

The Ohio State University

XtendFlex Soybean Herbicide Recommendations

Title No. 2: 2020-01-N8-08
 Trial ID: 20RRXFYLD
 Protocol ID: HP20USAJU1
 Project ID: LOCAL_PROJ

Location: Western Branch Big E Trial Year: 2020
 Investigator: Dr. Mark M. Loux
 Study Director: Pollard, Justin
 Sponsor Contact:

General Trial Information

Study Director: Pollard, Justin
Investigator: Dr. Mark M. Loux

Trial Status: E established
ARM Trial Created On: Mar-26-2020
Initiation Date: May-13-2020

Trial Location

Address (Location): 7721 South Charleston Pike
City: South Charleston **Country:** USA United States
State/Prov.: Ohio
Postal Code: 45368

Latitude of LL Corner °: 39.85611 N
Longitude of LL Corner °: -83.67024 W
Altitude of LL Corner: 1097.00 FT

Conducted Under GLP: No
Conducted Under GEP: Yes

Keywords: PHYTOTOX EFFICACY YIELD
 EFFICACY PHYTOTOX

Contacts

Study Director: Pollard, Justin

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: C GLXMA Glycine max Soybean **BBCH Scale:** BSOY
Entry Date: May-14-2020 **Stage Scale:** BBCH
Variety: AG30XF0
Attributes: Glyphosate, Glufosinate, and Dicamba
Seed Lot No: WN9SLG11
% Germination: 90
Seed Size: 2600 S/LB
Seed Treatment Products: Fluxapyroxad Imidacloprid Metalaxyl Pyraclostrobin
Planting Rate: 160000 S/A
Planting Date: May-13-2020
Depth: 2 IN
Rows per Plot: 8
Row Spacing: 15 IN
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Seed Bed: MEDIUM medium
Soil Moisture: NORMAL normal, adequate
Soil Temperature: 62 F
Emergence Date: May-25-2020
Harvest Date: Oct-8-2020
Moisture Meter: Harvest Master
% Standard Moisture: 13
Harvest Equipment: Kincaid 8XP
Harvested Width: 6.25 FT
Harvested Length: 30 FT
Weighing Equipment: Harvest Master HM800

Pest Description

Pest 1 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: ragweed, giant **Entry Date:** Jun-25-2020

Pest 2 Type: W **Code:** SETPU *Setaria helvola*
Common Name: yellow foxtail **Entry Date:** Jun-25-2020

Pest 3 Type: W **Code:** SETFA *Setaria faberi*
Common Name: foxtail, giant **Entry Date:** Jun-25-2020

Pest 4 Type: W **Code:** SIDSP *Sida spinosa*
Common Name: sida, prickly **Entry Date:** Jun-25-2020

Pest 5 Type: W **Code:** CHEAL *Chenopodium album*
Common Name: lambsquarters, common **Entry Date:** Jun-25-2020

Pest 6 Type: W **Code:** ABUTH *Abutilon theophrasti*
Common Name: velvetleaf **Entry Date:** Jun-25-2020

Pest 7 Type: W **Code:** AMARE *Amaranthus retroflexus*
Common Name: pigweed, redroot **Entry Date:** Jul-9-2020

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Site and Design

Treated Plot Width: 10 FT
 Treated Plot Length: 30 FT
 Treated Plot Area: 300 FT² Treatments: 16
 Replications: 4

Site Type: RESPLO research plot
 Experimental Unit: 1 PLOT plot
 Tillage Type: CONTIL conventional-till
 Study Design: RACOB� Randomized Complete Block (RCB)

Previous

No.	Crop	Year
1.	CORN	2019

Soil Description

Description Name: Big E
 % Sand: 44 % OM: 3.1 Texture: L loam
 % Silt: 45 pH: 6.6 Soil Name: Kokomo
 % Clay: 11 CEC: 15.2 Fert. Level: G good
 Soil Drainage: G good

