

The Ohio State University

Trial ID: 22CORNSHOW Cooperator Trial ID:
 Protocol ID: 22CORNSHOW Location: Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Status: E established
 ARM Trial Created On: Mar-31-2022
 Initiation Date: May-1-2022

Trial Location

City: South Charleston Country: USA United States
 State/Prov.: Ohio
 Postal Code: 45368

Latitude of LL Corner °: 39.8594 N
 Longitude of LL Corner °: -83.67435 W
 Altitude of LL Corner: 1085.00 FT

Conducted Under GLP: No
 Conducted Under GEP: No
 None

Crop Description

Crop 1: C ZEAMXZea mays Corn Stage Scale: BBCH
 Entry Date: May-3-2022
 Variety: Pioneer P1077AM
 Attributes: Glyphosate-R, Glufosinate-R
 Seed Size: 1588 S/LB
 Planting Rate: 32097 S/A
 Planting Date: May-2-2022
 Depth: 2 IN
 Rows per Plot: 4
 Row Spacing: 30 IN
 Planting Method: PLANTD planted
 Planting Equipment: FPP finger pickup planter
 Seed Bed: MEDIUM medium
 Soil Moisture: DRY dry
 Soil Temperature: 52 F
 Emergence Date: May-16-2022
 Harvest Date: Oct-11-2022
 Moisture Meter: Harvest Master
 % Standard Moisture: 15.5
 Weighing Equipment: Harvest Master HM800
 Harvest Equipment: Kincaid 8XP
 Harvested Width: 5 FT
 Harvested Length: 30 FT

Pest Description

Pest 1 Type: W Code: AMBTR Ambrosia trifida Entry Date: Jun-6-2022
 Common Name: Giant ragweed Stage Scale: BBCH
 Pest 2 Type: W Code: SETFA Setaria faberi Entry Date: Jun-6-2022
 Common Name: Giant foxtail Stage Scale: BBCH
 Pest 3 Type: W Code: CHEAL Chenopodium album Entry Date: Jun-6-2022
 Common Name: common lambsquarters Stage Scale: BBCH
 Pest 4 Type: W Code: IPOHE Ipomoea hederacea Entry Date: Jun-6-2022
 Common Name: ivy-leaf morning glory Stage Scale: BBCH
 Pest 5 Type: W Code: ECHCG Echinochloa crus-galli Entry Date: Jun-6-2022
 Common Name: common barnyardgrass Stage Scale: BBCH
 Pest 6 Type: W Code: ABUTH Abutilon theophrasti Entry Date: Jun-6-2022
 Common Name: velvetleaf Stage Scale: BBCH
 Pest 7 Type: W Code: SIDSP Sida spinosa Entry Date: Jun-6-2022
 Common Name: Prickly sida Stage Scale: BBCH

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 FT² Tillage Type: CONTIL conventional-till
 Replications: 4 Treatments: 10 Plots: 40 Study Design: RACOB Randomized Complete Block (RCB)

Previous
 No. Crop Year
 1. SOYBEAN 2021

Soil Description

Description Name: G-6
 % Sand: 32 % OM: 2.2 Texture: SICL silty clay loam
 % Silt: 53 Soil Name: Kokomo
 % Clay: 15 Fert. Level: G good
 pH: 5.9 CEC: 14
 g o o d

