

**Evaluation of a high load Warrant formulation POST in XtendFlex soybean**

Trial ID: SOY02-21 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:** 2.9  
**Soil Type:** SCL sandy clay loam **pH:** 7.5  
**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	annual grass	mainly foxtail species
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**

**Application Timing:** A  
**Date Treated:** POST  
**Time Treated:** 6-14-21  
**% Cloud Cover:** 7:55 AM  
**Air Temp., Unit:** 50  
**% Relative Humidity:** 60 F  
**Wind Speed/Unit/Dir:** 81  
**Soil Temp, Unit:** 3 MPH NE  
**Leaf Moist/Dew Presence (Y/N):** 70 F  
**Soil Moist:** N  
 5

**Crop Stage at Each Application**

**Crop 1 Name:** A  
 GLXMA  
**Height:** 8 "  
**Stage:** V2

**Weed Stage at Each Application**

**Weed 1 Name:** A  
 ANGR  
**Height:** 1-8 " (5)  
**Stage:** 2L-8L (6L)  
**Weed 2 Name:** CHEAL  
**Height:** 0.5-6 " (3.5)  
**Stage:** 4L-20L (12L)  
**Weed 3 Name:** AMAPO  
**Height:** 2-6 " (4)  
**Stage:** 8L-10L (9L)  
**Weed 4 Name:** AMBEL  
**Height:** 0.5-2 " (1.25)  
**Stage:** 2L-6L (4L)  
**Weed 5 Name:** ABUTH  
**Height:** 1 "  
**Stage:** 2L-4L (3L)

**Weed Density**

Date:	1	2	3	4	5
<b>Weed Name:</b>	ANGR	CHEAL	AMAPO	AMBEL	ABUTH
<b>Density:</b>	4 FT2	9 FT	0.5 FT2	3 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	28.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	25 PSI

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



Evaluation of a high load warrant formulation POST in XtendFlex soybean

Trial ID: SOY02-21

Location: Campus, C-12

Investigator (Creator): Christy Sprague

Study Director: Sprague, Stiles, Powell

Pest Code	ANGR CHEAL AMAPO AMBEL ABUTH								ANGR CHEAL AMAPO			
Crop Type, Code	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA	C, GLXMA
Rating Date	6-17-21	6-21-21	6-21-21	6-21-21	6-21-21	6-21-21	6-21-21	6-21-21	7-1-21	7-1-21	7-1-21	7-1-21
Rating Type	injury	injury	control	control	control	control	control	control	injury	control	control	control
Rating Unit	%	%	%	%	%	%	%	%	%	%	%	%
Trt-Eval Interval	3 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	17 DA-A	17 DA-A	17 DA-A	17 DA-A

Trt No.	Treatment Name	Rate	Appl Code	10	9	96	84	100	88	100	5	99	98	100
14	Outlook	14 fl oz/a	A											
14	XtendiMax	22 fl oz/a	A											
14	Roundup PowerMax 3	30 fl oz/a	A											
14	VaporGrip	20 fl oz/a	A											
14	Intact	0.5 % v/v	A											
14	Class Act Ridion	1 % v/v	A											
15	Zidua SC	3.26 fl oz/a	A	3	0	96	89	100	97	100	3	100	98	100
15	XtendiMax	22 fl oz/a	A											
15	Roundup PowerMax 3	30 fl oz/a	A											
15	VaporGrip	20 fl oz/a	A											
15	Intact	0.5 % v/v	A											
15	Class Act Ridion	1 % v/v	A											
LSD P=.05				0.7	1.1	6.5	9.9	.	8.8	.	2.9	3.6	7.0	1.9
Standard Deviation				0.5	0.7	4.5	7.0	0.0	6.2	0.0	2.0	2.5	4.9	1.4
CV				25.07	77.05	5.2	9.19	0.0	6.92	0.0	51.5	2.74	6.02	1.45

Evaluation of a high load warrant formulation POST in XtendFlex soybean  
 Trial ID: SOY02-21

Investigator (Creator): Christy Sprague  
 Study Director: Sprague, Stiles, Powell

Location: Campus, C-12

Pest Code	AMBEL	C, GLXMA	ANGR	CHEAL	AMAPO	AMBEL	ABUTH
Crop Type, Code							
Rating Date	7-1-21	7-12-21	7-12-21	7-12-21	7-12-21	7-12-21	7-12-21
Rating Type	control	injury	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%
Trt-Eval Interval	17 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A

