

2008 Corvus and Balance Flex used with and without Ignite 280 for weed control in corn.

Trial ID: 14 08 BAY JJB FlexxPRE Protocol ID: 08 BAY JJB Flexx PRE
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: 12-04-08 Harvest Equipment: SPC-40
Harvested Width, Unit: 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 (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

Table with 4 columns: Previous Crops, Previous Pesticides, Year. Row 1: Soybean, glyphosate, 2007

Maintenance

Table with 9 columns: No., Date, Maintenance Treatment Name, Form Conc, Form Unit, Form Type, Rate, Rate Unit, Tank Mix. Row 1: 1, 05-18-08, glyphosate, 5.5, lbai.ga, SL, 32, oz/A, n

Soil Description

% Sand: 34 % OM: 3.5 Texture: SILT LOAM
% Silt: 50 pH: 7.3
% Clay: 16 CEC: 17.4 Fert. Level: EXCELLENT
Analyzed By:
Midwest labs

Application Description

	A	B	C
Application Date:	06-04-08	06-18-08	07-01-08
Time of Day:	5:00 pm	11:00 am	10:00 am
Application Method:	spray	spray	spray
Application Timing:	PRE	EPOST	POST
Application Placement:	surface	foliar	foliar
Applied By:	rr su	rr	rr
Air Temperature, Unit:	75 F	81 F	78 F
% Relative Humidity:	70	40	60
Wind Velocity, Unit:	1 mph	2 mph	2.5 mph
Wind Direction:	var	S	S
Dew Presence (Y/N):		n	n
Soil Temperature, Unit:	68 F	72 F	65 F
Soil Moisture:	EXCESSIVE	ADEQUATE	ADEQUATE
% Cloud Cover:	100	50	10
Next Rain Occurred On:	06-05-08		

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:		V2 90	V5 50
Stage Maximum, Percent:		V3 10	V6 50
Height, Unit:		4 in	12 in

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	SETVI W	SETVI W	SETVI W
Height, Unit:		1.5 in	7 in
Height Minimum, Maximum:		1 2	6 8
Density, Unit:		5 m2	10 m2
Pest 2 Code, Disc., Scale:	ABUTH W	ABUTH W	ABUTH W
Height, Unit:		1.5 in	7 in
Height Minimum, Maximum:		1 2	6 8
Density, Unit:		2 m2	5 m2
Pest 3 Code, Disc., Scale:	AMATU W	AMATU W	AMATU W
Height, Unit:		1 in	7 in
Height Minimum, Maximum:		1 1	6 8
Density, Unit:		2 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

Northeast Research & Extension Center

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 Trial ID: 14 08 BAY JJB FlexxPRE Protocol ID: 08 BAY JJB Flexx PRE
 Location: Concord, NE Study Director: Stevan Knezevic
 Investigator: Stevan Knezevic

