

Northeast Research & Extension Center

2009 Mesotrione plus atrazine premix for crop tolerance and weed control at universities
 Title No. 2: 2009 Surestart residual foundation for weed control
 Trial ID: 09 CRLL-9 Syngenta DOW Protocol ID: 09 CRLL-9 Syngenta DOW
 Location: Concord, NE Study Director:
 Project ID: Investigator: Stevan Knezevic
 Sponsor Contact:

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: 05-18-09
 Planting Method: SEEDED seeded Rate, Unit: 24503 s/a
 Depth, Unit: 2 in
 Row Spacing, Unit: 30 in
 Harvest Date: 11-12-09 Harvest Equipment: Almaco SP40
 Harvested Width, Unit: 5 ft Harvested Length, Unit: 27.5 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: ABUTH Abutilon theophrasti
 Common Name: Velvetleaf
 Pest 3 Type: W Code: AMATU Amaranthus tuberculatus
 Common Name: Tall waterhemp

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD field
 Plot Length, Unit: 30 FT
 Plot Area, Unit: 300 FT2 Tillage Type: MINTIL minimum-till
 Replications: 3 Study Design: RACOB L Randomized Complete Block (RCB)

Trial Initiation Comments:

Trial was field cultivated 5-17-09 one time with rolling basket

	Previous Crops	Previous Pesticides	Year
1.	soybean	glyphosate	2008

Soil Description

% Sand: 10 % OM: 4.6 Texture: SICL silty clay loam
 % Silt: 56 pH: 6.2
 % Clay: 34 CEC: 25.3 Fert. Level: F fair

Analyzed By:
Midwest Labs

Application Description

Northeast Research & Extension Center

	A	B	C
Application Date:	05-21-09	06-05-09	06-17-09
Time of Day:	6:30 am	9:00 am	2:30 pm
Application Method:	spray	spray	spray
Application Timing:	PRE	EPOST	MPOST
Application Placement:	surface	foliar	foliar
Applied By:	js	js	rr
Air Temperature, Unit:	60 F	75 F	89 F
% Relative Humidity:	95	35	60
Wind Velocity, Unit:	5 mph	1 mph	4 mph
Wind Direction:	N	var	S
Dew Presence (Y/N):	N no	N no	N no
Soil Temperature, Unit:	66 F	70 F	70 F
Soil Moisture:	adequate	dry	wet
% Cloud Cover:	100	30	80
Next Rain Occurred On:			06-17-09

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		DESC	DESC
Stage Majority, Percent:		V3 80	V5 80
Stage Minimum, Percent:		V2 20	V4 20
Height, Unit:		4 in	8 in

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETVI W	SETVI W	SETVI W
Height, Unit:		1.5 in	3.5 in
Height Minimum, Maximum:		1 2	3 4
Density, Unit:		20 m2	20 m2
Pest 2 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W
Height, Unit:		1.5 in	5 in
Height Minimum, Maximum:		1 2	4 6
Density, Unit:		10 m2	10 m2
Pest 3 Code, Type, Scale:	AMATU W	AMATU W	AMATU W
Height, Unit:		1.5 in	3.5 in
Height Minimum, Maximum:		1 2	3 4
Density, Unit:		5 m2	5 m2

Application Equipment

	A	B	C
Appl. Equipment:	backpack	backpack	BACKPACK
Operating Pressure, Unit:	20 psi	20 psi	40 PSI
Nozzle Type:	Turbo Tee	Turbo Tee	TURBO TEE
Nozzle Size:	11003	11003	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

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2009 Mesotrione plus atrazine premix for crop tolerance and weed control at universities

Title No. 2: 2009 Surestart residual foundation for weed control

Trial ID: 09 CRLL-9 Syngenta DOW Protocol ID: 09 CRLL-9 Syngenta DOW

Location: Concord, NE Study Director:

Project ID: Investigator: Stevan Knezevic

Sponsor Contact:

Description					Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail	
Rating Date					11-12-09	11-12-09	06-02-09	06-25-09	07-01-09	06-02-09	06-17-09	
Rating Type					Yield@15.5%	Moisture	Injury	Injury	Injury	Control	Control	
Rating Unit					bu/A	%	Percent	Percent	Percent	Percent	Percent	
Days After First/Last Applic.					175 148	175 148	12 12	35 8	41 14	12 12	27 12	
Trt-Eval Interval												
Trt No.	Treatment Name	Rate	Unit	Growth Stage	Appl Code	1	2	3	4	5	6	7
1	Nontreated					133.697 e	19.067 a		0.0 c	0.0 a	0.0 c	0.0 c
2	Bicep II Magnum	1.2	qt/a	PRE	A	188.383 a-d	17.957 a	0.0 a	0.0 c	0.0 a	53.3 b	88.7 b
	N-PAK AMS Liquid	2.5	% w/v	MPOST	C							
	A16907	20	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
3	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	199.790 a	17.970 a		0.0 c	0.0 a		
	A16907	20	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
4	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	197.890 ab	17.677 a		0.0 c	0.0 a		
	Laudis	2	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
5	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	186.497 bcd	18.273 a		0.0 c	0.0 a		
	Impact	0.5	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
6	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	196.530 abc	17.880 a		0.0 c	0.0 a		
	Status	2.5	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
7	Lexar	2	qt/a	PRE	A	194.117 abc	18.157 a	0.0 a	0.0 c	0.0 a	77.7 ab	97.0 ab
	AMS	8.5	lb/100 gal	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
8	Bicep II Magnum	1.8	qt/a	PRE	A	190.777 a-d	18.033 a	0.0 a	0.0 c	0.0 a	90.0 a	96.0 ab
	AMS	8.5	lb/100 gal	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
9	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	184.590 cd	18.173 a		0.0 c	0.0 a		
	Halex GT	3.6	pt/a	MPOST	C							
	atrazine	0.5	pt/a	MPOST	C							
	NIS	0.25	% v/v	MPOST	C							
	AMS	8.5	lb/100 gal	MPOST	C							
10	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	188.683 a-d	17.967 a		0.0 c	0.0 a		
	Touchdown Total	24	oz/a	MPOST	C							
11	Surstart	2	pt/a	PRE	A	189.250 a-d	17.790 a	0.0 a	3.7 b	2.3 a	90.3 a	98.3 ab
	AAtrex	1.11	lb/a	PRE	A							
	Durango	24	oz/a	MPOST	C							
	AMS	2	% w/w	MPOST	C							
12	Surstart	1.75	pt/a	EPOST	B	181.743 d	18.383 a		4.7 a	1.7 a		100.0 a
	Durango	24	oz/a	EPOST	B							
	AMS	2	% w/w	EPOST	B							
LSD (P=.05)						11.9405	0.8068	0.00	0.78	1.79	31.16	9.86
Standard Deviation						7.0512	0.4765	0.00	0.46	1.06	15.59	5.34
CV						3.79	2.63	0.0	65.93	317.66	25.04	6.67
Grand Mean						186.0	18.11	0.0	0.69	0.33	62.27	80.0
Bartlett's X2						11.333	15.619	0.0	1.62	0.037	2.192	9.976
P(Bartlett's X2)						0.416	0.156	.	0.203	0.848	0.533	0.019*
Replicate F						7.564	4.683	0.000	1.723	2.081	2.350	1.176
Replicate Prob(F)						0.0032	0.0202	1.0000	0.2018	0.1487	0.1763	0.3517
Treatment F						18.160	1.725	0.000	38.301	1.676	17.737	163.395
Treatment Prob(F)						0.0001	0.1332	1.0000	0.0001	0.1458	0.0018	0.0001

Description					Green foxtail	Green foxtail	Green foxtail	Green foxtail	Velvetleaf	Velvetleaf	Velvetleaf	
Rating Date					06-25-09	06-25-09	07-01-09	08-12-09	06-02-09	06-17-09	06-25-09	
Rating Type					Control	Density	Control	Control	Control	Control	Control	
Rating Unit					Percent	m2 RunCH	Percent	Percent	Percent	Percent	Percent	
Days After First/Last Applic.					35 8	35 8	41 14	83 56	12 12	27 12	35 8	
Trt-Eval Interval												
Trt No.	Treatment Name	Rate	Unit	Growth Stage	Appl Code	8	9	10	11	12	13	14
1	Nontreated					0.0 b	0.0 e	0.0 c	0.0 c	0.0 c	0.0 d	0.0 c
2	Bicep II Magnum	1.2	qt/a	PRE	A	99.0 a	25.0 bcd	99.0 a	99.0 a	40.0 b	31.7 c	99.0 a
	N-PAK AMS Liquid	2.5	% w/v	MPOST	C							
	A16907	20	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
3	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a	18.3 cd	99.0 a	95.7 b			99.0 a
	A16907	20	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
4	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a	20.0 cd	99.0 a	97.3 ab			98.7 a
	Laudis	2	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
5	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a	15.0 d	99.0 a	98.7 a			99.0 a
	Impact	0.5	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
6	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a	50.0 a	99.0 a	98.7 a			98.7 a
	Status	2.5	oz/a	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
7	Lexar	2	qt/a	PRE	A	99.0 a	15.0 d	99.0 a	99.0 a	100.0 a	100.0 a	99.0 a
	AMS	8.5	lb/100 gal	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
8	Bicep II Magnum	1.8	qt/a	PRE	A	99.0 a	30.0 bc	99.0 a	99.0 a	63.3 ab	66.7 b	99.0 a
	AMS	8.5	lb/100 gal	MPOST	C							
	Touchdown Total	24	oz/a	MPOST	C							
9	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a	20.0 cd	99.0 a	99.0 a			99.0 a
	Halex GT	3.6	pt/a	MPOST	C							
	atrazine	0.5	pt/a	MPOST	C							
	NIS	0.25	% v/v	MPOST	C							
	AMS	8.5	lb/100 gal	MPOST	C							
10	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a	15.0 d	98.3 b	95.3 b			97.7 b
	Touchdown Total	24	oz/a	MPOST	C							
11	Surstart	2	pt/a	PRE	A	99.0 a	15.0 d	99.0 a	98.7 a	98.3 a	99.3 a	99.0 a
	AAtrex	1.11	lb/a	PRE	A							
	Durango	24	oz/a	MPOST	C							
	AMS	2	% w/w	MPOST	C							
12	Surstart	1.75	pt/a	EPOST	B	99.0 a	35.0 b	99.0 a	98.0 ab		100.0 a	99.0 a
	Durango	24	oz/a	EPOST	B							
	AMS	2	% w/w	EPOST	B							
LSD (P=.05)					0.00	12.95	0.28	2.93	36.84	17.20	0.66	
Standard Deviation					0.00	7.12	0.17	1.73	18.44	9.31	0.39	
CV					0.0	33.07	0.18	1.93	30.56	14.05	0.43	
Grand Mean					90.75	21.53	90.69	89.86	60.33	66.28	90.58	
Bartlett's X2					0.0	3.436	0.0	18.661	8.021	7.736	1.337	
P(Bartlett's X2)					.	0.488	.	0.005*	0.018*	0.021*	0.513	
Replicate F					0.000	0.096	1.000	0.676	0.358	1.184	2.200	
Replicate Prob(F)					1.0000	0.9094	0.3840	0.5187	0.7132	0.3494	0.1346	
Treatment F					0.000	9.279	88105.009	803.170	15.618	61.972	16115.252	
Treatment Prob(F)					1.0000	0.0007	0.0001	0.0001	0.0025	0.0001	0.0001	

