

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19 Study Dir.: Sprague, Powell, Stiles
 Conducted: Campus, C-12 Investigator: Christy Sprague

Planting Date: May-15-2019 **Row Spacing:** 30 IN
Variety: Enlist E3 'P74312619' **No. of Reps:** 4
Population: 157000 seeds/A **% OM:** 3.3
Soil Type: CL clay loam **pH:** 7.2
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	ABUTH	velvetleaf	Abutilon theophrasti
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

	A	B
Application Timing:	PRE	POST
Date Treated:	May-15-2019	Jul-1-2019
Time Treated:	11:30 AM	9:53 AM
% Cloud Cover:	20	30
Air Temp., Unit:	64 F	74 F
% Relative Humidity:	49	66
Wind Speed/Unit/Dir:	6 mph W	4 mph S
Soil Temp, Unit:	56 F	75 F
Leaf Moist/Dew Presence (Y/N):	5	5
Soil Moist:	5	4

Crop Stage at Each Application

	A	B
Crop 1 Name:	GLXMA	GLXMA
Height:		12 "
Stage:		V4

Weed Stage at Each Application

	A	B
Weed 1 Name:	ANGR	ANGR
Height:		1-5 " (4)
Stage:		2-4L
Weed 2 Name:	CHEAL	CHEAL
Height:		1-2 " (2)
Stage:		2-6L
Weed 3 Name:	AMAPO	AMAPO
Height:		
Stage:		
Weed 4 Name:	AMBEL	AMBEL
Height:		1-6 " (4)
Stage:		4-12L
Weed 5 Name:	ABUTH	ABUTH
Height:		
Stage:		

Weed Density

	1	2	3	4	5
Date:	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019
Weed Name:	ANGR	CHEAL	AMAPO	AMBEL	ABUTH
Density:	149 ft2	6 ft2	1 ft2	14 ft2	1 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	24 "	20 "	100 "	19 GPA	WATER	30 psi
B	CUB	3.8 mph	AIXR	11003	30 "	20 "	100 "	19 GPA	WATER	30 psi

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	GLXMA	GLXMA	ANGR	CHEAL	AMAPO	AMBEL
Crop Type, Code	Jun-5-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019
Rating Date	injury	injury	control	control	control	control
Rating Type	percent	percent	percent	percent	percent	percent
Rating Unit	21 DA-A	0 DA-B	0 DA-B	0 DA-B	0 DA-B	0 DA-B
Trt-Eval Interval	0	0	0	0	0	0
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Appl Timing	Appl Code						
1	Sonic	70	WG	4.5 oz/a	PRE	A	28	5	90	98	100	77
1	Durango DMA	4	SL	32 fl oz/a	POST	B						
1	AMS		WG	17 lb/100 gal	POST	B						
2	Trivence	61.3	WG	8 oz/a	PRE	A	23	8	97	100	100	99
2	Durango DMA	4	SL	32 fl oz/a	POST	B						
2	AMS		WG	17 lb/100 gal	POST	B						
3	Dimetric Charged	3.67	L	12 fl oz/a	PRE	A	28	0	87	97	100	99
3	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
3	AMS		WG	3 lb/a	POST	B						
4	Dimetric Charged	3.67	L	15 fl oz/a	PRE	A	29	0	85	97	100	99
4	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
4	AMS		WG	3 lb/a	POST	B						
5	Fierce	76	WG	3 oz/a	PRE	A	30	1	97	99	100	97
5	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
5	AMS		WG	3 lb/a	POST	B						
6	Fierce MTZ	2.64	L	1 pt/a	PRE	A	28	1	99	100	100	100
6	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
6	AMS		WG	3 lb/a	POST	B						
7	Fierce XLT	62.41	WG	4 oz/a	PRE	A	28	9	100	100	100	95
7	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
7	AMS		WG	3 lb/a	POST	B						
8	Untreated						0	0	0	0	0	0
9	Tripzin ZC	4	L	2 pt/a	PRE	A	12	0	87	92	100	83
9	Interline	2.34	L	32 fl oz/a	POST	B						
9	AMS		WG	17 lb/100 gal	POST	B						
10	Moccasin MTZ	4.5	L	2.67 pt/a	PRE	A	8	1	100	100	100	92
10	Interline	2.34	L	32 fl oz/a	POST	B						
10	AMS		WG	17 lb/100 gal	POST	B						
11	Verdict	5.57	L	5 fl oz/a	PRE	A	16	3	77	94	100	87
11	Metribuzin	75	WG	5 oz/a	PRE	A						
11	Liberty	2.34	L	32 fl oz/a	POST	B						
11	AMS		WG	3 lb/a	POST	B						
12	Zidua PRO	4.09	L	4.5 fl oz/a	PRE	A	13	6	95	99	100	92
12	Liberty	2.34	L	32 fl oz/a	POST	B						
12	AMS		WG	3 lb/a	POST	B						