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Application Description

	A	B
Application Date	May-2-2022	Jun-3-2022
Appl. Start Time	5:00 PM	9:50 AM
Appl. Stop Time	5:30 PM	10:05 AM
Application Method	NONINC	SPRAY
Application Timing	PRE	POST
Application Placement	BROSOL	BROFOL
Applied By	Loux	Loux
Appl. Entry Date	May-3-2022	Jun-6-2022
Air Temperature Start, Stop	71, 71 F	67, 67 F
% Relative Humidity Start, Stop	34, 34	52, 52
Wind Velocity+Dir. Start	9.5 MPH, W	4 MPS, W
Wind Velocity+Dir. Stop	9 MPH, W	4 MPS, W
Wind Velocity+Dir. Max	11 MPH, W	4 MPS, W
Wet Leaves (Y/N)	N, no	N, no
Soil Temperature	62 F	65 F
Soil Moisture	DRY	DRY
Soil Surface Condition	MEDIUM	MEDIUM
% Cloud Cover	33	0
Next Moisture Occurred On	May-3-2022	Jun-6-2022
Time to Next Moisture	14.0 HR	3.0 DAY
Moisture 6 Hours after Appl.	0 IN	0 IN
Moisture 1 Week after Appl.	2.09 IN	1.08 IN

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale	ZEAMX, BCOR	ZEAMX, BCOR
Days after Emergence	-14	18
Stage Majority, Percent		15, 100
Height Average		14 IN
Height Minimum, Maximum		10, 18

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale	AMBTR, W, BBCH	AMBTR, W, BBCH
Stage Majority, Percent		16, 50
Stage Minimum, Percent		14, 20
Stage Maximum, Percent		18, 20
Height Average		6 IN
Height Minimum, Maximum		2, 8
Density Average		12 PLA/m2
Density Minimum, Maximum		8, 15
Pest 2 Code, Type, Scale	SETFA, W, BBCH	SETFA, W, BBCH
Stage Majority, Percent		13, 80
Stage Minimum, Percent		12, 20
Stage Maximum, Percent		13, 80
Height Average		4 IN
Height Minimum, Maximum		2, 6
Density Average		125 pla/m2
Density Minimum, Maximum		100, 150
Pest 3 Code, Type, Scale	CHEAL, W, BBCH	CHEAL, W, BBCH
Stage Majority, Percent		16, 80
Stage Minimum, Percent		14, 20
Stage Maximum, Percent		16, 80
Height Average		2 IN
Height Minimum, Maximum		2, 4
Density Average		12 pla/m2
Density Minimum, Maximum		8, 16
Pest 4 Code, Type, Scale	IPOHE, W, BBCH	IPOHE, W, BBCH
Stage Majority, Percent		12, 100
Height Average		2 IN
Height Minimum, Maximum		2, 4
Density Average		3 pla/m2
Density Minimum, Maximum		1, 5
Pest 5 Code, Type, Scale	ECHCG, W, BBCH	ECHCG, W, BBCH
Stage Majority, Percent		13, 100
Height Average		4 IN
Height Minimum, Maximum		2, 4
Density Average		25 pla/m2
Density Minimum, Maximum		15, 30
Pest 6 Code, Type, Scale	ABUTH, W, BBCH	ABUTH, W, BBCH
Stage Majority, Percent		13, 80
Stage Minimum, Percent		13, 80
Stage Maximum, Percent		14, 20
Height Average		2 IN
Height Minimum, Maximum		2, 4
Density Average		2 pla/m2
Density Minimum, Maximum		0, 7
Pest 7 Code, Type, Scale	SIDSP, W, BBCH	SIDSP, W, BBCH
Stage Majority, Percent		12, 90
Stage Minimum, Percent		12, 90
Stage Maximum, Percent		13, 10
Height Average		2 IN
Height Minimum, Maximum		2, 4
Density Average		3 pla/m2
Density Minimum, Maximum		1, 9

Application Equipment

	A	B
Appl. Equipment	6' TTI	10' AIXR
Equipment Type	BACCAI	BACCAI
Operation Pressure	44 PSI	44 PSI
Nozzle Model	1110015	110015
Nozzle Type	TTI	AI XR
Nozzle TradeName	Turbo Tee Induction	TeeJet
Nozzle Tip Size, Color	015, green	015, green
Nozzle Spacing	18 IN	18 IN
Boom Length	6.67 FT	10 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 Overage		25 mL
Mix Size	1 L	2 L
Spray pH	7.8	7.8
Propellant	COMCO2	COMCO2
Tank Mix (Y/N)		Y, yes

Notes

Context	Date	By	Notes
STATUS	Mar-31-2022	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'S' during trial creation.
STATUS	May-3-2022	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'E' when Initiation Date entered.