Description					Velvetleaf	Velvetleaf	Velvetleaf	Waterhemp	Waterhemp	Waterhemp	Waterhemp	Waterhemp	
Rating Date					06-25-09	07-01-09	08-12-09	06-02-09	06-17-09	06-25-09	06-25-09	07-01-09	
Rating Type					Density	Control	Control	Control	Control	Control	Density	Control	
Rating Unit					m2 RunCH	Percent	Percent	Percent	Percent	Percent	m2 RunCH	Percent	
Days After First/Last Applic.					35 8	41 14	83 56	12 12	27 12	35 8	35 8	41 14	
Trt-Eval Interval													
Trt No.	Treatment Name	Rate	Unit	Growth Stage	Appl Code	15	16	17	18	19	20	21	22
1	Nontreated					0.0 a	0.0 c	0.0 c	0.0 c	0.0 b	0.0 c	0.0 a	0.0 c
2	Bicep II Magnum	1.2	qt/a	PRE	A	2.0 a	99.0 a	99.0 a	90.0 b	94.0 a	99.0 a	8.0 a	99.0 a
	N-PAK AMS Liquid	2.5	% w/v	MPOST	C								
	A16907	20	oz/a	MPOST	C								
	Touchdown Total	24	oz/a	MPOST	C								
3	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	3.3 a	99.0 a	99.0 a			99.0 a	5.0 a	99.0 a
	A16907	20	oz/a	MPOST	C								
	Touchdown Total	24	oz/a	MPOST	C								
4	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	4.5 a	97.3 a	99.0 a			99.0 a	15.0 a	99.0 a
	Laudis	2	oz/a	MPOST	C								
	Touchdown Total	24	oz/a	MPOST	C								
5	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	2.3 a	99.0 a	99.0 a			99.0 a	11.7 a	99.0 a
	Impact	0.5	oz/a	MPOST	C								
	Touchdown Total	24	oz/a	MPOST	C								
6	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	4.0 a	99.0 a	99.0 a			99.0 a	15.0 a	99.0 a
	Status	2.5	oz/a	MPOST	C								
	Touchdown Total	24	oz/a	MPOST	C								
7	Lexar	2	qt/a	PRE	A	2.0 a	99.0 a	99.0 a	100.0 a	100.0 a	99.0 a	6.5 a	99.0 a
	AMS	8.5	lb/100 gal	MPOST	C								
	Touchdown Total	24	oz/a	MPOST	C								
8	Bicep II Magnum	1.8	qt/a	PRE	A	4.0 a	99.0 a	99.0 a	96.7 ab	98.3 a	99.0 a	12.5 a	99.0 a
	AMS	8.5	lb/100 gal	MPOST	C								
	Touchdown Total	24	oz/a	MPOST	C								
9	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	5.0 a	99.0 a	99.0 a			99.0 a	10.0 a	99.0 a
	Halex GT	3.6	pt/a	MPOST	C								
	atrazine	0.5	pt/a	MPOST	C								
	NIS	0.25	% v/v	MPOST	C								
	AMS	8.5	lb/100 gal	MPOST	C								
10	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	4.5 a	91.3 b	93.7 b			98.7 b	11.5 a	98.0 b
	Touchdown Total	24	oz/a	MPOST	C								
11	Surstart	2	pt/a	PRE	A	3.5 a	99.0 a	99.0 a	99.7 a	100.0 a	99.0 a	7.5 a	99.0 a
	AAtrex	1.11	lb/a	PRE	A								
	Durango	24	oz/a	MPOST	C								
	AMS	2	% w/w	MPOST	C								
12	Surstart	1.75	pt/a	EPOST	B	2.5 a	99.0 a	99.0 a		100.0 a	99.0 a	6.5 a	99.0 a
	Durango	24	oz/a	EPOST	B								
	AMS	2	% w/w	EPOST	B								
LSD (P=.05)					2.72	4.92	2.31	7.87	6.66	0.28	11.88	0.49	
Standard Deviation					1.49	2.90	1.36	3.94	3.60	0.17	6.53	0.29	
CV					47.55	3.23	1.51	5.1	4.39	0.18	71.81	0.32	
Grand Mean					3.14	89.97	90.31	77.27	82.06	90.72	9.1	90.67	
Bartlett's X2					4.66	3.606	0.0	6.351	3.884	0.0	3.531	0.0	
P(Bartlett's X2)					0.701	0.058	.	0.042*	0.049*	.	0.74	.	
Replicate F					1.135	1.406	1.000	0.777	0.530	1.000	0.802	1.000	
Replicate Prob(F)					0.3597	0.2663	0.3840	0.5012	0.6057	0.3840	0.4754	0.3840	
Treatment F					2.733	287.199	1307.478	363.438	374.514	88156.009	1.350	29352.003	
Treatment Prob(F)					0.0622	0.0001	0.0001	0.0001	0.0001	0.0001	0.3219	0.0001	