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	GLXMA	GLXMA	ANGR	CHEAL	AMAPO	AMBEL
Crop Type, Code	Jun-5-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019
Rating Date	injury	injury	control	control	control	control
Rating Type	percent	percent	percent	percent	percent	percent
Rating Unit	21 DA-A	0 DA-B	0 DA-B	0 DA-B	0 DA-B	0 DA-B
Trt-Eval Interval	0	0	0	0	0	0
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code						
13	Zidua PRO	4.09	L	4.5	fl oz/a	PRE	A	6	4	98	99	100	96
13	Metribuzin	75	WG	5	oz/a	PRE	A						
13	Liberty	2.34	L	32	fl oz/a	POST	B						
13	AMS		WG	3	lb/a	POST	B						
14	Zidua PRO	4.09	L	4.5	fl oz/a	PRE	A	12	8	99	100	100	94
14	Liberty	2.34	L	32	fl oz/a	POST	B						
14	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B						
14	AMS		WG	3	lb/a	POST	B						
15	Valor	51	WG	2	oz/a	PRE	A	19	0	82	95	100	88
15	Warrant	3	L	3	pt/a	POST	B						
15	Liberty	2.34	L	32	fl oz/a	POST	B						
15	AMS		WG	3	lb/a	POST	B						
16	Authority MTZ	45	WG	16	oz/a	PRE	A	20	6	87	93	100	85
16	Anthem MAXX	4.3	L	3	fl oz/a	POST	B						
16	Liberty	2.34	L	32	fl oz/a	POST	B						
16	AMS		WG	8.5	lb/100 gal	POST	B						
17	Authority Supreme	4.16	L	6.5	fl oz/a	PRE	A	11	2	99	99	100	96
17	Metribuzin	75	WG	6	oz/a	PRE	A						
17	Anthem MAXX	4.3	L	2.5	fl oz/a	POST	B						
17	Liberty	2.34	L	32	fl oz/a	POST	B						
17	AMS		WG	8.5	lb/100 gal	POST	B						
18	Prefix	5.29	L	2	pt/a	PRE	A	6	0	99	99	100	100
18	Metribuzin	75	WG	6	oz/a	PRE	A						
18	Dual II Magnum	7.64	L	1.25	pt/a	POST	B						
18	Liberty	2.34	L	32	fl oz/a	POST	B						
18	AMS		WG	8.5	lb/100 gal	POST	B						
19	Boundary	6.5	L	1.8	pt/a	PRE	A	4	1	100	100	100	89
19	Prefix	5.29	L	2	pt/a	POST	B						
19	Liberty	2.34	L	32	fl oz/a	POST	B						
19	AMS		WG	8.5	lb/100 gal	POST	B						
20	Boundary	6.5	L	1.8	pt/a	PRE	A	2	0	100	100	100	91
20	Flexstar GT	2.82	L	3.5	pt/a	POST	B						
20	Dual II Magnum	7.64	L	1.25	pt/a	POST	B						
20	MSO		L	1	% v/v	POST	B						
20	AMS		WG	8.5	lb/100 gal	POST	B						
21	Sonic	70	WG	4.5	oz/a	PRE	A	21	4	94	98	100	76
21	EverpreX	7.62	L	1	pt/a	POST	B						
21	Durango DMA	4	SL	32	fl oz/a	POST	B						
21	AMS		WG	17	lb/100 gal	POST	B						
22	Liberty	2.34	L	32	fl oz/a	POST	B	0	0	0	0	0	0
22	AMS		WG	8.5	lb/100 gal	POST	B						

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code				ANGR	CHEAL	AMAPO	AMBEL
Crop Type, Code	GLXMA	GLXMA					
Rating Date	Jun-5-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019
Rating Type	injury	injury	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Trt-Eval Interval	21 DA-A	0 DA-B	0 DA-B	0 DA-B	0 DA-B	0 DA-B	0 DA-B
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code						
23	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B	0	0	0	0	0	
23	AMS		WG	17	lb/100 gal	POST	B						
LSD P=.05								6.4	4.8	4.6	6.3	.	6.0
Standard Deviation								4.5	3.4	3.3	4.4	0.0	4.3
CV								30.89	136.16	4.02	5.22	0.0	5.36

Missing data estimates are included in columns: Average=31,32
 Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	ANGR	CHEAL	AMAPO	AMBEL	ABUTH
Crop Type, Code	GLXMA				
Rating Date	Jul-8-2019	Jul-8-2019	Jul-8-2019	Jul-8-2019	Jul-8-2019
Rating Type	injury	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Trt-Eval Interval	7 DA-B	7 DA-B	7 DA-B	7 DA-B	7 DA-B
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Appl Timing	Appl Code						
1	Sonic	70	WG	4.5 oz/a	PRE	A	1	100	100	100	98	100
1	Durango DMA	4	SL	32 fl oz/a	POST	B						
1	AMS		WG	17 lb/100 gal	POST	B						
2	Trivence	61.3	WG	8 oz/a	PRE	A	9	100	100	100	100	100
2	Durango DMA	4	SL	32 fl oz/a	POST	B						
2	AMS		WG	17 lb/100 gal	POST	B						
3	Dimetric Charged	3.67	L	12 fl oz/a	PRE	A	0	100	100	100	100	100
3	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
3	AMS		WG	3 lb/a	POST	B						
4	Dimetric Charged	3.67	L	15 fl oz/a	PRE	A	0	100	100	100	100	100
4	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
4	AMS		WG	3 lb/a	POST	B						
5	Fierce	76	WG	3 oz/a	PRE	A	0	100	100	100	100	100
5	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
5	AMS		WG	3 lb/a	POST	B						
6	Fierce MTZ	2.64	L	1 pt/a	PRE	A	0	100	100	100	100	100
6	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
6	AMS		WG	3 lb/a	POST	B						
7	Fierce XLT	62.41	WG	4 oz/a	PRE	A	9	100	100	100	99	100
7	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B						
7	AMS		WG	3 lb/a	POST	B						
8	Untreated						0	0	0	0	0	0
9	Tripzin ZC	4	L	2 pt/a	PRE	A	0	99	100	100	100	100
9	Interline	2.34	L	32 fl oz/a	POST	B						
9	AMS		WG	17 lb/100 gal	POST	B						
10	Moccasin MTZ	4.5	L	2.67 pt/a	PRE	A	0	100	100	100	100	100
10	Interline	2.34	L	32 fl oz/a	POST	B						
10	AMS		WG	17 lb/100 gal	POST	B						
11	Verdict	5.57	L	5 fl oz/a	PRE	A	7	98	100	100	100	100
11	Metribuzin	75	WG	5 oz/a	PRE	A						
11	Liberty	2.34	L	32 fl oz/a	POST	B						
11	AMS		WG	3 lb/a	POST	B						
12	Zidua PRO	4.09	L	4.5 fl oz/a	PRE	A	5	100	100	100	100	100
12	Liberty	2.34	L	32 fl oz/a	POST	B						
12	AMS		WG	3 lb/a	POST	B						

