

The Ohio State University

2020 SL-575D Visibility Protocol

Trial ID: 20SL-575 Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: Investigator: Dr. Mark M. Loux
 Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

General Trial Information

Study Director: Chuck Foresman
Investigator: Dr. Mark M. Loux

Trial Status: E established

ARM Trial Created On: Mar-26-2020

Initiation Date: Apr-22-2020

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 °: 39.85947 N
Longitude of LL Corner °: -83.67535 W
Altitude of LL Corner: 1094.00 FT

Conducted Under GLP: No

Conducted Under GEP: No

Contacts

Study Director: Chuck Foresman

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: C	ZEAMX Zea mays	Corn		BBCH Scale: BCOR
	Entry Date: Apr-23-2020		Stage Scale: BBCH	
	Variety: Dekalb DKC59-81RIB			
	Attributes: Glyphosate and Glufosinate Resistant			
	Planting Date: Apr-22-2020		Planting Rate: 32097	S/A
	Depth: 2 IN			
	Rows per Plot: 4		Planting Method: PLANTD	planted
	Row Spacing: 30 IN		Planting Equipment: FPP	finger pickup planter
			Seed Bed: MEDIUM	medium
	Soil Temperature: 54 F		Soil Moisture: NORMAL	normal, adequate
	Emergence Date: May-14-2020			

Pest Description

Pest 1 Type: W	Code: SETFA	Setaria faberi	Entry Date: Jun-9-2020
	Common Name: foxtail, giant		
Pest 2 Type: W	Code: AMBTR	Ambrosia trifida	Entry Date: Jun-9-2020
	Common Name: ragweed, giant		
Pest 3 Type: W	Code: CHEAL	Chenopodium album	Entry Date: Jun-9-2020
	Common Name: lambsquarters, common		
Pest 4 Type: W	Code: SIDSP	Sida spinosa	Entry Date: Jun-9-2020
	Common Name: sida, prickly		
Pest 5 Type: W	Code: ABUTH	Abutilon theophrasti	Entry Date: Jun-9-2020
	Common Name: velvetleaf		
Pest 6 Type: W	Code: ECHCU	Echinochloa crus-galli amurensis	Entry Date: Jun-22-2020
	Common Name: Echinochloa crus-galli amurensis		
Pest 7 Type: W	Code: AMARE	Amaranthus retroflexus	Entry Date: Jun-22-2020
	Common Name: pigweed, redroot		

Site and Design

Treated Plot Width: 6.67 FT		Site Type: FIELD	field
Treated Plot Length: 30 FT		Experimental Unit: 1	PLOT plot
Treated Plot Area: 200.1 FT ²	Treatments: 8	Tillage Type: CONTIL	conventional-till
Replications: 4		Study Design: RAOBL	Randomized Complete Block (RCB)

Trial Initiation Comments:

fall chisel fb spring 1 pass finishing tool day of planting.

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Previous

No. Crop Year
 1. SOYBEAN 2019

Soil Description

Description Name: G-6
% Sand: 32 **% OM:** 2.2 **Texture:** SICL silty clay loam
% Silt: 53 **pH:** 5.9 **Soil Name:** Kokomo
% Clay: 15 **CEC:** 14.8 **Fert. Level:** G good
Soil Drainage: G good

Application Description

	A	B
Application Date	Apr-22-2020	Jun-9-2020
Appl. Start Time	3:30 PM	8:00 AM
Appl. Stop Time	4:00 PM	8:30 AM
Interval to Prev. Appl.		48 DAYS
Application Method	SPRAY	SPRAY
Application Timing	PREEM	POSPOS
Application Placement	BROSOL	BROFOL
Applied By	Loux	Ackley
Appl. Entry Date	Apr-23-2020	Jun-9-2020
Air Temperature Start, Stop	56 56 F	69 69 F
% Relative Humidity Start, Stop	37 38	64 64
Wind Velocity+Dir. Start	7 MPH S	8 MPH ESE
Wind Velocity+Dir. Stop	7 MPH S	8 MPH ESE
Wind Velocity+Dir. Max	8 MPH S	8 MPH ESE
Wet Leaves (Y/N)	N no	N no
Soil Temperature	54 F	68 F
Soil Moisture	NORMAL	DRY
Soil Surface Condition	MEDIUM	MEDIUM
% Cloud Cover	30	15
Next Moisture Occurred On	Apr-23-2020	Jun-9-2020
Time to Next Moisture	18 HR	9.5 HR
Moisture 6 Hours after Appl.	0 IN	0 IN
Moisture 1 Week after Appl.	1.24 IN	0.37 IN

