

Comparison of various Authority branded premixtures in Roundup Ready 2 Xtend soybean

Trial ID: SOY06-19 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: 155000 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

	A	B	C
Application Timing:	PRE	EPOS	POST
Date Treated:	May-14-2019	Jun-26-2019	Jul-1-2019
Time Treated:	7:50 PM	9:45 AM	8:40 AM
% Cloud Cover:	0	10	20
Air Temp., Unit:	66 F	74 F	71 F
% Relative Humidity:	32	65	69
Wind Speed/Unit/Dir:	4 mph NW	7 mph NW	3 mph S
Soil Temp, Unit:	64 F	70 F	74 F
Leaf Moist/Dew Presence (Y/N):	5	2	5
Soil Moist:	3	3	4

Crop Stage at Each Application

	A	B	C
Crop 1 Name:	GLXMA	GLXMA	GLXMA
Height:		8 "	12 "
Stage:		V3	V4

Weed Stage at Each Application

	A	B	C
Weed 1 Name:	ANGR	ANGR	ANGR
Height:		4-8 " (6)	2-4 " (3)
Stage:		2-4L	1-5L
Weed 2 Name:	CHEAL	CHEAL	CHEAL
Height:		1-2 " (2)	
Stage:		2-4L	
Weed 3 Name:	AMAPO	AMAPO	AMAPO
Height:			
Stage:			
Weed 4 Name:	AMBEL	AMBEL	AMBEL
Height:		1-6 " (4)	1-4 " (3)
Stage:		2-8L	2-8L
Weed 5 Name:	SINAR	SINAR	SINAR
Height:			
Stage:			
Weed 6 Name:	ABUTH	ABUTH	ABUTH
Height:			
Stage:			

Weed Density

	1	2	3	4	5	6
Date:	Jun-26-2019	Jun-26-2019	Jun-26-2019	Jun-26-2019	Jun-26-2019	Jun-26-2019
Weed Name:	ANGR	CHEAL	AMAPO	AMBEL	SINAR	ABUTH
Density:	61 ft2	1 ft2	1 ft2	48 ft2	1 ft2	1 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
B	CUB	3.8 mph	AIXR	11003	30 "	20 "	100 "	19 GPA	WATER	30 psi
C	CUB	3.8 mph	AIXR	11003	30 "	20 "	100 "	19 GPA	WATER	30 psi

Comments:

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Location: Campus, C-14

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	GLXMA	GLXMA	ANGR	CHEAL
Crop Type, Code	Jun-4-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019
Rating Date	injury	injury	control	control
Rating Type	percent	percent	percent	percent
Rating Unit	21 DA-A	0 DA-C	0 DA-C	0 DA-C
Trt-Eval Interval	0	0	0	0
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code				
1	Authority First	70	WG	6.4	oz/a	PRE	A	6	13	100	100
1	Anthem MAXX	4.3	L	3	fl oz/a	EPOS	B				
1	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
1	AMS		WG	17	lb/100 gal	EPOS	B				
2	Authority First	70	WG	6.4	oz/a	PRE	A	11	5	100	100
2	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
2	AMS		WG	17	lb/100 gal	EPOS	B				
3	Authority XL	70	WG	4	oz/a	PRE	A	2	5	99	100
3	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
3	AMS		WG	17	lb/100 gal	EPOS	B				
4	Untreated							0	0	0	0
5	Authority Supreme	4.16	L	7	fl oz/a	PRE	A	9	1	99	100
5	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
5	AMS		WG	17	lb/100 gal	POST	C				
6	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	13	0	100	100
6	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
6	AMS		WG	17	lb/100 gal	POST	C				
7	Authority Supreme HL VHP58-002	4.25	L	11	fl oz/a	PRE	A	25	16	100	100
7	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
7	AMS		WG	17	lb/100 gal	POST	C				
8	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	24	16	100	100
8	Classic	25	WG	1.6	oz/a	PRE	A				
8	Metribuzin	75	WG	3.33	oz/a	PRE	A				
8	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
8	AMS		WG	17	lb/100 gal	POST	C				
9	Anthem MAXX	4.3	L	4	fl oz/a	PRE	A	11	1	99	100
9	Metribuzin	75	WG	6	oz/a	PRE	A				
9	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
9	AMS		WG	17	lb/100 gal	POST	C				
10	Zidua PRO	4.09	L	6	fl oz/a	PRE	A	14	2	100	100
10	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
10	AMS		WG	17	lb/100 gal	POST	C				
11	Fierce XLT	62.41	WG	4	oz/a	PRE	A	29	10	99	100
11	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
11	AMS		WG	17	lb/100 gal	POST	C				