Description					Waterhemp	
Rating Date					08-12-09	
Rating Type					Control	
Rating Unit					Percent	
Days After First/Last Applic.					83 56	
Trt-Eval Interval						
Trt No.	Treatment Name	Rate	Unit	Growth Stage	Appl Code	
1	Nontreated					0.0 c
2	Bicep II Magnum	1.2	qt/a	PRE	A	99.0 a
	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	
	A16907	20	oz/a	MPOST	C	
	Touchdown Total	24	oz/a	MPOST	C	
3	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a
	A16907	20	oz/a	MPOST	C	
	Touchdown Total	24	oz/a	MPOST	C	
4	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a
	Laudis	2	oz/a	MPOST	C	
	Touchdown Total	24	oz/a	MPOST	C	
5	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a
	Impact	0.5	oz/a	MPOST	C	
	Touchdown Total	24	oz/a	MPOST	C	
6	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	98.7 a
	Status	2.5	oz/a	MPOST	C	
	Touchdown Total	24	oz/a	MPOST	C	
7	Lexar	2	qt/a	PRE	A	99.0 a
	AMS	8.5	lb/100 gal	MPOST	C	
	Touchdown Total	24	oz/a	MPOST	C	
8	Bicep II Magnum	1.8	qt/a	PRE	A	99.0 a
	AMS	8.5	lb/100 gal	MPOST	C	
	Touchdown Total	24	oz/a	MPOST	C	
9	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	99.0 a
	Halex GT	3.6	pt/a	MPOST	C	
	atrazine	0.5	pt/a	MPOST	C	
	NIS	0.25	% v/v	MPOST	C	
	AMS	8.5	lb/100 gal	MPOST	C	
10	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	93.7 b
	Touchdown Total	24	oz/a	MPOST	C	
11	Surstart	2	pt/a	PRE	A	99.0 a
	AAtrex	1.11	lb/a	PRE	A	
	Durango	24	oz/a	MPOST	C	
	AMS	2	% w/w	MPOST	C	
12	Surstart	1.75	pt/a	EPOST	B	99.0 a
	Durango	24	oz/a	EPOST	B	
	AMS	2	% w/w	EPOST	B	
LSD (P=.05)					2.32	
Standard Deviation					1.37	
CV					1.52	
Grand Mean					90.28	
Bartlett's X2					5.58	
P(Bartlett's X2)					0.018*	
Replicate F					1.081	
Replicate Prob(F)					0.3567	
Treatment F					1296.092	
Treatment Prob(F)					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.

Rating Unit

% = percent

Percent = percent

Northeast Research & Extension Center

2009 Mesotrione plus atrazine premix for crop tolerance and weed control at universities
 Title No. 2: 2009 Surestart residual foundation for weed control
 Trial ID: 09 CRLL-9 Syngenta DOW Protocol ID: 09 CRLL-9 Syngenta DOW
 Location: Concord, NE Study Director:
 Project ID: Investigator: Stevan Knezevic
 Sponsor Contact:

Description						Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail
Rating Date						11-12-09	11-12-09	06-02-09	06-25-09	07-01-09	06-02-09	06-17-09
Rating Type						Yield@15.5%	Moisture	Injury	Injury	Injury	Control	Control
Rating Unit						bu/A	%	Percent	Percent	Percent	Percent	Percent
Days After First/Last Applic.						175 148	175 148	12 12	35 8	41 14	12 12	27 12
Trt-Eval Interval												
Trt No.	Treatment Name	Rate	Growth Stage	Appl Code	Plot	1	2	3	4	5	6	7
1	Nontreated				101	127.790	19.070		0.0	0.0	0.0	0.0
					202	140.980	18.900		0.0	0.0		
					310	132.320	19.230		0.0	0.0		0.0
					Mean =	133.697	19.067	.	0.0	0.0	0.0	0.0
2	Bicep II Magnum	1.2 qt/a	PRE	A	102	183.570	17.940	0.0	0.0	0.0	70.0	96.0
	N-PAK AMS Liquid	2.5 % w/v	MPOST	C	208	187.030	18.580	0.0	0.0	0.0	60.0	95.0
	A16907	20 oz/a	MPOST	C	305	194.550	17.350	0.0	0.0	0.0	30.0	75.0
	Touchdown Total	24 oz/a	MPOST	C								
					Mean =	188.383	17.957	0.0	0.0	0.0	53.3	88.7
3	N-PAK AMS Liquid	2.5 % w/v	MPOST	C	103	191.380	17.600		0.0	0.0		
	A16907	20 oz/a	MPOST	C	207	195.680	18.620		0.0	0.0		
	Touchdown Total	24 oz/a	MPOST	C	302	212.310	17.690		0.0	0.0		
					Mean =	199.790	17.970	.	0.0	0.0	.	.
4	N-PAK AMS Liquid	2.5 % w/v	MPOST	C	104	200.720	17.810		0.0	0.0		
	Laudis	2 oz/a	MPOST	C	201	192.800	17.470		0.0	0.0		
	Touchdown Total	24 oz/a	MPOST	C	303	200.150	17.750		0.0	0.0		
					Mean =	197.890	17.677	.	0.0	0.0	.	.
5	N-PAK AMS Liquid	2.5 % w/v	MPOST	C	105	168.070	18.310		0.0	0.0		
	Impact	0.5 oz/a	MPOST	C	210	192.800	18.550		0.0	0.0		
	Touchdown Total	24 oz/a	MPOST	C	311	198.620	17.960		0.0	0.0		
					Mean =	186.497	18.273	.	0.0	0.0	.	.
6	N-PAK AMS Liquid	2.5 % w/v	MPOST	C	106	181.480	17.960		0.0	0.0		
	Status	2.5 oz/a	MPOST	C	203	197.320	17.920		0.0	0.0		
	Touchdown Total	24 oz/a	MPOST	C	312	210.790	17.760		0.0	0.0		
					Mean =	196.530	17.880	.	0.0	0.0	.	.
7	Lexar	2 qt/a	PRE	A	107	194.780	18.530	0.0	0.0	0.0	85.0	97.0
	AMS	8.5 lb/100 gal	MPOST	C	211	190.360	18.310	0.0	0.0	0.0	98.0	98.0
	Touchdown Total	24 oz/a	MPOST	C	307	197.210	17.630	0.0	0.0	0.0	50.0	96.0
					Mean =	194.117	18.157	0.0	0.0	0.0	77.7	97.0
8	Bicep II Magnum	1.8 qt/a	PRE	A	108	191.440	18.290	0.0	0.0	0.0	95.0	98.0
	AMS	8.5 lb/100 gal	MPOST	C	204	184.250	17.840	0.0	0.0	0.0	80.0	92.0
	Touchdown Total	24 oz/a	MPOST	C	309	196.640	17.970	0.0	0.0	0.0	95.0	98.0
					Mean =	190.777	18.033	0.0	0.0	0.0	90.0	96.0
9	N-PAK AMS Liquid	2.5 % w/v	MPOST	C	109	177.630	18.710		0.0	0.0		
	Halex GT	3.6 pt/a	MPOST	C	205	186.060	18.310		0.0	0.0		
	atrazine	0.5 pt/a	MPOST	C	301	190.080	17.500		0.0	0.0		
	NIS	0.25 % v/v	MPOST	C								
	AMS	8.5 lb/100 gal	MPOST	C								
					Mean =	184.590	18.173	.	0.0	0.0	.	.