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Pest Type	C, ZEAMX C, ZEAMX C, ZEAMX C, ZEAMX					W, Weed	W, Weed
Pest Code	Corn					SETFA	ECHCG
Pest Name	Giant foxtail					common	barnyard>
Crop Type, Code	Corn	Corn	Corn	Corn	Corn		
Crop Name	May-23-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022
Rating Date	PHYGEN	PHYSTU	PHYCHL	PHYNEC	PHYLMA	CONTRO	CONTRO
Rating Type	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100
Rating Unit/Min/Max	1	1	1	1	1	1	1
Number of Subsamples	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022
Data Entry Date	AT POST					AT POST	AT POST
Rating Timing	21, 21	31, 31	31, 31	31, 31	31, 31	31, 31	31, 31
Days After First/Last Applic.	21 DA-A	31 DA-A	31 DA-A	31 DA-A	31 DA-A	31 DA-A	31 DA-A
Trt-Eval Interval	7 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1
Days After Emergence	ARM Action Codes						
ARM Action Codes	Number of Decimals						
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1*	2*	3*	4*	5*	6*	7*
1	Bicep II Magnum	2.06 lb ai/a	A		0-	0-	0-	0-	0-	93-	93-
1	Impact	0.0219 lb ai/a	B								
1	Atrazine	0.5 lb ai/a	B								
1	HC MSO	0.5 % v/v	B								
1	N Pak AMS	2.5 % v/v	B								
2	Bicep II Magnum	2.06 lb ai/a	A		0-	0-	0-	0-	0-	80-	80-
2	Impact Core	1.68 lb ai/a	B								
2	Atrazine	0.5 lb ai/a	B								
2	HC MSO	0.5 % v/v	B								
2	N Pak AMS	2.5 % v/v	B								
3	Bicep II Magnum	2.06 lb ai/a	A		0-	0-	0-	0-	0-	86-	86-
3	Sinate	0.48 lb ai/a	B								
3	Atrazine	0.5 lb ai/a	B								
3	HC MSO	0.5 % v/v	B								
3	N Pak AMS	2.5 % v/v	B								
4	Bicep II Magnum	2.06 lb ai/a	A		0-	0-	0-	0-	0-	91-	91-
4	Shieldex	0.035 lb ai/a	B								
4	Atrazine	0.5 lb ai/a	B								
4	COC	1 % v/v	B								
4	N Pak AMS	2.5 % v/v	B								
5	Restraint	1.83 lb ai/a	A		0-	0-	0-	0-	0-	100-	100-
5	Shieldex	0.035 lb ai/a	B								
5	COC	1 % v/v	B								
5	N Pak AMS	2.5 % v/v	B								
6	SURESTART II	1.38 lb ai/a	A		0-	0-	0-	0-	0-	99-	99-
6	Resicore XL	1.22 lb ai/a	B								
6	Atrazine	1 lb ai/a	B								
6	Durango DMA	1 lb ae/a	B								
6	NIS	0.25 % v/v	B								
6	N Pak AMS	2.5 % v/v	B								
7	Trivolt	0.57 lb ai/a	A		0-	0-	0-	0-	0-	95-	95-
7	Harness Max	1.22 lb ai/a	B								
7	Atrazine	1 lb ai/a	B								
7	Roundup Powermax 3	1 lb ae/a	B								
7	NIS	0.25 % v/v	B								
7	N Pak AMS	2.5 % v/v	B								
8	Maverick	0.287 lb ai/a	A		0-	0-	0-	0-	0-	88-	88-
8	Maverick	0.223 lb ai/a	B								
8	Atrazine	1 lb ai/a	B								
8	Roundup Powermax 3	1 lb ae/a	B								
8	NIS	0.25 % v/v	B								
8	N Pak AMS	2.5 % v/v	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
 Could not calculate LSD (% mean diff) for columns 1,2,3,4,5 because error mean square = 0.
 ^Calculated from residual.