Missing data estimates are included in columns: Average=51,52

Could not calculate LSD (% mean diff) for columns 5,7,11,14,16,17 because error mean square = 0.

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Pest Code						GLXMA	GLXMA	ANGR	CHEAL
Crop Type, Code						Jun-4-2019	Jul-1-2019	Jul-1-2019	Jul-1-2019
Rating Date						injury	injury	control	control
Rating Type						percent	percent	percent	percent
Rating Unit						21 DA-A	0 DA-C	0 DA-C	0 DA-C
Trt-Eval Interval						0	0	0	0
Number of Decimals						0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code		
12	Boundary	6.5	L	1.8	pt/a	PRE	A	3	0
12	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B		
12	AMS		WG	17	lb/100 gal	EPOS	B		
13	Valor XLT	40.3	WG	4	oz/a	PRE	A	28	24
13	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C		
13	AMS		WG	17	lb/100 gal	POST	C		
14	Authority MTZ	45	WG	16	oz/a	PRE	A	14	1
14	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B		
14	AMS		WG	17	lb/100 gal	EPOS	B		
15	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	0	0
15	AMS		WG	17	lb/100 gal	POST	C		
LSD P=.05						8.1	7.6	1.4	0.4
Standard Deviation						5.7	5.3	1.0	0.3
CV						45.43	86.32	1.13	0.3

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Pest Code	AMAPO	AMBEL	ABUTH	GLXMA
Crop Type, Code	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-15-2019
Rating Date	control	control	control	injury
Rating Type	percent	percent	percent	percent
Rating Unit	0 DA-C	0 DA-C	0 DA-C	14 DA-C
Trt-Eval Interval	0	0	0	0
Number of Decimals				

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code				
1	Authority First	70	WG	6.4	oz/a	PRE	A	100	95	100	7
1	Anthem MAXX	4.3	L	3	fl oz/a	EPOS	B				
1	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
1	AMS		WG	17	lb/100 gal	EPOS	B				
2	Authority First	70	WG	6.4	oz/a	PRE	A	100	96	100	1
2	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
2	AMS		WG	17	lb/100 gal	EPOS	B				
3	Authority XL	70	WG	4	oz/a	PRE	A	100	83	100	2
3	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
3	AMS		WG	17	lb/100 gal	EPOS	B				
4	Untreated							0	0	0	0
5	Authority Supreme	4.16	L	7	fl oz/a	PRE	A	100	91	100	1
5	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
5	AMS		WG	17	lb/100 gal	POST	C				
6	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	100	86	100	2
6	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
6	AMS		WG	17	lb/100 gal	POST	C				
7	Authority Supreme HL VHP58-002	4.25	L	11	fl oz/a	PRE	A	100	97	100	6
7	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
7	AMS		WG	17	lb/100 gal	POST	C				
8	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	100	97	100	8
8	Classic	25	WG	1.6	oz/a	PRE	A				
8	Metribuzin	75	WG	3.33	oz/a	PRE	A				
8	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
8	AMS		WG	17	lb/100 gal	POST	C				
9	Anthem MAXX	4.3	L	4	fl oz/a	PRE	A	100	97	100	1
9	Metribuzin	75	WG	6	oz/a	PRE	A				
9	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
9	AMS		WG	17	lb/100 gal	POST	C				
10	Zidua PRO	4.09	L	6	fl oz/a	PRE	A	100	94	100	2
10	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
10	AMS		WG	17	lb/100 gal	POST	C				
11	Fierce XLT	62.41	WG	4	oz/a	PRE	A	100	96	100	3
11	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
11	AMS		WG	17	lb/100 gal	POST	C				

