

The Ohio State University

Herbicide - Sales Support - 2023 US

Trial ID: USNK0H5022023
 Protocol ID: HAISSUP4-2023US Location: Bruns Dain FS Trial Year: 2023
 Master Protocol ID:
 Study Director: Investigator: Dain Bruns Sponsor Contact: Gordon Vail
 Conducted Under GEP: No
 Trial Origin: P public institution trial

Crop Description

Crop 1: C GLXMA Glycine max Soybean BBCH Scale: BSOY
 Entry Date: Jun-7-2023 Stage Scale: BBCH
 Variety: P35T15E
 Attributes: 2,4-D Choline, Glyphosate, Glufosinate Tol
 Seed Lot No: X3HED13034-00-0769 Seed Source: Pioneer IA
 % Germination: 90
 Planting Date: May-31-2023 Planting Rate: 160000 S/A
 Depth: 1 IN Planting Method: PLANTD planted
 Rows per Plot: 8 Planting Equipment: FE field equipment
 Row Spacing: 15 IN Seed Bed: MEDIUM medium
 Soil Moisture: DRY dry
 Soil Temperature: 68 F
 Emergence Date: Jun-15-2023 Harvest Equipment: Kincaid 8XP
 Harvest Date: Oct-10-2023 Harvested Width: 6.25 FT
 Moisture Meter: Harvest Master Harvested Length: 30 FT
 % Standard Moisture: 13
 Weighing Equipment: Harvest Master HM800

Pest Description

Pest 1 Type: W Code: SETFA Setaria faberi Entry Date: Jul-6-2023
 Common Name: Giant foxtail Stage Scale: BBCH
 Artificial Population: N no
 Pest 2 Type: W Code: ECHCG Echinochloa crus-galli Entry Date: Jul-6-2023
 Common Name: common barnyardgrass Stage Scale: BBCH
 Artificial Population: N no
 Pest 3 Type: W Code: AMBTR Ambrosia trifida Entry Date: Jul-6-2023
 Common Name: Giant ragweed Stage Scale: BBCH
 Attributes: gly-R Artificial Population: N no
 Pest 4 Type: W Code: AMARE Amaranthus retroflexus Entry Date: Jul-6-2023
 Common Name: Redroot pigweed Stage Scale: BBCH
 Artificial Population: N no
 Pest 5 Type: W Code: IPOHE Ipomoea hederacea Entry Date: Jul-6-2023
 Common Name: ivy-leaf morning glory Stage Scale: BBCH
 Artificial Population: N no
 Pest 6 Type: W Code: ABUTH Abutilon theophrasti Entry Date: Jul-6-2023
 Common Name: velvetleaf Stage Scale: BBCH
 Artificial Population: N no
 Pest 7 Type: W Code: CHEAL Chenopodium album Entry Date: Jul-6-2023
 Common Name: common lambsquarters Stage Scale: BBCH
 Artificial Population: N no

Site and Design

Treated Plot Width: 6.67 FT Total Plot Width: 10 FT Site Type: FIELD field
 Treated Plot Length: 30 FT Total Plot Length: 30 FT Experimental Unit: 1 PLOT plot
 Treated Plot Area: 200.1 FT² Tillage Type: CONTIL conventional-till
 Replications: 4 Treatments: 10 Plots: 40 Study Design: RACOB L Randomized Complete Block (RCB)
 Untreated Arrangement: INCLUDED single control randomized in each block

Previous Previous
 No. Crop Pest Type Year
 1. GLXMA W 2022

Soil Description

Description Name: Big E
 % Sand: 44 % OM: 3.1 Texture: SICL silty clay loam
 % Silt: 45 Soil Name: Kokomo
 % Clay: 11 Fert. Level: G good
 pH: 6.6 CEC: 15
 Soil Drainage: G good

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Application Description

	A	B
Date	Jun-1-2023	Jul-5-2023
Start Time	9:14 AM	10:15 AM
Stop Time	9:30 AM	10:30 AM
Method	SPRAY	SPRAY
Timing	PREPRE	POSPOS
Placement	BROSOI	BROFOL
Applied By	Loux	MCCORMICK
Entry Date	Jun-2-2023	Jul-6-2023
Air Temperature Start, Stop	69, 69 F	80, 80 F
% Relative Humidity Start, Stop	63, 63	74, 74
Wind Velocity+Dir. Start	5 MPH, E	3 MPH, W
Wind Velocity+Dir. Stop	5 MPH, E	3 MPH, W
Wind Velocity+Dir. Max	5 MPH, E	3 MPH, W
Wet Leaves (Y/N)	N, no	N, no
Soil Temperature	69 F	65 F
Soil Moisture	DRY	SLIWET
% Cloud Cover	0	20
First Moisture Occurred On	Jun-2-2023	Jul-6-2023
Time to First Moisture	24.0 HR	25.0 HR
Moisture 24 Hours after Appl.	0.5 IN	0 IN
Moisture 1 Week after Appl.	0.54 IN	0.69 IN
Problems with Application?	N, no	N, no