Trt No.	Treatment Name	Rate	Appl Code	AMBEL	C, GLXMA	ANGR	CHEAL	AMAPO	AMBEL	ABUTH
		Rate Unit								
1	Untreated			0	0	0	0	0	0	0
2	MON 301668	30 fl oz/a	A	93	3	97	84	100	87	100
	2 Roundup PowerMax 3	30 fl oz/a	A							
	2 AMSOL	2 % v/v	A							
3	MON 301668	42 fl oz/a	A	97	2	99	83	100	89	100
	3 Roundup PowerMax 3	30 fl oz/a	A							
	3 AMSOL	2 % v/v	A							
4	Warrant	48 fl oz/a	A	96	4	98	72	100	87	100
	4 Roundup PowerMax 3	30 fl oz/a	A							
	4 AMSOL	2 % v/v	A							
5	Warrant	64 fl oz/a	A	94	3	100	76	100	91	100
	5 Roundup PowerMax 3	30 fl oz/a	A							
	5 AMSOL	2 % v/v	A							
6	MON 301668	30 fl oz/a	A	100	4	96	100	100	98	100
	6 XtendiMax	22 fl oz/a	A							
	6 Roundup PowerMax 3	30 fl oz/a	A							
	6 VaporGrip	20 fl oz/a	A							
	6 Intact	0.5 % v/v	A							
	6 Class Act Ridion	1 % v/v	A							
7	MON 301668	42 fl oz/a	A	99	4	97	100	100	97	100
	7 XtendiMax	22 fl oz/a	A							
	7 Roundup PowerMax 3	30 fl oz/a	A							
	7 VaporGrip	20 fl oz/a	A							
	7 Intact	0.5 % v/v	A							
	7 Class Act Ridion	1 % v/v	A							
8	MON 301668	30 fl oz/a	A	98	3	96	68	100	93	100
	8 Liberty	32 fl oz/a	A							
	8 AMSOL	2 % v/v	A							
9	MON 301668	30 fl oz/a	A	95	4	99	81	97	85	97
	9 Liberty	32 fl oz/a	A							
	9 Roundup PowerMax 3	30 fl oz/a	A							
	9 AMSOL	2 % v/v	A							
10	Warrant	48 fl oz/a	A	100	3	92	100	100	97	100
	10 XtendiMax	22 fl oz/a	A							
	10 Roundup PowerMax 3	30 fl oz/a	A							
	10 VaporGrip	20 fl oz/a	A							
	10 Intact	0.5 % v/v	A							
	10 Class Act Ridion	1 % v/v	A							
11	Warrant	48 fl oz/a	A	100	2	91	66	100	96	100
	11 Liberty	32 fl oz/a	A							
	11 AMSOL	2 % v/v	A							
12	Warrant	48 fl oz/a	A	100	3	100	80	100	90	100
	12 Liberty	32 fl oz/a	A							
	12 Roundup PowerMax 3	30 fl oz/a	A							
	12 AMSOL	2 % v/v	A							
13	Tavium	56.5 fl oz/a	A	100	2	98	100	100	96	100
	13 Roundup PowerMax 3	30 fl oz/a	A							
	13 VaporGrip	20 fl oz/a	A							
	13 Intact	0.5 % v/v	A							
	13 Class Act Ridion	1 % v/v	A							

Evaluation of a high load warrant formulation POST in XtendFlex soybean  
 Trial ID: SOY02-21

Location: Campus, C-12

Investigator (Creator): Christy Sprague

Study Director: Sprague, Stiles, Powell

Pest Code	AMBEL	ANGR	CHEAL	AMAPO	AMBEL	ABUTH
Crop Type, Code	C, GLXMA					
Rating Date	7-1-21	7-12-21	7-12-21	7-12-21	7-12-21	7-12-21
Rating Type	control	injury	control	control	control	control
Rating Unit	%	%	%	%	%	%
Trt-Eval Interval	17 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A

Trt No.	Treatment Name	Rate	Appl Code							
14	Outlook	14 fl oz/a	A	100	2	97	100	100	95	100
14	XtendiMax	22 fl oz/a	A							
14	Roundup PowerMax 3	30 fl oz/a	A							
14	VaporGrip	20 fl oz/a	A							
14	Intact	0.5 % v/v	A							
14	Class Act Ridion	1 % v/v	A							
15	Zidua SC	3.26 fl oz/a	A	100	2	99	100	100	96	100
15	XtendiMax	22 fl oz/a	A							
15	Roundup PowerMax 3	30 fl oz/a	A							
15	VaporGrip	20 fl oz/a	A							
15	Intact	0.5 % v/v	A							
15	Class Act Ridion	1 % v/v	A							
LSD	P=.05	5.6	2.2	4.0	7.7	2.2	6.5	2.2		
Standard Deviation		3.9	1.5	2.8	5.4	1.5	4.6	1.5		
CV		4.3	59.38	3.07	6.72	1.66	5.29	1.66		