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Pest Code	AMAPO	AMBEL	ABUTH	GLXMA							
Crop Type, Code	Jul-1-2019	Jul-1-2019	Jul-1-2019	Jul-15-2019							
Rating Date	control	control	control	injury							
Rating Type	percent	percent	percent	percent							
Rating Unit	0 DA-C	0 DA-C	0 DA-C	14 DA-C							
Trt-Eval Interval	0	0	0	0							
Number of Decimals	0	0	0	0							
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	AMAPO	AMBEL	ABUTH	GLXMA
12	Boundary	6.5	L	1.8	pt/a	PRE	A	100	95	100	0
12	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
12	AMS		WG	17	lb/100 gal	EPOS	B				
13	Valor XLT	40.3	WG	4	oz/a	PRE	A	100	89	100	10
13	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
13	AMS		WG	17	lb/100 gal	POST	C				
14	Authority MTZ	45	WG	16	oz/a	PRE	A	100	95	100	2
14	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
14	AMS		WG	17	lb/100 gal	EPOS	B				
15	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	0	0	0	0
15	AMS		WG	17	lb/100 gal	POST	C				
LSD P=.05								.	5.1	.	3.8
Standard Deviation								0.0	3.5	0.0	2.7
CV								0.0	4.39	0.0	93.85

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code				
1	Authority First	70	WG	6.4	oz/a	PRE	A	100	100	100	98
1	Anthem MAXX	4.3	L	3	fl oz/a	EPOS	B				
1	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
1	AMS		WG	17	lb/100 gal	EPOS	B				
2	Authority First	70	WG	6.4	oz/a	PRE	A	95	100	100	99
2	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
2	AMS		WG	17	lb/100 gal	EPOS	B				
3	Authority XL	70	WG	4	oz/a	PRE	A	95	100	100	91
3	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
3	AMS		WG	17	lb/100 gal	EPOS	B				
4	Untreated							0	0	0	0
5	Authority Supreme	4.16	L	7	fl oz/a	PRE	A	100	100	100	100
5	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
5	AMS		WG	17	lb/100 gal	POST	C				
6	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	100	100	100	100
6	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
6	AMS		WG	17	lb/100 gal	POST	C				
7	Authority Supreme HL VHP58-002	4.25	L	11	fl oz/a	PRE	A	100	100	100	100
7	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
7	AMS		WG	17	lb/100 gal	POST	C				
8	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	100	100	100	100
8	Classic	25	WG	1.6	oz/a	PRE	A				
8	Metribuzin	75	WG	3.33	oz/a	PRE	A				
8	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
8	AMS		WG	17	lb/100 gal	POST	C				
9	Anthem MAXX	4.3	L	4	fl oz/a	PRE	A	100	100	100	100
9	Metribuzin	75	WG	6	oz/a	PRE	A				
9	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
9	AMS		WG	17	lb/100 gal	POST	C				
10	Zidua PRO	4.09	L	6	fl oz/a	PRE	A	99	100	100	100
10	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
10	AMS		WG	17	lb/100 gal	POST	C				
11	Fierce XLT	62.41	WG	4	oz/a	PRE	A	99	100	100	100
11	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
11	AMS		WG	17	lb/100 gal	POST	C				

