

Winter Annual Grass Burndown with Corvus - 2.

Trial ID: 09-HRC-WU12-Corvus Location: Hort. Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: Carbondale IL 62901 USA
 Trial Status: FINAL Initiation Date: 04-04-09

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 Variety: NON-CROP

Pest 1 Type: W Code: HORPU Hordeum pusillum Nutt. barley, little
 Pest 2 Type: W Code: STEME Stellaria media (L.) Vill. chickweed, common
 Pest 3 Type: W Code: LAMPU Lamium purpureum L. deadnettle, purple

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. ZEAMD 2008

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

% OM: 2.8 Texture: SILT LOAM
 pH: 6.7
 CEC: 10 Fert. Level: P1: 92 LB/A, K: 334 LB/A

Application Description

A
 Application Date: 04-04-09
 Time of Day: 12:00
 Application Method: Spray
 Application Timing: 3-4"BD
 Application Placement: BROFOL
 Applied By: DKT
 Air Temperature, Unit: 65 F
 % Relative Humidity: 26
 Wind Velocity, Unit: 4 MPH
 Dew Presence (Y/N): N
 Soil Temperature, Unit: 53 F
 Soil Moisture: ABONOR

04-04-09
 Crop stage at application: NA

Pest Stage At Each Application

Application Date: 04-04-09
 Weed Code: HORPU
 Stage Majority (leaves): 30
 Stage Min, Max: 6 40
 Height Majority: 5 IN
 Height Min, Max: 2 10
 Density, Unit: 8 FT2
 Weed Code: STEME
 Stage Majority (leaves): 50
 Stage Min, Max: 30 60
 Height Majority: 6 IN
 Height Min, Max: 4 10
 Density, Unit: 3 FT2
 Weed Code: LAMPU
 Stage Majority (leaves): 15
 Stage Min, Max: 8 20
 Height Majority: 6 IN
 Height Min, Max: 4 8
 Density, Unit: 4 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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									HORPU	HORPU	HORPU	STEME	STEME	STEME
Pest Code									04-18-09	05-02-09	05-02-09	04-18-09	05-02-09	05-02-09
Crop Code									Control	Control	Plants	Control	Control	Plants
Rating Date									Percent	Percent	0.5 m2	Percent	Percent	0.5 m2
Rating Data Type														
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	10 f	48 f	30.8 b	10 fg	99 a
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					0.0 b
1	AMS	100	SG	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	20 e	58 d	22.5 cd	15 ef	99 a
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					0.0 b
2	AMS	100	SG	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	33 d	55 de	11.5 e	20 ef	99 a
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A					0.0 b
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					
3	AMS	100	SG	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	28 de	55 de	31.3 b	35 cd	99 a
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A					0.0 b
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					
4	AMS	100	SG	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	28 de	33 g	19.0 d	20 ef	99 a
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A					0.0 b
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					
5	AMS	100	SG	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	30 d	50 ef	20.3 d	18 ef	99 a
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A					0.0 b
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					
6	AMS	100	SG	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	79 bc	99 a	0.0 f	38 c	99 a
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A					0.0 b
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					
7	AMS	100	SG	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	75 c	97 a	0.0 f	25 de	99 a
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A					0.0 b
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					
8	AMS	100	SG	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	79 bc	81 c	27.8 bc	78 b	99 a
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A					0.0 b
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					
9	AMS	100	SG	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	85 ab	89 b	12.8 e	89 a	99 a
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A					0.0 b
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					
10	AMS	100	SG	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	90 a	93 ab	2.5 f	23 e	99 a
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					0.0 b
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	90 a	88 bc	21.5 d	94 a	99 a
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					0.0 b
12	AMS	100	SG	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	88 a	90 b	11.3 e	86 ab	99 a
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A					0.0 b
13	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A					
14	NONTREATED									0 g	0 h	69.3 a	0 g	0 b
LSD (P=.05)										7.9	6.5	5.40	10.9	0.0
Replicate F										0.568	2.062	2.860	3.337	0.000
Replicate Prob(F)										0.6396	0.1211	0.0492	0.0290	1.0000
Treatment F										149.304	163.213	87.180	72.840	0.000
Treatment Prob(F)										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-HRC-WU12-Corvus Location: Hort. Res. Center

Pest Code	LAMPU	LAMPU	LAMPU
Crop Code			
Rating Date	04-18-09	05-02-09	05-02-09
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	13	f	99 a
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			0.0 a
1	AMS	100	SG	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	18	ef	99 a
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			0.0 a
2	AMS	100	SG	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	28	d	99 a
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A			0.0 a
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			
3	AMS	100	SG	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	48	c	99 a
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A			0.0 a
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			
4	AMS	100	SG	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	28	d	99 a
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A			0.0 a
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			
5	AMS	100	SG	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	25	de	99 a
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A			0.0 a
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			
6	AMS	100	SG	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	55	c	99 a
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A			0.0 a
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			
7	AMS	100	SG	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	18	ef	99 a
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A			0.0 a
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			
8	AMS	100	SG	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	79	b	99 a
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A			0.0 a
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			
9	AMS	100	SG	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	91	a	99 a
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A			0.0 a
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			
10	AMS	100	SG	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	20	def	99 a
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			0.0 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
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			0.0 a
12	AMS	100	SG	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	88	ab	99 a
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A			0.0 a
13	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A			
14	NONTREATED									0	g	0 b
												0.0 a
LSD (P=.05)										9.8		0.0
Replicate F										2.436		0.000
Replicate Prob(F)										0.0792		1.0000
Treatment F										89.748		0.000
Treatment Prob(F)										0.0001		1.0000

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

Winter Annual Grass Burndown with Corvus - 2.

Trial ID: 09-HRC-WU12-Corvus Location: Hort. Res. Center

Trial Comments

1. Protocol: SIU(DT)/Bayer.
2. Ratings: WC at 14 and 28 DAT; Grass density (live plants) at 28 DAT.
3. Target little barley.
4. Plants 0.5 m² = Plants per 0.5 square meter.
By 5-2-09, LAMPU in the nontreated plots was senescing naturally.
5. Not harvested (non-crop).