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code						ANGR	CHEAL	AMAPO	AMBEL	ABUTH			
Crop Type, Code						GLXMA							
Rating Date						Jul-8-2019	Jul-8-2019	Jul-8-2019	Jul-8-2019	Jul-8-2019			
Rating Type						injury	control	control	control	control			
Rating Unit						percent	percent	percent	percent	percent			
Trt-Eval Interval						7 DA-B	7 DA-B	7 DA-B	7 DA-B	7 DA-B			
Number of Decimals						0	0	0	0	0			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code						
13	Zidua PRO	4.09	L	4.5	fl oz/a	PRE	A	8	100	100	100	100	100
13	Metribuzin	75	WG	5	oz/a	PRE	A						
13	Liberty	2.34	L	32	fl oz/a	POST	B						
13	AMS		WG	3	lb/a	POST	B						
14	Zidua PRO	4.09	L	4.5	fl oz/a	PRE	A	8	100	100	100	100	100
14	Liberty	2.34	L	32	fl oz/a	POST	B						
14	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B						
14	AMS		WG	3	lb/a	POST	B						
15	Valor	51	WG	2	oz/a	PRE	A	0	99	100	100	99	100
15	Warrant	3	L	3	pt/a	POST	B						
15	Liberty	2.34	L	32	fl oz/a	POST	B						
15	AMS		WG	3	lb/a	POST	B						
16	Authority MTZ	45	WG	16	oz/a	PRE	A	13	100	100	100	100	100
16	Anthem MAXX	4.3	L	3	fl oz/a	POST	B						
16	Liberty	2.34	L	32	fl oz/a	POST	B						
16	AMS		WG	8.5	lb/100 gal	POST	B						
17	Authority Supreme	4.16	L	6.5	fl oz/a	PRE	A	12	100	100	100	100	100
17	Metribuzin	75	WG	6	oz/a	PRE	A						
17	Anthem MAXX	4.3	L	2.5	fl oz/a	POST	B						
17	Liberty	2.34	L	32	fl oz/a	POST	B						
17	AMS		WG	8.5	lb/100 gal	POST	B						
18	Prefix	5.29	L	2	pt/a	PRE	A	2	100	100	100	100	100
18	Metribuzin	75	WG	6	oz/a	PRE	A						
18	Dual II Magnum	7.64	L	1.25	pt/a	POST	B						
18	Liberty	2.34	L	32	fl oz/a	POST	B						
18	AMS		WG	8.5	lb/100 gal	POST	B						
19	Boundary	6.5	L	1.8	pt/a	PRE	A	15	100	100	100	100	100
19	Prefix	5.29	L	2	pt/a	POST	B						
19	Liberty	2.34	L	32	fl oz/a	POST	B						
19	AMS		WG	8.5	lb/100 gal	POST	B						
20	Boundary	6.5	L	1.8	pt/a	PRE	A	14	100	100	100	100	100
20	Flexstar GT	2.82	L	3.5	pt/a	POST	B						
20	Dual II Magnum	7.64	L	1.25	pt/a	POST	B						
20	MSO		L	1	% v/v	POST	B						
20	AMS		WG	8.5	lb/100 gal	POST	B						
21	Sonic	70	WG	4.5	oz/a	PRE	A	5	100	100	100	99	100
21	EverpreX	7.62	L	1	pt/a	POST	B						
21	Durango DMA	4	SL	32	fl oz/a	POST	B						
21	AMS		WG	17	lb/100 gal	POST	B						
22	Liberty	2.34	L	32	fl oz/a	POST	B	0	73	99	100	90	100
22	AMS		WG	8.5	lb/100 gal	POST	B						

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code		ANGR	CHEAL	AMAPO	AMBEL	ABUTH
Crop Type, Code	GLXMA					
Rating Date	Jul-8-2019	Jul-8-2019	Jul-8-2019	Jul-8-2019	Jul-8-2019	Jul-8-2019
Rating Type	injury	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent
Trt-Eval Interval	7 DA-B	7 DA-B	7 DA-B	7 DA-B	7 DA-B	7 DA-B
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code						
23	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B	0	81	99	98	73	100
23	AMS		WG	17	lb/100 gal	POST	B						
LSD P=.05								5.0	1.7	1.0	1.5	1.6	.
Standard Deviation								3.5	1.2	0.7	1.0	1.1	0.0
CV								75.64	1.28	0.78	1.09	1.18	0.0

