

Corvus and Balance Flexx Burndown and Residual.

Trial ID: 09-6C-W90

Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: Belleville IL 62221 USA
 Trial Status: FINAL Initiation Date: 05-06-09

Objectives: Evaluate Corvus and Balance Flexx for burndown and residual weed control in no-till corn.

Crop 1: ZEAMD Dent corn Variety: P33K44 Description: RR/LL
 Planting Method: SEEDED Planting Date: 05-24-09
 Rate, Unit: 28000 S/A Depth, Unit: 1.5 IN
 Row Spacing, Unit: 30 IN

Pest 1 Type: W Code: SETFA Setaria faberi Herrm. foxtail, giant
 Pest 2 Type: W Code: AMBTR Ambrosia trifida L. ragweed, giant
 Pest 3 Type: W Code: IPOHE Ipomoea hederacea (L.) Jacq. morningglory, ivyleaf
 Pest 4 Type: W Code: CHEAL Chenopodium album L. lambsquarters, common

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 24 FT Tillage Type: NO-TILL
 Replications: 3 Study Design: Randomized Complete Block

Prior Crops, Year
 1. ZEAMD 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 Texture: SILT LOAM
 pH: 6.1 Soil Name: CASEYVILLE
 CEC: 8 Fert. Level: P1 82 LB/A, K 408 LB/A

Application Description

A
 Application Date: 05-06-09
 Time of Day: 17:00
 Application Method: Spray
 Application Timing: PREPLANT
 Application Placement: BROFOL
 Applied By: RFK
 Air Temperature, Unit: 66 F
 % Relative Humidity: 92
 Wind Velocity, Unit: 0 MPH
 Soil Moisture: ABONOR
 % Cloud Cover: 0

05-06-09
 Crop stage at application: NA

Pest Stage At Each Application

Application Date: 05-06-09
 Weed Code: SETFA
 Stage Majority (leaves): NA
 Weed Code: AMBTR
 Stage Majority (leaves): 5
 Stage Min, Max: 5 8
 Height Majority: 4 IN
 Height Min, Max: 2 6
 Density, Unit: 4 FT2
 Weed Code: IPOHE
 Stage Majority (leaves): NA
 Weed Code: CHEAL
 Stage Majority (leaves): 10
 Stage Min, Max: 7 10
 Height Majority: 3 IN
 Height Min, Max: 2 4
 Density, Unit: 2 FT2

Application Equipment

Appl. Equipment: CO2 sprayer
 Operating Pressure: 30 PSI
 Nozzle Type: Flat fan
 Nozzle Size: XR 8002
 Boom Length, Unit: 7.5 FT
 Spray Volume, Unit: 15 GPA

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Pest Code									ZEAMD			SETFA	SETFA	SETFA	
Crop Code									06-12-09	07-02-09	08-01-09				
Rating Date									Injury	Injury	Injury	Control	Control	Control	
Rating Data Type									Percent	Percent	Percent	Percent	Percent	Percent	
Rating Unit									10 DAE	30 DAE	60 DAE	10 DAE	30 DAE	60 DAE	
Rating Timing															
Trt-Eval Interval															
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	NONTREATED									0 a	0 a	0 a	0 c	0 c	0 c
2	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A		0 a	0 a	0 a	0 c	17 c	13 c
2	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
3	CORVUS	2.62	SC	0.115 lb ai/a	5.6 fl oz/a			PREPLANT A		0 a	0 a	0 a	99 a	92 a	88 a
3	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
3	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
4	CORVUS	2.62	SC	0.115 lb ai/a	5.6 fl oz/a			PREPLANT A		0 a	0 a	0 a	99 a	93 a	92 a
4	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
4	DESTINY HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
5	CORVUS	2.62	SC	0.0614 lb ai/a	3 fl oz/a			PREPLANT A		0 a	0 a	0 a	99 a	82 ab	78 ab
5	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
5	DESTINY HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
6	CORVUS	2.62	SC	0.115 lb ai/a	5.6 fl oz/a			PREPLANT A		0 a	0 a	0 a	99 a	80 ab	68 ab
6	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a			PREPLANT A							
6	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
6	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
7	BALANCE FLEXX	2	SC	0.094 lb ai/a	6 fl oz/a			PREPLANT A		0 a	0 a	0 a	99 a	67 b	68 ab
7	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
7	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
8	BALANCE FLEXX	2	SC	0.094 lb ai/a	6 fl oz/a			PREPLANT A		0 a	0 a	0 a	98 a	72 ab	73 ab
8	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
8	DESTINY HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
9	BALANCE FLEXX	2	SC	0.047 lb ai/a	3 fl oz/a			PREPLANT A		0 a	0 a	0 a	96 a	75 ab	63 ab
9	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
9	DESTINY HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
10	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a			PREPLANT A		0 a	0 a	0 a	27 b	10 c	3 c
11	LEXAR	3.7	SC	2.78 lb ai/a	3 qt/a			PREPLANT A		0 a	0 a	0 a	93 a	76 ab	53 b
11	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
12	INTEGRITY	5.57	EC	0.87 lb ai/a	20 fl oz/a			PREPLANT A		0 a	0 a	0 a	89 a	63 b	48 b
12	ATRAZINE 4L	4	SC	1 lb ai/a	1 qt/a			PREPLANT A							
12	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
LSD (P=.05)										0.0	0.0	0.0	23.5	22.7	32.2
Replicate F										0.000	0.000	0.000	0.823	0.318	0.179
Replicate Prob(F)										1.0000	1.0000	1.0000	0.4520	0.7310	0.8376
Treatment F										0.000	0.000	0.000	25.453	17.587	8.471
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