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Pest Type						W, Weed	W, Weed			
Pest Code						SETFA	ECHCG			
Pest Name						Giant foxtail common barnyard>				
Crop Type, Code	C, ZEAMX	C, ZEAMX	C, ZEAMX	C, ZEAMX	C, ZEAMX					
Crop Name	Corn	Corn	Corn	Corn	Corn					
Rating Date	May-23-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022			
Rating Type	PHYGEN	PHYSTU	PHYCHL	PHYNEC	PHYLMA	CONTRO	CONTRO			
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100			
Number of Subsamples	1	1	1	1	1	1	1			
Data Entry Date	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022			
Rating Timing						AT POST	AT POST			
Days After First/Last Applic.	21, 21	31, 31	31, 31	31, 31	31, 31	31, 31	31, 31			
Trt-Eval Interval	21 DA-A	31 DA-A	31 DA-A	31 DA-A	31 DA-A	31 DA-A	31 DA-A			
Days After Emergence	7 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1			
ARM Action Codes										
Number of Decimals	0	0	0	0	0	0	0			
Trt Treatment	Rate	Rate Unit	Appl Code	1*	2*	3*	4*	5*	6*	7*
9Acuron	1.29lb ai/a	A		0-	0-	0-	0-	0-	83-	83-
9Acuron GT	2.01lb ai/a	B								
9Atrazine	1 lb ai/a	B								
9NIS	0.25% v/v	B								
9N Pak AMS	2.5% v/v	B								
10Bicep II Magnum	2.9lb ai/a	A		0-	0-	0-	0-	0-	98-	98-
10Roundup Powermax 3	0.75lb ae/a	B								
10Status	0.0875lb ai/a	B								
10N Pak AMS	2.5% v/v	B								
LSD P=.05				.	.	.	.	.	12.6	12.6
Standard Deviation				0.0	0.0	0.0	0.0	0.0	8.7	8.7
CV				0.0	0.0	0.0	0.0	0.0	9.5	9.5
Grand Mean				0.0	0.0	0.0	0.0	0.0	91.2	91.2
Levene's F^				.	.	.	.	.	0.847	0.847
Levene's Prob(F)				.	.	.	.	.	0.58	0.58
Rank X2				.	.	.	.	.	.	.
P(Rank X2)				.	.	.	.	.	.	.
Skewness^				.	.	.	.	.	-0.1191	-0.1191
Kurtosis^				.	.	.	.	.	-0.0384	-0.0384
Replicate F				0.000	0.000	0.000	0.000	0.000	3.305	3.305
Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.0352	0.0352
Treatment F				0.000	0.000	0.000	0.000	0.000	2.609	2.609
Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	0.0260	0.0260

