

The Ohio State University

Soybean Showcase Treatments

Trial ID: 24SOYSHOW
 Protocol ID: 24SOYSHOW Location: Trial Year: 2024
 Study Director: Sponsor Contact:
 Investigator:

Crop Description

Crop 1: C GLXMA Glycine max	Soybean	BBCH Scale: BSOY
Entry Date: May-8-2024	Stage Scale: BBCH	
Variety: P34A98E	Maturity Group: 3.4	
Attributes: RR,LL,2,4-D toleranrt	Seed Source: Pioneer	
Seed Lot No: W3WOO13041-LIT-1023	1000 Seed Weight: 0.43 LB	
% Germination: 90	Seed Size: 2310 S/LB	
	Seed Treatment Products: LumiTreo, Lumiderm, llevo HL	
Planting Date: May-2-2024	Planting Rate: 155000 S/A	
Depth: 1 IN		
Rows per Plot: 8	Planting Method: PLANTD planted	
Row Spacing: 15 IN	Planting Equipment: FE field equipment	
	Seed Bed: MEDIUM medium	
Soil Temperature: 68 F	Soil Moisture: SLIDRY slightly dry	
Emergence Date: May-14-2024		

Pest Description

Pest 1 Type: W Code: SETFA Setaria faberi	Entry Date: May-30-2024
Common Name: Giant foxtail	Stage Scale: BBCH
Pest 2 Type: W Code: SETPU Setaria pumila	Entry Date: May-30-2024
Common Name: yellow foxtail	Stage Scale: BBCH
Pest 3 Type: W Code: AMBTR Ambrosia trifida	Entry Date: May-30-2024
Common Name: Giant ragweed	Stage Scale: BBCH
Pest 4 Type: W Code: CHEAL Chenopodium album	Entry Date: May-30-2024
Common Name: common lambsquarters	Stage Scale: BBCH
Pest 5 Type: W Code: AMARE Amaranthus retroflexus	Entry Date: May-30-2024
Common Name: Redroot pigweed	Stage Scale: BBCH
Pest 6 Type: W Code: ABUTH Abutilon theophrasti	Entry Date: May-30-2024
Common Name: velvetleaf	Stage Scale: BBCH
Pest 7 Type: W Code: SIDSP Sida spinosa	Entry Date: May-30-2024
Common Name: Prickly sida	Stage Scale: BBCH
Pest 8 Type: W Code: HIBTR Hibiscus trionum	Entry Date: May-30-2024
Common Name: Venice mallow	Stage Scale: BBCH
Pest 9 Type: W Code: IPOHE Ipomoea hederacea	Entry Date: May-30-2024
Common Name: ivy-leaf morning glory	Stage Scale: BBCH

Site and Design

Treated Plot Width: 10 FT	Site Type: FIELD field
Treated Plot Length: 30 FT	Experimental Unit: 1 PLOT plot
Treated Plot Area: 300.0 FT2	Tillage Type: CONTIL conventional-till
Replications: 3	Treatments: 16 Plots: 48
Distance between Blocks: 5 FT	Study Design: RACOBL Randomized Complete Block (RCB)
Distance between 'Plot' Experimental Units: 0 FT	

Previous
 No. Crop Year
 1. CORN 2023

Soil Description

Description Name: F-7 East
 % Sand: 37 % OM: 2.8 Texture: L loam
 % Silt: 48 Soil Name: Kokomo
 % Clay: 15 Fert. Level: G good
 pH: 5.7 CEC: 11

