

Metsulfuron in Wheat.

Trial ID: 12-20B-N110

Location: Belleville Res. Center

Investigator: Bryan Young

General Trial Information

Study Director: Bryan Young
Investigator: Bryan Young **Title:** Professor

Trial Status: F - one-year/final
Initiation Date: 10-12-11

Trial Location

City: Belleville
State/Prov.: IL
Postal Code: 62221
Country: USA

Objectives:

Determine the value of low rates of metsulfuron for weed control in winter wheat.

Personnel

Study Director: Bryan Young
Investigator: Bryan Young **Title:** Professor
Affiliation: Southern Illinois University
Address: 1205 Lincoln Drive - AG 176 - MC 4415
Location: Carbondale IL
Postal Code: 62901 **E-mail:** bgyoung@siu.edu
Phone No.: 618-453-7679 **Mobile No.:** 618-713-6471

Crop Description

Crop 1: TRZAW Triticum aestivum (winter) Winter wheat
Variety: P25R62
BBCH Scale: BCER **Planting Date:** 10-12-11
Planting Method: SEEDED **Rate, Unit:** 1.4 millionS/A
Depth, Unit: 1 IN
Row Spacing, Unit: 7.5 IN

Pest Description

Pest 1 Type: W **Code:** LAMAM - Lamium amplexicaule L.
Common Name: henbit
Pest 2 Type: W **Code:** CAPBP - Capsella bursa-pastoris (L.) M
Common Name: shepherdspurse

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 28 FT
Plot Area, Unit: 280 FT2 **Tillage Type:** NOTILL no-till
Replications: 4 **Study Design:** RACOB L Randomized Complete Block (RCB)

No.	Previous Crop	Year
1.	GLXMA	2011

Maintenance

No.	Maintenance Treatment Name
1.	Fall: N 30 LB/A, P205 0 LB/A, K20 0 LB/A
2.	Spring: N 85 LB/A, P205 0 LB/A, K20 0 LB/A

Soil Description

% OM: 1.8 **Texture:** SIL SILT LOAM
pH: 6.7 **Soil Name:** BETHALTO
CEC: 12

Additional Measured Elements

Element	Quantity	Unit
P1	54	LB/A
K	286	LB/A

Moisture and Weather Conditions

Overall Moisture Conditions: BELNOR below normal
Closest Weather Station: ICN - Belleville IL **Distance, Unit:** 0.5 MI

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Application Description

	A
Application Date:	3-14-12
Time of Day:	10:00
Application Method:	Spray
Application Timing:	2-4"W
Application Placement:	BROFOL
Applied By:	RFK
Air Temperature, Unit:	73 F
% Relative Humidity:	71
Wind Velocity, Unit:	5 MPH
Wind Direction:	S
Dew Presence (Y/N):	N no
Soil Temperature, Unit:	42 F
Soil Moisture:	NORMAL
% Cloud Cover:	0
Next Rain Occurred On:	3-16-12

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	TRZAW BCER
Stage Scale Used:	DESC
Stage Majority, Percent:	F4
Stage Minimum, Percent:	F4
Stage Maximum, Percent:	F5
Height, Unit:	5 IN
Height Minimum, Maximum:	4 6

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	LAMAM W DESC
Stage Majority, Percent:	10+
Height, Unit:	4 IN
Height Minimum, Maximum:	2 5
Density, Unit:	0.1 FT2
Pest 2 Code, Type, Scale:	CAPBP W DESC
Stage Majority, Percent:	6
Stage Minimum, Percent:	5
Stage Maximum, Percent:	8
Height, Unit:	4 IN
Height Minimum, Maximum:	2 4
Density, Unit:	0.01 FT2

