

The Ohio State University

Interseeded Winter Wheat in Soybean

Trial ID: 23-USB-Interseed-OSU
 Protocol ID: 22-USB-Interseed Location: Trial Year: 2023
 Project ID 2: Project ID 3:
 Investigator:

Crop Description

<p>Crop 1: CGLXMA Glycine max Entry Date: May-15-2023 Variety: Pioneer P35T15E Attributes: 2,4-D Choline, Glyphosate, Glufosinate Tol Seed Lot No: X3HED13034-00-0769 % Germination: 90 Seed Shape: ROUND Planting Date: May-11-2023 Depth: 1 IN Row Spacing: 30 IN Soil Temperature: 57 F</p>	<p>Soybean BBCH Scale: BSOY Stage Scale: BBCH Maturity Group: III Seed Source: Pioneer Seed Size: 2518 S/LB Seed Treatment Products: Lumigen, LumiTreo, ILEVO HL Planting Rate: 155500 S/A Planting Method: PLANTD planted Soil Moisture: NORMAL normal, adequate Harvested Width: 5 FT Harvested Length: 30 FT</p>
<p>Crop 2: CTRZAW Triticum aestivum Entry Date: May-3-2023 Variety: bin run Planting Date: Apr-13-2023 Depth: 0.25 IN Soil Temperature: 54 F</p>	<p>Winter wheat BBCH Scale: BCER Stage Scale: BBCH Planting Rate: 1500000 S/A Planting Method: BROADCAST broadcast Soil Moisture: NORMAL normal, adequate</p>
<p>Crop 3: CTRZAW Triticum aestivum Entry Date: May-15-2023 Variety: bin run Planting Date: May-11-2023 Depth: 0.25 IN</p>	<p>Winter wheat BBCH Scale: BCER Stage Scale: BBCH Planting Method: BROADCAST broadcast Soil Moisture: NORMAL normal, adequate Harvested Width: 5 FT Harvested Length: 30 FT</p>

Site and Design

Treated Plot Width: 10 FT
 Treated Plot Length: 30 FT
 Treated Plot Area: 300.0 FT²
 Replications: 4 Treatments: 9 Plots: 36 Study Design: SPLPLO Split-Plot

Application Description

	A	B
Date	May-11-2023	Jun-8-2023
Start Time	4:37 PM	8:00 AM
Stop Time	4:47 PM	8:10 AM
Interval to Prev. Appl.		28 DAYS
Method	SPRAY	SPRAY
Timing	PRE	POST
Placement	BROFOL	BROFOL
Applied By	Dobbels	Dobbels
Air Temperature Start, Stop	80	54
% Relative Humidity Start, Stop	32	59
Wind Velocity+Dir. Start	7 MPH, SE	5 MPH, N
Wet Leaves (Y/N)	N, no	N, no
Soil Temperature	72 F	60 F
Soil Moisture	SLIDRY	DRY
% Cloud Cover	0	0
First Moisture Occurred On	May-12-2023	Jun-11-2023
Time to First Moisture	1.0 DAY	3.0 DAY
Moisture 24 Hours after Appl.	0 IN	0 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 Scale Used	BBCH	BBCH
Stage Majority, Percent		12
Stage Minimum, Percent		11
Stage Maximum, Percent		12
Height Average		4 IN
Height Minimum, Maximum		2, 4
Crop 2 Code, BBCH Scale	TRZAW, BCER	TRZAW, BCER
Stage Scale Used	BBCH	BBCH
Crop 3 Code, BBCH Scale	TRZAW, BCER	TRZAW, BCER
Stage Scale Used	BBCH	BBCH

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Application Equipment

	A	B
Equipment Name	10' AIXR	Tractor
Equipment Type	BACCAI	SPRAYE
Operation Pressure	44 PSI	30 PSI
Nozzle Model	110015	11002
Nozzle Type	AI XR	TTI
Boom Length	10 FT	10 FT
Application Amount	15 GAL/AC	15 GAL/AC

