, Disc., Scale:	AMATU W	AMATU W
Height, Unit:		9 in
Height Minimum, Maximum:		2 18
Density, Unit:		20 m2

Application Equipment

	A	B
Appl. Equipment:	backpack	BACKPACK
Operating Pressure, Unit:	18 psi	40 PSI
Nozzle Type:	Turbo Tee	TURBO TEE
Nozzle Size:	11003	11002
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	12 IN	12 IN
Ground Speed, Unit:	2.7 MPH	2.7 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA
Mix Size, Unit:	1.8 Liters	1.8 Liters
Propellant:	co2	co2

Northeast Research & Extension Center

2007 KIH-485 Protocol (Higher organic soils)

Trial ID: 07CRR-11
Location: Concord, NE

Protocol ID: 07 KIH Corn Higher OM
Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Description					Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail	Green foxtail	
Rating Date					10-30-07	10-30-07	07-08-07	06-21-07	07-08-07	07-18-07	
Rating Data Type					Yield@15.5%	Moisture	Stunting	Control	Control	Control	
Rating Unit					bu/A	%	percent	percent	percent	percent	
Days After First/Last Applic.					162	129	162	129	48	15	
Trt-Eval Interval					164	DP-1	164	DP-1	50	DP-1	
Plant-Eval Interval					33	DP-1	50	DP-1	60	DP-1	
Trt No.	Treatment Name	Rate	Other Rate	Other Unit	Growth Stage						
1	Nontreated Check					131.3 e	15.0 a	0.0 c	0.0 g	0.0 f	0.0 g
2	KIH-485	0.42 oz/a	25	g a/ha	PRE	186.5 d	15.6 a	0.0 c	33.3 f	8.3 f	16.7 f
3	KIH-485	1.4 oz/a	83	g a/ha	PRE	201.2 a-d	15.3 a	0.0 c	80.0 de	53.3 e	23.3 f
4	KIH-485	1.76 oz/a	105	g a/ha	PRE	201.4 a-d	15.5 a	0.0 c	83.0 cde	61.7 e	53.3 e
5	KIH-485	2.52 oz/a	150	g a/ha	PRE	202.6 a-d	15.4 a	0.0 c	86.3 bcd	76.7 d	66.7 d
6	KIH-485	3.02 oz/a	180	g a/ha	PRE	205.2 a-d	15.5 a	0.0 c	99.0 a	86.7 c	68.3 d
7	KIH-485	3.5 oz/a	209	g a/ha	PRE	202.4 a-d	15.3 a	0.0 c	96.0 ab	88.3 bc	81.7 c
8	KIH-485	4.2 oz/a	250	g a/ha	PRE	211.8 abc	15.7 a	0.0 c	99.0 a	96.3 ab	86.7 bc
9	KIH-485	8.4 oz/a	500	g a/ha	PRE	192.6 cd	15.0 a	3.3 b	99.0 a	97.7 ab	93.3 ab
10	KIH-485	11.8 oz/a	700	g a/ha	PRE	209.2 abc	15.7 a	6.7 a	99.0 a	99.0 a	96.3 ab
11	KIH-485	0.42 oz/a	25	g a/ha	PRE	207.4 a-d	15.4 a	0.0 c	41.7 f	99.0 a	96.7 ab
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
12	KIH-485	1.4 oz/a	83	g a/ha	PRE	219.2 a	14.9 a	0.0 c	73.3 e	99.0 a	93.3 ab
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
13	KIH-485	1.76 oz/a	105	g a/ha	PRE	203.0 a-d	15.3 a	0.0 c	83.3 cde	99.0 a	96.7 ab
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
14	KIH-485	2.52 oz/a	150	g a/ha	PRE	215.3 ab	15.3 a	0.0 c	85.0 cd	99.0 a	98.0 a
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
15	KIH-485	3.02 oz/a	180	g a/ha	PRE	213.7 ab	15.3 a	0.0 c	99.0 a	99.0 a	99.7 a
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
16	KIH-485	3.5 oz/a	209	g a/ha	PRE	211.0 abc	15.4 a	0.0 c	99.0 a	99.0 a	98.3 a
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
17	KIH-485	4.2 oz/a	250	g a/ha	PRE	213.7 ab	15.6 a	0.0 c	99.0 a	99.0 a	100.0 a
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
18	KIH-485	8.4 oz/a	500	g a/ha	PRE	213.8 ab	15.2 a	0.0 c	99.0 a	99.0 a	100.0 a
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
19	KIH-485	11.8 oz/a	700	g a/ha	PRE	211.8 abc	15.5 a	0.0 c	99.0 a	99.0 a	98.3 a
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
20	Dual II Magnum	2 pt/a	2140	g a/ha	PRE	197.8 bcd	15.7 a	0.0 c	96.0 ab	88.3 bc	66.7 d
21	Dual II Magnum	2 pt/a	2140	g a/ha	PRE	214.8 ab	15.4 a	0.0 c	93.0 abc	99.0 a	100.0 a
	Roundup Original MAX	22 oz/a	1060	g a/ha	POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
22	Roundup Original MAX	22 oz/a	1060	g a/ha	POST	202.5 a-d	15.6 a	0.0 c	0.0 g	99.0 a	93.3 ab
	Ammonium Sulfate	17 lb/100 gal			POST						
LSD (P=.05)					20.84	0.65	2.84	10.33	9.44	11.02	
Standard Deviation					12.63	0.39	1.72	6.26	5.72	6.68	
CV					6.22	2.57	378.38	7.91	6.82	8.51	
Grand Mean					203.1	15.39	0.45	79.18	83.88	78.52	
Replicate F					0.658	2.688	1.537	3.902	0.185	0.017	
Replicate Prob(F)					0.5231	0.0797	0.2270	0.0279	0.8318	0.9835	
Treatment F					6.037	0.990	2.463	74.642	75.694	60.077	
Treatment Prob(F)					0.0001	0.4941	0.0064	0.0001	0.0001	0.0001	