Missing data estimates are included in columns: Average=31,32
 Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	ANGR	CHEAL	AMAPO	AMBEL
Crop Type, Code	GLXMA			
Rating Date	Jul-15-2019	Jul-15-2019	Jul-15-2019	Jul-15-2019
Rating Type	injury	control	control	control
Rating Unit	percent	percent	percent	percent
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Appl Timing	Appl Code					
1	Sonic	70	WG	4.5 oz/a	PRE	A	1	97	100	100	100
1	Durango DMA	4	SL	32 fl oz/a	POST	B					
1	AMS		WG	17 lb/100 gal	POST	B					
2	Trivence	61.3	WG	8 oz/a	PRE	A	7	100	100	100	100
2	Durango DMA	4	SL	32 fl oz/a	POST	B					
2	AMS		WG	17 lb/100 gal	POST	B					
3	Dimetric Charged	3.67	L	12 fl oz/a	PRE	A	0	98	100	100	100
3	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
3	AMS		WG	3 lb/a	POST	B					
4	Dimetric Charged	3.67	L	15 fl oz/a	PRE	A	0	97	100	100	100
4	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
4	AMS		WG	3 lb/a	POST	B					
5	Fierce	76	WG	3 oz/a	PRE	A	1	99	100	100	100
5	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
5	AMS		WG	3 lb/a	POST	B					
6	Fierce MTZ	2.64	L	1 pt/a	PRE	A	0	100	100	100	100
6	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
6	AMS		WG	3 lb/a	POST	B					
7	Fierce XLT	62.41	WG	4 oz/a	PRE	A	4	99	100	100	100
7	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
7	AMS		WG	3 lb/a	POST	B					
8	Untreated						0	0	0	0	0
9	Tripzin ZC	4	L	2 pt/a	PRE	A	0	99	100	100	100
9	Interline	2.34	L	32 fl oz/a	POST	B					
9	AMS		WG	17 lb/100 gal	POST	B					
10	Moccasin MTZ	4.5	L	2.67 pt/a	PRE	A	0	100	99	100	100
10	Interline	2.34	L	32 fl oz/a	POST	B					
10	AMS		WG	17 lb/100 gal	POST	B					
11	Verdict	5.57	L	5 fl oz/a	PRE	A	3	92	100	100	100
11	Metribuzin	75	WG	5 oz/a	PRE	A					
11	Liberty	2.34	L	32 fl oz/a	POST	B					
11	AMS		WG	3 lb/a	POST	B					
12	Zidua PRO	4.09	L	4.5 fl oz/a	PRE	A	2	99	100	100	100
12	Liberty	2.34	L	32 fl oz/a	POST	B					
12	AMS		WG	3 lb/a	POST	B					

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	ANGR	CHEAL	AMAPO	AMBEL
Crop Type, Code	GLXMA			
Rating Date	Jul-15-2019	Jul-15-2019	Jul-15-2019	Jul-15-2019
Rating Type	injury	control	control	control
Rating Unit	percent	percent	percent	percent
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code					
13	Zidua PRO	4.09	L	4.5	fl oz/a	PRE	A	4	99	100	100	100
13	Metribuzin	75	WG	5	oz/a	PRE	A					
13	Liberty	2.34	L	32	fl oz/a	POST	B					
13	AMS		WG	3	lb/a	POST	B					
14	Zidua PRO	4.09	L	4.5	fl oz/a	PRE	A	6	99	100	100	100
14	Liberty	2.34	L	32	fl oz/a	POST	B					
14	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B					
14	AMS		WG	3	lb/a	POST	B					
15	Valor	51	WG	2	oz/a	PRE	A	0	100	100	100	100
15	Warrant	3	L	3	pt/a	POST	B					
15	Liberty	2.34	L	32	fl oz/a	POST	B					
15	AMS		WG	3	lb/a	POST	B					
16	Authority MTZ	45	WG	16	oz/a	PRE	A	5	100	100	100	100
16	Anthem MAXX	4.3	L	3	fl oz/a	POST	B					
16	Liberty	2.34	L	32	fl oz/a	POST	B					
16	AMS		WG	8.5	lb/100 gal	POST	B					
17	Authority Supreme	4.16	L	6.5	fl oz/a	PRE	A	6	100	100	100	100
17	Metribuzin	75	WG	6	oz/a	PRE	A					
17	Anthem MAXX	4.3	L	2.5	fl oz/a	POST	B					
17	Liberty	2.34	L	32	fl oz/a	POST	B					
17	AMS		WG	8.5	lb/100 gal	POST	B					
18	Prefix	5.29	L	2	pt/a	PRE	A	2	100	100	100	100
18	Metribuzin	75	WG	6	oz/a	PRE	A					
18	Dual II Magnum	7.64	L	1.25	pt/a	POST	B					
18	Liberty	2.34	L	32	fl oz/a	POST	B					
18	AMS		WG	8.5	lb/100 gal	POST	B					
19	Boundary	6.5	L	1.8	pt/a	PRE	A	11	100	100	100	100
19	Prefix	5.29	L	2	pt/a	POST	B					
19	Liberty	2.34	L	32	fl oz/a	POST	B					
19	AMS		WG	8.5	lb/100 gal	POST	B					
20	Boundary	6.5	L	1.8	pt/a	PRE	A	14	100	100	100	100
20	Flexstar GT	2.82	L	3.5	pt/a	POST	B					
20	Dual II Magnum	7.64	L	1.25	pt/a	POST	B					
20	MSO		L	1	% v/v	POST	B					
20	AMS		WG	8.5	lb/100 gal	POST	B					
21	Sonic	70	WG	4.5	oz/a	PRE	A	3	100	100	100	100
21	EverpreX	7.62	L	1	pt/a	POST	B					
21	Durango DMA	4	SL	32	fl oz/a	POST	B					
21	AMS		WG	17	lb/100 gal	POST	B					
22	Liberty	2.34	L	32	fl oz/a	POST	B	0	93	99	100	91
22	AMS		WG	8.5	lb/100 gal	POST	B					

