

2008 Conventional Corn Programs

Trial ID: 24 08 SYN Conv Corn Protocol ID: 08 SYN Conv Corn
 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 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

	Previous Crops	Previous Pesticides	Year
1.	Soybean	glyphosate	2007

Maintenance

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Tank Mix
1.	05-18-08	glyphosate	5.5	lbai/ga	SL	32	oz/A	n
2.	06-04-08	glyphosate	5.4	lbai/ga	SL	32	oz/A	n

Soil Description

% Sand: 12 % OM: 3.4 Texture: SILT LOAM
% Silt: 62 pH: 6.7
% Clay: 26 CEC: 20.4 Fert. Level: EXCELLENT

Application Description

	A	B
Application Date:	06-04-08	06-18-08
Time of Day:	5:00 pm	11:00 am
Application Method:	spray	spray
Application Timing:	PRE	EAPOCR
Application Placement:	surface	foliar
Applied By:	js	js
Air Temperature, Unit:	75 F	81 F
% Relative Humidity:	70	40
Wind Velocity, Unit:	1 mph	2 mph
Wind Direction:	var	S
Dew Presence (Y/N):	n	n
Soil Temperature, Unit:	68 F	72 F
Soil Moisture:	EXCESSIVE	ADEQUATE
% Cloud Cover:	100	50
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:		V2 90
Stage Maximum, Percent:		V3 10
Height, Unit:		4 in

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	SETVI W	SETVI W
Height, Unit:		1.5 in
Height Minimum, Maximum:		1 2
Density, Unit:		5 m2
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W
Height, Unit:		1.5 in
Height Minimum, Maximum:		1 2
Density, Unit:		5 m2
Pest 3 Code, Disc., Scale:	AMATU W	AMATU W
Height, Unit:		1 in
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 Liters	1.8 Liters
Propellant:	co2	co2

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Description	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail	Green foxtail	Green foxtail						
Rating Date	11-26-08	11-26-08	07-03-08	07-18-08	08-04-08	07-03-08	07-18-08	07-18-08	08-04-08						
Rating Data Type	Yield	Moisture	Injury	Injury	Injury	Control	Control	Density	Control						
Rating Unit	Bu/A15.5	%	%	%	%	Percent	Percent	m2 RunCH	Percent						
Days After First/Last Applic.	175 161	175 161	29 15	44 30	61 47	29 15	44 30	44 30	61 47						
Plant-Eval Interval	175 DP-1	175 DP-1	29 DP-1	44 DP-1	61 DP-1	29 DP-1	44 DP-1	44 DP-1	61 DP-1						
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Unit	Stage									
1	Lexar	3 qt/a			PRE		188.5 a	15.4 a	0.0 a	0.0 a	0.0 a	97.3 a	86.7 a	58.3 a	91.3 a
2	Lumax atrazine	2.5 qt/a 1 pt/a		0.5 lb a/a	PRE PRE		186.2 a	15.1 a	0.0 a	0.0 a	0.0 a	96.3 a	85.0 a	66.7 a	92.3 a
3	Bicep II Magnum Callisto atrazine COC	2.1 qt/a 3 oz/a 0.556 lb/a 1 % v/v		0.5 lb a/a	PRE EPOST EPOST EPOST		195.6 a	15.3 a	0.0 a	0.0 a	0.0 a	97.3 a	85.0 a	56.7 a	95.7 a
4	Lumax atrazine Lumax	1.5 qt/a 1 pt/a 1 qt/a		0.5 lb a/a	PRE PRE EPOST		188.2 a	15.2 a	0.0 a	0.0 a	0.0 a	98.7 a	88.3 a	26.7 a	97.7 a
5	Bicep II Magnum NorthStar NIS	2.1 qt/a 5 oz/a 0.25 % v/v			PRE EPOST EPOST		199.9 a	15.4 a	0.0 a	0.0 a	0.0 a	98.7 a	86.7 a	50.0 a	94.7 a
LSD (P=.05)		14.29	0.47	0.00	0.00	0.00	3.01	5.83	36.30	8.95					
Standard Deviation		7.59	0.25	0.00	0.00	0.00	1.60	3.10	19.28	4.75					
CV		3.96	1.65	0.0	0.0	0.0	1.64	3.59	37.31	5.04					
Grand Mean		191.67	15.24	0.0	0.0	0.0	97.67	86.33	51.67	94.33					
Replicate F		1.977	4.810	0.000	0.000	0.000	1.752	1.217	3.422	0.145					
Replicate Prob(F)		0.2005	0.0425	1.0000	1.0000	1.0000	0.2339	0.3455	0.0844	0.8676					
Treatment F		1.755	0.710	0.000	0.000	0.000	1.176	0.609	1.861	0.863					
Treatment Prob(F)		0.2309	0.6077	1.0000	1.0000	1.0000	0.3900	0.6679	0.2108	0.5254					

