

Evaluation of Herbicide Programs for Soybeans with BOLT Technology in the Southern US.

Trial ID: 15-19B Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Trial Status: F one-year/final
Initiation Date: 6-11-15
Completion Date: 9-4-15

Trial Location

City: Belleville **Country:** USA
State/Prov.: Illinois IL
Postal Code: 62221

Objectives:

Evaluate crop tolerance of BOLT soybeans and weed control with BOLT-based herbicide programs compared to non-BOLT programs in the Southern US.

Contacts

Study Director: Ronald F. Krausz **Title:** Researcher/Farm Manager
Organization: Belleville Research Center - Southern Illinois Univ Carbondale
Address: 2036 Charles Lane **Phone No.:** 618-566-4761
City+State/Prov: Belleville, IL **E-mail:** rkrausz@siu.edu
Postal Code: 62221
Country: USA

Crop Description

Crop 1: GLXMA Glycine max **Soybean**
Variety: BOLT **BBCH Scale:** BSOY
Planting Rate, Unit: 140000 S/A **Planting Method:** SEEDED
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN

Pest Description

Pest 1 Type: W **Code:** SETFA *Setaria faberi* Herrm.
Common Name: foxtail, giant

Pest 2 Type: W **Code:** XANST *Xanthium strumarium* L.
Common Name: cocklebur, common

Pest 3 Type: W **Code:** IPOHE *Ipomoea hederacea* (L.) Jacq.
Common Name: morningglory, ivyleaf

Pest 4 Type: W **Code:** AMBTR *Ambrosia trifida* L.
Common Name: ragweed, giant

Pest 5 Type: W **Code:** AMATA *Amaranthus rudis* Sauer
Common Name: waterhemp, common

Site and Design

Treated Plot Width: 7.5 FT **Total Plot Width:** 10 FT **Site Type:** FIELD
Treated Plot Length: 25 FT **Total Plot Length:** 25 FT **Experimental Unit:** 1 PLOT
Tillage Type: REDTIL reduced-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)
Untreated Arrangement: INCLUDED single control randomized in each block

No.	Previous Crop	Year
1.	GLXMA	2014

Maintenance

No.	Maintenance Product Name
1.	N 0 LB/A, P2O5 50 LB/A, K2O 100 LB/A

Soil Description

Description Name: 19B_2013
% OM: 3.5 **Texture:** SIL silt loam
pH: 6.6 **Soil Name:** Bethalto
CEC: 12

Additional Measured Elements

Element	Quantity	Unit
P1	54	lb/A
K	335	lb/A

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Overall Moisture Conditions: ABONOR						Moisture and Weather Conditions				
Closest Weather Station: ICN - Belleville IL						Distance, Unit: 0.5 MI				
No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	5-29-15	2.15	IN	RAIN	rain	2	DAY			
2.	6-3-15					7	DAY	53	89	F
3.	6-5-15	0.17	IN	RAIN	rain	1	DAY			
4.	6-8-15	0.66	IN	RAIN	rain	1	DAY			
5.	6-10-15					7	DAY	64	91	F
6.	6-14-15	0.16	IN	RAIN	rain	1	DAY			
7.	6-15-15	0.11	IN	RAIN	rain	1	DAY			
8.	6-16-15	2.25	IN	RAIN	rain	1	DAY			
9.	6-17-15					7	DAY	69	91	F
10.	6-17-15	0.09	IN	RAIN	rain	1	DAY			
11.	6-18-15	0.14	IN	RAIN	rain	1	DAY			
12.	6-19-15	3.29	IN	RAIN	rain	1	DAY			
13.	6-20-15	0.2	IN	RAIN	rain	2	DAY			
14.	6-24-15					7	DAY	62	93	F
15.	6-25-15	1.66	IN	RAIN	rain	2	DAY			
16.	6-28-15	0.6	IN	RAIN	rain	2	DAY			
17.	7-1-15					7	DAY	63	88	F
18.	7-1-15	0.64	IN	RAIN	rain	2	DAY			
19.	7-7-15	1.33	IN	RAIN	rain	2	DAY			
20.	7-8-15					7	DAY	59	97	F
21.	7-10-15	0.26	IN	RAIN	rain	1	DAY			
22.	7-15-15					7	DAY	69	93	F
23.	7-19-15	0.35	IN	RAIN	rain	2	DAY			
24.	7-22-15					7	DAY	65	95	F
25.	7-26-15	1.21	IN	RAIN	rain	3	DAY			
26.	7-29-15					7	DAY	65	93	F
27.	8-5-15					7	DAY	64	88	F
28.	8-5-15	2.25	IN	RAIN	rain	1	DAY			
29.	8-9-15	0.47	IN	RAIN	rain	1	DAY			
30.	8-12-15					7	DAY	63	89	F
31.	8-18-15	2.23	IN	RAIN	rain	2	DAY			
32.	8-19-15					7	DAY	52	82	F
33.	8-22-15	0.18	IN	RAIN	rain	1	DAY			
34.	8-26-15					7	DAY	54	91	F
35.	9-2-15					7	DAY	68	94	F
36.	9-8-15	1.93	IN	RAIN	rain	2	DAY			