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code		ANGR	CHEAL	AMAPO	AMBEL
Crop Type, Code	GLXMA				
Rating Date	Jul-15-2019	Jul-15-2019	Jul-15-2019	Jul-15-2019	Jul-15-2019
Rating Type	injury	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B	14 DA-B
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code					
23	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B	0	99	98	100	88
23	AMS		WG	17	lb/100 gal	POST	B					
LSD P=.05								3.5	2.0	1.7	.	2.9
Standard Deviation								2.5	1.4	1.2	0.0	2.1
CV								84.08	1.47	1.28	0.0	2.2

Missing data estimates are included in columns: Average=31,32
 Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	ABUTH		ANGR	CHEAL	AMAPO
Crop Type, Code		GLXMA			
Rating Date	Jul-15-2019	Jul-29-2019	Jul-29-2019	Jul-29-2019	Jul-29-2019
Rating Type	control	injury	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Trt-Eval Interval	14 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Appl Timing	Appl Code	ABUTH	GLXMA	ANGR	CHEAL	AMAPO
1	Sonic	70	WG	4.5 oz/a	PRE	A	100	0	99	100	100
1	Durango DMA	4	SL	32 fl oz/a	POST	B					
1	AMS		WG	17 lb/100 gal	POST	B					
2	Trivence	61.3	WG	8 oz/a	PRE	A	100	8	98	100	100
2	Durango DMA	4	SL	32 fl oz/a	POST	B					
2	AMS		WG	17 lb/100 gal	POST	B					
3	Dimetric Charged	3.67	L	12 fl oz/a	PRE	A	100	0	97	100	100
3	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
3	AMS		WG	3 lb/a	POST	B					
4	Dimetric Charged	3.67	L	15 fl oz/a	PRE	A	100	0	98	100	100
4	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
4	AMS		WG	3 lb/a	POST	B					
5	Fierce	76	WG	3 oz/a	PRE	A	100	0	100	100	100
5	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
5	AMS		WG	3 lb/a	POST	B					
6	Fierce MTZ	2.64	L	1 pt/a	PRE	A	100	0	100	100	100
6	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
6	AMS		WG	3 lb/a	POST	B					
7	Fierce XLT	62.41	WG	4 oz/a	PRE	A	100	5	98	100	100
7	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
7	AMS		WG	3 lb/a	POST	B					
8	Untreated						0	0	0	0	0
9	Tripzin ZC	4	L	2 pt/a	PRE	A	100	0	99	100	100
9	Interline	2.34	L	32 fl oz/a	POST	B					
9	AMS		WG	17 lb/100 gal	POST	B					
10	Moccasin MTZ	4.5	L	2.67 pt/a	PRE	A	100	0	100	100	100
10	Interline	2.34	L	32 fl oz/a	POST	B					
10	AMS		WG	17 lb/100 gal	POST	B					
11	Verdict	5.57	L	5 fl oz/a	PRE	A	100	0	93	100	100
11	Metribuzin	75	WG	5 oz/a	PRE	A					
11	Liberty	2.34	L	32 fl oz/a	POST	B					
11	AMS		WG	3 lb/a	POST	B					
12	Zidua PRO	4.09	L	4.5 fl oz/a	PRE	A	100	0	99	100	100
12	Liberty	2.34	L	32 fl oz/a	POST	B					
12	AMS		WG	3 lb/a	POST	B					

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	ABUTH		GLXMA		ANGR	CHEAL	AMAPO						
Crop Type, Code	Jul-15-2019	Jul-29-2019	Jul-29-2019	Jul-29-2019	Jul-29-2019	Jul-29-2019	Jul-29-2019						
Rating Date	control	injury	control	control	control	control	control						
Rating Type	percent	percent	percent	percent	percent	percent	percent						
Rating Unit	14 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B						
Trt-Eval Interval	0	0	0	0	0	0	0						
Number of Decimals	0	0	0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code						
13	Zidua PRO	4.09	L	4.5	fl oz/a	PRE	A	100	0	100	100	100	
13	Metribuzin	75	WG	5	oz/a	PRE	A						
13	Liberty	2.34	L	32	fl oz/a	POST	B						
13	AMS		WG	3	lb/a	POST	B						
14	Zidua PRO	4.09	L	4.5	fl oz/a	PRE	A	100	1	99	100	100	
14	Liberty	2.34	L	32	fl oz/a	POST	B						
14	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B						
14	AMS		WG	3	lb/a	POST	B						
15	Valor	51	WG	2	oz/a	PRE	A	100	0	100	100	100	
15	Warrant	3	L	3	pt/a	POST	B						
15	Liberty	2.34	L	32	fl oz/a	POST	B						
15	AMS		WG	3	lb/a	POST	B						
16	Authority MTZ	45	WG	16	oz/a	PRE	A	100	0	100	100	100	
16	Anthem MAXX	4.3	L	3	fl oz/a	POST	B						
16	Liberty	2.34	L	32	fl oz/a	POST	B						
16	AMS		WG	8.5	lb/100 gal	POST	B						
17	Authority Supreme	4.16	L	6.5	fl oz/a	PRE	A	100	0	100	100	100	
17	Metribuzin	75	WG	6	oz/a	PRE	A						
17	Anthem MAXX	4.3	L	2.5	fl oz/a	POST	B						
17	Liberty	2.34	L	32	fl oz/a	POST	B						
17	AMS		WG	8.5	lb/100 gal	POST	B						
18	Prefix	5.29	L	2	pt/a	PRE	A	100	0	100	100	100	
18	Metribuzin	75	WG	6	oz/a	PRE	A						
18	Dual II Magnum	7.64	L	1.25	pt/a	POST	B						
18	Liberty	2.34	L	32	fl oz/a	POST	B						
18	AMS		WG	8.5	lb/100 gal	POST	B						
19	Boundary	6.5	L	1.8	pt/a	PRE	A	100	0	100	100	100	
19	Prefix	5.29	L	2	pt/a	POST	B						
19	Liberty	2.34	L	32	fl oz/a	POST	B						
19	AMS		WG	8.5	lb/100 gal	POST	B						
20	Boundary	6.5	L	1.8	pt/a	PRE	A	100	0	100	100	100	
20	Flexstar GT	2.82	L	3.5	pt/a	POST	B						
20	Dual II Magnum	7.64	L	1.25	pt/a	POST	B						
20	MSO		L	1	% v/v	POST	B						
20	AMS		WG	8.5	lb/100 gal	POST	B						
21	Sonic	70	WG	4.5	oz/a	PRE	A	100	6	100	100	100	
21	EverpreX	7.62	L	1	pt/a	POST	B						
21	Durango DMA	4	SL	32	fl oz/a	POST	B						
21	AMS		WG	17	lb/100 gal	POST	B						
22	Liberty	2.34	L	32	fl oz/a	POST	B	100	0	93	97	100	
22	AMS		WG	8.5	lb/100 gal	POST	B						