Crop Stage At Each Application

	A		B	
Crop 1 Code, BBCH Scale	ZEAMX	BCOR	ZEAMX	BCOR
Days after Emergence	-22		26	
Stage Majority, Percent			16	100
Height Average			18	IN
Height Minimum, Maximum			16	19

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 Sponsor Contact: Jay Turner

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale	SETFA W	SETFA W
Stage Majority, Percent	12	90
Stage Minimum, Percent	11	5
Stage Maximum, Percent	13	5
Height Average	2	IN
Height Minimum, Maximum	1	3
Density Average	1220	PLA/m2
Density Min, Max	756	1576
Pest 2 Code, Type, Scale	AMBTR W	AMBTR W
Stage Majority, Percent	18	90
Stage Minimum, Percent	16	5
Stage Maximum, Percent	19	5
Height Average	8	IN
Height Minimum, Maximum	2	12
Density Average	10	PLA/m2
Density Min, Max	4	12
Pest 3 Code, Type, Scale	CHEAL W	CHEAL W
Stage Majority, Percent	6	80
Stage Minimum, Percent	3	10
Stage Maximum, Percent	8	10
Height Average	7	IN
Height Minimum, Maximum	6	8
Density Average	130	PLA/m2
Density Min, Max	64	212
Pest 4 Code, Type, Scale	SIDSP W	SIDSP W
Stage Majority, Percent	12	100
Height Average	0.5	IN
Height Minimum, Maximum	0.25	1
Pest 5 Code, Type, Scale	ABUTH W	ABUTH W
Stage Majority, Percent	13	100
Height Average	3	IN
Height Minimum, Maximum	2	4
Pest 6 Code, Type, Scale	ECHCU W	ECHCU W
Density Average	157	PLA/m2
Density Min, Max	108	232
Pest 7 Code, Type, Scale	AMARE W	AMARE W
Density Average	2	PLA/m2
Density Min, Max	0	8

Application Equipment

	A	B
Appl. Equipment	6 Foot TTI	
Equipment Type	BACCAI	
Operation Pressure	48	PSI
Nozzle Type	TTI	
Nozzle Size	110015	
Nozzle Spacing	18	IN
Boom Length	6.67	FT
Boom Height	20	IN
Ground Speed	3	MPH
Carrier	WATER	
Application Amount	15	GAL/AC
Mix Size	2	L
Propellant	COMCO2	

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	Apr-23-2020	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'E' when Initiation Date entered.

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2020 SL-575D Visibility Protocol

