

**Weed control with various flumioxazin (Valor) mixtures in soybean**

Trial ID: SOY07-19 Study Dir.: Sprague, Powell, Stiles  
 Conducted: Campus, C-14 Investigator: Christy Sprague

**Planting Date:** May-14-2019 **Row Spacing:** 30 IN  
**Variety:** Pioneer P24A80X **No. of Reps:** 4  
**Population:** 157000 seeds/A **% OM:** 2.5  
**Soil Type:** L loam **pH:** 6.7  
**Plot Size:** 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

**Tillage/Previous Crops:** Fall soil finish; spring soil finish (2X)  
**Fertilizer:**

**Crop and Weed Description**

Weed	Code	Common Name	Scientific Name
1	ANGR	mainly foxtail species	Annual grass
2	CHEAL	lambquarters, common	Chenopodium album
3	AMAPO	amaranth, Powell	Amaranthus powellii
4	AMBEL	ragweed, common	Ambrosia artemisiifolia
5	SINAR	mustard, wild	Sinapis arvensis
6	ABUTH	velvetleaf	Abutilon theophrasti
Crop	Code	Common Name	
1	GLXMA	Soybean	

**Application Description**

**Application Timing:** A PRE  
**Date Treated:** May-14-2019  
**Time Treated:** 7:15 PM  
**% Cloud Cover:** 0  
**Air Temp., Unit:** 67 F  
**% Relative Humidity:** 32  
**Wind Speed/Unit/Dir:** 4 mph NW  
**Soil Temp, Unit:** 64 F  
**Leaf Moist/Dew Presence (Y/N):** 5  
**Soil Moist:** 3

**Crop Stage at Each Application**

**A**  
**Crop 1 Name:** GLXMA  
**Height:**  
**Stage:**

**Weed Stage at Each Application**

**A**  
**Weed 1 Name:** ANGR  
**Height:**  
**Stage:**  
**Weed 2 Name:** CHEAL  
**Height:**  
**Stage:**  
**Weed 3 Name:** AMAPO  
**Height:**  
**Stage:**  
**Weed 4 Name:** AMBEL  
**Height:**  
**Stage:**  
**Weed 5 Name:** SINAR  
**Height:**  
**Stage:**  
**Weed 6 Name:** ABUTH  
**Height:**  
**Stage:**

**Weed Density**

	1	2	3	4	5	6
<b>Date:</b>	May-14-2019	May-14-2019	May-14-2019	May-14-2019	May-14-2019	May-14-2019
<b>Weed Name:</b>	ANGR	CHEAL	AMAPO	AMBEL	SINAR	ABUTH
<b>Density:</b>	118 ft2	10 ft2	1 ft2	14 ft2	1 ft2	4 ft2

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Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Application Equipment			Spray Volume	Carrier	Operation Pressure
					Nozzle Height	Nozzle Spacing	Boom Width			
A	CUB	3.8 mph	AIXR	11003	22 "	20 "	100 "	19 GPA	WATER	30 psi