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	ABUTH		ANGR	CHEAL	AMAPO
Crop Type, Code		GLXMA			
Rating Date	Jul-15-2019	Jul-29-2019	Jul-29-2019	Jul-29-2019	Jul-29-2019
Rating Type	control	injury	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Trt-Eval Interval	14 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code					
23	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B	100	0	98	100	
23	AMS		WG	17	lb/100 gal	POST	B				100	
LSD P=.05								.	2.7	1.8	1.2	.
Standard Deviation								0.0	1.9	1.3	0.9	0.0
CV								0.0	228.87	1.36	0.92	0.0

Missing data estimates are included in columns: Average=31,32
 Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	AMBEL	ABUTH	GLXMA	ANGR	CHEAL
Crop Type, Code					
Rating Date	Jul-29-2019	Jul-29-2019	Aug-26-2019	Jul-29-2019	Jul-29-2019
Rating Type	control	control	injury	control	control
Rating Unit	percent	percent	percent	percent	percent
Trt-Eval Interval	28 DA-B	28 DA-B	56 DA-B	56 DA-B	56 DA-B
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Appl Timing	Appl Code					
1	Sonic	70	WG	4.5 oz/a	PRE	A	100	100	0	93	100
1	Durango DMA	4	SL	32 fl oz/a	POST	B					
1	AMS		WG	17 lb/100 gal	POST	B					
2	Trivence	61.3	WG	8 oz/a	PRE	A	100	100	0	87	100
2	Durango DMA	4	SL	32 fl oz/a	POST	B					
2	AMS		WG	17 lb/100 gal	POST	B					
3	Dimetric Charged	3.67	L	12 fl oz/a	PRE	A	100	100	0	86	100
3	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
3	AMS		WG	3 lb/a	POST	B					
4	Dimetric Charged	3.67	L	15 fl oz/a	PRE	A	100	100	0	86	100
4	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
4	AMS		WG	3 lb/a	POST	B					
5	Fierce	76	WG	3 oz/a	PRE	A	100	100	0	93	100
5	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
5	AMS		WG	3 lb/a	POST	B					
6	Fierce MTZ	2.64	L	1 pt/a	PRE	A	100	100	0	97	100
6	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
6	AMS		WG	3 lb/a	POST	B					
7	Fierce XLT	62.41	WG	4 oz/a	PRE	A	100	100	0	90	100
7	Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
7	AMS		WG	3 lb/a	POST	B					
8	Untreated						0	0	0	0	0
9	Tripzin ZC	4	L	2 pt/a	PRE	A	100	100	0	94	100
9	Interline	2.34	L	32 fl oz/a	POST	B					
9	AMS		WG	17 lb/100 gal	POST	B					
10	Moccasin MTZ	4.5	L	2.67 pt/a	PRE	A	100	100	0	97	98
10	Interline	2.34	L	32 fl oz/a	POST	B					
10	AMS		WG	17 lb/100 gal	POST	B					
11	Verdict	5.57	L	5 fl oz/a	PRE	A	100	100	0	80	100
11	Metribuzin	75	WG	5 oz/a	PRE	A					
11	Liberty	2.34	L	32 fl oz/a	POST	B					
11	AMS		WG	3 lb/a	POST	B					
12	Zidua PRO	4.09	L	4.5 fl oz/a	PRE	A	100	100	0	90	100
12	Liberty	2.34	L	32 fl oz/a	POST	B					
12	AMS		WG	3 lb/a	POST	B					