Trial ID: 20SL-575 Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: Investigator: Dr. Mark M. Loux
 Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Ipomoea sp.
Pest Name	Giant foxtail	Giant ragweed	common lambsqu	Morning glory
Crop Type, Code				C ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020 Jun-16-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO PHYNEC
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020 Jun-22-2020
Days After First/Last Applic.	47 47	47 47	47 47	47 47 55 7
Trt-Eval Interval	47 DA-A	47 DA-A	47 DA-A	47 DA-A 7 DA-B
Plant-Eval Interval	47 DP-1	47 DP-1	47 DP-1	47 DP-1 55 DP-1
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1 33 DE-1
ARM Action Codes	ET8	ET8		
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Other Rate	Other Unit	Appl Code	1*	2*	3*	4*	5*
1	SL-575D	1.88 pt/a	1710 g ai/ha		A	74 -	53 abc	91 ab	7 -	0 c
1	Atrazine	0.5 lb ai/a	560 g ai/ha		A					
1	Shieldex	1 fl oz/a	29.2 g ai/ha		B					
1	Atrazine	0.5 lb ai/a	560 g ai/ha		B					
1	COC	1 % v/v	1 % v/v		B					
2	SL-575D	2.25 pt/a	2050 g ai/ha		A	75 -	45 bc	95 ab	-3 -	0 c
2	Atrazine	0.5 lb ai/a	560 g ai/ha		A					
2	Shieldex	1 fl oz/a	29.2 g ai/ha		B					
2	Atrazine	0.5 lb ai/a	560 g ai/ha		B					
2	COC	1 % v/v	1 % v/v		B					
3	SL-575D	1.125 pt/a	1020 g ai/ha		A	65 -	38 c	90 ab	-7 -	4 b
3	Atrazine	0.5 lb ai/a	560 g ai/ha		A					
3	SL-575D	1.125 pt/a	1020 g ai/ha		B					
3	Atrazine	0.5 lb ai/a	560 g ai/ha		B					
3	COC	1 % v/v	1 % v/v		B					
4	Resicore	40 fl oz/a	1.25 qt/a		A	65 -	66 a	100 a	17 -	5 a
4	Atrazine	0.5 lb ai/a	560 g ai/ha		A					
4	Resicore	40 fl oz/a	1.25 qt/a		B					
4	Atrazine	0.5 lb ai/a	560 g ai/ha		B					
4	COC	1 % v/v	1 % v/v		B					
5	Acuron	40 fl oz/a	1.25 qt/a		A	75 -	58 ab	100 a	22 -	0 c
5	Acuron	40 fl oz/a	1.25 qt/a		B					
5	COC	1 % v/v	1 % v/v		B					
6	Armezon Pro	20 fl oz/a	1.25 pt/a		A	75 -	48 bc	85 b	15 -	0 c
6	Atrazine	0.5 lb ai/a	560 g ai/ha		A					
6	Atrazine	0.5 lb ai/a	560 g ai/ha		B					
6	Roundup Powermax	32 fl oz/a	1260 g ae/ha		B					
6	COC	1 % v/v	1 % v/v		B					

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
 †=Mean descriptions are reported in transformed data units, and are not de-transformed.
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, larger LSD values (col. 10: >=16.9 and <=19.6) are used for mean comparisons of treatment pairs with missing data.
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 18 because error mean square = 0.