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Application Description

	A	B	C	D
Date	May-2-2024	May-30-2024	Jun-4-2024	Jun-13-2024
Start Time	8:00 PM	12:30 PM	8:30 AM	8:30 AM
Stop Time	8:35 PM	12:35 PM	9:00 AM	8:35 AM
Interval to Prev. Appl.		28 DAYS	5 DAYS	9 DAYS
Method	SPRAY	SPRAY	SPRAY	SPRAY
Timing	PRE	V3	POST	LPO
Placement	BROSOI	BROFOL	BROFOL	BROFOL
Mixed/Prepared By			Dobbels	Dobbels
Applied By	BARCLAY	Dobbels	Dobbels	Dobbels
Entry Date	May-3-2024	May-30-2024	Jun-5-2024	Jun-13-2024
Air Temperature Start, Stop	66, 66 F	65, 65 F	73, 73 F	70, 70 F
% Relative Humidity Start, Stop	41, 41	41, 41	83, 83	56, 56
Wind Velocity+Dir. Start	3 MPH, W	4 MPH, S	5 MPH, E	3 MPH, N
Wind Velocity+Dir. Stop	3 MPH, W	4 MPH, S	5 MPH, E	3 MPH, N
Wind Velocity+Dir. Max	4.6 MPH, W	5 MPH, S	6 MPH, E	3.5 MPH, N
Wet Leaves (Y/N)	N, no	N, no	Y, yes	N, no
Soil Temperature	58 F	62 F	67 F	66 F
Soil Temperature Depth	6 IN	6 IN	6 IN	6 IN
Soil Moisture	DRY	SLIWET	DRY	DRY
Soil Surface Condition	MEDIUM	MEDIUM	MEDIUM	MEDIUM
% Ground Cover	0	100	70	50
% Cloud Cover	0	50	50	25
First Moisture Occurred On	May-3-2024	Jun-1-2024	Jun-4-2024	Jun-17-2024
Time to First Moisture	21.0 HR	2.0 DAY	12.0 HR	4.0 DAY
Amount of First Moisture	0.25 IN	0.01 IN	0.24 IN	0.09 IN
Moisture 1 Week Before Appl.	0.38 IN	0.69 IN	0.57 IN	0.01 IN
Moisture 6 Hours After Appl.	0 IN	0 IN	0 IN	0 IN
Moisture 24 Hours After Appl.	0.25 IN	0 IN	0.24 IN	0 IN
Moisture 1 Week After Appl.	0.82 IN	0.67 IN	0.64 IN	0.09 IN
Problems with Application?	N, no	N, no	N, no	N, no

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale	GLXMA, BSOY	GLXMA, BSOY	GLXMA, BSOY	GLXMA, BSOY
Days after Emergence	-12	16	21	30
Stage Majority, Percent		13, 90	14, 80	14, 80
Stage Minimum, Percent		12, 10	13, 20	14, 80
Stage Maximum, Percent		13, 90	14, 80	15, 20
Height Average		5 IN	6 IN	8 IN
Height Minimum, Maximum		4, 5	5, 6	6, 9

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Type, Scale	SETFA, W, BBCH	SETFA, W, BBCH	SETFA, W, BBCH	SETFA, W, BBCH
Stage Majority, Percent		12, 80	15, 70	
Stage Minimum, Percent		11, 10	13, 10	
Stage Maximum, Percent		13, 10	15, 70	
Height Average		3 IN	4 IN	
Height Minimum, Maximum		1, 4	4, 6	
Relative Density		HIGH	HIGH	
Density Average		1312 M2	1312 M2	
Density Minimum, Maximum		956, 1485	956, 1485	
Pest 2 Code, Type, Scale	SETPU, W, BBCH	SETPU, W, BBCH	SETPU, W, BBCH	SETPU, W, BBCH
Stage Majority, Percent		12, 80	22, 80	23, 70
Stage Minimum, Percent		11, 10	13, 10	22, 10
Stage Maximum, Percent		13, 10	22, 80	24, 10
Height Average		3 IN	4 IN	4 IN
Height Minimum, Maximum		1, 4	1, 4	3, 6
Relative Density		MEDIUM	MEDIUM	MEDIUM
Density Average		95 M2	95 M2	50 M2
Density Minimum, Maximum		35, 189	35, 189	12, 68
Pest 3 Code, Type, Scale	AMBTR, W, BBCH	AMBTR, W, BBCH	AMBTR, W, BBCH	AMBTR, W, BBCH
Stage Majority, Percent		18, 80	18, 80	14, 80
Stage Minimum, Percent		14, 10	14, 10	12, 20
Stage Maximum, Percent		18, 80	18, 80	14, 80
Height Average		7 IN	9 IN	2 IN
Height Minimum, Maximum		3, 8	2, 9	1, 3
Relative Density		HIGH	HIGH	LOW
Density Average		12 M2	12 M2	2 M2
Density Minimum, Maximum		8, 25	8, 25	1, 5
Pest 4 Code, Type, Scale	CHEAL, W, BBCH	CHEAL, W, BBCH	CHEAL, W, BBCH	CHEAL, W, BBCH
Stage Majority, Percent		14, 80		14, 80
Stage Minimum, Percent		12, 20		14, 80
Stage Maximum, Percent		14, 80		18, 10
Height Average		1 IN		3 IN
Height Minimum, Maximum		1, 2		2, 4