Application Description

	A	B	C
Application Date	May-13-2020	Jun-24-2020	Jul-8-2020
Appl. Start Time	4:00 AM	8:00 AM	8:15 AM
Appl. Stop Time	4:30 AM	8:30 AM	8:30 AM
Interval to Prev. Appl.		42 DAYS	14 DAYS
Application Method	SPRAY	SPRAY	SPRAY
Application Timing	PREPRE	EAPOCR	POSPOS
Application Placement	BROSOI	BROFOL	BROFOL
Applied By	Ackley and Essman	Dobbels	Kimmet
Appl. Entry Date	May-14-2020	Jun-25-2020	Jul-9-2020
Air Temperature Start, Stop	64 64 F	66 66 F	74 74 F
% Relative Humidity Start, Stop	32 32	80 80	89 89
Wind Velocity+Dir. Start	10 MPH SE	8 MPH W	4 MPH ESE
Wind Velocity+Dir. Stop	10 MPH SE	8 MPH W	4 MPH ESE
Wind Velocity+Dir. Max	11 MPH SE	8 MPH W	4 MPH ESE
Wet Leaves (Y/N)	N no	Y yes	N no
Soil Temperature	62 F	69 F	72 F
Soil Moisture	NORMAL	SLIWET	MOIST
Soil Surface Condition	MEDIUM	MEDIUM	MEDIUM
% Cloud Cover	25	30	0
Next Moisture Occurred On	May-14-2020	Jun-25-2020	Jul-10-2020
Time to Next Moisture	14 HR	1 DAY	2 DAY
Moisture 6 Hours after Appl.	0 IN	0 IN	0 IN
Moisture 1 Week after Appl.	2.52 IN	0.09 IN	0.49 IN

Protocol Application Directions:

Site Considerations:

Select site that is uniform for the region with moderate to high weed pressure.
 Trial is stewarded and must comply with appropriate GST-OPS.

Seeding Considerations:

Use XtendFlex soybean. Use local standards for seeding rates.

Stewarded seeds will be delivered in double containments to indicated SRRs addresses and it should be stored in locked rooms until planting.

Application Code Description:

Start clean with tillage.

A=PREPRE: Apply at planting

B=EAPOCR: V3-V5 soybean or 4 inch weeds, whichever comes first

C=POSPOS: 4 inch weeds or prior to R1

All applications to be made at 15 GPA.

Any treatments including dicamba must use TTI nozzles. All other treatments should be applied using nozzles recommended by the herbicide label.

Spray all rows of plot, yield center 2 rows.

Assessment Codes:

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PE12AD1 = When rating soybean injury, please give an overall % injury rating (**%CI**).

EE22AD3 = Please rate % weed control for all broadleaf and grass weeds present (w/ somewhat uniform population) by individual weed species using BAYER code for each species, DO NOT lump weeds together under one code (**%WC**).

HM41NA3 = Please provide yield data already corrected for 13% moisture.

Rating Timings:

PE12AD1 = 14 DAT "B" application = B1 Assessment Code

PE12AD1 = 14 DAT "C" application = C1 Assessment Code

EE22AD3 = At Canopy or August 1st whichever comes first = E1 Assessment Code

EE22AD3 = At Harvest = H1 Assessment Code

HM41NA3 = Harvest Yield = H2 Assessment Code

Photos:

Please take photos of 1st replication in treatment order (or representative rep) just prior to "C" application. Please take photos of 1st replication in treatment order (or representative rep) at E1 (Canopy) Assessment Code Timing.

Fate of Plots:

XtendFlex is still under stewardship requirements, so harvest should follow compliance guidelines.

Harvested stewarded grains CANNOT LEAVE PLOT. It must be dumped back into stewarded area and managed accordingly for volunteer control.

YIELD is required.

Additional Comments:

Follow all state and federal application requirements.

DO NOT DEVIATE FROM THE TREATMENT LIST OR ALTER RATES.

Reporting Dates:

In season data due September 1st

Final data due November 15th

Experimental Field Trials must be clearly and continuously marked to avoid unauthorized entry or accidental harvest. Any harvestable portion of the crop treated with non-registered compounds or registered products experimentally tested off-label must be destroyed. Crop destruction date and method shall be reported to Bayer.

Objective:

The primary objective is to evaluate POST XtendFlex soybeans safety and weed control with XtendiMax and Roundup PowerMAX plus tank-mix products and with dicamba and glyphosate PREMIX formulations.

Start clean with tillage or a blanket burndown herbicide application across entire study prior to planting. Use burndown herbicides that are effective and DO NOT have residual activity.

Apply a blanket PRE herbicide application (A timing) of Warrant (1.125 lb ai/A) + Metribuzin (0.25 lb ai/A).

Uniform weed pressure of grass and/or broadleaf weeds is ideal, with waterhemp or Palmer amaranth preferred for the POST (B timing).

