

2011 Corn Herbicide Programs PRE followed by POST

Trial ID: 11 SYN CRN PRE fb POST Protocol ID: 11 SYN CRN PRE fb POST
Location: Concord, NE
Project ID: 2011 TSR-005 Investigator: Stevan Knezevic

General Trial Information

Investigator: Stevan Knezevic

Trial Location

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

Personnel

Investigator: Stevan Knezevic

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: Pioneer 35F40 Description: RRL
BBCH Scale: BCOR Planting Date: 06-05-2011
Planting Method: SEEDED seeded Rate, Unit: 25677 s/a
Depth, Unit: 2 in
Row Spacing, Unit: 30 in
Harvest Date: 10-21-2011 Harvest Equipment: Almaco SP40
Harvested Width, Unit: 5 ft Harvested Length, Unit: 22.5 ft
% Standard Moisture: 15.5

Pest Description

Pest 1 Type: W Code: SETVI Setaria viridis
Common Name: Green foxtail
Pest 2 Type: W Code: AMASS Amaranthus sp.
Common Name: Amaranth
Establishment Method/Description: waterhemp and redroot pigweed

Site and Design

Plot Width, Unit: 6.667 FT Site Type: FIELD field
Plot Length, Unit: 25 FT
Plot Area, Unit: 166.6667 FT2 Tillage Type: NOTILL no-till
Replications: 4 Study Design: RACOB L Randomized Complete Block (RCB)

Maintenance

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Tank Mix
1.	05-18-2011	glyphosate (Durango)	5.4	lb/gal	SL	44	oz/A	yes
2.	06-05-2011	Roundup Power MAX	5.5	lb/gal	SL	29	oz/A	yes
3.	06-05-2011	AMS	21.5	%	SG	2.5	lb/A	yes

Soil Description

% Sand: 10 % OM: 2.8 Texture: SICL silty clay loam
% Silt: 58 pH: 6.3
% Clay: 32 CEC: 19.7 Fert. Level: E excellent
Analyzed By:
Midwest Labs

Application Description

	A	B
Application Date:	06-09-2011	07-06-2011
Time of Day:	9:50 am	10:00 am
Application Method:	spray	spray
Application Timing:	PRE	POST
Application Placement:	surface	foliar
Applied By:	js	js
Air Temperature, Unit:	59 F	79 F
% Relative Humidity:	69	71
Wind Velocity, Unit:	7 mph	1 mph
Wind Direction:	NE	SE
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	64 F	76 F
Soil Moisture:	adequate	adequate
% Cloud Cover:	100	76

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V6 50
Stage Minimum, Percent:		V7 50
Height, Unit:		14 in
Height Minimum, Maximum:		12 16

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETVI W	SETVI W
Height, Unit:		4 in
Height Minimum, Maximum:		2 6
Density, Unit:		1 m2
Pest 2 Code, Type, Scale:	AMASS W	AMASS W
Height, Unit:		4 in
Height Minimum, Maximum:		2 6
Density, Unit:		1 m2

Application Equipment

	A	B
Appl. Equipment:	4 nozzle PRE	Backpack
Operating Pressure, Unit:	20 PSI	30 PSI
Nozzle Type:	Turbo Tee	AIXR
Nozzle Size:	11002	110015
Nozzle Spacing, Unit:	20 in	20 in
Boom Length, Unit:	6.67 ft	6.67 ft
Boom Height, Unit:	15 in	15 in
Ground Speed, Unit:	2.7 mph	2.7 mph
Carrier:	WATER	WATER
Spray Volume, Unit:	15 gal/ac	15 gal/ac
Mix Size, Unit:	.9 liters	.9 liters
Propellant:	COMCO2	COMCO2