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Relative Density		HIGH		LOW
Density Average		24 M2		5 M2
Density Minimum, Maximum		18, 36		0, 10
Pest 5 Code, Type, Scale	AMARE, W, BBCH	AMARE, W, BBCH	AMARE, W, BBCH	AMARE, W, BBCH
Stage Majority, Percent		14, 80		
Stage Minimum, Percent		12, 20		
Stage Maximum, Percent		14, 80		
Height Average		1 IN		
Height Minimum, Maximum		0.5, 1		
Relative Density		LOW		
Density Average		2 M2		
Density Minimum, Maximum		1, 5		
Pest 6 Code, Type, Scale	ABUTH, W, BBCH	ABUTH, W, BBCH	ABUTH, W, BBCH	ABUTH, W, BBCH
Stage Majority, Percent		13, 80		13, 80
Stage Minimum, Percent		12, 10		12, 10
Stage Maximum, Percent		13, 80		13, 80
Height Average		3 IN		3 IN
Height Minimum, Maximum		1, 3		1, 3
Relative Density		LOW		LOW
Density Average		3 M2		0.33 M2
Density Minimum, Maximum		1, 6		0, 1
Pest 7 Code, Type, Scale	SIDSP, W, BBCH	SIDSP, W, BBCH	SIDSP, W, BBCH	SIDSP, W, BBCH
Stage Majority, Percent		13, 80		
Stage Minimum, Percent		12, 10		
Stage Maximum, Percent		13, 80		
Height Average		2 IN		
Height Minimum, Maximum		1, 2		
Relative Density		MEDIUM		
Density Average		4 M2		
Density Minimum, Maximum		2, 8		
Pest 8 Code, Type, Scale	HIBTR, W, BBCH	HIBTR, W, BBCH	HIBTR, W, BBCH	HIBTR, W, BBCH
Stage Majority, Percent		13, 80		
Stage Minimum, Percent		12, 20		
Stage Maximum, Percent		13, 80		
Height Average		3 IN		
Height Minimum, Maximum		1, 3		
Relative Density		LOW		
Density Average		3 M2		
Density Minimum, Maximum		3, 8		
Pest 9 Code, Type, Scale	IPOHE, W, BBCH	IPOHE, W, BBCH	IPOHE, W, BBCH	IPOHE, W, BBCH
Stage Majority, Percent		12, 70		
Stage Minimum, Percent		10, 20		
Stage Maximum, Percent		13, 10		
Height Average		2 IN		
Height Minimum, Maximum		1, 2		
Relative Density		LOW		
Density Average		1 M2		
Density Minimum, Maximum		0, 5		

