

Northeast Research & Extension Center

2008 Laudis Corn Efficacy University Programs

Trial ID: 11EX 08 BAY DLA Laudis Protocol ID: 08 BAY DLA Laudis
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 Description: Corn
Variety: Pioneer 35F40 Description: HX1 LL RR2
BBCH Scale: BCOR Planting Date: 06-04-08
Planting Method: seeded Rate, Unit: 24503 s/a
Depth, Unit: 1.75 in
Row Spacing, Unit: 30 in
Soil Moisture: ABOVE NORMAL
Harvest Date: 11-26-08 Harvest Equipment: Almaco 40
Harvested Width, Unit: 5 ft Harvested Length, Unit: 27 ft
% Standard Moisture: 15.5

Pest Description

Pest 1 Type: W Code: SETVI Setaria viridis (L.) P.Beauv.
Common Name: Foxtail, green
Pest 2 Type: W Code: ABUTH Abutilon theophrasti Medik.
Common Name: Velvetleaf
Pest 3 Type: W Code: AMATU Amaranthus tuberculatos (Moq.) J
Common Name: Waterhemp, tall

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 9 columns: No., Date, Maintenance Treatment Name, Form Conc, Form Unit, Form Type, Rate, Rate Unit, Tank Mix. Contains 2 rows of maintenance data.

Soil Description

Description Name: 08CRNHRBW
% Sand: 12 % OM: 3.4 Texture: SILT LOAM
% Silt: 62 pH: 6.7 Soil Name: Baltic
% Clay: 26 CEC: 20.4 Fert. Level: EXCELLENT
Analyzed By:
Midwest Labs

Application Description

	A	B
Application Date:	06-04-08	06-30-08
Time of Day:	5:00 pm	2:00 pm
Application Method:	spray	spray
Application Timing:	PRE	POST
Application Placement:	surface	foliar
Applied By:		js
Air Temperature, Unit:	75 F	86 F
% Relative Humidity:	70	36
Wind Velocity, Unit:	1 mph	4 mph
Wind Direction:	var	S
Dew Presence (Y/N):	n	n
Soil Temperature, Unit:	68 F	82 F
Soil Moisture:	EXCESSIVE	ADEQUATE
% Cloud Cover:	100	10
Next Rain Occurred On:	06-05-08	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V4 75
Stage Maximum, Percent:		V5 25
Height, Unit:		10 in

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETVI W	SETVI W
Height, Unit:		3.5 in
Height Minimum, Maximum:		3 4
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Height, Unit:		5 in
Height Minimum, Maximum:		4 6
Density, Unit:		5 m2
Pest 3 Code, Disc., Scale:	AMATU W	AMATU W
Height, Unit:		5 in
Height Minimum, Maximum:		4 6
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