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Trial ID: 20SL-575 Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: Investigator: Dr. Mark M. Loux
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Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	CHEAL	IPOSS					
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Ipomoea sp.					
Pest Name	Giant foxtail	Giant ragweed	common lambsqu	Morning glory					
Crop Type, Code				C ZEAMX					
BBCH Scale				BCOR					
Crop Scientific Name				Zea mays					
Crop Name				Corn					
Rating Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020 Jun-16-2020					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO PHYNEC					
Rating Unit	%	%	%	%					
Number of Subsamples	1	1	1	1					
Data Entry Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020 Jun-22-2020					
Days After First/Last Applic.	47 47	47 47	47 47	47 47 55 7					
Trt-Eval Interval	47 DA-A	47 DA-A	47 DA-A	47 DA-A 7 DA-B					
Plant-Eval Interval	47 DP-1	47 DP-1	47 DP-1	47 DP-1 55 DP-1					
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1 33 DE-1					
ARM Action Codes	ET8	ET8							
Number of Decimals	0	0	0	0					
Trt Treatment No. Name	Rate	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*
7 Harness Max	1.72 qt/a	1860 g ai/ha		A	71 -	68 a	100 a	25 -	0 c
7 Atrazine	0.5 lb ai/a	560 g ai/ha		A					
7 Roundup Powermax	32 fl oz/a	1260 g ae/ha		B					
7 Atrazine	0.5 lb ai/a	560 g ai/ha		B					
7 COC	1 % v/v	1 % v/v		B					
8 Untreated Check					0	0	0 c	0 -	0 c
LSD P=.05					12.5	16.9	13.0	19.9	1.1
Standard Deviation					8.4	11.4	8.8	11.9	0.8
CV					11.77	21.33	10.7	142.86	68.84
Grand Mean					71.4	53.4	82.7	8.3	1.1
Levene's F					0.33	0.333	5.294	2.313	5.571
Levene's Prob(F)					0.914	0.912	0.001*	0.121	0.001*
Rank X2					.	.	.	.	.
P(Rank X2)					.	.	.	.	.
Skewness					-0.1113	-0.4715	-2.0293*	1.0849*	1.6611*
Kurtosis					-1.3613	-0.848	2.7625*	-0.9415	1.4064
Replicate F					1.245	0.282	2.036	1.195	1.672
Replicate Prob(F)					0.3226	0.8375	0.1396	0.3792	0.2035
Treatment F					1.191	3.803	58.634	1.764	29.724
Treatment Prob(F)					0.3550	0.0127	0.0001	0.2358	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Ipomoea sp.
Pest Name	Giant foxtail	Giant ragweed	common lambsqu	Morning glory
Crop Type, Code	C ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	Jun-24-2020	Jun-24-2020	Jun-24-2020	Jun-24-2020
Rating Type	PHYNEC	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-26-2020	Jun-26-2020	Jun-26-2020	Jun-26-2020
Days After First/Last Applic.	63 15	63 15	63 15	63 15
Trt-Eval Interval				
Plant-Eval Interval	63 DP-1	63 DP-1	63 DP-1	63 DP-1
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1
ARM Action Codes	AS	ET8		
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate Rate	Other Unit	Other Rate	Appl Unit	Code	6*	7*	8*	9*	10*
1	SL-575D	1.88 pt/a		1710 g ai/ha		A	0 c	80 bc	88 b	100 a	70 cd
1	Atrazine	0.5 lb ai/a		560 g ai/ha		A					
1	Shieldex	1 fl oz/a		29.2 g ai/ha		B					
1	Atrazine	0.5 lb ai/a		560 g ai/ha		B					
1	COC	1 % v/v		1 % v/v		B					
2	SL-575D	2.25 pt/a		2050 g ai/ha		A	0 c	82 abc	90 ab	100 a	58 d
2	Atrazine	0.5 lb ai/a		560 g ai/ha		A					
2	Shieldex	1 fl oz/a		29.2 g ai/ha		B					
2	Atrazine	0.5 lb ai/a		560 g ai/ha		B					
2	COC	1 % v/v		1 % v/v		B					
3	SL-575D	1.125 pt/a		1020 g ai/ha		A	2 b	90 a	99 a	100 a	90 ab
3	Atrazine	0.5 lb ai/a		560 g ai/ha		A					
3	SL-575D	1.125 pt/a		1020 g ai/ha		B					
3	Atrazine	0.5 lb ai/a		560 g ai/ha		B					
3	COC	1 % v/v		1 % v/v		B					
4	Resicore	40 fl oz/a		1.25 qt/a		A	4 a	69 d	95 ab	100 a	96 a
4	Atrazine	0.5 lb ai/a		560 g ai/ha		A					
4	Resicore	40 fl oz/a		1.25 qt/a		B					
4	Atrazine	0.5 lb ai/a		560 g ai/ha		B					
4	COC	1 % v/v		1 % v/v		B					
5	Acuron	40 fl oz/a		1.25 qt/a		A	0 c	76 cd	95 ab	100 a	82 abc
5	Acuron	40 fl oz/a		1.25 qt/a		B					
5	COC	1 % v/v		1 % v/v		B					
6	Armezon Pro	20 fl oz/a		1.25 pt/a		A	0 c	88 ab	54 d	98 a	75 bcd
6	Atrazine	0.5 lb ai/a		560 g ai/ha		A					
6	Atrazine	0.5 lb ai/a		560 g ai/ha		B					
6	Roundup Powermax	32 fl oz/a		1260 g ae/ha		B					
6	COC	1 % v/v		1 % v/v		B					