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code						AMBEL	ABUTH	GLXMA	ANGR	CHEAL
Crop Type, Code						Jul-29-2019	Jul-29-2019	Aug-26-2019	Jul-29-2019	Jul-29-2019
Rating Date						control	control	injury	control	control
Rating Type						percent	percent	percent	percent	percent
Rating Unit						28 DA-B	28 DA-B	56 DA-B	56 DA-B	56 DA-B
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 Appl Timing Code					
13	Zidua PRO	4.09	L	4.5 fl oz/a	PRE A	100	100	0	96	100
13	Metribuzin	75	WG	5 oz/a	PRE A					
13	Liberty	2.34	L	32 fl oz/a	POST B					
13	AMS		WG	3 lb/a	POST B					
14	Zidua PRO	4.09	L	4.5 fl oz/a	PRE A	100	100	0	94	100
14	Liberty	2.34	L	32 fl oz/a	POST B					
14	Roundup PowerMax	4.5	SL	32 fl oz/a	POST B					
14	AMS		WG	3 lb/a	POST B					
15	Valor	51	WG	2 oz/a	PRE A	100	100	0	99	100
15	Warrant	3	L	3 pt/a	POST B					
15	Liberty	2.34	L	32 fl oz/a	POST B					
15	AMS		WG	3 lb/a	POST B					
16	Authority MTZ	45	WG	16 oz/a	PRE A	100	100	0	99	100
16	Anthem MAXX	4.3	L	3 fl oz/a	POST B					
16	Liberty	2.34	L	32 fl oz/a	POST B					
16	AMS		WG	8.5 lb/100 gal	POST B					
17	Authority Supreme	4.16	L	6.5 fl oz/a	PRE A	100	100	0	100	100
17	Metribuzin	75	WG	6 oz/a	PRE A					
17	Anthem MAXX	4.3	L	2.5 fl oz/a	POST B					
17	Liberty	2.34	L	32 fl oz/a	POST B					
17	AMS		WG	8.5 lb/100 gal	POST B					
18	Prefix	5.29	L	2 pt/a	PRE A	100	100	0	100	100
18	Metribuzin	75	WG	6 oz/a	PRE A					
18	Dual II Magnum	7.64	L	1.25 pt/a	POST B					
18	Liberty	2.34	L	32 fl oz/a	POST B					
18	AMS		WG	8.5 lb/100 gal	POST B					
19	Boundary	6.5	L	1.8 pt/a	PRE A	100	100	0	100	100
19	Prefix	5.29	L	2 pt/a	POST B					
19	Liberty	2.34	L	32 fl oz/a	POST B					
19	AMS		WG	8.5 lb/100 gal	POST B					
20	Boundary	6.5	L	1.8 pt/a	PRE A	100	100	0	100	100
20	Flexstar GT	2.82	L	3.5 pt/a	POST B					
20	Dual II Magnum	7.64	L	1.25 pt/a	POST B					
20	MSO		L	1 % v/v	POST B					
20	AMS		WG	8.5 lb/100 gal	POST B					
21	Sonic	70	WG	4.5 oz/a	PRE A	99	100	0	100	100
21	EverpreX	7.62	L	1 pt/a	POST B					
21	Durango DMA	4	SL	32 fl oz/a	POST B					
21	AMS		WG	17 lb/100 gal	POST B					
22	Liberty	2.34	L	32 fl oz/a	POST B	87	100	0	78	94
22	AMS		WG	8.5 lb/100 gal	POST B					

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	AMBEL	ABUTH	GLXMA	ANGR	CHEAL
Crop Type, Code					
Rating Date	Jul-29-2019	Jul-29-2019	Aug-26-2019	Jul-29-2019	Jul-29-2019
Rating Type	control	control	injury	control	control
Rating Unit	percent	percent	percent	percent	percent
Trt-Eval Interval	28 DA-B	28 DA-B	56 DA-B	56 DA-B	56 DA-B
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code			
23	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B	95	100	0
23	AMS		WG	17	lb/100 gal	POST	B			88
										90
	LSD P=.05							2.2	.	.
	Standard Deviation							1.6	0.0	0.0
	CV							1.66	0.0	0.0
										5.5
										3.9
										4.36
										2.6
										1.8
										1.94

Missing data estimates are included in columns: Average=31,32
 Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	AMAPO	AMBEL	ABUTH	GLXMA	GLXMA					
Crop Type, Code	Jul-29-2019	Jul-29-2019	Jul-29-2019	Oct-8-2019	Oct-8-2019					
Rating Date	control	control	control	moisture	yield					
Rating Type	percent	percent	percent	percent	bu/acre					
Rating Unit	56 DA-B	56 DA-B	56 DA-B		at 13% M					
Trt-Eval Interval	0	0	0	1	1					
Number of Decimals										
Trt Treatment No. Name	Form Conc	Form Type	Rate Rate Unit	Appl Timing	Appl Code					
1 Sonic	70	WG	4.5 oz/a	PRE	A	100	98	100	11.6	44.9
1 Durango DMA	4	SL	32 fl oz/a	POST	B					
1 AMS		WG	17 lb/100 gal	POST	B					
2 Trivence	61.3	WG	8 oz/a	PRE	A	100	100	100	11.6	43.6
2 Durango DMA	4	SL	32 fl oz/a	POST	B					
2 AMS		WG	17 lb/100 gal	POST	B					
3 Dimetric Charged	3.67	L	12 fl oz/a	PRE	A	100	100	100	11.5	45.5
3 Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
3 AMS		WG	3 lb/a	POST	B					
4 Dimetric Charged	3.67	L	15 fl oz/a	PRE	A	100	100	100	11.8	43.4
4 Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
4 AMS		WG	3 lb/a	POST	B					
5 Fierce	76	WG	3 oz/a	PRE	A	100	100	100	11.6	47.3
5 Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
5 AMS		WG	3 lb/a	POST	B					
6 Fierce MTZ	2.64	L	1 pt/a	PRE	A	100	100	100	11.7	40.1
6 Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
6 AMS		WG	3 lb/a	POST	B					
7 Fierce XLT	62.41	WG	4 oz/a	PRE	A	100	100	100	11.6	40.4
7 Roundup PowerMax	4.5	SL	32 fl oz/a	POST	B					
7 AMS		WG	3 lb/a	POST	B					
8 Untreated						0	0	0	9.2	16.6
9 Tripzin ZC	4	L	2 pt/a	PRE	A	100	100	100	11.9	42.8
9 Interline	2.34	L	32 fl oz/a	POST	B					
9 AMS		WG	17 lb/100 gal	POST	B					
10 Moccasin MTZ	4.5	L	2.67 pt/a	PRE	A	100	100	100	11.6	43.9
10 Interline	2.34	L	32 fl oz/a	POST	B					
10 AMS		WG	17 lb/100 gal	POST	B					
11 Verdict	5.57	L	5 fl oz/a	PRE	A	100	100	100	11.7	40.6
11 Metribuzin	75	WG	5 oz/a	PRE	A					
11 Liberty	2.34	L	32 fl oz/a	POST	B					
11 AMS		WG	3 lb/a	POST	B					
12 Zidua PRO	4.09	L	4.5 fl oz/a	PRE	A	100	100	100	11.6	36.1
12 Liberty	2.34	L	32 fl oz/a	POST	B					
12 AMS		WG	3 lb/a	POST	B					