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Application Description

	A	B
Application Date:	6-12-15	7-10-15
Appl. Start Time:	13:15	15:30
Appl. Stop Time:	13:45	16:00
Application Method:	Spray	Spray
Application Timing:	PRE	2-4"W
Application Placement:	BROSOI	BROFOL
Applied By:	KNW	EAE
Air Temperature, Unit:	91 F	79 F
% Relative Humidity:	49	77
Wind Velocity, Unit:	10 MPH	1 MPH
Wind Direction:	SE	E
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	75 F	74 F
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	25	50
Next Moisture Occurred On:	6-14-15	7-19-15
Time to Next Moisture, Unit:	2 DAY	9 DAY

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA	GLXMA
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:	NA	V3
Stage Minimum, Percent:		V3
Stage Maximum, Percent:		V3
Height, Unit:		8 IN
Height Minimum, Maximum:		6 8

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:	NA	4
Stage Minimum, Percent:		3
Stage Maximum, Percent:		4
Height, Unit:		2 IN
Height Minimum, Maximum:		1 3
Density, Unit:		0.01 FT2
Pest 2 Code, Type, Scale:	XANST W	XANST W
Stage Majority, Percent:	NA	5
Stage Minimum, Percent:		5
Stage Maximum, Percent:		8
Height, Unit:		3 IN
Height Minimum, Maximum:		1 5
Density, Unit:		0.1 FT2
Pest 3 Code, Type, Scale:	IPOHE W	IPOHE W
Stage Majority, Percent:	NA	4
Stage Minimum, Percent:		2
Stage Maximum, Percent:		4
Height, Unit:		1 IN
Height Minimum, Maximum:		0.25 1
Density, Unit:		0.001 FT2
Pest 4 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	NA	6
Stage Minimum, Percent:		4
Stage Maximum, Percent:		8
Height, Unit:		4 IN
Height Minimum, Maximum:		2 4
Density, Unit:		0.1 FT2
Pest 5 Code, Type, Scale:	AMATA W	AMATA W
Stage Majority, Percent:	NA	6
Stage Minimum, Percent:		2
Stage Maximum, Percent:		8
Height, Unit:		1 IN
Height Minimum, Maximum:		1 3
Density, Unit:		0.1 FT2

Application Equipment

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Equipment Type:	BACSPR	BACSPR
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	XR	XR
Nozzle Size:	8002	8002
Boom Length, Unit:	7.5 FT	7.5 FT
Incorporation Equip.:	NA	NA
Spray Volume, Unit:	15 GPA	15 GPA

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	GLXMA 6-26-15 Injury Percent 14 DA-A 14 DAP	GLXMA 7-10-15 Injury Percent 28 DA-A 0 DA-B	GLXMA 7-17-15 Injury Percent 7 DA-B	GLXMA 7-24-15 Injury Percent 14 DA-B	GLXMA 8-7-15 Injury Percent 28 DA-B	GLXMA 9-4-15 Injury Percent 56 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	VALOR SX	51	WG	0.064 lb ai/a	2 oz/a		PRE	A	5 bc	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
2	ENVIVE	41.3	WG	0.09 lb ai/a	3.5 oz/a		PRE	A	8 abc	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
3	LEADOFF	33.4	SG	0.0313 lb ai/a	1.5 oz/a		PRE	A	0 c	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
4	LEADOFF	33.4	SG	0.0313 lb ai/a	1.5 oz/a		PRE	A	10 ab	0 a	0 a	0 a
	VALOR SX	51	WG	0.064 lb ai/a	2 oz/a		PRE	A				
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
5	DILIGENT	37.87	WG	0.095 lb ai/a	4 oz/a		PRE	A	0 c	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
6	AUTHORITY FIRST DF	70	WG	0.28 lb ai/a	6.4 oz/a		PRE	A	13 a	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
7	NONTREATED									0	0	0
LSD P=.05							8.1
Standard Deviation							4.2	0.0	0.0	0.0	0.0	0.0
CV							70.56	0.0	0.0	0.0	0.0	0.0
Replicate F							1.545	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)							0.2782	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F							4.900	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)							0.0302	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in
 columns: Average=5,11,17,23,29,35,6,12,18,24,30,36,7,13,19,25,31,37,8,14,20,26,32,38,9,15,21,27,33,39,10,16,22,28,34,40
 Could not calculate LSD (% mean diff) for columns 11,17,23,29,35,6,18,24,19,25,20,26,22 because error mean square = 0.