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Appl Code	Appl Timing	Rep 1	Rep 2	Rep 3	Notes
1	Tendovo	4.177	LBA/GAL	ZC	2.1 qt/a	2.2 lb ai/a		A	PRE	101	216	304	
	Dual Magnum	7.62	LBA/GAL	EC	1.5 pt/a	1.43 lb ai/a		C	POST				
	Roundup Powermax 3	4.79	LBAE/GAL	SL	28 oz/a	1.05 lb ae/a		C	POST				
	Enlist One	3.8	LBAE/GAL	SL	614 oz/a	18.2 lb ai/a		C	POST				
	AMSOL	100 %		L	6 % v/v	6 % v/v		C	POST				
2	Fierce EZ	3.04	LBA/GAL	SC	6 oz/a	0.143 lb ai/a		A	PRE	102	205	306	
	Perpetuo	2.3	LBA/GAL	SC	6 oz/a	0.108 lb ai/a		C	POST				
	Liberty	2.34	LBA/GAL	SL	32 oz/a	0.585 lb ai/a		C	POST				
	COC	100 %		SL	1 % v/v	1 % v/v		C	POST				
	AMSOL	100 %		L	6 % v/v	6 % v/v		C	POST				
3	Sonic	70 %	AW/W	DF	6 oz/a	0.263 lb ai/a		A	PRE	103	206	305	
	Enversa	3	LBA/GAL	CS	48 oz/a	1.13 lb ai/a		C	POST				
	Liberty	2.34	LBA/GAL	SL	32 oz/a	0.585 lb ai/a		C	POST				
	COC	100 %		SL	0.5 % v/v	0.5 % v/v		C	POST				
	AMSOL	100 %		L	6 % v/v	6 % v/v		C	POST				
4	EXP1	100 %		L	32 oz/a			A	PRE	104	213	308	
	Liberty	2.34	LBA/GAL	SL	32 oz/a	0.585 lb ai/a		C	POST				
	COC	100 %		SL	1 % v/v	1 % v/v		C	POST				
	AMSOL	100 %		L	6 % v/v	6 % v/v		C	POST				
5	EXP1	100 %		L	32 oz/a			A	PRE	105	215	315	