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Trial ID: 23-USB-Interseed-OSU
 Protocol ID: 22-USB-Interseed Location: Trial Year: 2023
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Rating Date	Oct-10-2023	Oct-10-2023	Oct-10-2023	Oct-10-2023					
Part Rated	grain, C	grain, C	grain, C	GRAIN, C					
Rating Type	WEIGHT	moicon	YIELD	weight					
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 QT					
Reporting Basis	1 PLOT	1 PLOT	1 A	1 BU					
Number of Subsamples	1	1	1	1					
Crop Type, Code	C, GLXMA		C, GLXMA						
Crop Scientific Name	Glycine max		Glycine max						
Crop Name	Soybean		Soybean						
Pest Type									
Pest Code									
Pest Scientific Name									
Pest Name									
Days After First/Last Applic.	152, 124	152, 124	152, 124	152, 124					
Trt-Eval Interval									
Plant-Eval Interval	152 DP-1	152 DP-1	152 DP-1	152 DP-1					
EDC App									
ARM Action Codes			TY1						
Number of Decimals			1						
Data Entry Date	Oct-11-2023	Oct-11-2023		Oct-11-2023					
Trt Treatment No. Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	39*	40*	41*	42*
1 NO WHEAT						11.245abc	11.78-	54.0ab	52.48-
1 NONTREATED									
2 NO WHEAT						12.040a	10.93-	58.3a	53.48-
2 SHARPEN	0.0223lb ai/a		1 fl oz/a		A				
2 ENLIST ONE	0.95lb ae/a		32 fl oz/a		B				
2 ROUNDUP POWERMAX	1.13lb ae/a		32 fl oz/a		B				
2 WARRANT	1.13lb ai/a		48 fl oz/a		B				
2 AMS - LIQUID	2.5% v/v		2.5% v/v		B				
3 NO WHEAT						12.698a	11.53-	61.1a	53.63-
3 PREFIX	1.65lb ai/a		2.5 pt/a		A				
3 METRIBUZIN 75	0.28lb ai/a		6 oz/a		A				
3 ENLIST ONE	0.95lb ae/a		32 fl oz/a		B				
3 ROUNDUP POWERMAX	1.13lb ae/a		32 fl oz/a		B				
3 WARRANT	1.13lb ai/a		48 fl oz/a		B				
3 AMS - LIQUID	2.5% v/v		2.5% v/v		B				
4 WHEAT 4 WEEKS PRIOR TO SOY						9.478c	13.13-	44.8c	51.75-
4 NONTREATED									
5 WHEAT 4 WEEKS PRIOR TO SOY						9.773c	13.65-	45.8bc	52.33-
5 SHARPEN	0.0223lb ai/a		1 fl oz/a		A				
5 ENLIST ONE	0.95lb ae/a		32 fl oz/a		B				
5 ROUNDUP POWERMAX	1.13lb ae/a		32 fl oz/a		B				
5 WARRANT	1.13lb ai/a		48 fl oz/a		B				
5 AMS - LIQUID	2.5% v/v		2.5% v/v		B				
6 WHEAT 4 WEEKS PRIOR TO SOY						11.840ab	11.08-	57.2a	54.10-
6 PREFIX	1.65lb ai/a		2.5 pt/a		A				
6 METRIBUZIN 75	0.28lb ai/a		6 oz/a		A				
6 ENLIST ONE	0.95lb ae/a		32 fl oz/a		B				
6 ROUNDUP POWERMAX	1.13lb ae/a		32 fl oz/a		B				
6 WARRANT	1.13lb ai/a		48 fl oz/a		B				
6 AMS - LIQUID	2.5% v/v		2.5% v/v		B				
7 WHEAT AT SOY PLANTING						10.138bc	13.35-	47.7bc	49.43-
7 NONTREATED									

Means followed by same letter or symbol do not significantly differ (P=0.05, Student-Newman-Keuls).
 Mean separations are based on the complete error term.
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 * Adjusted means
 ^Calculated from residual.

