

**Commercial weed control programs in XtendFlex soybean**

Trial ID: SOY03-21 Study Dir.: Sprague, Stiles, Powell  
 Conducted: Campus, C-12 Investigator: Christy Sprague

**Planting Date:** 5-10-21 **Row Spacing:** 30 IN  
**Variety:** AG24XF1 **No. of Reps:** 4  
**Population:** 155000 seeds/A **% OM:** 3.2  
**Soil Type:** CL clay loam **pH:** 7.8  
**Plot Size:** 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

**Tillage/Previous Crops:** Fall chisel plow; Spring soil finish twice  
**Fertilizer:**

**Crop and Weed Description**

Weed	Code	Common Name	Scientific Name
1	ANGR	mainly foxtail species	annual grass
2	CHEAL	common lambsquarters	Chenopodium album
3	AMAPO	Powell amaranth	Amaranthus powellii
4	AMBEL	common ragweed	Ambrosia artemisiifolia
5	ABUTH	velvetleaf	Abutilon theophrasti
Crop	Code	Common Name	
1	GLXMA	Soybean	

**Application Description**

	A	B
<b>Application Timing:</b>	PRE	POST
<b>Date Treated:</b>	5-10-21	6-15-21
<b>Time Treated:</b>	5:00 PM	7:50 AM
<b>% Cloud Cover:</b>	50	5
<b>Air Temp., Unit:</b>	54 F	57 F
<b>% Relative Humidity:</b>	39	83
<b>Wind Speed/Unit/Dir:</b>	5 MPH NW	3 MPH NW
<b>Soil Temp, Unit:</b>	51 F	67 F
<b>Leaf Moist/Dew Presence (Y/N):</b>	N	N
<b>Soil Moist:</b>	4	4

**Crop Stage at Each Application**

	A	B
<b>Crop 1 Name:</b>	GLXMA	GLXMA
<b>Height:</b>		5-8 " (6)
<b>Stage:</b>		V3

**Weed Stage at Each Application**

	A	B
<b>Weed 1 Name:</b>	ANGR	ANGR
<b>Height:</b>		4-12 " (8)
<b>Stage:</b>		6L-10L (8L)
<b>Weed 2 Name:</b>	CHEAL	CHEAL
<b>Height:</b>		3-6 " (5)
<b>Stage:</b>		6L-20L (13L)
<b>Weed 3 Name:</b>	AMAPO	AMAPO
<b>Height:</b>		3-5 " (4)
<b>Stage:</b>		7L-9L (8L)
<b>Weed 4 Name:</b>	AMBEL	AMBEL
<b>Height:</b>		3-6 " (4)
<b>Stage:</b>		6L-10L (8L)
<b>Weed 5 Name:</b>	ABUTH	ABUTH
<b>Height:</b>		2-4 " (3)
<b>Stage:</b>		3L-6L (4L)

**Weed Density**

	1	2	3	4	5
<b>Date:</b>	6-15-21	6-15-21	6-15-21	6-15-21	6-15-21
<b>Weed Name:</b>	ANGR	CHEAL	AMAPO	AMBEL	ABUTH
<b>Density:</b>	5 FT2	5 FT2	0.5 FT2	7 FT2	0.5 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	TTI	11003	22.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	25 PSI
B	CUB	3.8 MPH	TTI	11003	27.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	25 PSI

**Comments:** The common ragweed population at this location is Group 2 (ALS) resistant.



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Pest Code	Crop Type, Code	C, GLXMA	C, GLXMA	ANGR	CHEAL	AMAPO	AMBEL	ABUTH	C, GLXMA	ANGR	CHEAL	AMAPO
Rating Date	Rating Type	5-31-21	6-14-21	6-14-21	6-14-21	6-14-21	6-14-21	6-14-21	6-22-21	6-22-21	6-22-21	6-22-21
Rating Unit	Trt-Eval Interval	injury %	injury %	control %	control %	control %	control %	control %	injury %	control %	control %	control %