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Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Rate Unit	Other Rate	Other Unit	Appl Code	Appl Timing	Rep 1	Rep 2	Rep 3	Notes
	Liberty	2.34	LBA/GAL	SL	32 oz/a		0.585 lb ai/a		C	POST				
	Roundup Powermax 3	4.79	LBAE/GAL	SL	30 oz/a		1.12 lb ae/a		C	POST				
	COC	100 %		SL	1 % v/v		1 % v/v		C	POST				
	AMSOL	100 %		L	6 % v/v		6 % v/v		C	POST				
6	EXP1	100 %		L	24 oz/a				A	PRE	106	204	302	
	EXP1	100 %		L	16 oz/a				C	POST				
	Liberty	2.34	LBA/GAL	SL	32 oz/a		0.585 lb ai/a		C	POST				
	COC	100 %		SL	1 % v/v		1 % v/v		C	POST				
	AMSOL	100 %		L	6 % v/v		6 % v/v		C	POST				
7	Authority Supreme	4.16	LBA/GAL	SC	6.5 oz/a		0.211 lb ai/a		A	PRE	107	203	303	
	Anthem Maxx	4.3	LB/GAL	SC	2.5 oz/a		0.084 lb ai/a		C	POST				
	Liberty	2.34	LBA/GAL	SL	32 oz/a		0.585 lb ai/a		C	POST				
	AMSOL	100 %		L	6 % v/v		6 % v/v		C	POST				
8	Authority Edge	4.25	LBA/GAL	SC	7 oz/a		0.232 lb ai/a		A	PRE	108	209	309	
	Anthem Maxx	4.3	LB/GAL	SC	3 oz/a		0.101 lb ai/a		C	POST				
	Liberty	2.34	LBA/GAL	SL	32 oz/a		0.585 lb ai/a		C	POST				
	AMSOL	100 %		L	6 % v/v		6 % v/v		C	POST				
9	Authority XL	70 %	AW/W	DF	4 oz/a		0.175 lb ai/a		A	PRE	109	211	307	
	Metribuzin	75 %	AW/W	DF	5 oz/a		0.234 lb ai/a		A	PRE				
	Anthem Maxx	4.3	LB/GAL	SC	3 oz/a		0.101 lb ai/a		C	POST				
	Liberty	2.34	LBA/GAL	SL	32 oz/a		0.585 lb ai/a		C	POST				
	AMSOL	100 %		L	6 % v/v		6 % v/v		C	POST				
10	Preview 2:1	3.35	LBA/GAL	SC	21 oz/a		0.55 lb ai/a		A	PRE	110	208	314	
	Intermoc	3.57	LBA/GAL	SE	64 oz/a		1.79 lb ai/a		C	POST				
	Velexi	0.34238	LBA/GAL	L	12.8 oz/a		0.0342 lb ai/a		C	POST				
	AMSOL	100 %		L	6 % v/v		3.6 qt/a		C	POST				
11	Preview 2:1	3.35	LBA/GAL	SC	21 oz/a		0.55 lb ai/a		A	PRE	111	201	316	
	Mocassin	8	LB/GAL	EC	1.1 pt/a		1.1 lb ai/a		A	PRE				
	Intermoc	3.57	LBA/GAL	SE	64 oz/a		1.79 lb ai/a		C	POST				
	Velexi	0.34238	LBA/GAL	L	12.8 oz/a		0.0342 lb ai/a		C	POST				
	AMSOL	100 %		L	6 % v/v		3.6 qt/a		C	POST				
12	Preview 2:1	3.35	LBA/GAL	SC	21 oz/a		0.55 lb ai/a		A	PRE	112	207	301	
	Satellite Hyrocap	3.8	LB/GAL	CS	2 pt/a		0.95 lb ai/a		A	PRE				
	Intermoc	3.57	LBA/GAL	SE	64 oz/a		1.79 lb ai/a		C	POST				
	Velexi	0.34238	LBA/GAL	L	12.8 oz/a		0.0342 lb ai/a		C	POST				
	AMSOL	100 %		L	6 % v/v		3.6 qt/a		C	POST				
13	Zidua Pro	4.09	LBA/GAL	SC	6 oz/a		0.192 lb ai/a		A	PRE	113	202	310	
	BAS 101005H	1.76	LB/GAL	SL	24 oz/a		370 g ai/ha		C	POST				
	Outlook	6	LB/GAL	EC	12.8 oz/a		670 g ai/ha		C	POST				
	AMSOL	100 %		L	6 % v/v		3.6 qt/a		C	POST				
14	Sonic	70 %	AW/W	DF	6.45 oz/a		0.282 lb ai/a		A	PRE	114	212	312	
	Surmise 5	4.6	LB/GAL	SL	16.4 oz/a		660 g ai/ha		C	POST				
	Dual II Magnum	7.64	LB/GAL	EC	16 oz/a		1070 g ai/ha		C	POST				
	AMSOL	100 %		L	6 % v/v		3.6 qt/a		C	POST				
15	Zalo	2.57	LBA/GAL	SL	32 oz/a		0.64 lb ai/a		B	EPO	115	214	313	
	COC	100 %		SL	1 % v/v		0.6 qt/a		B	EPO				
	AMSOL	100 %		L	6 % v/v		3.6 qt/a		B	EPO				
	Zalo	2.57	LBA/GAL	SL	32 oz/a		0.64 lb ai/a		D	LPO				
	COC	100 %		SL	1 % v/v		0.6 qt/a		D	LPO				
	AMSOL	100 %		L	6 % v/v		3.6 qt/a		D	LPO				
16	Zalo	2.57	LBA/GAL	SL	32 oz/a		0.64 lb ai/a		B	EPO	116	210	311	
	Dual II Magnum	7.64	LB/GAL	EC	1.33 pt/a		1.27 lb ai/a		B	EPO				
	COC	100 %		SL	1 % v/v		0.6 qt/a		B	EPO				
	AMSOL	100 %		L	6 % v/v		3.6 qt/a		B	EPO				

Sort Order: Replicate 1