Description	Corn, field	Corn, field	Corn	Corn	Green foxtail	Green foxtail	Green foxtail	Green foxtail	Velvetleaf	Velvetleaf	
Rating Date	12-04-08	12-04-08	07-03-08	07-18-08	07-03-08	07-18-08	07-18-08	08-05-08	07-03-08	07-18-08	
Rating Data Type	Yield	Moisture	Injury	Injury	Control	Control	Density	Control	Control	Control	
Rating Unit	bu/A15.5	Percent	Percent	Percent	Percent	Percent	m2 RunCH	Percent	Percent	Percent	
Days After First/Last Applic.	183 156	183 156	29 2	44 17	29 2	44 17	44 17	62 35	29 2	44 17	
Plant-Eval Interval	183 DP-1	183 DP-1	29 DP-1	44 DP-1	29 DP-1	44 DP-1	44 DP-1	62 DP-1	29 DP-1	44 DP-1	
Trt Treatment	Rate	Growth									
No. Name	Unit	Stage									
1 Corvus	2.2 oz/a	PRE	174.8 a	13.4 a	0.0 a	0.0 a	87.0 abc	99.0 a	11.7 a	99.0 a	99.0 a
Ignite 280	22 oz/a	POST									
Laudis	2 oz/a	POST									
Ammonium Sulfate	1.5 lb/a	POST									
2 Corvus	3.3 oz/a	PRE	185.2 a	13.5 a	0.0 a	0.0 a	87.3 abc	99.0 a	8.3 a	99.0 a	99.0 a
Ignite 280	22 oz/a	POST									
Laudis	2 oz/a	POST									
Ammonium Sulfate	1.5 lb/a	POST									
3 Corvus	2.2 oz/a	PRE	171.7 a	13.6 a	0.0 a	0.0 a	84.7 c	99.0 a	6.7 a	99.0 a	82.7 a
Roundup PowerMAX	22 oz/a	POST									
Laudis	3 oz/a	POST									
Ammonium Sulfate	1.5 lb/a	POST									
4 Corvus	3.3 oz/a	PRE	157.1 a	12.9 a	0.0 a	0.0 a	86.3 bc	96.0 b	8.3 a	99.0 a	87.7 a
Roundup PowerMAX	22 oz/a	POST									
Laudis	3 oz/a	POST									
Ammonium Sulfate	1.5 lb/a	POST									
5 Balance Flexx	3 oz/a	PRE	166.8 a	13.4 a	0.0 a	0.0 a	91.0 abc	99.0 a	8.3 a	99.0 a	99.0 a
atrazine	2 pt/a	PRE									
Ignite 280	22 oz/a	POST									
Laudis	2 oz/a	POST									
Ammonium Sulfate	1.5 lb/a	POST									
6 Balance Flexx	4 oz/a	PRE	156.4 a	13.0 a	0.0 a	0.0 a	97.0 a	99.0 a	8.3 a	99.0 a	99.0 a
atrazine	2 pt/a	PRE									
Ignite 280	22 oz/a	POST									
Laudis	2 oz/a	POST									
Ammonium Sulfate	1.5 lb/a	POST									
7 Corvus	2.2 oz/a	PRE	175.7 a	13.3 a	0.0 a	0.0 a	89.0 abc	97.7 ab	8.3 a	92.3 c	99.0 a
atrazine	2 pt/a	PRE									
8 Corvus	3.3 oz/a	PRE	175.0 a	13.3 a	0.0 a	0.0 a	96.7 ab	99.0 a	6.7 a	99.0 a	99.0 a
atrazine	2 pt/a	PRE									
9 Corvus	4.5 oz/a	PRE	187.8 a	13.6 a	0.0 a	0.0 a	89.0 abc	95.0 b	11.7 a	95.3 b	99.0 a
atrazine	2 pt/a	PRE									
10 Balance Flexx	4 oz/a	PRE	165.7 a	13.3 a	0.0 a	0.0 a	94.0 abc	99.0 a	11.7 a	99.0 a	99.0 a
Harness Xtra	1.5 qt/a	PRE									
11 Balance Flexx	4 oz/a	EPOST V2	183.6 a	13.7 a	0.0 a	0.0 a	95.0 abc	99.0 a	10.0 a	98.0 a	99.0 a
atrazine	2 pt/a	EPOST V2									
Ignite 280	22 oz/a	EPOST V2									
Laudis	2 oz/a	EPOST V2									
Ammonium Sulfate	1.5 lb/a	EPOST V2									
12 Nontreated Check			100.9 b	13.3 a	0.0 a	0.0 a	0.0 d	0.0 c	10.0 a	0.0 d	0.0 b
LSD (P=.05)	36.36	0.75	0.00	0.00	10.56	2.83	4.83	2.61	17.19	0.00	
Standard Deviation	21.47	0.44	0.00	0.00	6.24	1.67	2.85	1.54	10.15	0.00	
CV	12.88	3.33	0.0	0.0	7.51	1.85	31.13	1.72	11.48	0.0	
Grand Mean	166.74	13.36	0.0	0.0	83.08	90.06	9.17	89.81	88.44	90.75	
Replicate F	4.291	3.492	0.000	0.000	1.455	0.608	14.581	2.284	0.510	0.000	
Replicate Prob(F)	0.0267	0.0482	1.0000	1.0000	0.2550	0.5532	0.0001	0.1255	0.6075	1.0000	
Treatment F	3.456	0.851	0.000	0.000	54.153	868.283	1.209	1011.978	23.455	0.000	
Treatment Prob(F)	0.0064	0.5956	1.0000	1.0000	0.0001	0.0001	0.3372	0.0001	0.0001	1.0000	