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Rating Date	Oct-10-2023	Oct-10-2023	Oct-10-2023	Oct-10-2023
Part Rated	grain, C	grain, C	grain, C	GRAIN, C
Rating Type	WEIGHT	moicon	YIELD	weltest
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 QT
Reporting Basis	1 PLOT	1 PLOT	1 A	1 BU
Number of Subsamples	1	1	1	1
Crop Type, Code	C, GLXMA		C, GLXMA	
Crop Scientific Name	Glycine max		Glycine max	
Crop Name	Soybean		Soybean	
Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Days After First/Last Applic.	152, 124	152, 124	152, 124	152, 124
Trt-Eval Interval				
Plant-Eval Interval	152 DP-1	152 DP-1	152 DP-1	152 DP-1
EDC App				
ARM Action Codes			TY1	
Number of Decimals			1	
Data Entry Date	Oct-11-2023	Oct-11-2023		Oct-11-2023
Trt Treatment	Rate	Other Other	Appl	
No. Name	Rate Unit	Rate Rate	Unit Code	39* 40* 41* 42*
8 WHEAT AT SOY PLANTING				11.195abc 10.95- 54.2ab 52.85-
8 SHARPEN	0.0223lb ai/a	1 fl oz/a	A	
8 ENLIST ONE	0.95lb ae/a	32fl oz/a	B	
8 ROUNDUP POWERMAX	1.13lb ae/a	32fl oz/a	B	
8 WARRANT	1.13lb ai/a	48fl oz/a	B	
8 AMS - LIQUID	2.5% v/v	2.5% v/v	B	
9 WHEAT AT SOY PLANTING				12.263a 11.60- 59.0a 53.78-
9 PREFIX	1.65lb ai/a	2.5 pt/a	A	
9 METRIBUZIN 75	0.28lb ai/a	6 oz/a	A	
9 ENLIST ONE	0.95lb ae/a	32fl oz/a	B	
9 ROUNDUP POWERMAX	1.13lb ae/a	32fl oz/a	B	
9 WARRANT	1.13lb ai/a	48fl oz/a	B	
9 AMS - LIQUID	2.5% v/v	2.5% v/v	B	
LSD P=.05				1.3205 2.044 6.50 3.301
Standard Deviation				0.9048 1.400 4.45 2.262
CV				8.09 11.67 8.31 4.3
Grand Mean				11.1853 11.997 53.58 52.644
Levene's F^				0.258 2.963* 0.362 0.871
Levene's Prob(F)				0.974 0.016* 0.931 0.552
Rank X2				.
P(Rank X2)				.
Shapiro-Wilk^				0.9783 0.9312* 0.9777 0.9611
P(Shapiro-Wilk)^				0.6894 0.0272* 0.6672 0.2318
Skewness^				-0.4266 0.8887* -0.364 0.5082
P(Skewness)^				0.3037 0.0365* 0.3792 0.222
Kurtosis^				-0.2285 3.0277* -0.3877 2.0954*
P(Kurtosis)^				0.7768 0.0006* 0.6309 0.0129*
Analyzed as				RCB RCB RCB RCB
Replicate F				13.998 0.758 12.827 0.665
Replicate Prob(F)				0.0001 0.5288 0.0001 0.5817
Treatment F				6.486 2.386 7.403 1.601
Treatment Prob(F)				0.0002 0.0475 0.0001 0.1768

Part Rated
 GRAIN = grain
 C = Crop is Part Rated
Rating Type
 WEIGHT = weight
 moicon = moisture content
 YIELD = yield
Rating Unit/Min/Max
 LB, , = pound
 %, 0, 100 = percent
 BU, , = bushel

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PLOT = total plot
QT = quart
A = acre

PLOT = total plot
QT = quart

PLOT = total plot
A = acre
BU = bushel
Crop Type, Code
C = EPPO species (Bayer) codes
GLXMA, BSOY, Glycine max, Soybean = US
Plant-Eval Interval
152 DP-1 = 1 GLXMA May-11-2023
ARM Action Codes
 $TY1 = 4.84 * [39] * (100 - [40]) / 89$

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