Application Equipment

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

Southern Illinois University

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Pest Code										TRZAW	TRZAW	TRZAW	LAMAM	LAMAM	CAPBP	CAPBP
Crop Code										3-21-12	3-28-12	4-11-12	3-28-12	4-11-12	3-28-12	4-11-12
Rating Date										Injury	Injury	Injury	Control	Control	Control	Control
Rating Type										Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit																
Rating Timing																
Trt-Eval Interval										7 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Growth Unit	Appl Stage	Code							
1	HARMONY EXTRA SG	50 SG			0.75 oz/a			2-4"W	A	0 a	0 a	0 a	90 a	99 a	90 a	99 a
	HARMONY SG	50 SG		0.01563 lb ai/a				2-4"W	A							
	EXPRESS	50 SG		.007813 lb ai/a				2-4"W	A							
	NIS (ACTIVATOR 90)	100 SL		0.25 % v/v	0.25 % v/v			2-4"W	A							
2	HARMONY EXTRA SG	50 SG			0.9 oz/a			2-4"W	A	0 a	0 a	0 a	90 a	99 a	90 a	99 a
	HARMONY SG	50 SG		0.01875 lb ai/a				2-4"W	A							
	EXPRESS	50 SG		.009375 lb ai/a				2-4"W	A							
	NIS (ACTIVATOR 90)	100 SL		0.25 % v/v	0.25 % v/v			2-4"W	A							
3	ALLY XP	60 WG		0.00125 lb ai/a	0.0333 oz/a			2-4"W	A	0 a	0 a	0 a	86 b	99 a	90 a	99 a
	NIS (ACTIVATOR 90)	100 SL		0.25 % v/v	0.25 % v/v			2-4"W	A							
4	EXPRESS	50 SG		.009375 lb ai/a	0.3 oz/a			2-4"W	A	0 a	0 a	0 a	90 a	99 a	90 a	99 a
	ALLY XP	60 WG		0.00125 lb ai/a	0.0333 oz/a			2-4"W	A							
	NIS (ACTIVATOR 90)	100 SL		0.25 % v/v	0.25 % v/v			2-4"W	A							
5	HARMONY EXTRA SG	50 SG			0.75 oz/a			2-4"W	A	0 a	0 a	0 a	90 a	99 a	90 a	99 a
	HARMONY SG	50 SG		0.01563 lb ai/a				2-4"W	A							
	EXPRESS	50 SG		.007813 lb ai/a				2-4"W	A							
	ALLY XP	60 WG		0.00125 lb ai/a	0.0333 oz/a			2-4"W	A							
	NIS (ACTIVATOR 90)	100 SL		0.25 % v/v	0.25 % v/v			2-4"W	A							
6	HARMONY EXTRA SG	50 SG			0.9 oz/a			2-4"W	A	0 a	0 a	0 a	90 a	99 a	90 a	99 a
	HARMONY SG	50 SG		0.01875 lb ai/a				2-4"W	A							
	EXPRESS	50 SG		.009375 lb ai/a				2-4"W	A							
	ALLY XP	60 WG		0.00125 lb ai/a	0.0333 oz/a			2-4"W	A							
	NIS (ACTIVATOR 90)	100 SL		0.25 % v/v	0.25 % v/v			2-4"W	A							
7	OLYMPUS FLEX	11.25 SG		0.0223 lb ai/a	3.17 oz/a			2-4"W	A	0 a	0 a	0 a	89 a	99 a	90 a	99 a
	NIS (ACTIVATOR 90)	100 SL		0.25 % v/v	0.25 % v/v			2-4"W	A							
8	NONTREATED									0 a	0 a	0 a	0 c	0 b	0 b	0 b
LSD (P=.05)										0.0	0.0	0.0	1.8	0.0	0.0	0.0
Standard Deviation										0.0	0.0	0.0	1.2	0.0	0.0	0.0
CV										0.0	0.0	0.0	1.56	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	1.400	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	0.2706	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	2683.200	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	1.0000	1.0000	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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Trial Comments

1. Protocol: DuPont (USA-12-224).
2. CI 5-7, 14 and 28 DAT. WC 14 and 28 DAT.
3. Apply blanket POST application for grass control as needed.
4. Not harvested.