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	Velvetleaf 07-03-08	Velvetleaf 07-18-08	Velvetleaf 07-18-08	Velvetleaf 08-04-08	Waterhemp 07-03-08	Waterhemp 07-18-08	Waterhemp 07-18-08	Waterhemp 08-04-08					
Rating Date	Control	Control	Density	Control	Control	Control	Density	Control					
Rating Data Type	Percent	Percent	m2 RunCH	Percent	Percent	Percent	m2 RunCH	Percent					
Rating Unit	29 15	44 30	44 30	61 47	29 15	44 30	44 30	61 47					
Days After First/Last Applic.	29 DP-1	44 DP-1	44 DP-1	61 DP-1	29 DP-1	44 DP-1	44 DP-1	61 DP-1					
Plant-Eval Interval													
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage								
1	Lexar	3 qt/a			PRE	99.0 a	93.3 a	33.3 a	95.7 a	99.0 a	96.3 a	15.0 a	99.0 a
2	Lumax atrazine	2.5 qt/a 1 pt/a		0.5 lb a/a	PRE PRE	98.7 a	91.7 a	6.7 a	96.0 a	99.0 a	93.0 a	15.0 a	96.0 a
3	Bicep II Magnum Callisto atrazine COC	2.1 qt/a 3 oz/a 0.556 lb/a 1 % v/v		0.5 lb a/a	PRE EPOST EPOST EPOST	98.7 a	90.0 a	16.7 a	98.3 a	99.0 a	96.3 a	11.7 a	99.0 a
4	Lumax atrazine Lumax	1.5 qt/a 1 pt/a 1 qt/a		0.5 lb a/a	PRE PRE EPOST	99.0 a	93.3 a	13.7 a	99.0 a	99.0 a	98.7 a	15.7 a	99.0 a
5	Bicep II Magnum NorthStar NIS	2.1 qt/a 5 oz/a 0.25 % v/v			PRE EPOST EPOST	99.0 a	93.3 a	18.3 a	96.0 a	99.0 a	97.3 a	13.3 a	99.0 a
LSD (P=.05)						0.73	7.09	27.25	6.74	0.00	7.05	21.75	4.38
Standard Deviation						0.39	3.76	14.47	3.58	0.00	3.74	11.55	2.32
CV						0.39	4.08	81.6	3.69	0.0	3.89	81.73	2.36
Grand Mean						98.87	92.33	17.73	97.0	99.0	96.33	14.13	98.4
Replicate F						0.444	0.118	0.554	0.421	0.000	0.804	0.219	1.000
Replicate Prob(F)						0.6561	0.8905	0.5951	0.6699	1.0000	0.4807	0.8077	0.4096
Treatment F						0.667	0.471	1.375	0.559	0.000	0.939	0.059	1.000
Treatment Prob(F)						0.6328	0.7567	0.3243	0.6990	1.0000	0.4883	0.9921	0.4609

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<u>Additional Treatment Information</u>	
<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	
LB/A = Pounds Product per Acre (Metric=KG/MU) AE	
% V/V = Percent, Volume Product per Volume Mix Basis (Metric=same) Z	
<u>Other Rate Unit</u>	
LB A/A = Pounds Active Ingredient per Acre	