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Pest Code							SETFA	SETFA	SETFA	SETFA	SETFA	SETFA	
Crop Code							6-26-15	7-10-15	7-17-15	7-24-15	8-7-15	9-4-15	
Rating Date							Control	Control	Control	Control	Control	Control	
Rating Type							Percent	Percent	Percent	Percent	Percent	Percent	
Rating Unit							14 DA-A	28 DA-A	7 DA-B	14 DA-B	28 DA-B	56 DA-B	
Rating Timing							14 DAP	0 DA-B	7 DA-B	14 DA-B	28 DA-B	56 DA-B	
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99 a	93 b	99 a	95 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
2	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	99 a	99 a	99 a	95 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
3	LEADOFF	33.4	SG	0.0313	lb ai/a	1.5	oz/a	PRE	A	99 a	99 a	99 a	91 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
4	LEADOFF	33.4	SG	0.0313	lb ai/a	1.5	oz/a	PRE	A	99 a	98 a	99 a	96 a
	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
5	DILIGENT	37.87	WG	0.095	lb ai/a	4	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
6	AUTHORITY FIRST DF	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	93 b	99 a	94 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
7	NONTREATED									0	0	0	0
LSD P=.05											5.1	11.4	11.4
Standard Deviation										0.0	2.6	5.9	5.9
CV										0.0	2.73	6.21	6.21
Replicate F										0.000	0.566	0.000	0.155
Replicate Prob(F)										1.0000	0.5919	1.0000	0.8590
Treatment F										0.000	4.406	0.000	0.586
Treatment Prob(F)										1.0000	0.0392	1.0000	0.7124

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	XANST	XANST	XANST	XANST	XANST	XANST	
							6-26-15 Control Percent 14 DA-A 14 DAP	7-10-15 Control Percent 28 DA-A 0 DA-B	7-17-15 Control Percent 7 DA-B	7-24-15 Control Percent 14 DA-B	8-7-15 Control Percent 28 DA-B	9-4-15 Control Percent 56 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
2	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
3	LEADOFF	33.4	SG	0.0313	lb ai/a	1.5	oz/a	PRE	A	96 a	95 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
4	LEADOFF	33.4	SG	0.0313	lb ai/a	1.5	oz/a	PRE	A	99 a	96 a	99 a	99 a
	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
5	DILIGENT	37.87	WG	0.095	lb ai/a	4	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
6	AUTHORITY FIRST DF	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
7	NONTREATED									0	0	0	0
LSD P=.05										4.6	4.3	.	0.5
Standard Deviation										2.4	2.2	0.0	0.0
CV										2.45	2.27	0.0	0.0
Replicate F										0.700	1.227	0.000	0.000
Replicate Prob(F)										0.5283	0.3494	1.0000	1.0000
Treatment F										0.959	2.287	0.000	0.000
Treatment Prob(F)										0.5007	0.1554	1.0000	1.0000

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Crop Code							6-26-15	7-10-15	7-17-15	7-24-15	8-7-15	9-4-15
Rating Date							Control	Control	Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit							14 DA-A	28 DA-A	7 DA-B	14 DA-B	28 DA-B	56 DA-B
Rating Timing							14 DAP	0 DA-B				
Trt-Eval Interval												
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	VALOR SX	51	WG	0.064 lb ai/a	2 oz/a		PRE	A	99 a	95 a	99 a	97 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
2	ENVIVE	41.3	WG	0.09 lb ai/a	3.5 oz/a		PRE	A	99 a	97 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
3	LEADOFF	33.4	SG	0.0313 lb ai/a	1.5 oz/a		PRE	A	99 a	91 a	99 a	91 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
4	LEADOFF	33.4	SG	0.0313 lb ai/a	1.5 oz/a		PRE	A	99 a	94 a	99 a	95 a
	VALOR SX	51	WG	0.064 lb ai/a	2 oz/a		PRE	A				
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
5	DILIGENT	37.87	WG	0.095 lb ai/a	4 oz/a		PRE	A	99 a	95 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	SYNCHRONY XP	28.4	WG	0.00666 lb ai/a	0.375 oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
6	AUTHORITY FIRST DF	70	WG	0.28 lb ai/a	6.4 oz/a		PRE	A	99 a	99 a	99 a	96 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B				
	AMS	100	SG	2.04 % w/w	17 lb/100 gal		2-4"W	B				
7	NONTREATED							0	0	0	0	0
LSD P=.05							0.5	12.8	.	.	6.9	6.9
Standard Deviation							0.3	6.6	0.0	0.0	3.6	3.6
CV							0.28	6.98	0.0	0.0	3.71	3.71
Replicate F							0.700	0.156	0.000	0.000	2.802	2.802
Replicate Prob(F)							0.5283	0.8582	1.0000	1.0000	0.1277	0.1277
Treatment F							0.700	0.467	0.000	0.000	1.875	1.875
Treatment Prob(F)							0.6410	0.7904	1.0000	1.0000	0.2171	0.2171

Evaluation of Herbicide Programs for Soybeans with BOLT Technology in the Southern US.