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code				
12	Boundary	6.5	L	1.8	pt/a	PRE	A	100	100	100	100
12	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
12	AMS		WG	17	lb/100 gal	EPOS	B				
13	Valor XLT	40.3	WG	4	oz/a	PRE	A	97	100	100	100
13	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
13	AMS		WG	17	lb/100 gal	POST	C				
14	Authority MTZ	45	WG	16	oz/a	PRE	A	98	100	100	99
14	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
14	AMS		WG	17	lb/100 gal	EPOS	B				
15	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	100	99	100	90
15	AMS		WG	17	lb/100 gal	POST	C				
	LSD P=.05							2.5	0.7	.	3.9
	Standard Deviation							1.8	0.5	0.0	2.7
	CV							1.92	0.5	0.0	2.95

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code				
1	Authority First	70	WG	6.4	oz/a	PRE	A	100	0	100	100
1	Anthem MAXX	4.3	L	3	fl oz/a	EPOS	B				
1	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
1	AMS		WG	17	lb/100 gal	EPOS	B				
2	Authority First	70	WG	6.4	oz/a	PRE	A	100	0	95	100
2	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
2	AMS		WG	17	lb/100 gal	EPOS	B				
3	Authority XL	70	WG	4	oz/a	PRE	A	100	0	95	100
3	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
3	AMS		WG	17	lb/100 gal	EPOS	B				
4	Untreated							0	0	0	0
5	Authority Supreme	4.16	L	7	fl oz/a	PRE	A	100	0	100	100
5	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
5	AMS		WG	17	lb/100 gal	POST	C				
6	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	99	0	100	100
6	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
6	AMS		WG	17	lb/100 gal	POST	C				
7	Authority Supreme HL VHP58-002	4.25	L	11	fl oz/a	PRE	A	100	0	100	100
7	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
7	AMS		WG	17	lb/100 gal	POST	C				
8	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	100	0	100	100
8	Classic	25	WG	1.6	oz/a	PRE	A				
8	Metribuzin	75	WG	3.33	oz/a	PRE	A				
8	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
8	AMS		WG	17	lb/100 gal	POST	C				
9	Anthem MAXX	4.3	L	4	fl oz/a	PRE	A	100	0	99	100
9	Metribuzin	75	WG	6	oz/a	PRE	A				
9	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
9	AMS		WG	17	lb/100 gal	POST	C				
10	Zidua PRO	4.09	L	6	fl oz/a	PRE	A	100	0	99	100
10	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
10	AMS		WG	17	lb/100 gal	POST	C				
11	Fierce XLT	62.41	WG	4	oz/a	PRE	A	100	0	98	100
11	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
11	AMS		WG	17	lb/100 gal	POST	C				

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	ABUTH	GLXMA	ANGR	CHEAL
12	Boundary	6.5	L	1.8	pt/a	PRE	A	98	0	100	100
12	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
12	AMS		WG	17	lb/100 gal	EPOS	B				
13	Valor XLT	40.3	WG	4	oz/a	PRE	A	100	0	96	100
13	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
13	AMS		WG	17	lb/100 gal	POST	C				
14	Authority MTZ	45	WG	16	oz/a	PRE	A	100	0	97	100
14	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
14	AMS		WG	17	lb/100 gal	EPOS	B				
15	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	100	0	100	100
15	AMS		WG	17	lb/100 gal	POST	C				
	LSD P=.05							1.0	.	2.9	.
	Standard Deviation							0.7	0.0	2.0	0.0
	CV							0.77	0.0	2.18	0.0

Missing data estimates are included in columns: Average=51,52

Could not calculate LSD (% mean diff) for columns 5,7,11,14,16,17 because error mean square = 0.