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Pest Code	SETFA	AMBTR	CHEAL	IPOSS
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Ipomoea sp.
Pest Name	Giant foxtail	Giant ragweed	common lambsqu	Morning glory
Crop Type, Code	C ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	Jun-24-2020	Jun-24-2020	Jun-24-2020	Jun-24-2020
Rating Type	PHYNEC	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-26-2020	Jun-26-2020	Jun-26-2020	Jun-26-2020
Days After First/Last Applic.	63 15	63 15	63 15	63 15
Trt-Eval Interval				
Plant-Eval Interval	63 DP-1	63 DP-1	63 DP-1	63 DP-1
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1
ARM Action Codes	AS	ET8		
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate Rate Unit	Other Rate	Other Rate Unit	Appl Code	6*	7*	8*	9*	10*
7 Harness Max	1.72 qt/a	1860 g ai/ha		A	0 c	86 ab	75 c	100 a	85 abc
7 Atrazine	0.5 lb ai/a	560 g ai/ha		A					
7 Roundup Powermax	32 fl oz/a	1260 g ae/ha		B					
7 Atrazine	0.5 lb ai/a	560 g ai/ha		B					
7 COC	1 % v/v	1 % v/v		B					
8 Untreated Check					0 c	0	0 e	0 b	0 e
LSD P=.05					0.6 - 0.7	9.1	9.8	2.6	16.9
Standard Deviation					0.1t	6.1	6.7	1.8	11.4
CV					11.24t	7.52	8.99	2.03	16.43
Grand Mean					1.0t	81.3	74.5	87.2	69.1
Levene's F					0.00	2.414	0.843	1.00	1.173
Levene's Prob(F)					.	0.062	0.563	0.455	0.361
Rank X2					.	.	.	.	.
P(Rank X2)					.	.	.	.	.
Skewness					1.4524*	-0.2836	-1.5426*	-2.3685*	-1.1778*
Kurtosis					0.5233	-0.5364	1.3134	3.8711*	0.5755
Replicate F					1.000	0.116	0.320	1.000	3.297
Replicate Prob(F)					0.4123	0.9497	0.8107	0.4123	0.0458
Treatment F					100.708	5.810	99.788	1589.572	28.499
Treatment Prob(F)					0.0001	0.0016	0.0001	0.0001	0.0001

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 Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	SIDSP
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Sida spinosa
Pest Name	foxtail, giant ragweed, giant	lambquarters,>	Morning glory	sida, prickly	
Crop Type, Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jul-8-2020	Jul-8-2020	Jul-8-2020	Jul-8-2020	Jul-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Data Entry Date	Jul-9-2020	Jul-9-2020	Jul-9-2020	Jul-9-2020	Jul-9-2020
Days After First/Last Applic.	77 29	77 29	77 29	77 29	77 29
Trt-Eval Interval					
Plant-Eval Interval	77 DP-1	77 DP-1	77 DP-1	77 DP-1	77 DP-1
Days After Emergence	55 DE-1	55 DE-1	55 DE-1	55 DE-1	55 DE-1
ARM Action Codes					
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Other Rate	Other Unit	Appl Unit Code	11*	12*	13*	14*	15*
1	SL-575D	1.88 pt/a	1710 g ai/ha		A	74 b	95 a	96 a	44 b	30 cde
	1 Atrazine	0.5 lb ai/a	560 g ai/ha		A					
	1 Shieldex	1 fl oz/a	29.2 g ai/ha		B					
	1 Atrazine	0.5 lb ai/a	560 g ai/ha		B					
	1 COC	1 % v/v	1 % v/v		B					
2	SL-575D	2.25 pt/a	2050 g ai/ha		A	74 b	100 a	96 a	61 ab	13 de
	2 Atrazine	0.5 lb ai/a	560 g ai/ha		A					
	2 Shieldex	1 fl oz/a	29.2 g ai/ha		B					
	2 Atrazine	0.5 lb ai/a	560 g ai/ha		B					
	2 COC	1 % v/v	1 % v/v		B					
3	SL-575D	1.125 pt/a	1020 g ai/ha		A	84 a	97 a	100 a	68 ab	50 bcd
	3 Atrazine	0.5 lb ai/a	560 g ai/ha		A					
	3 SL-575D	1.125 pt/a	1020 g ai/ha		B					
	3 Atrazine	0.5 lb ai/a	560 g ai/ha		B					
	3 COC	1 % v/v	1 % v/v		B					
4	Resicore	40 fl oz/a	1.25 qt/a		A	63 c	99 a	100 a	83 a	85 ab
	4 Atrazine	0.5 lb ai/a	560 g ai/ha		A					
	4 Resicore	40 fl oz/a	1.25 qt/a		B					
	4 Atrazine	0.5 lb ai/a	560 g ai/ha		B					
	4 COC	1 % v/v	1 % v/v		B					
5	Acuron	40 fl oz/a	1.25 qt/a		A	69 bc	98 a	100 a	84 a	100 a
	5 Acuron	40 fl oz/a	1.25 qt/a		B					
	5 COC	1 % v/v	1 % v/v		B					
6	Armezon Pro	20 fl oz/a	1.25 pt/a		A	74 b	58 c	96 a	59 ab	66 abc
	6 Atrazine	0.5 lb ai/a	560 g ai/ha		A					
	6 Atrazine	0.5 lb ai/a	560 g ai/ha		B					
	6 Roundup Powermax	32 fl oz/a	1260 g ae/ha		B					
	6 COC	1 % v/v	1 % v/v		B					