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Please make "**B**" applications with a TTI nozzle set to deliver coarse droplets for ALL treatments in the study.

Agronomics and Trial Setup:

XtendFlex Soybean Stewarded and 10 Acre Soybean trial. Plant at your local population seeding rate. Please note soybean emergence date.

APPLICATION:

A=PREPRE = apply pre emergence after planting before weeds or crop emerges

B=EAPOCR= early POST to crop. TARGET V3-V4 soybean or no more than 45 days after planting, whichever comes first

TREATMENTS:

Please evaluate all treatments in the protocol. All treatments (1-15) are core. **Please DO NOT alter rates or change treatment order of the core set of treatments (1-15).**

CROP DESTRUCT REQUIREMENTS:

This is a XtendFlex Stewarded and 10 acre regulated trial. Crop destruct after final rating. It is a stewarded and 10 Acre Trial and grain CANNOT enter commerce. Please follow ALL requirements.

Trial must be conducted in accordance with "10 Acre Rule" regulations; USC-OPS-007
 NONREGISTERED CROP PROTECTION PRODUCT (CPP) FIELD TRIAL REQUIREMENTS FOR THE U.S.

ASSESSMENT:

Photos would be appreciated throughout the season

Crop tolerance - PE12AD1- percent crop injury on 0-100% scale of all inclusive crop injury vs. the baseline in the untreated control plots. This needs to be just a general crop injury evaluation. Do not separate into various types (chlorosis, necrosis, etc).

Target evaluations (CI):

4 days after "B" (B1- range 3-5 days)

7 days after "B" (B2- range 6-10 days)

14 days after "B" (B3- range 11-18 days)

Note if injury persists

Weed Control - EE22AD3 - percent weed control on 0-100% scale. Please rate % weed control for each individual species. Record percent ground cover of each weed in UTC.

Target evaluations (WC):

14 days after "B" (B3- range 11-18 days)

21 days after "B" (B4- range 19-25 days)

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Sponsor Contact:

Reporting Dates:

Final reports due: **August 1st, 2020**

Sample Orders:

All herbicides for this protocol should be ordered by the crop protection TDR for internal and external locations that have been assigned in SCOUT.

Crop Stage At Each Application

Crop 1 Code, BBCH Scale	A		B		C	
	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
Days after Emergence	-12		30		44	
Stage Scale Used	BBCH		BBCH		BBCH	
Stage Majority, Percent			14	100	16	100
Height Average			8	IN	12	IN
Height Minimum, Maximum			6	10	10	13

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Pest Stage At Each Application

	A		B		C	
Pest 1 Code, Type, Scale	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent	18		80		19	100
Stage Minimum, Percent	16		10			
Stage Maximum, Percent	19		10			
Height Average	10		IN		10	IN
Height Minimum, Maximum	4		16		8	12
Density Average	10		PLA/m2		10	PLA/m2
Density Min, Max	4		16		4	16
Pest 2 Code, Type, Scale	SETPU	W	SETPU	W	SETPU	W
Stage Majority, Percent	16		80		23	100
Stage Minimum, Percent	14		10			
Stage Maximum, Percent	19		10			
Height Average	4		IN		3	IN
Height Minimum, Maximum	2		6		2	6
Density Average	93		PLA/m2		5	PLA/m2
Density Min, Max	50		300		1	12
Pest 3 Code, Type, Scale	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent	13		80			
Stage Minimum, Percent	13		80			
Stage Maximum, Percent	15		10			
Height Average	4		IN			
Height Minimum, Maximum	2		6			
Density Average	380		PLA/m2			
Density Min, Max	72		1000			
Pest 4 Code, Type, Scale	SIDSP	W	SIDSP	W	SIDSP	W
Stage Majority, Percent	18		80			
Stage Minimum, Percent	16		10			
Stage Maximum, Percent	19		10			
Height Average	2		IN			
Height Minimum, Maximum	2		4			
Density Average	9		PLA/m2			
Density Min, Max	0		24			
Pest 5 Code, Type, Scale	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent	16		80			
Stage Minimum, Percent	14		10			
Stage Maximum, Percent	19		10			
Height Average	16		80			
Height Minimum, Maximum	14		19			
Density Average	17		PLA/m2			
Density Min, Max	3		48			
Pest 6 Code, Type, Scale	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent	16		80			
Stage Minimum, Percent	14		10			
Stage Maximum, Percent	18		10			
Height Average	4		IN			
Height Minimum, Maximum	2		4			
Density Average	1		PLA/m2			
Density Min, Max	0.25		2			
Pest 7 Code, Type, Scale	AMARE	W	AMARE	W	AMARE	W
Density Average	10		PLA/m2			
Density Min, Max	1		40			