Comparison of various Authority branded premixtures in Roundup Ready 2 Xtend soybean

Trial ID: SOY06-19

Location: Campus, C-14

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	AMAPO	AMBEL	ABUTH	GLXMA
Crop Type, Code	Jul-29-2019	Jul-29-2019	Jul-29-2019	Oct-8-2019
Rating Date	control	control	control	moisture
Rating Type	percent	percent	percent	percent
Rating Unit	28 DA-C	28 DA-C	28 DA-C	
Trt-Eval Interval	0	0	0	1
Number of Decimals				

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code				
1	Authority First	70	WG	6.4	oz/a	PRE	A	100	100	100	12.1
1	Anthem MAXX	4.3	L	3	fl oz/a	EPOS	B				
1	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
1	AMS		WG	17	lb/100 gal	EPOS	B				
2	Authority First	70	WG	6.4	oz/a	PRE	A	100	100	100	12.1
2	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
2	AMS		WG	17	lb/100 gal	EPOS	B				
3	Authority XL	70	WG	4	oz/a	PRE	A	100	95	100	12.0
3	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
3	AMS		WG	17	lb/100 gal	EPOS	B				
4	Untreated							0	0	0	12.0
5	Authority Supreme	4.16	L	7	fl oz/a	PRE	A	100	100	100	12.0
5	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
5	AMS		WG	17	lb/100 gal	POST	C				
6	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	100	100	100	12.0
6	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
6	AMS		WG	17	lb/100 gal	POST	C				
7	Authority Supreme HL VHP58-002	4.25	L	11	fl oz/a	PRE	A	100	100	100	11.9
7	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
7	AMS		WG	17	lb/100 gal	POST	C				
8	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	100	100	100	12.1
8	Classic	25	WG	1.6	oz/a	PRE	A				
8	Metribuzin	75	WG	3.33	oz/a	PRE	A				
8	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
8	AMS		WG	17	lb/100 gal	POST	C				
9	Anthem MAXX	4.3	L	4	fl oz/a	PRE	A	100	100	100	12.1
9	Metribuzin	75	WG	6	oz/a	PRE	A				
9	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
9	AMS		WG	17	lb/100 gal	POST	C				
10	Zidua PRO	4.09	L	6	fl oz/a	PRE	A	100	100	100	12.1
10	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
10	AMS		WG	17	lb/100 gal	POST	C				
11	Fierce XLT	62.41	WG	4	oz/a	PRE	A	100	100	100	11.9
11	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
11	AMS		WG	17	lb/100 gal	POST	C				

Missing data estimates are included in columns: Average=51,52

Could not calculate LSD (% mean diff) for columns 5,7,11,14,16,17 because error mean square = 0.

Comparison of various Authority branded premixtures in Roundup Ready 2 Xtend soybean

Trial ID: SOY06-19

Location: Campus, C-14

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	AMAPO	AMBEL	ABUTH	GLXMA
Crop Type, Code	Jul-29-2019	Jul-29-2019	Jul-29-2019	Oct-8-2019
Rating Date	control	control	control	moisture
Rating Type	percent	percent	percent	percent
Rating Unit	28 DA-C	28 DA-C	28 DA-C	
Trt-Eval Interval	0	0	0	1
Number of Decimals				

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code				
12	Boundary	6.5	L	1.8	pt/a	PRE	A	100	100	98	12.1
12	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
12	AMS		WG	17	lb/100 gal	EPOS	B				
13	Valor XLT	40.3	WG	4	oz/a	PRE	A	100	100	100	12.0
13	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C				
13	AMS		WG	17	lb/100 gal	POST	C				
14	Authority MTZ	45	WG	16	oz/a	PRE	A	100	100	100	12.1
14	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B				
14	AMS		WG	17	lb/100 gal	EPOS	B				
15	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	100	100	100	12.0
15	AMS		WG	17	lb/100 gal	POST	C				
	LSD P=.05							.	1.3	0.9	0.40
	Standard Deviation							0.0	0.9	0.6	0.28
	CV							0.0	0.99	0.68	2.34

Missing data estimates are included in columns: Average=51,52

Could not calculate LSD (% mean diff) for columns 5,7,11,14,16,17 because error mean square = 0.

