

Winter Annual Grass Burndown with Corvus - 3.

Trial ID: 09-YRC-Corvus Location: Young Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: Murphysboro IL 62966 USA
 Trial Status: FINAL Initiation Date: 04-29-09

Objectives: Determine the efficacy of Corvus and Corvus tank-mixtures for foliar burndown activity on winter annual grass species compared with commercial standards.

Crop 1: YACKR Arable land

Pest 1 Type: W Code: ERICA Conyza canadensis (L.) Crong. horseweed
 Pest Description: glyphosate-resistant marestail
 Pest 2 Type: W Code: HORPU Hordeum pusillum Nutt. barley, little
 Pest 3 Type: W Code: VERAR Veronica arvensis L. speedwell, corn

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 30 FT Tillage Type: NO-TILL
 Replications: 4 Study Design: Randomized Complete Block

Prior Crops, Year
 1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P205 0 LB/A, K20 0 LB/A

% OM: 2.1 Texture: VERY FINE SANDY LOAM
 pH: 5 Soil Name: ALVIN
 CEC: 9 Fert. Level: P1 133 LB/A, K 209 LB/A

Application Description

A
 Application Date: 04-29-09
 Time of Day: 15:20
 Application Method: Spray
 Application Timing: 3-4"BD
 Application Placement: BROFOL
 Applied By: DKT
 Air Temperature, Unit: 78 F
 % Relative Humidity: 50
 Wind Velocity, Unit: 3 MPH
 Wind Direction: N
 Dew Presence (Y/N): N
 Soil Temperature, Unit: 70 F
 Soil Moisture: ABONOR

04-29-09
 Crop stage at application: NA

Pest Stage At Each Application

Application Date: 04-29-09
 Weed Code: ERICA
 Stage Majority (leaves): 10
 Stage Min, Max: 6 14
 Height Majority: 4 IN
 Height Min, Max: 2 6
 Density, Unit: 2 FT2
 Weed Code: HORPU
 Stage Majority (leaves): 5
 Stage Min, Max: 3 5
 Height Majority: 7 IN
 Height Min, Max: 6 10
 Density, Unit: 2 FT2
 Weed Code: VERAR
 Stage Majority (leaves): 16
 Stage Min, Max: 8 20
 Height Majority: 6 IN
 Height Min, Max: 5 10
 Density, Unit: 8 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									ERICA-HR	ERICA-HR	ERICA-HR	HORPU	HORPU	HORPU	
Crop Code									05-13-09	05-27-09	05-27-09	05-13-09	05-27-09	05-27-09	
Rating Date									Control	Control	Plants	Control	Control	Plants	
Rating Data Type									Percent	Percent	0.5 m2	Percent	Percent	0.5 m2	
Rating Unit															
Rating Timing															
Trt-Eval Interval									14 DA-A	28 DA-A	28 DA-A	14 DA-A	28 DA-A	28 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	94	a	99	a	0.0	c
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					10	f
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					40	f
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	86	b	99	a	0.0	c
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					10	f
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					45	f
3	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	94	a	99	a	0.0	c
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A					20	e
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					86	cd
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					0.5	bc
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	95	a	99	a	0.0	c
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A					20	e
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					79	de
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					0.4	bc
5	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	86	b	99	a	0.0	c
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A					13	f
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					70	e
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					0.6	bc
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	94	a	99	a	0.0	c
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A					10	f
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					48	f
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					1.4	b
7	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	95	a	99	a	0.0	c
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A					78	bc
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					99	a
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					0.0	c
8	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	94	a	99	a	0.0	c
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A					63	d
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					99	a
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					0.0	c
9	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	94	a	99	a	0.0	c
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A					90	a
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					89	bc
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					0.9	bc
10	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	95	a	99	a	0.0	c
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A					73	c
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					89	bc
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					0.9	bc
11	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A	63	c	75	b	4.1	b
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					83	b
11	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A					92	abc
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A	94	a	99	a	0.0	c
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					93	a
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					97	ab
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	3-4"BD	A	94	a	99	a	0.0	c
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					91	a
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A					99	a
14	NONTREATED									0	d	0	c	13.3	a
LSD (P=.05)										5.9	2.2	1.93	7.0	10.0	1.31
Replicate F										0.441	1.000	1.729	2.374	3.150	1.247
Replicate Prob(F)										0.7249	0.4031	0.1769	0.0849	0.0356	0.3059
Treatment F										153.032	1201.375	28.906	227.311	72.742	2.615
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0102

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

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Pest Code	VERAR	VERAR	VERAR
Crop Code			
Rating Date	05-13-09	05-27-09	05-27-09
Rating Data Type	Control	Control	Plants
Rating Unit	Percent	Percent	0.5 m2
Rating Timing			
Trt-Eval Interval	14 DA-A	28 DA-A	28 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"	BD A	88	bc	88	cd	1.3	b
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"	BD A	88	bc	95	b	0.6	b
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
3	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"	BD A	95	a	99	a	0.0	b
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"	BD A						
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"	BD A	94	a	99	a	0.0	b
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"	BD A						
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
5	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"	BD A	85	c	90	c	0.9	b
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"	BD A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"	BD A	91	ab	99	a	0.0	b
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"	BD A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
7	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"	BD A	94	a	99	a	0.0	b
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"	BD A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
8	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"	BD A	95	a	99	a	0.0	b
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"	BD A						
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
9	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"	BD A	94	a	99	a	0.0	b
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"	BD A						
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
10	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"	BD A	94	a	99	a	0.0	b
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"	BD A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
11	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"	BD A	91	ab	96	ab	0.0	b
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
11	AMS	100	SG	5	% v/v	5	% v/v	3-4"	BD A						
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"	BD A	94	a	99	a	0.0	b
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	3-4"	BD A	83	c	85	d	2.3	b
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"	BD A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"	BD A						
14	NONTREATED									0	d	0	e	10.1	a
LSD (P=.05)										5.2		3.7		2.89	
Replicate F										4.684		0.522		1.223	
Replicate Prob(F)										0.0069		0.6694		0.3141	
Treatment F										182.634		400.092		7.067	
Treatment Prob(F)										0.0001		0.0001		0.0001	

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

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Trial Comments

1. Protocol: SIU(DT)/Bayer.
2. Ratings: WC at 14 and 28 DAT; Grass density (live plants) at 28 DAT.
3. Target species marestail and little barley.
4. Plants 0.5 m² = Plants per 0.5 square meter.
ERICA-HR = Herbicide-resistant marestail (glyphosate).
5. Not harvested (non-crop).