Northeast Research & Extension Center

Description	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail	Green foxtail
Rating Date	10-30-07	10-30-07	07-08-07	06-21-07	07-08-07	07-18-07
Rating Data Type	Yield@15.5%	Moisture	Stunting	Control	Control	Control
Rating Unit	bu/A	%	percent	percent	percent	percent
Days After First/Last Applic.	162 129	162 129	48 15	31 31	48 15	58 25
Trt-Eval Interval						
Plant-Eval Interval	164 DP-1	164 DP-1	50 DP-1	33 DP-1	50 DP-1	60 DP-1

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

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

Northeast Research & Extension Center

Description						Green foxtail	Green foxtail	Waterhemp	Waterhemp	Waterhemp	Waterhemp
Rating Date						09-13-07	07-23-07	06-21-07	07-08-07	07-18-07	09-13-07
Rating Data Type						Control	Density	Control	Control	Control	Control
Rating Unit						percent	m2 RunCH	percent	percent	percent	percent
Days After First/Last Applic.						115 82	63 30	31 31	48 15	58 25	115 82
Trt-Eval Interval											
Plant-Eval Interval						117 DP-1	65 DP-1	33 DP-1	50 DP-1	60 DP-1	117 DP-1
Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Growth Stage						
1	Nontreated Check					0.0 d	8.3 a	0.0 g	0.0 e	0.0 g	0.0 e
2	KIH-485	0.42 oz/a	25 g a/ha		PRE	11.7 d	5.0 a	33.3 f	0.0 e	16.7 f	3.3 e
3	KIH-485	1.4 oz/a	83 g a/ha		PRE	60.0 c	5.0 a	81.7 cd	56.7 d	23.3 f	60.0 d
4	KIH-485	1.76 oz/a	105 g a/ha		PRE	66.7 c	7.5 a	86.3 bc	81.7 c	63.3 e	78.3 c
5	KIH-485	2.52 oz/a	150 g a/ha		PRE	70.0 c	6.7 a	93.0 abc	86.7 bc	76.7 cde	81.7 bc
6	KIH-485	3.02 oz/a	180 g a/ha		PRE	86.7 b	7.5 a	99.0 a	85.0 bc	75.0 cde	83.3 bc
7	KIH-485	3.5 oz/a	209 g a/ha		PRE	83.3 b	10.0 a	99.0 a	94.7 ab	81.7 bcd	90.0 abc
8	KIH-485	4.2 oz/a	250 g a/ha		PRE	88.3 ab	5.0 a	99.0 a	97.7 a	86.7 abc	88.3 abc
9	KIH-485	8.4 oz/a	500 g a/ha		PRE	91.7 ab	4.3 a	99.0 a	99.0 a	96.3 a	93.0 ab
10	KIH-485	11.8 oz/a	700 g a/ha		PRE	93.0 ab	7.5 a	99.0 a	99.0 a	99.3 a	96.0 a
11	KIH-485	0.42 oz/a	25 g a/ha		PRE	99.0 a	7.5 a	63.3 e	99.0 a	96.7 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
12	KIH-485	1.4 oz/a	83 g a/ha		PRE	99.0 a	3.7 a	71.7 de	99.0 a	93.3 ab	97.7 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
13	KIH-485	1.76 oz/a	105 g a/ha		PRE	99.0 a	4.3 a	88.3 abc	99.0 a	96.7 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
14	KIH-485	2.52 oz/a	150 g a/ha		PRE	99.0 a	6.7 a	99.0 a	99.0 a	98.0 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
15	KIH-485	3.02 oz/a	180 g a/ha		PRE	99.0 a	5.0 a	99.0 a	99.0 a	99.7 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
16	KIH-485	3.5 oz/a	209 g a/ha		PRE	99.0 a	10.0 a	99.0 a	99.0 a	98.3 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
17	KIH-485	4.2 oz/a	250 g a/ha		PRE	99.0 a	5.0 a	99.0 a	99.0 a	100.0 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
18	KIH-485	8.4 oz/a	500 g a/ha		PRE	99.0 a	5.3 a	99.0 a	99.0 a	100.0 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
19	KIH-485	11.8 oz/a	700 g a/ha		PRE	99.0 a	3.7 a	99.0 a	99.0 a	98.3 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
20	Dual II Magnum	2 pt/a	2140 g a/ha		PRE	83.3 b	5.3 a	96.0 ab	90.0 abc	70.0 de	86.7 abc
21	Dual II Magnum	2 pt/a	2140 g a/ha		PRE	99.0 a	3.0 a	96.0 ab	99.0 a	100.0 a	99.0 a