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
 t=Mean descriptions are reported in transformed data units, and are not de-transformed.
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, larger LSD values (col. 10: >=16.9 and <=19.6) are used for mean comparisons of treatment pairs with missing data.
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 18 because error mean square = 0.

The Ohio State University

2020 SL-575D Visibility Protocol

Trial ID: 20SL-575 Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: Investigator: Dr. Mark M. Loux
 Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	SIDSP
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Sida spinosa
Pest Name	foxtail, giant ragweed, giant	lambquarters,>	Morning glory	sida, prickly	
Crop Type, Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jul-8-2020	Jul-8-2020	Jul-8-2020	Jul-8-2020	Jul-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Data Entry Date	Jul-9-2020	Jul-9-2020	Jul-9-2020	Jul-9-2020	Jul-9-2020
Days After First/Last Applic.	77 29	77 29	77 29	77 29	77 29
Trt-Eval Interval					
Plant-Eval Interval	77 DP-1	77 DP-1	77 DP-1	77 DP-1	77 DP-1
Days After Emergence	55 DE-1	55 DE-1	55 DE-1	55 DE-1	55 DE-1
ARM Action Codes					
Number of Decimals	0	0	0	0	0
Trt Treatment	Rate	Other	Other	Appl	
No. Name	Rate Unit	Rate	Rate Unit	Code	11* 12* 13* 14* 15*
7 Harness Max	1.72 qt/a	1860 g ai/ha		A	75 ab 76 b 100 a 54 ab 71 ab
7 Atrazine	0.5 lb ai/a	560 g ai/ha		A	
7 Roundup Powermax	32 fl oz/a	1260 g ae/ha		B	
7 Atrazine	0.5 lb ai/a	560 g ai/ha		B	
7 COC	1 % v/v	1 % v/v		B	
8 Untreated Check					0 d 0 d 0 b 0 c 0 e
LSD P=.05					9.4 6.4 6.7 31.5 38.7
Standard Deviation					6.4 4.4 4.5 21.0 26.3
CV					10.0 5.63 5.26 37.01 50.69
Grand Mean					63.9 77.7 86.0 56.9 51.9
Levene's F					0.732 2.594 0.678 0.603 7.312
Levene's Prob(F)					0.647 0.038* 0.689 0.746 0.001*
Rank X2					.
P(Rank X2)					.
Skewness					-1.9635* -1.6258* -2.3048* -0.3091 -0.0983
Kurtosis					2.7351* 1.4595 3.6692* -1.0969 -1.7004*
Replicate F					0.492 3.486 1.297 3.598 2.962
Replicate Prob(F)					0.6915 0.0339 0.3017 0.0369 0.0556
Treatment F					68.731 252.443 236.880 6.195 7.206
Treatment Prob(F)					0.0001 0.0001 0.0001 0.0012 0.0002