Comparison of various Authority branded premixtures in Roundup Ready 2 Xtend soybean

Trial ID: SOY06-19

Location: Campus, C-14

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	
Crop Type, Code	GLXMA
Rating Date	Oct-8-2019
Rating Type	yield
Rating Unit	bu/acre
Trt-Eval Interval	at 13% M
Number of Decimals	1

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	
1	Authority First	70	WG	6.4	oz/a	PRE	A	46.5
1	Anthem MAXX	4.3	L	3	fl oz/a	EPOS	B	
1	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B	
1	AMS		WG	17	lb/100 gal	EPOS	B	
2	Authority First	70	WG	6.4	oz/a	PRE	A	45.9
2	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B	
2	AMS		WG	17	lb/100 gal	EPOS	B	
3	Authority XL	70	WG	4	oz/a	PRE	A	43.2
3	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B	
3	AMS		WG	17	lb/100 gal	EPOS	B	
4	Untreated							16.7
5	Authority Supreme	4.16	L	7	fl oz/a	PRE	A	43.1
5	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	
5	AMS		WG	17	lb/100 gal	POST	C	
6	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	45.3
6	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	
6	AMS		WG	17	lb/100 gal	POST	C	
7	Authority Supreme HL VHP58-002	4.25	L	11	fl oz/a	PRE	A	41.0
7	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	
7	AMS		WG	17	lb/100 gal	POST	C	
8	Authority Supreme HL VHP58-002	4.25	L	8	fl oz/a	PRE	A	42.5
8	Classic	25	WG	1.6	oz/a	PRE	A	
8	Metribuzin	75	WG	3.33	oz/a	PRE	A	
8	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	
8	AMS		WG	17	lb/100 gal	POST	C	
9	Anthem MAXX	4.3	L	4	fl oz/a	PRE	A	47.2
9	Metribuzin	75	WG	6	oz/a	PRE	A	
9	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	
9	AMS		WG	17	lb/100 gal	POST	C	
10	Zidua PRO	4.09	L	6	fl oz/a	PRE	A	47.3
10	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	
10	AMS		WG	17	lb/100 gal	POST	C	
11	Fierce XLT	62.41	WG	4	oz/a	PRE	A	47.0
11	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	
11	AMS		WG	17	lb/100 gal	POST	C	

Missing data estimates are included in columns: Average=51,52

Could not calculate LSD (% mean diff) for columns 5,7,11,14,16,17 because error mean square = 0.

Comparison of various Authority branded premixtures in Roundup Ready 2 Xtend soybean

Trial ID: SOY06-19

Location: Campus, C-14

Investigator: Christy Sprague

Study Director: Sprague, Powell, Stiles

Pest Code	
Crop Type, Code	GLXMA
Rating Date	Oct-8-2019
Rating Type	yield
Rating Unit	bu/acre
Trt-Eval Interval	at 13% M
Number of Decimals	1

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code	
12	Boundary	6.5	L	1.8	pt/a	PRE	A	48.3
12	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B	
12	AMS		WG	17	lb/100 gal	EPOS	B	
13	Valor XLT	40.3	WG	4	oz/a	PRE	A	43.8
13	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	
13	AMS		WG	17	lb/100 gal	POST	C	
14	Authority MTZ	45	WG	16	oz/a	PRE	A	47.0
14	Roundup PowerMax	4.5	SL	32	fl oz/a	EPOS	B	
14	AMS		WG	17	lb/100 gal	EPOS	B	
15	Roundup PowerMax	4.5	SL	32	fl oz/a	POST	C	45.3
15	AMS		WG	17	lb/100 gal	POST	C	
	LSD P=.05							8.10
	Standard Deviation							5.66
	CV							13.07

Missing data estimates are included in columns: Average=51,52

Could not calculate LSD (% mean diff) for columns 5,7,11,14,16,17 because error mean square = 0.