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Trial ID: 11EX 08 BAY DLA Laudis Protocol ID: 08 BAY DLA Laudis
 Location: Concord, NE Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description	Corn, field	Corn, field	Green Foxtail	Green Foxtail	Green Foxtail	Green Foxtail	Velvetleaf	Velvetleaf	Velvetleaf	Velvetleaf			
Rating Date	11-26-08	11-26-08	07-03-08	07-18-08	07-18-08	08-06-08	07-03-08	07-18-08	07-18-08	08-06-08			
Rating Data Type	Yield	Moisture	Control	Control	Density	Control	Control	Control	Density	Control			
Rating Unit	Bu/A15.5	%	Percent	Percent	m2 RunCH	Percent	Percent	Percent	m2 RunCH	Percent			
Days After First/Last Applic.	175 149	175 149	29 3	44 18	44 18	63 37	29 3	44 18	44 18	63 37			
Plant-Eval Interval	175 DP-1	175 DP-1	29 DP-1	44 DP-1	44 DP-1	63 DP-1	29 DP-1	44 DP-1	44 DP-1	63 DP-1			
Trt No.	Treatment Name	Rate	Growth Stage										
1	Nontreated Check			152.7 b	16.1 a	47.5 a	0.0 b	0.0 d	42.5 a	0.0 c	0.0 c		
2	Corvus atrazine Laudis atrazine COC 28% UAN	2.5 oz/a 1 qt/a 3 oz/a 1 pt/a 1 % v/v 1.5 qt/a	PRE PRE MPOST MPOST MPOST MPOST	187.4 a	15.3 a	91.0 a	90.0 a	66.7 a	95.0 ab	99.0 a	99.0 a	5.0 c	98.0 ab
3	Corvus atrazine Laudis atrazine MSO 28% UAN	2.5 oz/a 1 qt/a 3 oz/a 1 pt/a 1 % v/v 1.5 qt/a	PRE PRE MPOST MPOST MPOST MPOST	193.9 a	15.5 a	98.0 a	96.0 a	55.0 a	97.3 ab	99.0 a	99.0 a	8.3 c	98.7 a
4	Lumax Lumax NIS	1.5 qt/a 1.5 qt/a 0.25 % v/v	PRE MPOST MPOST	189.5 a	15.7 a	92.3 a	85.0 a	30.0 a	80.0 c	99.0 a	97.7 ab	31.7 a	96.0 ab
5	G-MAX Lite Laudis atrazine COC 28% UAN	2.5 pt/a 3 oz/a 1 pt/a 1 % v/v 1.5 qt/a	PRE MPOST MPOST MPOST MPOST	191.8 a	15.8 a	97.0 a	84.7 a	21.7 a	88.0 bc	92.5 a	97.7 ab	10.0 c	97.3 ab
6	Laudis Ignite 280 atrazine Ammonium Sulfate	2 oz/a 22.9 oz/a 1 pt/a 8.5 lb/100 gal	MPOST MPOST MPOST MPOST	189.3 a	15.7 a		91.7 a	33.3 a	91.7 ab		94.7 b	26.7 ab	94.3 b
7	Laudis atrazine Roundup PowerMAX Ammonium Sulfate	3 oz/a 1 pt/a 22 oz/a 8.5 lb/100 gal	MPOST MPOST MPOST MPOST	189.5 a	15.3 a		99.0 a	15.0 a	98.7 a		94.7 b	10.0 c	96.7 ab
8	Laudis atrazine Roundup PowerMAX Ammonium Sulfate	3 oz/a 1 qt/a 22 oz/a 8.5 lb/100 gal	MPOST MPOST MPOST MPOST	189.5 a	15.6 a		96.3 a	36.7 a	96.0 ab		97.7 ab	15.0 bc	96.3 ab
LSD (P=.05)		23.47	0.82	49.03	14.65	42.66	10.55	44.25	4.16	13.98	4.05		
Standard Deviation		13.40	0.47	24.54	8.36	23.98	6.03	22.15	2.38	7.86	2.31		
CV		7.23	2.99	28.81	10.41	64.98	7.46	25.63	2.79	51.55	2.73		
Grand Mean		185.45	15.63	85.17	80.33	36.9	80.83	86.4	85.04	15.24	84.67		
Replicate F		0.486	0.165	0.854	0.519	1.928	0.903	0.696	3.042	3.723	1.553		
Replicate Prob(F)		0.6251	0.8498	0.4716	0.6063	0.1880	0.4277	0.5348	0.0800	0.0552	0.2460		
Treatment F		2.984	0.973	2.253	46.349	1.727	91.159	3.733	629.256	4.926	658.569		
Treatment Prob(F)		0.0388	0.4871	0.1788	0.0001	0.1980	0.0001	0.0740	0.0001	0.0092	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				Waterhemp 07-03-08	Waterhemp 07-18-08	Waterhemp 07-18-08	Waterhemp 08-06-08
Rating Date				Control	Control	Density	Control
Rating Data Type				Percent	Percent	m2 RunCH	Percent
Rating Unit				29 3	44 18	44 18	63 37
Days After First/Last Applic.				29 DP-1	44 DP-1	44 DP-1	63 DP-1
Plant-Eval Interval							
Trt No.	Treatment Name	Rate	Growth Stage				
		Rate Unit					
1	Nontreated Check			47.5 a	0.0 b		0.0 b
2	Corvus	2.5 oz/a	PRE	99.0 a	99.0 a	5.0 a	98.7 a
	atrazine	1 qt/a	PRE				
	Laudis	3 oz/a	MPOST				
	atrazine	1 pt/a	MPOST				
	COC	1 % v/v	MPOST				
	28% UAN	1.5 qt/a	MPOST				
3	Corvus	2.5 oz/a	PRE	99.0 a	99.0 a	15.0 a	98.7 a
	atrazine	1 qt/a	PRE				
	Laudis	3 oz/a	MPOST				
	atrazine	1 pt/a	MPOST				
	MSO	1 % v/v	MPOST				
	28% UAN	1.5 qt/a	MPOST				
4	Lumax	1.5 qt/a	PRE	99.0 a	99.0 a	26.7 a	97.3 a
	Lumax	1.5 qt/a	MPOST				
	NIS	0.25 % v/v	MPOST				
5	G-MAX Lite	2.5 pt/a	PRE	99.0 a	99.0 a	6.7 a	97.3 a
	Laudis	3 oz/a	MPOST				
	atrazine	1 pt/a	MPOST				
	COC	1 % v/v	MPOST				
	28% UAN	1.5 qt/a	MPOST				
6	Laudis	2 oz/a	MPOST		97.7 a	18.3 a	98.3 a
	Ignite 280	22.9 oz/a	MPOST				
	atrazine	1 pt/a	MPOST				
	Ammonium Sulfate	8.5 lb/100 gal	MPOST				
7	Laudis	3 oz/a	MPOST		96.0 a	10.0 a	99.0 a
	atrazine	1 pt/a	MPOST				
	Roundup PowerMAX	22 oz/a	MPOST				
	Ammonium Sulfate	8.5 lb/100 gal	MPOST				
8	Laudis	3 oz/a	MPOST		99.0 a	18.3 a	99.0 a
	atrazine	1 qt/a	MPOST				
	Roundup PowerMAX	22 oz/a	MPOST				
	Ammonium Sulfate	8.5 lb/100 gal	MPOST				
LSD (P=.05)				49.01	3.61	24.06	1.75
Standard Deviation				24.53	2.06	13.53	1.00
CV				27.65	2.4	94.68	1.16
Grand Mean				88.7	86.08	14.29	86.04
Replicate F				0.750	0.597	1.425	2.667
Replicate Prob(F)				0.5120	0.5638	0.2784	0.1044
Treatment F				2.645	853.634	0.954	3627.375
Treatment Prob(F)				0.1381	0.0001	0.4937	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.

<u>Additional Treatment Information</u>	
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	
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	