Application Equipment

	A		B		C	
Appl. Equipment	10'	TTI	10'	TTI	10'	TTI
Equipment Type	BACCAI		BACCAI		BACCAI	
Operation Pressure	44	PSI	44	PSI	44	PSI
Nozzle Type	TTI		TTI		TTI	
Nozzle Size	110015		110015		110015	
Nozzle Spacing	18	IN	18	IN	18	IN
Boom Length	10	FT	10	FT	10	FT
Boom Height	20	IN	20	IN	20	IN
Ground Speed	3	MPH	3	MPH	3	MPH
Carrier	WATER		WATER		WATER	
Application Amount	15	GAL/AC	15	GAL/AC	15	GAL/AC
Mix Size	2	L	2	L	2	L
Propellant	COMCO2		COMCO2		COMCO2	
Tank Mix (Y/N)	Y	yes	Y	yes	Y	yes

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Context	Date	By	Notes
STATUS	Mar-26-2020	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'S' during trial creation.
STATUS	Mar-26-2020	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'S' during trial creation.
STATUS	May-14-2020	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'E' when Planting Date entered.
STATUS	May-14-2020	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'E' when Application Date entered.

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Type, Code	C	GLXMA	C GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Oct-8-2020	Oct-8-2020	Oct-8-2020
Rating Type	YIELD	MOICON	YIELD
Rating Unit	LBS	%	BU
Number of Subsamples	1	1	1
Data Entry Date	Oct-12-2020	Oct-12-2020	
Rating Timing			
Days After First/Last Applic.	148 92	148 92	148 92
Trt-Eval Interval			
Plant-Eval Interval	148 DP-1	148 DP-1	148 DP-1
Days After Emergence	136 DE-1	136 DE-1	136 DE-1
ARM Action Codes			TY1
Number of Decimals		2	2 1

Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Appl Unit Code	37*	38*	39*
1	UNTREATED					13.56 g	11.48 -	53.4 g
2	XTENDIMAX	828 g ae/ha	22 oz/a		A	20.00 ab	11.16 -	79.0 ab
2	WARRANT	1259 g ai/ha	48 oz/a		A			
2	MAULER	280.6 g ai/ha	8 oz/a		A			
2	XTENDIMAX	828 g ae/ha	22 oz/a		B			
2	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a		B			
2	WARRANT	1259 g ai/ha	48 oz/a		B			
2	CLASS ACT RIDION	1 % v/v	1 % v/v		B			
2	INTACT	0.5 % v/v	0.5 % v/v		B			
3	XTENDIMAX	828 g ae/ha	22 oz/a		A	19.35 abc	11.25 -	76.4 abc
3	WARRANT	1259 g ai/ha	48 oz/a		A			
3	MAULER	280.6 g ai/ha	8 oz/a		A			
3	LIBERTY 280 SL	655 g ai/ha	32 oz/a		B			
3	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a		B			
3	WARRANT	1259 g ai/ha	48 oz/a		B			
3	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v		B			
4	XTENDIMAX	828 g ae/ha	22 oz/a		A	17.38 de	11.33 -	68.6 de
4	WARRANT	1259 g ai/ha	48 oz/a		A			
4	MAULER	280.6 g ai/ha	8 oz/a		A			
4	LIBERTY 280 SL	655 g ai/ha	32 oz/a		B			
4	WARRANT	1259 g ai/ha	48 oz/a		B			
4	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v		B			
5	XTENDIMAX	828 g ae/ha	22 oz/a		A	18.10 cd	11.48 -	71.3 cd
5	WARRANT	1259 g ai/ha	48 oz/a		A			
5	MAULER	280.6 g ai/ha	8 oz/a		A			
5	LIBERTY 280 SL	655 g ai/ha	32 oz/a		B			
5	WARRANT	1259 g ai/ha	48 oz/a		B			
5	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v		B			
5	LIBERTY 280 SL	655 g ai/ha	32 oz/a		C			
5	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v		C			