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Description						Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail	
Rating Date						11-12-09	11-12-09	06-02-09	06-25-09	07-01-09	06-02-09	06-17-09	
Rating Type						Yield@15.5%	Moisture	Injury	Injury	Injury	Control	Control	
Rating Unit						bu/A	%	Percent	Percent	Percent	Percent	Percent	
Days After First/Last Applic.						175 148	175 148	12 12	35 8	41 14	12 12	27 12	
Trt-Eval Interval													
Trt No.	Treatment Name	Rate	Unit	Growth Stage	Appl Code	Plot	1	2	3	4	5	6	7
10	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	110	185.550	17.530		0.0	0.0		
	Touchdown Total	24	oz/a	MPOST	C	206	188.890	18.110		0.0	0.0		
						308	191.610	18.260		0.0	0.0		
						Mean =	188.683	17.967	.	0.0	0.0	.	.
11	Surstart	2	pt/a	PRE	A	111	177.630	18.440	0.0	4.0	2.0	98.0	100.0
	AAtrex	1.11	lb/a	PRE	A	212	192.060	17.930	0.0	5.0	5.0	98.0	100.0
	Durango	24	oz/a	MPOST	C	304	198.060	17.000	0.0	2.0	0.0	75.0	95.0
	AMS	2	% w/w	MPOST	C								
						Mean =	189.250	17.790	0.0	3.7	2.3	90.3	98.3
12	Surstart	1.75	pt/a	EPOST	B	112	185.720	19.410		5.0	0.0		100.0
	Durango	24	oz/a	EPOST	B	209	181.760	18.630		5.0	5.0		100.0
	AMS	2	% w/w	EPOST	B	306	177.750	17.110		4.0	0.0		100.0
						Mean =	181.743	18.383	.	4.7	1.7	.	100.0

Description						Green foxtail	Green foxtail	Green foxtail	Green foxtail	Velvetleaf	Velvetleaf	Velvetleaf	Velvetleaf	
Rating Date						06-25-09	06-25-09	07-01-09	08-12-09	06-02-09	06-17-09	06-25-09	06-25-09	
Rating Type						Control	Density	Control	Control	Control	Control	Control	Density	
Rating Unit						Percent	m2 RunCH	Percent	Percent	Percent	Percent	Percent	m2 RunCH	
Days After First/Last Applic.						35 8	35 8	41 14	83 56	12 12	27 12	35 8	35 8	
Trt-Eval Interval														
Trt No.	Treatment Name	Rate	Unit	Growth Stage	Appl Code	Plot	8	9	10	11	12	13	14	15
1	Nontreated					101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						202	0.0	0.0	0.0	0.0		0.0	0.0	0.0
						310	0.0	0.0	0.0	0.0		0.0	0.0	0.0
						Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Bicep II Magnum	1.2	qt/a	PRE	A	102	99.0		99.0	99.0	30.0	20.0	99.0	
	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	208	99.0	25.0	99.0	99.0	50.0	25.0	99.0	2.0
	A16907	20	oz/a	MPOST	C	305	99.0		99.0	99.0	40.0	50.0	99.0	
	Touchdown Total	24	oz/a	MPOST	C									
						Mean =	99.0	25.0	99.0	99.0	40.0	31.7	99.0	2.0
3	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	103	99.0	20.0	99.0	98.0			99.0	1.0
	A16907	20	oz/a	MPOST	C	207	99.0	20.0	99.0	92.0			99.0	6.0
	Touchdown Total	24	oz/a	MPOST	C	302	99.0	15.0	99.0	97.0			99.0	3.0
						Mean =	99.0	18.3	99.0	95.7	.	.	99.0	3.3
4	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	104	99.0		99.0	98.0			99.0	
	Laudis	2	oz/a	MPOST	C	201	99.0	15.0	99.0	97.0			98.0	5.0
	Touchdown Total	24	oz/a	MPOST	C	303	99.0	25.0	99.0	97.0			99.0	4.0
						Mean =	99.0	20.0	99.0	97.3	.	.	98.7	4.5
5	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	105	99.0	5.0	99.0	98.0			99.0	2.0
	Impact	0.5	oz/a	MPOST	C	210	99.0	30.0	99.0	99.0			99.0	3.0
	Touchdown Total	24	oz/a	MPOST	C	311	99.0	10.0	99.0	99.0			99.0	2.0
						Mean =	99.0	15.0	99.0	98.7	.	.	99.0	2.3
6	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	106	99.0		99.0	99.0			99.0	
	Status	2.5	oz/a	MPOST	C	203	99.0	50.0	99.0	98.0			98.0	4.0
	Touchdown Total	24	oz/a	MPOST	C	312	99.0		99.0	99.0			99.0	
						Mean =	99.0	50.0	99.0	98.7	.	.	98.7	4.0
7	Lexar	2	qt/a	PRE	A	107	99.0	15.0	99.0	99.0	100.0	100.0	99.0	1.0
	AMS	8.5	lb/100 gal	MPOST	C	211	99.0	15.0	99.0	99.0	100.0	100.0	99.0	3.0
	Touchdown Total	24	oz/a	MPOST	C	307	99.0		99.0	99.0	100.0	100.0	99.0	
						Mean =	99.0	15.0	99.0	99.0	100.0	100.0	99.0	2.0
8	Bicep II Magnum	1.8	qt/a	PRE	A	108	99.0		99.0	99.0	100.0	50.0	99.0	
	AMS	8.5	lb/100 gal	MPOST	C	204	99.0	30.0	99.0	99.0	40.0	80.0	99.0	5.0
	Touchdown Total	24	oz/a	MPOST	C	309	99.0	30.0	99.0	99.0	50.0	70.0	99.0	3.0
						Mean =	99.0	30.0	99.0	99.0	63.3	66.7	99.0	4.0
9	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	109	99.0		99.0	99.0			99.0	
	Halex GT	3.6	pt/a	MPOST	C	205	99.0	20.0	99.0	99.0			99.0	5.0
	atrazine	0.5	pt/a	MPOST	C	301	99.0		99.0	99.0			99.0	
	NIS	0.25	% v/v	MPOST	C									
	AMS	8.5	lb/100 gal	MPOST	C									
						Mean =	99.0	20.0	99.0	99.0	.	.	99.0	5.0