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code						AMAPO	AMBEL	ABUTH	GLXMA	GLXMA
Crop Type, Code						Jul-29-2019	Jul-29-2019	Jul-29-2019	Oct-8-2019	Oct-8-2019
Rating Date						control	control	control	moisture	yield
Rating Type						percent	percent	percent	percent	bu/acre
Rating Unit						56 DA-B	56 DA-B	56 DA-B		at 13% M
Trt-Eval Interval						0	0	0	1	1
Number of Decimals										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Appl Appl Timing Code					
13	Zidua PRO	4.09	L	4.5 fl oz/a	PRE A	100	100	100	11.6	35.7
13	Metribuzin	75	WG	5 oz/a	PRE A					
13	Liberty	2.34	L	32 fl oz/a	POST B					
13	AMS		WG	3 lb/a	POST B					
14	Zidua PRO	4.09	L	4.5 fl oz/a	PRE A	100	100	100	11.6	33.6
14	Liberty	2.34	L	32 fl oz/a	POST B					
14	Roundup PowerMax	4.5	SL	32 fl oz/a	POST B					
14	AMS		WG	3 lb/a	POST B					
15	Valor	51	WG	2 oz/a	PRE A	100	100	100	11.8	43.3
15	Warrant	3	L	3 pt/a	POST B					
15	Liberty	2.34	L	32 fl oz/a	POST B					
15	AMS		WG	3 lb/a	POST B					
16	Authority MTZ	45	WG	16 oz/a	PRE A	100	100	100	11.6	41.6
16	Anthem MAXX	4.3	L	3 fl oz/a	POST B					
16	Liberty	2.34	L	32 fl oz/a	POST B					
16	AMS		WG	8.5 lb/100 gal	POST B					
17	Authority Supreme	4.16	L	6.5 fl oz/a	PRE A	100	100	100	11.5	43.0
17	Metribuzin	75	WG	6 oz/a	PRE A					
17	Anthem MAXX	4.3	L	2.5 fl oz/a	POST B					
17	Liberty	2.34	L	32 fl oz/a	POST B					
17	AMS		WG	8.5 lb/100 gal	POST B					
18	Prefix	5.29	L	2 pt/a	PRE A	100	100	100	11.8	40.1
18	Metribuzin	75	WG	6 oz/a	PRE A					
18	Dual II Magnum	7.64	L	1.25 pt/a	POST B					
18	Liberty	2.34	L	32 fl oz/a	POST B					
18	AMS		WG	8.5 lb/100 gal	POST B					
19	Boundary	6.5	L	1.8 pt/a	PRE A	100	100	100	11.7	42.2
19	Prefix	5.29	L	2 pt/a	POST B					
19	Liberty	2.34	L	32 fl oz/a	POST B					
19	AMS		WG	8.5 lb/100 gal	POST B					
20	Boundary	6.5	L	1.8 pt/a	PRE A	100	100	100	11.7	42.0
20	Flexstar GT	2.82	L	3.5 pt/a	POST B					
20	Dual II Magnum	7.64	L	1.25 pt/a	POST B					
20	MSO		L	1 % v/v	POST B					
20	AMS		WG	8.5 lb/100 gal	POST B					
21	Sonic	70	WG	4.5 oz/a	PRE A	100	100	100	11.9	38.6
21	EverpreX	7.62	L	1 pt/a	POST B					
21	Durango DMA	4	SL	32 fl oz/a	POST B					
21	AMS		WG	17 lb/100 gal	POST B					
22	Liberty	2.34	L	32 fl oz/a	POST B	100	78	100	11.8	42.6
22	AMS		WG	8.5 lb/100 gal	POST B					

Missing data estimates are included in columns: Average=31,32

Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.

Economics of glyphosate- and glufosinate-based weed control programs in soybean

Trial ID: SOY03-19

Location: Campus, C-12

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	AMAPO	AMBEL	ABUTH	GLXMA	GLXMA
Crop Type, Code	Jul-29-2019	Jul-29-2019	Jul-29-2019	Oct-8-2019	Oct-8-2019
Rating Date	control	control	control	moisture	yield
Rating Type	percent	percent	percent	percent	bu/acre
Rating Unit	56 DA-B	56 DA-B	56 DA-B		at 13% M
Trt-Eval Interval	0	0	0	1	1
Number of Decimals					

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code			
23	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	B	100	85	100
23	AMS		WG	17	lb/100 gal	POST	B			
	LSD P=.05								3.6	
	Standard Deviation							0.0	2.6	0.0
	CV							0.0	2.72	0.0
										0.48
										10.55
										0.34
										7.47
										2.96
										18.53

Missing data estimates are included in columns: Average=31,32
 Could not calculate LSD (% mean diff) for columns 5,12,16,18,22,24,25,28,30 because error mean square = 0.