Northeast Research & Extension Center

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Description		Corn, field		Green foxtail		Green foxtail		Green foxtail		AMASS	
Rating Date		07-04-2011		07-04-2011		07-30-2011		08-29-2011		07-04-2011	
Rating Type		Injury		Control		Control		Control		Control	
Rating Unit		Percent		Percent		Percent		Percent		Percent	
Days After First/Last Applic.		25 25		25 25		51 24		81 54		25 25	
Trt-Eval Interval		29 DP-1		29 DP-1		55 DP-1		85 DP-1		29 DP-1	
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	Bicep II Magnum	5.5 lb/gal	SL		1.4 qt/a			PRE	A	0.0 a	94.8 a
	Halex GT	4.389 lb/gal	SL		3.6 pt/a			EPOST V3 B			
	AAtrex 4L	4 lb/gal	L		1 pt/a			EPOST V3 B			
	NIS	100 %	L		0.25 % v/v			EPOST V3 B			
	AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B			
2	A17622C	443.8 ga/l	SL		1.5 qt/a			PRE	A	0.0 a	95.8 a
	Halex GT	4.389 lb/gal	SL		3.6 pt/a			EPOST V3 B			
	NIS	100 %	L		0.25 % v/v			EPOST V3 B			
	AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B			
3	A17622C	443.8 ga/l	SL		1.5 qt/a			PRE	A	0.0 a	99.0 a
	Callisto XTRA	3.7 lb/gal	SL		20 oz/a			EPOST V3 B			
	Touchdown Total	5 lb/gal	SL		24 oz/a			EPOST V3 B			
	AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B			
4	Verdict	5.57 lb/gal	EC		10 oz/a			PRE	A	0.0 a	85.0 b
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			EPOST V3 B			
	Status	56 %	WG		5 oz/a			EPOST V3 B			
	AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B			
5	Prequel 1.66oz									0.0 a	86.3 b
	rimsulfuron	25 %	SG		1 oz/a	0.25 oz ai/a		PRE	A		
	isoxaflutole	75 %	WG		0.67 oz/a	0.5 oz ai/a		PRE	A		
	Realm Q 4oz										
	rimsulfuron	25 %	SG		1.2 oz/a	0.3 oz ai/a		EPOST V3 B			
	isoxadifen	50 %	WG		0.3 oz/a	.15 oz ai/a		EPOST V3 B			
	mesotrione	50 %	WG		2.5 oz/a	1.25 oz ai/a		EPOST V3 B			
	COC	100 %	L		1 % v/v			EPOST V3 B			
	AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B			
6	Fierce	76 %	WG		1.5 oz/a			PRE	A	0.0 a	99.0 a
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			EPOST V3 B			
	AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B			
LSD (P=.05)										7.67	
Standard Deviation										5.09	
CV										5.46	
Grand Mean										93.29	
Replicate F										0.970	
Replicate Prob(F)										0.4325	
Treatment F										5.916	
Treatment Prob(F)										0.0033	

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

Description	AMASS	AMASS	Corn, field	Corn, field	Corn, field								
Rating Date	07-30-2011	08-29-2011	10-21-2011	10-21-2011	10-21-2011								
Rating Type	Control	Control	Moisture	Test Weight	Yield@15.5%								
Rating Unit	Percent	Percent	%	lb/bu	bu/A								
Days After First/Last Applic.	51 24	81 54	134 107	134 107	134 107								
Trt-Eval Interval	55 DP-1	85 DP-1	138 DP-1	138 DP-1	138 DP-1								
Plant-Eval Interval													
Trt Treatment No. Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1 Bicep II Magnum	5.5 lb/gal	SL		1.4 qt/a			PRE	A	99.0 a	100.0 a	15.265 a	55.145 a	163.968 a
Halex GT	4.389 lb/gal	SL		3.6 pt/a			EPOST V3 B						
AAtrex 4L	4 lb/gal	L		1 pt/a			EPOST V3 B						
NIS	100 %	L		0.25 % v/v			EPOST V3 B						
AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B						
2 A17622C	443.8 ga/l	SL		1.5 qt/a			PRE	A	99.0 a	100.0 a	15.210 a	55.255 a	158.955 a
Halex GT	4.389 lb/gal	SL		3.6 pt/a			EPOST V3 B						
NIS	100 %	L		0.25 % v/v			EPOST V3 B						
AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B						
3 A17622C	443.8 ga/l	SL		1.5 qt/a			PRE	A	99.0 a	100.0 a	15.198 a	55.255 a	161.930 a
Callisto XTRA	3.7 lb/gal	SL		20 oz/a			EPOST V3 B						
Touchdown Total	5 lb/gal	SL		24 oz/a			EPOST V3 B						
AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B						
4 Verdict	5.57 lb/gal	EC		10 oz/a			PRE	A	99.0 a	100.0 a	14.800 a	55.795 a	157.995 a
Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			EPOST V3 B						
Status	56 %	WG		5 oz/a			EPOST V3 B						
AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B						
5 Prequel 1.66oz									99.0 a	99.0 b	14.653 a	56.205 a	155.180 a
rimsulfuron	25 %	SG		1 oz/a	0.25 oz ai/a		PRE	A					
isoxaflutole	75 %	WG		0.67 oz/a	0.5 oz ai/a		PRE	A					
Realm Q 4oz													
rimsulfuron	25 %	SG		1.2 oz/a	0.3 oz ai/a		EPOST V3 B						
isoxadifen	50 %	WG		0.3 oz/a	.15 oz ai/a		EPOST V3 B						
mesotrione	50 %	WG		2.5 oz/a	1.25 oz ai/a		EPOST V3 B						
COC	100 %	L		1 % v/v			EPOST V3 B						
AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B						
6 Fierce	76 %	WG		1.5 oz/a			PRE	A	99.0 a	100.0 a	15.058 a	55.255 a	157.580 a
Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			EPOST V3 B						
AMS	21.5 %	SG		8.5 lb/100 gal			EPOST V3 B						
LSD (P=.05)	0.00	0.00		0.6631							1.2679		10.6708
Standard Deviation	0.00	0.00		0.4401							0.8414		7.0815
CV	0.0	0.0		2.93							1.52		4.45
Grand Mean	99.0	99.83		15.03							55.49		159.27
Replicate F	0.000	0.000		0.138							0.216		2.164
Replicate Prob(F)	1.0000	1.0000		0.9359							0.8840		0.1348
Treatment F	0.000	0.000		1.290							1.004		0.805
Treatment Prob(F)	1.0000	1.0000		0.3195							0.4489		0.5638

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