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Description							Green foxtail	Green foxtail	Green foxtail	Green foxtail	Velvetleaf	Velvetleaf	Velvetleaf	Velvetleaf						
Rating Date							06-25-09	06-25-09	07-01-09	08-12-09	06-02-09	06-17-09	06-25-09	06-25-09						
Rating Type							Control	Density	Control	Control	Control	Control	Control	Density						
Rating Unit							Percent	m2 RunCH	Percent	Percent	Percent	Percent	Percent	m2 RunCH						
Days After First/Last Applic.							35	8	41	14	83	56	12	12	27	12	35	8	35	8
Trt-Eval Interval																				
Trt No.	Treatment Name	Rate	Unit	Growth Stage	Appl Code	Plot	8	9	10	11	12	13	14	15						
10	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	110	99.0		99.0	99.0			99.0							
	Touchdown Total	24	oz/a	MPOST	C	206	99.0	15.0	98.0	97.0			97.0	6.0						
						308	99.0	15.0	98.0	90.0			97.0	3.0						
						Mean =	99.0	15.0	98.3	95.3	.	.	97.7	4.5						
11	Surstart	2	pt/a	PRE	A	111	99.0		99.0	99.0	100.0	100.0	99.0							
	AAtrex	1.11	lb/a	PRE	A	212	99.0	10.0	99.0	98.0	95.0	100.0	99.0	2.0						
	Durango	24	oz/a	MPOST	C	304	99.0	20.0	99.0	99.0	100.0	98.0	99.0	5.0						
	AMS	2	% w/w	MPOST	C															
						Mean =	99.0	15.0	99.0	98.7	98.3	99.3	99.0	3.5						
12	Surstart	1.75	pt/a	EPOST	B	112	99.0		99.0	97.0		100.0	99.0							
	Durango	24	oz/a	EPOST	B	209	99.0	30.0	99.0	98.0		100.0	99.0	3.0						
	AMS	2	% w/w	EPOST	B	306	99.0	40.0	99.0	99.0		100.0	99.0	2.0						
						Mean =	99.0	35.0	99.0	98.0	.	100.0	99.0	2.5						