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Pest Type	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed
Pest Code	AMBTR	CHEAL	ABUTH	IPOHE	SETFA	SETPU
Pest Name	Giant ragweed	common lambsqua>	velvetleaf	ivy-leaf mornin>	Giant foxtail	yellow foxtail
Crop Type, Code						
Crop Name						
Rating Date	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-17-2022	Jun-17-2022
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100
Number of Subsamples	1	1	1	1	1	1
Data Entry Date	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022		Jun-24-2022
Rating Timing	AT POST	AT POST	AT POST	AT POST		
Days After First/Last Applic.	31, 31	31, 31	31, 31	31, 31	46, 14	46, 14
Trt-Eval Interval	31 DA-A	31 DA-A	31 DA-A	31 DA-A	14 DA-B	14 DA-B
Days After Emergence	17 DE-1	17 DE-1	17 DE-1	17 DE-1	32 DE-1	32 DE-1
ARM Action Codes						
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	8*	9*	10*	11*	12*	13*	
1	Bicep II Magnum	2.06 lb ai/a	A		18bcd		87-	50b	65-	99-	100-
1	Impact	0.0219 lb ai/a	B								
1	Atrazine	0.5 lb ai/a	B								
1	HC MSO	0.5 % v/v	B								
1	N Pak AMS	2.5 % v/v	B								
2	Bicep II Magnum	2.06 lb ai/a	A		15cd		100-	58b	43-	99-	100-
2	Impact Core	1.68 lb ai/a	B								
2	Atrazine	0.5 lb ai/a	B								
2	HC MSO	0.5 % v/v	B								
2	N Pak AMS	2.5 % v/v	B								
3	Bicep II Magnum	2.06 lb ai/a	A		5d		88-	53b	48-	100-	98-
3	Sinate	0.48 lb ai/a	B								
3	Atrazine	0.5 lb ai/a	B								
3	HC MSO	0.5 % v/v	B								
3	N Pak AMS	2.5 % v/v	B								
4	Bicep II Magnum	2.06 lb ai/a	A		5d		91-	58b	28-	100-	100-
4	Shieldex	0.035 lb ai/a	B								
4	Atrazine	0.5 lb ai/a	B								
4	COC	1 % v/v	B								
4	N Pak AMS	2.5 % v/v	B								
5	Restraint	1.83 lb ai/a	A		38a-d		95-	58b	25-	100-	100-
5	Shieldex	0.035 lb ai/a	B								
5	COC	1 % v/v	B								
5	N Pak AMS	2.5 % v/v	B								
6	SURESTART II	1.38 lb ai/a	A		25bcd		100-	65b	38-	100-	100-
6	Resicore XL	1.22 lb ai/a	B								
6	Atrazine	1 lb ai/a	B								
6	Durango DMA	1 lb ae/a	B								
6	NIS	0.25 % v/v	B								
6	N Pak AMS	2.5 % v/v	B								
7	Trivolt	0.57 lb ai/a	A		63a		100-	100a	63-	100-	100-
7	Harness Max	1.22 lb ai/a	B								
7	Atrazine	1 lb ai/a	B								
7	Roundup Powermax 3	1 lb ae/a	B								
7	NIS	0.25 % v/v	B								
7	N Pak AMS	2.5 % v/v	B								
8	Maverick	0.287 lb ai/a	A		50ab		100-	100a	78-	100-	100-
8	Maverick	0.223 lb ai/a	B								
8	Atrazine	1 lb ai/a	B								
8	Roundup Powermax 3	1 lb ae/a	B								
8	NIS	0.25 % v/v	B								
8	N Pak AMS	2.5 % v/v	B								