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	21 DA-A	35 DA-A	35 DA-A	35 DA-A	35 DA-A	35 DA-A	35 DA-A	7 DA-B	7 DA-B	7 DA-B	7 DA-B
11	Fierce EZ	6 fl oz/a	oz/a	A	0	2	79	75	100	74	100	6	98	94	100
11	Perpetuo	6 fl oz/a	oz/a	B											
11	XtendiMax	22 fl oz/a	oz/a	B											
11	Roundup PowerMax 3	30 fl oz/a	oz/a	B											
11	VaporGrip	20 fl oz/a	oz/a	B											
11	Intact	0.5 % v/v	v/v	B											
12	Boundary	2 pt/a	pt/a	A	0	0	81	71	100	72	100	4	98	93	100
12	Tavium	56.5 fl oz/a	oz/a	B											
12	Roundup PowerMax 3	30 fl oz/a	oz/a	B											
12	Class Act Ridion	1 % v/v	v/v	B											
12	Volt-Edge	20 fl oz/a	oz/a	B											
12	Intact	0.5 % v/v	v/v	B											
13	Prefix	2 pt/a	pt/a	A	0	0	80	65	100	73	94	4	96	92	100
13	Metribuzin	6 oz/a	oz/a	A											
13	Tavium	56.5 fl oz/a	oz/a	B											
13	Roundup PowerMax 3	30 fl oz/a	oz/a	B											
13	Class Act Ridion	1 % v/v	v/v	B											
13	Volt-Edge	20 fl oz/a	oz/a	B											
13	Intact	0.5 % v/v	v/v	B											
14	Fierce MTZ	1 pt/a	pt/a	A	0	3	85	70	100	78	100	2	97	92	100
14	Warrant	48 fl oz/a	oz/a	B											
14	XtendiMax	22 fl oz/a	oz/a	B											
14	Roundup PowerMax 3	30 fl oz/a	oz/a	B											
14	VaporGrip	20 fl oz/a	oz/a	B											
14	Intact	0.5 % v/v	v/v	B											
15	Roundup PowerMax 3	30 fl oz/a	oz/a	B	0	1	0	0	0	0	0	0	93	90	100
15	AMS	17 lb/100 gal	gal	B											
16	Liberty	32 fl oz/a	oz/a	B	0	0	0	0	0	0	0	1	97	95	100
16	Roundup PowerMax 3	30 fl oz/a	oz/a	B											
16	AMS	3 lb/a	lb/a	B											
17	XtendiMax	22 fl oz/a	oz/a	B	0	0	0	0	0	0	0	2	94	91	100
17	Roundup PowerMax 3	30 fl oz/a	oz/a	B											
17	VaporGrip	20 fl oz/a	oz/a	B											
17	Intact	0.5 % v/v	v/v	B											
18	Engenia	12.8 fl oz/a	oz/a	B	0	0	0	0	0	0	0	3	93	88	100
18	Zidua	2.5 fl oz/a	oz/a	B											
18	Roundup PowerMax 3	30 fl oz/a	oz/a	B											
18	Sentris	8 fl oz/a	oz/a	B											
LSD	P=.05	.			1.6	9.6	12.3	.	10.0	8.0	1.8	5.6	7.7	.	
Standard Deviation		0.0			1.1	6.8	8.7	0.0	7.1	5.6	1.3	3.9	5.4	0.0	
CV		0.0			158.83	11.55	15.77	0.0	12.62	7.95	68.32	4.35	6.06	0.0	



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Pest Code			AMBEL ABUTH		C, GLXMA		ANGR CHEAL		AMAPO		AMBEL ABUTH		C, GLXMA		ANGR CHEAL	
Crop Type, Code			6-22-21	6-22-21	7-1-21	7-1-21	7-1-21	7-1-21	7-1-21	7-1-21	7-1-21	7-1-21	7-1-21	7-13-21	7-13-21	7-13-21
Rating Date			control	control	injury	control	control	control	control	control	control	control	control	injury	control	control
Rating Type			%	%	%	%	%	%	%	%	%	%	%	%	%	%
Rating Unit																
Trt-Eval Interval			7 DA-B	7 DA-B	16 DA-B	16 DA-B	16 DA-B	16 DA-B	16 DA-B	16 DA-B	16 DA-B	16 DA-B	16 DA-B	28 DA-B	28 DA-B	28 DA-B
Trt No.	Treatment Name	Rate Unit	Appl Code													
11	Fierce EZ	6 fl oz/a	A	93	100	2	100	100	100	99	99			1	100	100
11	Perpetuo	6 fl oz/a	B													
11	XtendiMax	22 fl oz/a	B													
11	Roundup PowerMax 3	30 fl oz/a	B													
11	VaporGrip	20 fl oz/a	B													
11	Intact	0.5 % v/v	B													
12	Boundary	2 pt/a	A	93	100	5	100	100	100	99	100			4	100	100
12	Tavium	56.5 fl oz/a	B													
12	Roundup PowerMax 3	30 fl oz/a	B													
12	Class Act Ridion	1 % v/v	B													
12	Volt-Edge	20 fl oz/a	B													
12	Intact	0.5 % v/v	B													
13	Prefix	2 pt/a	A	94	98	4	100	99	100	100	100			4	100	100
13	Metribuzin	6 oz/a	A													
13	Tavium	56.5 fl oz/a	B													
13	Roundup PowerMax 3	30 fl oz/a	B													
13	Class Act Ridion	1 % v/v	B													
13	Volt-Edge	20 fl oz/a	B													
13	Intact	0.5 % v/v	B													
14	Fierce MTZ	1 pt/a	A	93	100	5	100	99	100	100	99			3	100	100
14	Warrant	48 fl oz/a	B													
14	XtendiMax	22 fl oz/a	B													
14	Roundup PowerMax 3	30 fl oz/a	B													
14	VaporGrip	20 fl oz/a	B													
14	Intact	0.5 % v/v	B													
15	Roundup PowerMax 3	30 fl oz/a	B	91	100	1	96	89	100	87	100			0	84	92
15	AMS	17 lb/100 gal	B													
16	Liberty	32 fl oz/a	B	98	100	1	95	97	100	89	100			0	86	90
16	Roundup PowerMax 3	30 fl oz/a	B													
16	AMS	3 lb/a	B													
17	XtendiMax	22 fl oz/a	B	91	100	0	97	99	100	100	100			0	92	99
17	Roundup PowerMax 3	30 fl oz/a	B													
17	VaporGrip	20 fl oz/a	B													
17	Intact	0.5 % v/v	B													
18	Engenia	12.8 fl oz/a	B	93	100	3	98	99	100	100	100			0	97	100
18	Zidua	2.5 fl oz/a	B													
18	Roundup PowerMax 3	30 fl oz/a	B													
18	Sentris	8 fl oz/a	B													
LSD	P=.05			5.9	1.7	2.3	2.9	2.9	.	4.8	2.3			1.4	4.8	4.1
Standard Deviation				4.2	1.2	1.6	2.1	2.0	0.0	3.4	1.6			1.0	3.4	2.9
CV				4.63	1.25	88.93	2.22	2.17	0.0	3.69	1.74			107.45	3.72	3.06