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									AMBTR	AMBTR	AMBTR	IPOHE	IPOHE	IPOHE	
Pest Code									06-12-09	07-02-09	08-01-09	06-12-09	07-02-09	08-01-09	
Crop Code									Control	Control	Control	Control	Control	Control	
Rating Date									Percent	Percent	Percent	Percent	Percent	Percent	
Rating Data Type									10 DAE	30 DAE	60 DAE	10 DAE	30 DAE	60 DAE	
Rating Unit															
Rating Timing															
Trt-Eval Interval															
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	NONTREATED									0 d	0 c	0 c	0 c	0 d	0 c
2	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A		72 b	50 b	47 b	99 a	63 bc	63 ab
2	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
3	CORVUS	2.62	SC	0.115 lb ai/a	5.6 fl oz/a			PREPLANT A		99 a	97 a	97 a	99 a	94 a	89 a
3	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
3	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
4	CORVUS	2.62	SC	0.115 lb ai/a	5.6 fl oz/a			PREPLANT A		99 a	97 a	96 a	99 a	95 a	86 ab
4	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
4	DESTINY HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
5	CORVUS	2.62	SC	0.0614 lb ai/a	3 fl oz/a			PREPLANT A		98 a	89 a	88 a	99 a	71 abc	76 ab
5	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
5	DESTINY HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
6	CORVUS	2.62	SC	0.115 lb ai/a	5.6 fl oz/a			PREPLANT A		99 a	89 a	87 a	99 a	88 ab	83 ab
6	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a			PREPLANT A							
6	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
6	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
7	BALANCE FLEXX	2	SC	0.094 lb ai/a	6 fl oz/a			PREPLANT A		97 a	87 a	86 a	95 a	80 abc	80 ab
7	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
7	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
8	BALANCE FLEXX	2	SC	0.094 lb ai/a	6 fl oz/a			PREPLANT A		97 a	91 a	87 a	96 a	77 abc	75 ab
8	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
8	DESTINY HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
9	BALANCE FLEXX	2	SC	0.047 lb ai/a	3 fl oz/a			PREPLANT A		93 ab	87 a	80 a	96 a	85 ab	78 ab
9	ATRAZINE 4L	4	SC	1 lb ai/a	2 pt/a			PREPLANT A							
9	DESTINY HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
10	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a			PREPLANT A		27 c	50 b	40 b	30 b	7 d	17 c
11	LEXAR	3.7	SC	2.78 lb ai/a	3 qt/a			PREPLANT A		97 a	90 a	84 a	96 a	79 abc	79 ab
11	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
12	INTEGRITY	5.57	EC	0.87 lb ai/a	20 fl oz/a			PREPLANT A		97 a	88 a	85 a	99 a	53 c	57 b
12	ATRAZINE 4L	4	SC	1 lb ai/a	1 qt/a			PREPLANT A							
12	SUPERB HC	100	SL	0.5 % v/v	0.5 % v/v			PREPLANT A							
LSD (P=.05)										24.3	14.3	17.6	25.6	28.4	29.9
Replicate F										1.545	0.008	0.165	1.199	3.331	5.476
Replicate Prob(F)										0.2356	0.9919	0.8492	0.3205	0.0545	0.0117
Treatment F										15.894	34.811	23.619	14.189	10.704	7.746
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