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 * Adjusted means
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The Ohio State University

2020 SL-575D Visibility Protocol

Trial ID: 20SL-575 Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: Investigator: Dr. Mark M. Loux
 Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	SIDSP				
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium ai>	Ipomoea sp.	Sida spinosa				
Pest Name	foxtail, giant	ragweed, giant	lambsquarters,>	Morning glory	sida, prickly				
Crop Type, Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	Jul-20-2020	Jul-20-2020	Jul-20-2020	Jul-20-2020	Jul-20-2020				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1				
Data Entry Date	Jul-20-2020	Jul-20-2020	Jul-20-2020	Jul-20-2020	Jul-20-2020				
Days After First/Last Applic.	89 41	89 41	89 41	89 41	89 41				
Trt-Eval Interval									
Plant-Eval Interval	89 DP-1	89 DP-1	89 DP-1	89 DP-1	89 DP-1				
Days After Emergence	67 DE-1	67 DE-1	67 DE-1	67 DE-1	67 DE-1				
ARM Action Codes									
Number of Decimals	0	0	0	0	0				
Trt Treatment	Rate	Other	Other	Appl					
No. Name	Rate Unit	Rate Unit	Rate Unit	Code					
					16*				
					17*				
					18*				
					19*				
					20*				
1 SL-575D	1.88 pt/a	1710 g ai/ha	A		83 ab	98 a	100 a	80 a	70 bc
1 Atrazine	0.5 lb ai/a	560 g ai/ha	A						
1 Shieldex	1 fl oz/a	29.2 g ai/ha	B						
1 Atrazine	0.5 lb ai/a	560 g ai/ha	B						
1 COC	1 % v/v	1 % v/v	B						
2 SL-575D	2.25 pt/a	2050 g ai/ha	A		81 ab	96 a	100 a	81 a	43 c
2 Atrazine	0.5 lb ai/a	560 g ai/ha	A						
2 Shieldex	1 fl oz/a	29.2 g ai/ha	B						
2 Atrazine	0.5 lb ai/a	560 g ai/ha	B						
2 COC	1 % v/v	1 % v/v	B						
3 SL-575D	1.125 pt/a	1020 g ai/ha	A		84 a	95 a	100 a	80 a	73 ab
3 Atrazine	0.5 lb ai/a	560 g ai/ha	A						
3 SL-575D	1.125 pt/a	1020 g ai/ha	B						
3 Atrazine	0.5 lb ai/a	560 g ai/ha	B						
3 COC	1 % v/v	1 % v/v	B						
4 Resicore	40 fl oz/a	1.25 qt/a	A		72 c	100 a	100 a	95 a	95 ab
4 Atrazine	0.5 lb ai/a	560 g ai/ha	A						
4 Resicore	40 fl oz/a	1.25 qt/a	B						
4 Atrazine	0.5 lb ai/a	560 g ai/ha	B						
4 COC	1 % v/v	1 % v/v	B						
5 Acuron	40 fl oz/a	1.25 qt/a	A		78 b	98 a	100 a	91 a	100 a
5 Acuron	40 fl oz/a	1.25 qt/a	B						
5 COC	1 % v/v	1 % v/v	B						
6 Armezon Pro	20 fl oz/a	1.25 pt/a	A		82 ab	79 b	100 a	75 a	80 ab
6 Atrazine	0.5 lb ai/a	560 g ai/ha	A						
6 Atrazine	0.5 lb ai/a	560 g ai/ha	B						
6 Roundup Powermax	32 fl oz/a	1260 g ae/ha	B						
6 COC	1 % v/v	1 % v/v	B						

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 Due to missing data, larger LSD values (col. 10: >=16.9 and <=19.6) are used for mean comparisons of treatment pairs with missing data.
 * Adjusted means
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The Ohio State University