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Pest Code	AMAPO	AMBEL	ABUTH	ANGR	CHEAL	AMAPO	AMBEL	ABUTH	C, GLXMA	C, GLXMA				
Crop Type, Code	7-13-21	7-13-21	7-13-21	9-24-21	9-24-21	9-24-21	9-24-21	9-24-21	10-14-21	10-14-21				
Rating Date	control	control	control	control	control	control	control	control	yield	lbs/plot				
Rating Type	%	%	%	%	%	%	%	%	bu/A					
Rating Unit														
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	101 DA-B	101 DA-B	101 DA-B	101 DA-B	101 DA-B	121 DA-B					
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code										
11	Fierce EZ	6 fl oz/a		A	100	98	100	99	100	100	97	100	73.7	16.0
11	Perpetuo	6 fl oz/a		B										
11	XtendiMax	22 fl oz/a		B										
11	Roundup PowerMax 3	30 fl oz/a		B										
11	VaporGrip	20 fl oz/a		B										
11	Intact	0.5 % v/v		B										
12	Boundary	2 pt/a		A	100	93	100	100	100	100	96	100	76.0	16.5
12	Tavium	56.5 fl oz/a		B										
12	Roundup PowerMax 3	30 fl oz/a		B										
12	Class Act Ridion	1 % v/v		B										
12	Volt-Edge	20 fl oz/a		B										
12	Intact	0.5 % v/v		B										
13	Prefix	2 pt/a		A	100	96	100	100	100	100	98	100	71.8	15.5
13	Metribuzin	6 oz/a		A										
13	Tavium	56.5 fl oz/a		B										
13	Roundup PowerMax 3	30 fl oz/a		B										
13	Class Act Ridion	1 % v/v		B										
13	Volt-Edge	20 fl oz/a		B										
13	Intact	0.5 % v/v		B										
14	Fierce MTZ	1 pt/a		A	100	100	100	100	100	100	100	100	75.8	16.4
14	Warrant	48 fl oz/a		B										
14	XtendiMax	22 fl oz/a		B										
14	Roundup PowerMax 3	30 fl oz/a		B										
14	VaporGrip	20 fl oz/a		B										
14	Intact	0.5 % v/v		B										
15	Roundup PowerMax 3	30 fl oz/a		B	100	84	99	88	91	100	90	100	79.9	17.3
15	AMS	17 lb/100 gal		B										
16	Liberty	32 fl oz/a		B	96	80	100	82	87	98	80	100	80.4	17.4
16	Roundup PowerMax 3	30 fl oz/a		B										
16	AMS	3 lb/a		B										
17	XtendiMax	22 fl oz/a		B	100	95	100	94	99	100	100	100	81.4	17.6
17	Roundup PowerMax 3	30 fl oz/a		B										
17	VaporGrip	20 fl oz/a		B										
17	Intact	0.5 % v/v		B										
18	Engenia	12.8 fl oz/a		B	100	92	100	100	100	100	98	100	79.3	17.2
18	Zidua	2.5 fl oz/a		B										
18	Roundup PowerMax 3	30 fl oz/a		B										
18	Sentris	8 fl oz/a		B										
LSD	P=.05				1.9	5.5	3.4	5.2	4.8	1.7	6.4	0.5	7.21 ..	1.56
	Standard Deviation				1.3	3.9	2.4	3.6	3.4	1.2	4.5	0.4	5.08 ..	1.10
	CV				1.42	4.42	2.55	3.98	3.6	1.25	5.11	0.37	6.75 ..	6.75