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Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Type, Code	C GLXMA	C GLXMA	C GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Oct-8-2020	Oct-8-2020	Oct-8-2020
Rating Type	YIELD	MOICON	YIELD
Rating Unit	LBS	%	BU
Number of Subsamples	1	1	1
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Days After First/Last Applic.	148 92	148 92	148 92
Trt-Eval Interval			
Plant-Eval Interval	148 DP-1	148 DP-1	148 DP-1
Days After Emergence	136 DE-1	136 DE-1	136 DE-1
ARM Action Codes			TY1
Number of Decimals	2	2	1

Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Appl Unit Code	37*	38*	39*
6	XTENDIMAX	828 g ae/ha	22 oz/a		A	16.11 ef	11.04 -	63.8 ef
6	WARRANT	1259 g ai/ha	48 oz/a		A			
6	MAULER	280.6 g ai/ha	8 oz/a		A			
6	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a		B			
6	WARRANT ULTRA HERBICIDE	1449 g ai/ha	48 oz/a		B			
6	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v		B			
6	LIBERTY 280 SL	655 g ai/ha	32 oz/a		C			
6	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v		C			
7	WARRANT	1259 g ai/ha	48 oz/a		A	18.06 cd	10.99 -	71.6 cd
7	MAULER	280.6 g ai/ha	8 oz/a		A			
7	XTENDIMAX	828 g ae/ha	22 oz/a		B			
7	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a		B			
7	WARRANT	1259 g ai/ha	48 oz/a		B			
7	CLASS ACT RIDION	1 % v/v	1 % v/v		B			
7	INTACT	0.5 % v/v	0.5 % v/v		B			
8	WARRANT	1259 g ai/ha	48 oz/a		A	19.89 ab	11.30 -	78.5 ab
8	MAULER	280.6 g ai/ha	8 oz/a		A			
8	XTENDIMAX	828 g ae/ha	22 oz/a		B			
8	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a		B			
8	WARRANT	1259 g ai/ha	48 oz/a		B			
8	CLASS ACT RIDION	1 % v/v	1 % v/v		B			
8	INTACT	0.5 % v/v	0.5 % v/v		B			
8	LIBERTY 280 SL	655 g ai/ha	32 oz/a		C			
8	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v		C			
9	WARRANT	1259 g ai/ha	48 oz/a		A	14.93 fg	11.30 -	58.9 fg
9	MAULER	280.6 g ai/ha	8 oz/a		A			
9	XTENDIMAX	828 g ae/ha	22 oz/a		B			
9	WARRANT	1259 g ai/ha	48 oz/a		B			
9	CLASS ACT RIDION	1 % v/v	1 % v/v		B			
9	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a		C			
9	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v		C			
10	WARRANT	1259 g ai/ha	48 oz/a		A	19.15 abc	10.52 -	76.3 abc
10	MAULER	280.6 g ai/ha	8 oz/a		A			
10	XTENDIMAX	828 g ae/ha	22 oz/a		B			
10	WARRANT	1259 g ai/ha	48 oz/a		B			
10	CLASS ACT RIDION	1 % v/v	1 % v/v		B			
10	LIBERTY 280 SL	655 g ai/ha	32 oz/a		C			
10	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a		C			
10	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v		C			

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Pest Code			
Pest Scientific Name			
Pest Name			
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Crop Scientific Name	Glycine max	Glycine max	Glycine max
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ARM Action Codes			TY1
Number of Decimals	2	2	1

Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Unit	Appl Code	37*	38*	39*
11	WARRANT	1259 g ai/ha	48 oz/a			A	19.44 abc	12.15 -	76.0 abc
11	MAULER	280.6 g ai/ha	8 oz/a			A			
11	XTENDIMAX	828 g ae/ha	22 oz/a			B			
11	WARRANT	1259 g ai/ha	48 oz/a			B			
11	CLASS ACT RIDION	1 % v/v	1 % v/v			B			
11	LIBERTY 280 SL	655 g ai/ha	32 oz/a			C			
11	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v			C			
12	WARRANT	1259 g ai/ha	48 oz/a			A	17.80 cd	12.63 -	69.2 de
12	MAULER	280.6 g ai/ha	8 oz/a			A			
12	LIBERTY 280 SL	655 g ai/ha	32 oz/a			B			
12	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a			B			
12	WARRANT	1259 g ai/ha	48 oz/a			B			
12	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v			B			
13	WARRANT	1259 g ai/ha	48 oz/a			A	16.92 de	11.55 -	66.6 de
13	MAULER	280.6 g ai/ha	8 oz/a			A			
13	LIBERTY 280 SL	655 g ai/ha	32 oz/a			B			
13	WARRANT	1259 g ai/ha	48 oz/a			B			
13	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v			B			
14	XTENDIMAX	828 g ae/ha	22 oz/a			A	20.63 a	10.95 -	81.8 a
14	WARRANT ULTRA HERBICIDE	1449 g ai/ha	48 oz/a			A			
14	INTACT	0.5 % v/v	0.5 % v/v			A			
14	XTENDIMAX	828 g ae/ha	22 oz/a			B			
14	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a			B			
14	WARRANT	1259 g ai/ha	48 oz/a			B			
14	CLASS ACT RIDION	1 % v/v	1 % v/v			B			
14	INTACT	0.5 % v/v	0.5 % v/v			B			
15	XTENDIMAX	828 g ae/ha	22 oz/a			A	18.34 bcd	10.93 -	72.7 bcd
15	WARRANT ULTRA HERBICIDE	1449 g ai/ha	48 oz/a			A			
15	INTACT	0.5 % v/v	0.5 % v/v			A			
15	LIBERTY 280 SL	655 g ai/ha	32 oz/a			B			
15	ROUNDUP POWER MAX	1263 g ae/ha	32 oz/a			B			
15	WARRANT	1259 g ai/ha	48 oz/a			B			
15	N-PAK AMS LIQUID	2.5 % v/v	2.5 % v/v			B			

The Ohio State University

XtendFlex Soybean Herbicide Recommendations

Title No. 2: 2020-01-N8-08
 Trial ID: 20RRXFYLD
 Protocol ID: HP20USAJU1
 Project ID: LOCAL_PROJ

Location: Western Branch Big E Trial Year: 2020
 Investigator: Dr. Mark M. Loux
 Study Director: Pollard, Justin
 Sponsor Contact:

Pest Type	C	GLXMA	C	GLXMA	C	GLXMA
Pest Code	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY
Pest Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Pest Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Crop Type, Code	Oct-8-2020	Oct-8-2020	Oct-8-2020	Oct-8-2020	Oct-8-2020	Oct-8-2020
BBCH Scale	YIELD	MOICON	YIELD	YIELD	YIELD	YIELD
Crop Scientific Name	LBS	%	BU	BU	BU	BU
Crop Name	1	1	1	1	1	1
Rating Date	Oct-12-2020	Oct-12-2020	Oct-12-2020	Oct-12-2020	Oct-12-2020	Oct-12-2020
Rating Type	148	92	148	92	148	92
Rating Unit	148	92	148	92	148	92
Number of Subsamples	DP-1	DP-1	DP-1	DP-1	DP-1	DP-1
Data Entry Date	136	DE-1	136	DE-1	136	DE-1
Rating Timing	TY1	TY1	TY1	TY1	TY1	TY1
Days After First/Last Applic.	2	2	2	2	2	2
Trt-Eval Interval	2	2	2	2	2	2
Plant-Eval Interval	2	2	2	2	2	2
Days After Emergence	2	2	2	2	2	2
ARM Action Codes	2	2	2	2	2	2
Number of Decimals	2	2	2	2	2	2
Trt Treatment	Rate	Other	Other	Appl		
No. Name	Unit	Rate	Rate	Unit	Code	
16 WARRANT	1259 g ai/ha	48 oz/a	8 oz/a	A	37*	14.25 g
16 MAULER	280.6 g ai/ha			A	38*	11.33 - 56.2 g
LSD P=.05						1.673
Standard Deviation						1.174
CV						6.62
Grand Mean						17.745
Levene's F						1.525
Levene's Prob(F)						0.134
Rank X2						.
P(Rank X2)						.
Skewness						-0.4851
Kurtosis						-0.7272
Replicate F						5.043
Replicate Prob(F)						0.0043
Treatment F						12.973
Treatment Prob(F)						0.0001

Crop Type, Code

C = EPPO species (Bayer) codes

GLXMA, BSOY, Glycine max, Soybean = US

Rating Type

YIELD = yield

MOICON = moisture content

Rating Unit

% = percent

BU = bushel

Plant-Eval Interval

148 DP-1 = 1 GLXMA May-13-2020

ARM Action Codes

TY1 = 3.872*[37]*(100-[38])/87