2020 SL-575D Visibility Protocol

Trial ID: 20SL-575 Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: Investigator: Dr. Mark M. Loux
 Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	IPOSS	SIDSP
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ipomoea sp.	Sida spinosa
Pest Name	foxtail, giant ragweed, giant	lambsquarters,>	Morning glory	sida, prickly	
Crop Type, Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jul-20-2020	Jul-20-2020	Jul-20-2020	Jul-20-2020	Jul-20-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Data Entry Date	Jul-20-2020	Jul-20-2020	Jul-20-2020	Jul-20-2020	Jul-20-2020
Days After First/Last Applic.	89 41	89 41	89 41	89 41	89 41
Trt-Eval Interval					
Plant-Eval Interval	89 DP-1	89 DP-1	89 DP-1	89 DP-1	89 DP-1
Days After Emergence	67 DE-1	67 DE-1	67 DE-1	67 DE-1	67 DE-1
ARM Action Codes					
Number of Decimals	0	0	0	0	0
Trt Treatment	Rate	Other	Other	Appl	
No. Name	Rate	Unit	Rate	Rate	Unit Code
	16*		17*		
	18*		19*		20*
7 Harness Max	1.72 qt/a		1860 g ai/ha	A	82 ab
7 Atrazine	0.5 lb ai/a		560 g ai/ha	A	93 a
7 Roundup Powermax	32 fl oz/a		1260 g ae/ha	B	100 a
7 Atrazine	0.5 lb ai/a		560 g ai/ha	B	77 a
7 COC	1 % v/v		1 % v/v	B	80 ab
8 Untreated Check					0 d
LSD P=.05	5.0		8.6		. 18.5 28.6
Standard Deviation	3.4		5.9		0.0 12.4 19.4
CV	4.88		7.12		0.0 17.52 28.78
Grand Mean	70.3		82.3		87.5 71.0 67.5
Levene's F	0.66		0.932		0.00 1.673 3.088
Levene's Prob(F)	0.703		0.50		. 0.17 0.018*
Rank X2	.		.		. . .
P(Rank X2)	.		.		. . .
Skewness	-2.2334*		-2.11*		-2.3809* -1.3869* -0.7541
Kurtosis	3.4466*		3.0658*		3.9094* 0.9442 -0.7443
Replicate F	4.121		1.601		0.000 4.581 1.700
Replicate Prob(F)	0.0191		0.2191		1.0000 0.0149 0.1975
Treatment F	279.024		133.710		0.000 22.692 11.110
Treatment Prob(F)	0.0001		0.0001		1.0000 0.0001 0.0001

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 * Adjusted means
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The Ohio State University

2020 SL-575D Visibility Protocol

Trial ID: 20SL-575 Location: Western Branch G-6 Trial Year: 2020
Protocol ID: Investigator: Dr. Mark M. Loux
Project ID: Study Director: Chuck Foresman
 Sponsor Contact: Jay Turner

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
CHEAL, Chenopodium album, common lambsquarters = US
IPOSS, Ipomoea sp., Morning glory = US
SETFA, Setaria faberi, foxtail, giant = US
AMBTR, Ambrosia trifida, ragweed, giant = US
CHEAL, Chenopodium album, lambsquarters, common = US
SIDSP, Sida spinosa, sida, prickly = US

Crop Type, Code

C = EPPO species (Bayer) codes
ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

CONTRO = control / burndown or knockdown
PHYNEC = phytotoxicity - necrosis /burn

Rating Unit

% = percent

Plant-Eval Interval

47 DP-1 = 1 ZEAMX Apr-22-2020
55 DP-1 = 1 ZEAMX Apr-22-2020
63 DP-1 = 1 ZEAMX Apr-22-2020
77 DP-1 = 1 ZEAMX Apr-22-2020
89 DP-1 = 1 ZEAMX Apr-22-2020

ARM Action Codes

ET8 = Excluded treatment 8
AS = Automatic square root transformation of X+0.5