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	Velvetleaf 07-18-08	Velvetleaf 08-05-08	Waterhemp 07-03-08	Waterhemp 07-18-08	Waterhemp 07-18-08	Waterhemp 08-05-08				
Rating Date										
Rating Data Type	Density	Control	Control	Control	Density	Control				
Rating Unit	m2 RunCH	Percent	Percent	Percent	m2 RunCH	Percent				
Days After First/Last Applic.	44 17	62 35	29 2	44 17	44 17	62 35				
Plant-Eval Interval	44 DP-1	62 DP-1	29 DP-1	44 DP-1	44 DP-1	62 DP-1				
Trt No.	Treatment Name	Rate	Growth Unit	Stage						
1	Corvus	2.2 oz/a	PRE		2.7 a	99.0 a	99.0 a	99.0 a	6.7 a	99.0 a
	Ignite 280	22 oz/a	POST							
	Laudis	2 oz/a	POST							
	Ammonium Sulfate	1.5 lb/a	POST							
2	Corvus	3.3 oz/a	PRE		0.7 a	99.0 a	99.0 a	99.0 a	5.0 a	99.0 a
	Ignite 280	22 oz/a	POST							
	Laudis	2 oz/a	POST							
	Ammonium Sulfate	1.5 lb/a	POST							
3	Corvus	2.2 oz/a	PRE		1.7 a	99.0 a	74.3 b	99.0 a	5.7 a	99.0 a
	Roundup PowerMAX	22 oz/a	POST							
	Laudis	3 oz/a	POST							
	Ammonium Sulfate	1.5 lb/a	POST							
4	Corvus	3.3 oz/a	PRE		1.3 a	99.0 a	94.3 ab	99.0 a	6.7 a	99.0 a
	Roundup PowerMAX	22 oz/a	POST							
	Laudis	3 oz/a	POST							
	Ammonium Sulfate	1.5 lb/a	POST							
5	Balance Flexx	3 oz/a	PRE		3.0 a	99.0 a	99.0 a	99.0 a	6.7 a	99.0 a
	atrazine	2 pt/a	PRE							
	Ignite 280	22 oz/a	POST							
	Laudis	2 oz/a	POST							
	Ammonium Sulfate	1.5 lb/a	POST							
6	Balance Flexx	4 oz/a	PRE		2.3 a	99.0 a	99.0 a	99.0 a	6.7 a	99.0 a
	atrazine	2 pt/a	PRE							
	Ignite 280	22 oz/a	POST							
	Laudis	2 oz/a	POST							
	Ammonium Sulfate	1.5 lb/a	POST							
7	Corvus	2.2 oz/a	PRE		1.3 a	99.0 a	96.0 a	93.0 b	5.0 a	97.0 ab
	atrazine	2 pt/a	PRE							
8	Corvus	3.3 oz/a	PRE		1.3 a	99.0 a	99.0 a	99.0 a	4.0 a	99.0 a
	atrazine	2 pt/a	PRE							
9	Corvus	4.5 oz/a	PRE		1.0 a	99.0 a	96.3 a	91.3 b	5.0 a	95.7 b
	atrazine	2 pt/a	PRE							
10	Balance Flexx	4 oz/a	PRE		1.0 a	99.0 a	99.0 a	99.0 a	5.7 a	99.0 a
	Harness Xtra	1.5 qt/a	PRE							
11	Balance Flexx	4 oz/a	EPOST V2		1.7 a	99.0 a	99.0 a	99.0 a	4.0 a	99.0 a
	atrazine	2 pt/a	EPOST V2							
	Ignite 280	22 oz/a	EPOST V2							
	Laudis	2 oz/a	EPOST V2							
	Ammonium Sulfate	1.5 lb/a	EPOST V2							
12	Nontreated Check				2.0 a	0.0 b	0.0 c	0.0 c	6.7 a	0.0 c
LSD (P=.05)		1.76	0.00	21.49	5.12	3.84	3.16			
Standard Deviation		1.04	0.00	12.69	3.02	2.27	1.86			
CV		62.45	0.0	14.45	3.38	40.24	2.06			
Grand Mean		1.67	90.75	87.83	89.61	5.64	90.31			
Replicate F		4.385	0.000	0.760	0.185	1.689	2.047			
Replicate Prob(F)		0.0250	1.0000	0.4798	0.8322	0.2079	0.1531			
Treatment F		1.399	0.000	15.157	263.456	0.629	699.252			
Treatment Prob(F)		0.2416	1.0000	0.0001	0.0001	0.7851	0.0001			

Means followed by same letter do not significantly differ (P=.05, LSD)
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Additional Treatment Information	
Treatment Name	Ammonium Sulfate =
Rate Unit	
OZ/A	= Ounces Product per Acre (Metric=ML-G/HA) O
LB/A	= Pounds Product per Acre (Metric=KG/MU) AE
PT/A	= Pints Product per Acre (Metric=L/HA) P
QT/A	= Quarts Product per Acre (Metric=L/HA) Q