**Comments:**

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Pest Code				ANGR	CHEAL	AMAPO
Crop Type, Code		GLXMA	GLXMA			
Rating Date		Jun-4-2019	Jun-11-2019	Jun-11-2019	Jun-11-2019	Jun-11-2019
Rating Type		injury	injury	control	control	control
Rating Unit		percent	percent	percent	percent	percent
Trt-Eval Interval		21 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A
Number of Decimals		0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code					
1	Valor	51	WG	2 oz/a		PRE	A	21	34	100	100	100
2	Fierce	76	WG	3 oz/a		PRE	A	29	34	100	100	100
3	Fierce EZ	3.04	L	6 fl oz/a		PRE	A	25	34	100	100	100
4	V-10425 2078	1.52	L	12 fl oz/a		PRE	A	26	33	100	100	100
5	Untreated							0	0	0	0	0
6	Fierce MTZ	2.64	L	16 fl oz/a		PRE	A	25	33	100	100	100
7	Valor	51	WG	2 oz/a		PRE	A	26	30	100	100	100
7	Mauler	4	L	8 fl oz/a		PRE	A					
7	Prowl H2O	3.8	L	22 fl oz/a		PRE	A					
8	Valor	51	WG	2.5 oz/a		PRE	A	29	34	100	100	100
8	Mauler	4	L	9.5 fl oz/a		PRE	A					
8	Prowl H2O	3.8	L	26.6 fl oz/a		PRE	A					
9	Valor	51	WG	3 oz/a		PRE	A	39	43	100	100	100
9	Mauler	4	L	12 fl oz/a		PRE	A					
9	Prowl H2O	3.8	L	34 fl oz/a		PRE	A					
10	Authority Elite	7	L	32 fl oz/a		PRE	A	17	26	100	100	100
11	Matador	4.7	L	3.9 pt/a		PRE	A	10	6	93	93	98
12	Authority Assist	4	L	10 fl oz/a		PRE	A	19	13	100	98	100
13	Intimidator	4.81	L	2.8 pt/a		PRE	A	13	19	100	100	100
	LSD P=.05							9.9	9.0	2.3	4.0	2.0
	Standard Deviation							6.9	6.3	1.6	2.8	1.4
	CV							32.21	24.26	1.77	3.01	1.51

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Pest Code					AMBEL	SINAR	GLXMA	ANGR	CHEAL			
Crop Type, Code					Jun-11-2019	Jun-11-2019	Jun-24-2019	Jun-24-2019	Jun-24-2019			
Rating Date					control	control	injury	control	control			
Rating Type					percent	percent	percent	percent	percent			
Rating Unit					28 DA-A	28 DA-A	41 DA-A	41 DA-A	41 DA-A			
Trt-Eval Interval					0	0	0	0	0			
Number of Decimals					0	0	0	0	0			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code					
1	Valor	51	WG	2 oz/a	PRE	A		99	100	21	94	99
2	Fierce	76	WG	3 oz/a	PRE	A		100	100	26	100	100
3	Fierce EZ	3.04	L	6 fl oz/a	PRE	A		100	100	19	100	100
4	V-10425 2078	1.52	L	12 fl oz/a	PRE	A		100	100	20	100	100
5	Untreated							0	0	0	0	0
6	Fierce MTZ	2.64	L	16 fl oz/a	PRE	A		100	100	21	100	100
7	Valor	51	WG	2 oz/a	PRE	A		99	100	19	99	100
7	Mauler	4	L	8 fl oz/a	PRE	A						
7	Prowl H2O	3.8	L	22 fl oz/a	PRE	A						
8	Valor	51	WG	2.5 oz/a	PRE	A		100	100	28	99	100
8	Mauler	4	L	9.5 fl oz/a	PRE	A						
8	Prowl H2O	3.8	L	26.6 fl oz/a	PRE	A						
9	Valor	51	WG	3 oz/a	PRE	A		100	100	29	100	100
9	Mauler	4	L	12 fl oz/a	PRE	A						
9	Prowl H2O	3.8	L	34 fl oz/a	PRE	A						
10	Authority Elite	7	L	32 fl oz/a	PRE	A		100	100	20	100	100
11	Matador	4.7	L	3.9 pt/a	PRE	A		5	100	3	95	86
12	Authority Assist	4	L	10 fl oz/a	PRE	A		95	100	16	100	100
13	Intimidator	4.81	L	2.8 pt/a	PRE	A		100	100	9	100	100
LSD P=.05								4.6	.	10.9	2.5	2.1
Standard Deviation								3.2	0.0	7.6	1.7	1.4
CV								3.82	0.0	43.39	1.91	1.58

Could not calculate LSD (% mean diff) for columns 7 because error mean square = 0.