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Trial ID: 09-6C-W90

Location: Belleville Res. Center

Pest Code	CHEAL	CHEAL	CHEAL
Crop Code			
Rating Date	06-12-09	07-02-09	08-01-09
Rating Data Type	Control	Control	Control
Rating Unit	Percent	Percent	Percent
Rating Timing	10 DAE	30 DAE	60 DAE
Trt-Eval Interval			

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	NONTREATED									0 c	0 c	0 c
2	ATRAZINE 4L	4	SC	1 lb ai/a		2 pt/a		PREPLANT	A	99 a	93 a	99 a
2	SUPERB HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
3	CORVUS	2.62	SC	0.115 lb ai/a		5.6 fl oz/a		PREPLANT	A	99 a	99 a	99 a
3	ATRAZINE 4L	4	SC	1 lb ai/a		2 pt/a		PREPLANT	A			
3	SUPERB HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
4	CORVUS	2.62	SC	0.115 lb ai/a		5.6 fl oz/a		PREPLANT	A	99 a	99 a	99 a
4	ATRAZINE 4L	4	SC	1 lb ai/a		2 pt/a		PREPLANT	A			
4	DESTINY HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
5	CORVUS	2.62	SC	0.0614 lb ai/a		3 fl oz/a		PREPLANT	A	99 a	96 a	96 a
5	ATRAZINE 4L	4	SC	1 lb ai/a		2 pt/a		PREPLANT	A			
5	DESTINY HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
6	CORVUS	2.62	SC	0.115 lb ai/a		5.6 fl oz/a		PREPLANT	A	99 a	96 a	99 a
6	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a		16 fl oz/a		PREPLANT	A			
6	ATRAZINE 4L	4	SC	1 lb ai/a		2 pt/a		PREPLANT	A			
6	SUPERB HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
7	BALANCE FLEXX	2	SC	0.094 lb ai/a		6 fl oz/a		PREPLANT	A	99 a	99 a	99 a
7	ATRAZINE 4L	4	SC	1 lb ai/a		2 pt/a		PREPLANT	A			
7	SUPERB HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
8	BALANCE FLEXX	2	SC	0.094 lb ai/a		6 fl oz/a		PREPLANT	A	99 a	95 a	99 a
8	ATRAZINE 4L	4	SC	1 lb ai/a		2 pt/a		PREPLANT	A			
8	DESTINY HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
9	BALANCE FLEXX	2	SC	0.047 lb ai/a		3 fl oz/a		PREPLANT	A	99 a	94 a	93 a
9	ATRAZINE 4L	4	SC	1 lb ai/a		2 pt/a		PREPLANT	A			
9	DESTINY HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
10	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a		16 fl oz/a		PREPLANT	A	60 b	37 b	56 b
11	LEXAR	3.7	SC	2.78 lb ai/a		3 qt/a		PREPLANT	A	99 a	99 a	99 a
11	SUPERB HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
12	INTEGRITY	5.57	EC	0.87 lb ai/a		20 fl oz/a		PREPLANT	A	99 a	99 a	99 a
12	ATRAZINE 4L	4	SC	1 lb ai/a		1 qt/a		PREPLANT	A			
12	SUPERB HC	100	SL	0.5 % v/v		0.5 % v/v		PREPLANT	A			
LSD (P=.05)										25.4	16.5	25.3
Replicate F										1.000	1.608	1.256
Replicate Prob(F)										0.3840	0.2230	0.3044
Treatment F										11.800	31.550	11.929
Treatment Prob(F)										0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (JJA-1), BASF.
2. Ratings: CI/WC at 10, 30 and 60 DAE.
3. Stand reduction due to standing water was observed and recorded by plot.
4. Not harvested.