	Roundup Original MAX	22 oz/a	1060 g a/ha		POST						
	Ammonium Sulfate	17 lb/100 gal			POST						
22	Roundup Original MAX	22 oz/a	1060 g a/ha		POST	99.0 a	5.0 a	0.0 g	99.0 a	93.3 ab	99.0 a
	Ammonium Sulfate	17 lb/100 gal			POST						
LSD (P=.05)						12.06	4.93	11.36	10.54	13.87	12.57
Standard Deviation						7.31	2.99	6.89	6.39	8.41	7.62
CV						8.82	50.09	8.42	7.48	10.49	9.07
Grand Mean						82.89	5.97	81.76	85.42	80.15	84.02
Replicate F						1.183	4.367	1.518	1.680	0.053	1.560
Replicate Prob(F)						0.3165	0.0200	0.2308	0.1987	0.9485	0.2220
Treatment F						42.709	1.272	60.306	63.316	36.821	41.601
Treatment Prob(F)						0.0001	0.2562	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Description						Waterhemp
Rating Date						07-23-07
Rating Data Type						Density
Rating Unit						m2 RunCH
Days After First/Last Applic.						63 30
Trt-Eval Interval						
Plant-Eval Interval						65 DP-1
Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage
1	Nontreated Check					16.7 ab
2	KIH-485	0.42	oz/a	25	g a/ha	PRE 23.3 a
3	KIH-485	1.4	oz/a	83	g a/ha	PRE 16.7 ab
4	KIH-485	1.76	oz/a	105	g a/ha	PRE 22.5 a
5	KIH-485	2.52	oz/a	150	g a/ha	PRE 15.0 abc
6	KIH-485	3.02	oz/a	180	g a/ha	PRE 12.5 bc
7	KIH-485	3.5	oz/a	209	g a/ha	PRE 10.0 bc
8	KIH-485	4.2	oz/a	250	g a/ha	PRE 16.7 ab
9	KIH-485	8.4	oz/a	500	g a/ha	PRE 7.7 c
10	KIH-485	11.8	oz/a	700	g a/ha	PRE 10.0 bc
11	KIH-485	0.42	oz/a	25	g a/ha	PRE 10.0 bc
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
12	KIH-485	1.4	oz/a	83	g a/ha	PRE 23.3 a
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
13	KIH-485	1.76	oz/a	105	g a/ha	PRE 15.0 abc
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
14	KIH-485	2.52	oz/a	150	g a/ha	PRE 11.7 bc
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
15	KIH-485	3.02	oz/a	180	g a/ha	PRE 18.3 ab
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
16	KIH-485	3.5	oz/a	209	g a/ha	PRE 11.7 bc
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
17	KIH-485	4.2	oz/a	250	g a/ha	PRE 15.0 abc
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
18	KIH-485	8.4	oz/a	500	g a/ha	PRE 11.7 bc
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
19	KIH-485	11.8	oz/a	700	g a/ha	PRE 10.0 bc
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
20	Dual II Magnum	2	pt/a	2140	g a/ha	PRE 13.3 bc
21	Dual II Magnum	2	pt/a	2140	g a/ha	PRE 16.7 ab
	Roundup Original MAX	22	oz/a	1060	g a/ha	POST
	Ammonium Sulfate	17	lb/100 gal			POST
22	Roundup Original MAX	22	oz/a	1060	g a/ha	POST 17.5 ab
	Ammonium Sulfate	17	lb/100 gal			POST
LSD (P=.05)						8.51
Standard Deviation						5.15
CV						34.88
Grand Mean						14.78
Replicate F						1.824
Replicate Prob(F)						0.1760
Treatment F						2.251
Treatment Prob(F)						0.0157

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

<u>Additional Treatment Information</u>
Treatment Name

<p><u>Additional Treatment Information</u> Ammonium Sulfate = <u>Rate Unit</u> OZ/A = Ounces Product per Acre (Metric=ML-G/HA)O LB/100 GAL = Pounds Dry Product per 100 Gallons Mix (Metric=KG/100 L)] PT/A = Pints Product per Acre (Metric=L/HA)P <u>Other Rate Unit</u> G A/HA = Grams Active Ingredient per Hectare</p>