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale	GLXMA, BSOY	GLXMA, BSOY
Stage Majority, Percent	00, -	14, 80
Stage Minimum, Percent	00, -	13, 10
Stage Maximum, Percent	00, -	15, 10
Height Average		5 IN
Height Minimum, Maximum		4, 8

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale	SETFA, W, BBCH	SETFA, W, BBCH
Stage Majority, Percent	00, -	16, 70
Stage Minimum, Percent	00, -	13, 10
Stage Maximum, Percent	00, -	19, 10
Height Average	0 IN	3 IN
Height Minimum, Maximum	0, 0	2, 9
Density Average		896 m2
Density Minimum, Maximum		695, 1125
Pest 2 Code, Type, Scale	ECHCG, W, BBCH	ECHCG, W, BBCH
Stage Majority, Percent	00, -	16, 70
Stage Minimum, Percent	00, -	13, 10
Stage Maximum, Percent	00, -	19, 10
Height Average	0 IN	3 IN
Height Minimum, Maximum	0, 0	2, 9
Density Average		35 m2
Density Minimum, Maximum		15, 42
Pest 3 Code, Type, Scale	AMBTR, W, BBCH	AMBTR, W, BBCH
Stage Majority, Percent	00, -	18, 70
Stage Minimum, Percent	00, -	16, 10
Stage Maximum, Percent	00, -	19, 10
Height Average	0 IN	4 IN
Height Minimum, Maximum	0, 0	2, 10
Density Average		8 m2
Density Minimum, Maximum		4, 12
Pest 4 Code, Type, Scale	AMARE, W, BBCH	AMARE, W, BBCH
Stage Majority, Percent	00, -	16, 70
Stage Minimum, Percent	00, -	14, 10
Stage Maximum, Percent	00, -	19, 10
Height Average	0 IN	4 IN
Height Minimum, Maximum	0, 0	3, 5
Density Average		3 m2
Density Minimum, Maximum		1, 9
Pest 5 Code, Type, Scale	IPOHE, W, BBCH	IPOHE, W, BBCH
Stage Majority, Percent	00, -	14, 80
Stage Minimum, Percent	00, -	12, 10
Stage Maximum, Percent	00, -	14, 80
Height Average	0 IN	3 IN
Height Minimum, Maximum	0, 0	2, 4
Density Average		0.33 m2
Density Minimum, Maximum		0, 1
Pest 6 Code, Type, Scale	ABUTH, W, BBCH	ABUTH, W, BBCH
Stage Majority, Percent	00, -	14, 70
Stage Minimum, Percent	00, -	12, 10
Stage Maximum, Percent	00, -	18, 10
Height Average	0 IN	4 IN
Height Minimum, Maximum	0, 0	2, 5
Density Average		1 m2
Density Minimum, Maximum		0, 3
Pest 7 Code, Type, Scale	CHEAL, W, BBCH	CHEAL, W, BBCH
Stage Majority, Percent	00, -	18, 70
Stage Minimum, Percent	00, -	14, 10
Stage Maximum, Percent	00, -	19, 10
Height Average	0 IN	4 IN
Height Minimum, Maximum	0, 0	2, 6
Density Average		14 m2
Density Minimum, Maximum		10, 24

Application Equipment

	A	B
Equipment Name	6' TTI	6' AIXR
Equipment Type	BACCAI	BACCAI
Operation Pressure	44 PSI	44 PSI
Nozzle Model	1110015	110015
Nozzle Type	TEEJAI	ARINDH
Nozzle TradeName	Turbuo Tee Inducted	Air Inducted XR Flat
Nozzle Tip Size, Color	015, GREEN	015, GREEN
Nozzle Spacing	18 IN	18 IN
Boom Length	6.67 FT	6.67 FT
Boom Height	20 IN	20 IN
Ground Speed	3 MPH	3 MPH
Carrier	WATER	WATER
Water Hardness (ppm CaCO3)	250	250
Application Amount	15 GAL/AC	15 GAL/AC
Mix Size	1 L	1 L
Spray pH	7.8	7.8
Propellant	COMCO2	COMCO2