Trial ID: 15-19B Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Pest Code							AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	
Crop Code							6-26-15	7-10-15	7-17-15	7-24-15	8-7-15	9-4-15	
Rating Date							Control	Control	Control	Control	Control	Control	
Rating Type							Percent	Percent	Percent	Percent	Percent	Percent	
Rating Unit							14 DA-A	28 DA-A	7 DA-B	14 DA-B	28 DA-B	56 DA-B	
Rating Timing							14 DAP	0 DA-B					
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99 a	89 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
2	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	99 a	97 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
3	LEADOFF	33.4	SG	0.0313	lb ai/a	1.5	oz/a	PRE	A	96 a	59 a	96 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
4	LEADOFF	33.4	SG	0.0313	lb ai/a	1.5	oz/a	PRE	A	99 a	92 a	99 a	99 a
	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
5	DILIGENT	37.87	WG	0.095	lb ai/a	4	oz/a	PRE	A	99 a	97 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
6	AUTHORITY FIRST DF	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	94 a	99 a	98 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
7	NONTREATED									0	0	0	0
LSD P=.05										4.5	48.4	4.9	4.9
Standard Deviation										2.3	25.1	2.5	2.6
CV										2.37	28.55	2.57	2.6
Replicate F										1.073	1.037	0.700	0.731
Replicate Prob(F)										0.3922	0.4033	0.5283	0.5150
Treatment F										0.945	0.973	0.700	0.636
Treatment Prob(F)										0.5075	0.4941	0.6410	0.6804
													0.318
													0.7375
													0.509
													0.7626

Evaluation of Herbicide Programs for Soybeans with BOLT Technology in the Southern US.

Trial ID: 15-19B Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Pest Code							AMATA	AMATA	AMATA	AMATA	AMATA	AMATA	
Crop Code							6-26-15	7-10-15	7-17-15	7-24-15	8-7-15	9-4-15	
Rating Date							Control	Control	Control	Control	Control	Control	
Rating Type							Percent	Percent	Percent	Percent	Percent	Percent	
Rating Unit							14 DA-A	28 DA-A	7 DA-B	14 DA-B	28 DA-B	56 DA-B	
Rating Timing							14 DAP	0 DA-B	7 DA-B	14 DA-B	28 DA-B	56 DA-B	
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99 a	95 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
2	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	99 a	98 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
3	LEADOFF	33.4	SG	0.0313	lb ai/a	1.5	oz/a	PRE	A	66 a	55 a	99 a	93 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				90 b
4	LEADOFF	33.4	SG	0.0313	lb ai/a	1.5	oz/a	PRE	A	99 a	98 a	99 a	99 a
	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
5	DILIGENT	37.87	WG	0.095	lb ai/a	4	oz/a	PRE	A	99 a	97 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				
	SYNCHRONY XP	28.4	WG	0.00666	lb ai/a	0.375	oz/a	2-4"	W B				
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				
6	AUTHORITY FIRST DF	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W B				98 a
	AMS	100	SG	2.04	% w/w	17	lb/100 gal	2-4"	W B				98 a
7	NONTREATED									0	0	0	0
LSD P=.05										53.8	44.8	.	4.9
Standard Deviation										27.9	23.2	0.0	2.5
CV										29.83	25.69	0.0	2.59
Replicate F										0.700	0.865	0.000	0.700
Replicate Prob(F)										0.5283	0.4616	1.0000	0.5283
Treatment F										0.700	1.681	0.000	2.800
Treatment Prob(F)										0.6410	0.2566	1.0000	0.1060
													0.714
													0.5223
													5.247
													0.0255

Trial Comments

1. Protocol: DuPont (US 174/45/01).
2. Ratings:
CI 14 DAP; CI 0, 7, 14, 28, and 56 DA-B.
WC 14 DAP; WC 0, 14, 28, and 56 DA-B.
Rate before spray application B.
3. Yield not requested.
4. Herbicides are not yet approved, do not sell grain.
5. Rainfall following the PRE application was 2.52 inch over 3 days beginning 2 days later.
Rainfall following the 2-4"W application was 0.35 inch over 2 days beginning 9 days later.
6. Missing data for plots 101, 102, and 105 was due to flooding.
7. Crop injury at at 14 DAP was stunting.
8. Not harvested.