Description						Velvetleaf	Velvetleaf	Waterhemp	Waterhemp	Waterhemp	Waterhemp	Waterhemp	Waterhemp	
Rating Date						07-01-09	08-12-09	06-02-09	06-17-09	06-25-09	06-25-09	07-01-09	08-12-09	
Rating Type						Control	Control	Control	Control	Control	Density	Control	Control	
Rating Unit						Percent	Percent	Percent	Percent	Percent	m2 RunCH	Percent	Percent	
Days After First/Last Applic.						41 14	83 56	12 12	27 12	35 8	35 8	41 14	83 56	
Trt-Eval Interval														
Trt No.	Treatment Name	Rate	Unit	Growth Stage	Appl Code	Plot	16	17	18	19	20	21	22	23
1	Nontreated					101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						202	0.0	0.0			0.0	0.0	0.0	0.0
						310	0.0	0.0		0.0	0.0	0.0	0.0	0.0
						Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Bicep II Magnum	1.2	qt/a	PRE	A	102	99.0	99.0	85.0	97.0	99.0		99.0	99.0
	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	208	99.0	99.0	90.0	100.0	99.0	8.0	99.0	99.0
	A16907	20	oz/a	MPOST	C	305	99.0	99.0	95.0	85.0	99.0		99.0	99.0
	Touchdown Total	24	oz/a	MPOST	C									
						Mean =	99.0	99.0	90.0	94.0	99.0	8.0	99.0	99.0
3	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	103	99.0	99.0			99.0	5.0	99.0	99.0
	A16907	20	oz/a	MPOST	C	207	99.0	99.0			99.0	5.0	99.0	99.0
	Touchdown Total	24	oz/a	MPOST	C	302	99.0	99.0			99.0	5.0	99.0	99.0
						Mean =	99.0	99.0	.	.	99.0	5.0	99.0	99.0
4	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	104	98.0	99.0			99.0		99.0	99.0
	Laudis	2	oz/a	MPOST	C	201	95.0	99.0			99.0	20.0	99.0	99.0
	Touchdown Total	24	oz/a	MPOST	C	303	99.0	99.0			99.0	10.0	99.0	99.0
						Mean =	97.3	99.0	.	.	99.0	15.0	99.0	99.0
5	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	105	99.0	99.0			99.0	5.0	99.0	99.0
	Impact	0.5	oz/a	MPOST	C	210	99.0	99.0			99.0	5.0	99.0	99.0
	Touchdown Total	24	oz/a	MPOST	C	311	99.0	99.0			99.0	25.0	99.0	99.0
						Mean =	99.0	99.0	.	.	99.0	11.7	99.0	99.0
6	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	106	99.0	99.0			99.0		99.0	99.0
	Status	2.5	oz/a	MPOST	C	203	99.0	99.0			99.0	15.0	99.0	98.0
	Touchdown Total	24	oz/a	MPOST	C	312	99.0	99.0			99.0		99.0	99.0
						Mean =	99.0	99.0	.	.	99.0	15.0	99.0	98.7
7	Lexar	2	qt/a	PRE	A	107	99.0	99.0	100.0	100.0	99.0	3.0	99.0	99.0
	AMS	8.5	lb/100 gal	MPOST	C	211	99.0	99.0	100.0	100.0	99.0	10.0	99.0	99.0
	Touchdown Total	24	oz/a	MPOST	C	307	99.0	99.0	100.0	100.0	99.0		99.0	99.0
						Mean =	99.0	99.0	100.0	100.0	99.0	6.5	99.0	99.0
8	Bicep II Magnum	1.8	qt/a	PRE	A	108	99.0	99.0	100.0	98.0	99.0		99.0	99.0
	AMS	8.5	lb/100 gal	MPOST	C	204	99.0	99.0	90.0	97.0	99.0	5.0	99.0	99.0
	Touchdown Total	24	oz/a	MPOST	C	309	99.0	99.0	100.0	100.0	99.0	20.0	99.0	99.0
						Mean =	99.0	99.0	96.7	98.3	99.0	12.5	99.0	99.0
9	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	109	99.0	99.0			99.0		99.0	99.0
	Halex GT	3.6	pt/a	MPOST	C	205	99.0	99.0			99.0	10.0	99.0	99.0
	atrazine	0.5	pt/a	MPOST	C	301	99.0	99.0			99.0		99.0	99.0
	NIS	0.25	% v/v	MPOST	C									
	AMS	8.5	lb/100 gal	MPOST	C									
						Mean =	99.0	99.0	.	.	99.0	10.0	99.0	99.0

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Description						Velvetleaf	Velvetleaf	Waterhemp	Waterhemp	Waterhemp	Waterhemp	Waterhemp	Waterhemp	
Rating Date						07-01-09	08-12-09	06-02-09	06-17-09	06-25-09	06-25-09	07-01-09	08-12-09	
Rating Type						Control	Control	Control	Control	Control	Density	Control	Control	
Rating Unit						Percent	Percent	Percent	Percent	Percent	m2 RunCH	Percent	Percent	
Days After First/Last Applic.						41 14	83 56	12 12	27 12	35 8	35 8	41 14	83 56	
Trt-Eval Interval														
Trt No.	Treatment Name	Rate	Unit	Growth Stage	Appl Code	Plot	16	17	18	19	20	21	22	23
10	N-PAK AMS Liquid	2.5	% w/v	MPOST	C	110	99.0	99.0			99.0		99.0	99.0
	Touchdown Total	24	oz/a	MPOST	C	206	80.0	92.0			99.0	8.0	97.0	92.0
						308	95.0	90.0			98.0	15.0	98.0	90.0
						Mean =	91.3	93.7	.	.	98.7	11.5	98.0	93.7
11	Surstart	2	pt/a	PRE	A	111	99.0	99.0	99.0	100.0	99.0		99.0	99.0
	AAtrex	1.11	lb/a	PRE	A	212	99.0	99.0	100.0	100.0	99.0	5.0	99.0	99.0
	Durango	24	oz/a	MPOST	C	304	99.0	99.0	100.0	100.0	99.0	10.0	99.0	99.0
	AMS	2	% w/w	MPOST	C									
					Mean =	99.0	99.0	99.7	100.0	99.0	7.5	99.0	99.0	
12	Surstart	1.75	pt/a	EPOST	B	112	99.0	99.0		100.0	99.0		99.0	99.0
	Durango	24	oz/a	EPOST	B	209	99.0	99.0		100.0	99.0	5.0	99.0	99.0
	AMS	2	% w/w	EPOST	B	306	99.0	99.0		100.0	99.0	8.0	99.0	99.0
						Mean =	99.0	99.0	.	100.0	99.0	6.5	99.0	99.0

Northeast Research & Extension Center

2009 Mesotrione plus atrazine premix for crop tolerance and weed control at universities

Title No. 2: 2009 Surestart residual foundation for weed control

Trial ID: 09 CRLL-9 Syngenta DOW Protocol ID: 09 CRLL-9 Syngenta DOW

Location: Concord, NE Study Director:

Project ID: Investigator: Stevan Knezevic

Sponsor Contact:

Rating Unit

% = percent

Percent = percent