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Pest Code					AMAPO	AMBEL	ABUTH	GLXMA	ANGR	CHEAL		
Crop Type, Code					Jun-24-2019	Jun-24-2019	Jun-24-2019	Jul-9-2019	Jul-9-2019	Jul-9-2019		
Rating Date					control	control	control	injury	control	control		
Rating Type					percent	percent	percent	percent	percent	percent		
Rating Unit					41 DA-A	41 DA-A	41 DA-A	56 DA-A	56 DA-A	56 DA-A		
Trt-Eval Interval					0	0	0	0	0	0		
Number of Decimals												
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Appl Timing	Appl Code						
1	Valor	51 WG		2 oz/a	PRE	A	100	96	100	0	74	100
2	Fierce	76 WG		3 oz/a	PRE	A	100	99	100	2	90	100
3	Fierce EZ	3.04 L		6 fl oz/a	PRE	A	100	99	100	1	89	100
4	V-10425 2078	1.52 L		12 fl oz/a	PRE	A	100	100	100	0	88	100
5	Untreated						0	0	0	0	0	0
6	Fierce MTZ	2.64 L		16 fl oz/a	PRE	A	100	100	100	3	90	100
7	Valor	51 WG		2 oz/a	PRE	A	100	99	100	2	82	99
7	Mauler	4 L		8 fl oz/a	PRE	A						
7	Prowl H2O	3.8 L		22 fl oz/a	PRE	A						
8	Valor	51 WG		2.5 oz/a	PRE	A	100	100	100	3	86	100
8	Mauler	4 L		9.5 fl oz/a	PRE	A						
8	Prowl H2O	3.8 L		26.6 fl oz/a	PRE	A						
9	Valor	51 WG		3 oz/a	PRE	A	100	100	100	5	86	100
9	Mauler	4 L		12 fl oz/a	PRE	A						
9	Prowl H2O	3.8 L		34 fl oz/a	PRE	A						
10	Authority Elite	7 L		32 fl oz/a	PRE	A	100	87	100	5	98	100
11	Matador	4.7 L		3.9 pt/a	PRE	A	90	18	81	3	93	88
12	Authority Assist	4 L		10 fl oz/a	PRE	A	100	81	100	3	93	100
13	Intimidator	4.81 L		2.8 pt/a	PRE	A	100	100	100	1	100	98
LSD P=.05							5.6	6.8	5.3	5.1	5.6	4.5
Standard Deviation							3.9	4.8	3.7	3.5	3.9	3.2
CV							4.28	5.75	4.06	177.27	4.77	3.48

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Pest Code	AMAPO	AMBEL	ABUTH
Crop Type, Code			
Rating Date	Jul-9-2019	Jul-9-2019	Jul-9-2019
Rating Type	control	control	control
Rating Unit	percent	percent	percent
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A
Number of Decimals	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	AMAPO	AMBEL	ABUTH
1	Valor	51	WG	2 oz/a		PRE	A	100	86	100
2	Fierce	76	WG	3 oz/a		PRE	A	100	94	99
3	Fierce EZ	3.04	L	6 fl oz/a		PRE	A	100	91	98
4	V-10425 2078	1.52	L	12 fl oz/a		PRE	A	100	92	100
5	Untreated							0	0	0
6	Fierce MTZ	2.64	L	16 fl oz/a		PRE	A	100	93	100
7	Valor	51	WG	2 oz/a		PRE	A	100	93	100
7	Mauler	4	L	8 fl oz/a		PRE	A			
7	Prowl H2O	3.8	L	22 fl oz/a		PRE	A			
8	Valor	51	WG	2.5 oz/a		PRE	A	100	100	100
8	Mauler	4	L	9.5 fl oz/a		PRE	A			
8	Prowl H2O	3.8	L	26.6 fl oz/a		PRE	A			
9	Valor	51	WG	3 oz/a		PRE	A	100	96	100
9	Mauler	4	L	12 fl oz/a		PRE	A			
9	Prowl H2O	3.8	L	34 fl oz/a		PRE	A			
10	Authority Elite	7	L	32 fl oz/a		PRE	A	100	72	100
11	Matador	4.7	L	3.9 pt/a		PRE	A	88	5	100
12	Authority Assist	4	L	10 fl oz/a		PRE	A	100	64	100
13	Intimidator	4.81	L	2.8 pt/a		PRE	A	100	100	90
	LSD P=.05							3.4	9.4	3.7
	Standard Deviation							2.4	6.6	2.6
	CV							2.63	8.66	2.85