

Titration of metribuzin rates for waterhemp control

Trial ID: SOY24-22 Study Dir.: Sprague, Stiles, Powell
 Conducted: Shiawassee County Investigator:

Planting Date: May-24-2022 **Row Spacing:** 30 IN
Variety: P24T35E **No. of Reps:** 4
Population: 150000 seeds/A **% OM:** 2.6
Soil Type: SCL sandy clay loam **pH:** 6.1
Plot Size: 10 X 25 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: Fall chisel plow; spring disk and soil finished.
Fertilizer:

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	AMATU	tall waterhemp	Amaranthus tuberculatus
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

A
Application Timing: PRE
Date Treated: May-24-2022
Time Treated: 3:37 PM
% Cloud Cover: 5
Air Temp., Unit: 70 F
% Relative Humidity: 38
Wind Speed/Unit/Dir: 5 MPH NE
Soil Temp, Unit: 70 F
Leaf Moist/Dew Presence (Y/N): N
Soil Moist: 4

Crop Stage at Each Application

A
Crop 1 Name: GLXMA
Height:
Stage:

Weed Stage at Each Application

A
Weed 1 Name: AMATU
Height:
Stage:

Weed Density

1
Date: May-24-2022
Weed Name: AMATU
Density: 44 FT2

Application Equipment

Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	CUB	3.8 MPH	AIXR	11003	18.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	30 PSI

Comments: Due to plot configuration the untreated control was not included in the treatment set up. However, average waterhemp counts 236 per 0.5 m2.

Michigan State University

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Trial ID: SOY24-22 Cooperator Trial ID:
 Protocol ID: SOY24-22 Location: Shiawassee County Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Sprague, Stiles, Powell Sponsor Contact:
 Investigator (Creator): Christy Sprague

Pest Code				AMATU		AMATU		AMATU		AMATU		
Crop Type, Code				C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	
Rating Date				Jun-7-2022	Jun-7-2022	Jun-21-2022	Jun-21-2022	Jun-21-2022	Jun-21-2022	Jul-5-2022	Jul-5-2022	
Rating Type				injury	control	injury	control	ave. counts	ave.height	injury	control	
Rating Unit/Min/Max				%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	0.5 m2, -, -	inches, -, -	%, 0, 100	%, 0, 100	
Trt-Eval Interval				14 DA-A	14 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	42 DA-A	42 DA-A	
Number of Decimals				0	0	0	0	0	1	0	0	
Trt No.	Treatment Name	Rate	Appl	Appl								
		Rate Unit	Timing	Code								
1	Weed-free				0	100	0	100	0	9.7	0	100
2	Metribuzin	4 oz/a	PRE	A	1	83	3	63	46	9.5	0	51
3	Metribuzin	5 oz/a	PRE	A	7	95	6	75	23	9.4	1	62
4	Metribuzin	6 oz/a	PRE	A	8	98	9	85	5	8.7	3	77
5	Metribuzin	7 oz/a	PRE	A	1	91	0	69	19	9.5	0	66
6	Metribuzin	8 oz/a	PRE	A	6	96	5	75	13	9.4	0	72
7	Metribuzin	9 oz/a	PRE	A	8	100	9	84	7	9.3	2	77
8	Metribuzin	10 oz/a	PRE	A	11	100	7	90	1	9.0	1	87
9	Metribuzin	11 oz/a	PRE	A	4	98	4	85	8	9.6	0	82
10	Metribuzin	12 oz/a	PRE	A	11	100	9	88	5	9.2	3	80
11	Metribuzin	13 oz/a	PRE	A	16	100	11	90	2	9.8	5	86
12	Metribuzin	14 oz/a	PRE	A	21	100	16	94	3	9.1	6	88
13	Metribuzin	15 oz/a	PRE	A	5	99	4	98	1	9.2	0	93
14	Metribuzin	16 oz/a	PRE	A	13	100	8	97	1	8.9	0	88
15	Spartan	12 fl oz/a	PRE	A	21	99	15	95	1	9.5	3	95
16	Dual Magnum	1.67 pt/a	PRE	A	23	100	20	97	1	8.8	6	95
LSD P=.05				8.6	6.6	9.7	9.6	11.2	1.29	4.4	11.0	
Standard Deviation				6.1	4.6	6.8	6.8	7.9	0.91	3.1	7.7	
CV				62.64	4.73	86.87	7.81	94.15	9.78	167.54	9.54	