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Rating Date	Oct-10-2023	Oct-10-2023	Oct-10-2023	Oct-10-2023
SE Group No.	48	49	52	50
SE Name				
SE Description				
Part Rated	GRAIN, C	GRAIN, -	GRAIN, -	GRAIN, -
Rating Type	WEIGHT	CONMOI	YIELD	WEITES
Rating Unit/Min/Max	lb, -, -	%, 0, 100	BU, -, -	lb, -, -
Sample Size	1 plot	1 QT	1 A	1 qt
Collection Basis	1 plot	1 QT	1 plot	1 qt
Reporting Basis	1 plot	1 plot	1 A	1 BU
Calculation	NC	NC	IN	IN
Number of Subsamples	1	1	1	1
Crop ID Code	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean	Soybean
Crop Variety	P35T15E	P35T15E	P35T15E	P35T15E
Crop Attributes	2,4-D Choline, >	2,4-D Choline, >	2,4-D Choline, >	2,4-D Choline, >
Pest ID Code				
Pest Code				
Pest Scientific Name				
Pest Name				
Days After First/Last Applic.	131, 97	131, 97	131, 97	131, 97
Trt-Eval Interval				
Plant-Eval Interval	132 DP-1	132 DP-1	132 DP-1	132 DP-1
Days After Emergence	117 DE-1	117 DE-1	117 DE-1	117 DE-1
ARM Action Codes			TY1	
Number of Decimals			1	
Data Entry Date	Oct-16-2023	Oct-16-2023		Oct-16-2023
First Export Date				

Trt Treatment No. Name	Rate Rate Unit	Other Other Rate Rate Unit	Appl Unit Code	24*	25*	26*	27*
1 CHECK				12.8485b	12.43-	50.1b	52.80-
2 TENDOVO HERBICIDE	1740g ai/ha	1.5qt/a	A	15.1213ab	12.25-	59.1ab	53.30-
2 AMSOL	2.5% v/v	2.5% v/v	B				
2 DUAL MAGNUM	1330g ai/ha	1.25pt/a	B				
2 ENLIST ONE 3.8 SL	1060g ae/ha	2pt/a	B				
2 ROUNDUP POWERMAX 3 HERBICIDE	1090g ae/ha	26fl oz/a	B				
3 TENDOVO HERBICIDE	2320g ai/ha	2qt/a	A	15.7800a	12.05-	61.8a	54.43-
3 AMSOL	2.5% v/v	2.5% v/v	B				
3 DUAL MAGNUM	1330g ai/ha	1.25pt/a	B				
3 ENLIST ONE 3.8 SL	1060g ae/ha	2pt/a	B				
3 ROUNDUP POWERMAX 3 HERBICIDE	1090g ae/ha	26fl oz/a	B				
4 TENDOVO HERBICIDE	2320g ai/ha	2qt/a	A	15.4653ab	12.28-	60.4ab	52.75-
4 AMSOL	2.5% v/v	2.5% v/v	B				
4 ENLIST ONE 3.8 SL	1060g ae/ha	2pt/a	B				
4 ROUNDUP POWERMAX 3 HERBICIDE	1090g ae/ha	26fl oz/a	B				
5 TENDOVO HERBICIDE	2320g ai/ha	2qt/a	A	13.1385ab	12.38-	51.3ab	52.50-
5 AMSOL	2.5% v/v	2.5% v/v	B				
5 DUAL MAGNUM	1330g ai/ha	1.25pt/a	B				
5 LIBERTY 2.34 SL	740g ai/ha	36fl oz/a	B				
5 ROUNDUP POWERMAX 3 HERBICIDE	1090g ae/ha	26fl oz/a	B				
6 BOUNDARY 6.5 EC	1820g ai/ha	2pt/a	A	14.3553ab	12.43-	55.9ab	54.40-
6 AMSOL	2.5% v/v	2.5% v/v	B				
6 DUAL MAGNUM	1330g ai/ha	1.25pt/a	B				
6 ENLIST ONE 3.8 SL	1060g ae/ha	2pt/a	B				
6 ROUNDUP POWERMAX 3 HERBICIDE	1090g ae/ha	26fl oz/a	B				
7 SONIC 70 DF	245g ai/ha	5oz wt/a	A	14.7100ab	12.65-	57.2ab	53.48-
7 AMSOL	2.5% v/v	2.5% v/v	B				
7 DUAL MAGNUM	1330g ai/ha	1.25pt/a	B				
7 ENLIST ONE 3.8 SL	1060g ae/ha	2pt/a	B				
7 ROUNDUP POWERMAX 3 HERBICIDE	1090g ae/ha	26fl oz/a	B				

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 * Adjusted means
 ^Calculated from residual.

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C = Crop is Part Rated
Rating Type
WEIGHT = weight
CONMOI = content - moisture
YIELD = yield
WEITES = weight - test
Rating Unit/Min/Max
lb, , = pound
%, 0, 100 = percent
BU, , = bushel

plot = total plot
QT = quart
A = acre

plot = total plot
QT = quart

plot = total plot
A = acre
BU = bushel

Calculation
NC = no calculation
IN = increase

Crop ID Code
1, GLXMA, BSOY, Glycine max, Soybean, P35T15E, 2,4-D Choline, Glyphosate, Glufosinate Tol = May-31-2023

Plant-Eval Interval
132 DP-1 = 1 GLXMA May-31-2023

ARM Action Codes
TY1 = 3.872*[24]^(100-[25])/87

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