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Pest Type	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed				
Pest Code	AMBTR	CHEAL	ABUTH	IPOHE	SETFA	SETPU				
Pest Name	Giant ragweed	common lambsqua>	velvetleaf	ivy-leaf mornin>	Giant foxtail	yellow foxtail				
Crop Type, Code										
Crop Name										
Rating Date	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-17-2022	Jun-17-2022				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100				
Number of Subsamples	1	1	1	1	1	1				
Data Entry Date	Jun-2-2022	Jun-2-2022	Jun-2-2022	Jun-2-2022		Jun-24-2022				
Rating Timing	AT POST	AT POST	AT POST	AT POST						
Days After First/Last Applic.	31, 31	31, 31	31, 31	31, 31	46, 14	46, 14				
Trt-Eval Interval	31 DA-A	31 DA-A	31 DA-A	31 DA-A	14 DA-B	14 DA-B				
Days After Emergence	17 DE-1	17 DE-1	17 DE-1	17 DE-1	32 DE-1	32 DE-1				
ARM Action Codes										
Number of Decimals	0	0	0	0	0	0				
Trt Treatment	Rate	Rate Unit	Appl Code	8*	9*	10*	11*	12*	13*	
9Acuron	1.29 lb ai/a	A		43abc		100-	98a	25-	99-	100-
9Acuron GT	2.01 lb ai/a	B								
9Atrazine	1 lb ai/a	B								
9NIS	0.25 % v/v	B								
9N Pak AMS	2.5 % v/v	B								
10Bicep II Magnum	2.9 lb ai/a	A		23bcd		96-	52b	25-	100-	100-
10Roundup Powermax 3	0.75 lb ae/a	B								
10Status	0.0875 lb ai/a	B								
10N Pak AMS	2.5 % v/v	B								
LSD P=.05				22.4	16.9	25.3	48.0	2.0	2.3	
Standard Deviation				15.4	11.6	17.5	33.1	1.4	1.6	
CV				54.62	12.15	25.33	76.04	1.36	1.59	
Grand Mean				28.3	95.7	69.0	43.5	99.6	99.8	
Levene's F^				0.648	0.33	0.37	1.069	0.535	0.711	
Levene's Prob(F)				0.747	0.958	0.94	0.413	0.837	0.694	
Rank X2				.	.	.	.	.	.
P(Rank X2)				.	.	.	.	.	.
Skewness^				0.3862	-1.2191*	0.5555	0.2794	-1.7408*	-3.2005*	
Kurtosis^				-0.4122	2.1754*	0.8282	-0.5908	3.9906*	18.2785*	
Replicate F				0.207	2.570	2.108	1.862	1.253	1.000	
Replicate Prob(F)				0.8910	0.0751	0.1227	0.1600	0.3101	0.4079	
Treatment F				6.256	0.842	5.930	1.347	0.797	1.000	
Treatment Prob(F)				0.0001	0.5852	0.0001	0.2603	0.6217	0.4635	

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 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 1,2,3,4,5 because error mean square = 0.
 ^Calculated from residual.

The Ohio State University

Trial ID: 22CORNSHOW Cooperator Trial ID:
 Protocol ID: 22CORNSHOW Location: Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director:
 Investigator (Creator): Dr. Mark M. Loux Sponsor Contact:

Pest Type	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed
Pest Code	ECHCG	AMBTR	IPOHE	CHEAL	ABUTH	SETFA
Pest Name	common barnyard>	Giant ragweed	ivy-leaf mornin>	common lambsqua>	velvetleaf	Giant foxtail
Crop Type, Code						
Crop Name						
Rating Date	Jun-17-2022	Jun-17-2022	Jun-17-2022	Jun-17-2022	Jun-17-2022	Jul-1-2022
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100
Number of Subsamples	1	1	1	1	1	1
Data Entry Date	Jun-24-2022	Jun-24-2022	Jun-24-2022	Jun-24-2022	Jul-20-2022	Jul-8-2022
Rating Timing						
Days After First/Last Applic.	46, 14	46, 14	46, 14	46, 14	46, 14	60, 28
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B	14 DA-B	28 DA-B
Days After Emergence	32 DE-1	32 DE-1	32 DE-1	32 DE-1	32 DE-1	46 DE-1
ARM Action Codes						
Number of Decimals	0	0	0	0	0	0

Trt	Treatment	Rate	Rate Unit	Appl Code	14*	15*	16*	17*	18*	19*
1	Bicep II Magnum	2.06 lb ai/a	A		99-	66d	79c	100-	100-	99-
1	Impact	0.0219 lb ai/a	B							
1	Atrazine	0.5 lb ai/a	B							
1	HC MSO	0.5 % v/v	B							
1	N Pak AMS	2.5 % v/v	B							
2	Bicep II Magnum	2.06 lb ai/a	A		100-	79bc	85bc	100-	100-	96-
2	Impact Core	1.68 lb ai/a	B							
2	Atrazine	0.5 lb ai/a	B							
2	HC MSO	0.5 % v/v	B							
2	N Pak AMS	2.5 % v/v	B							
3	Bicep II Magnum	2.06 lb ai/a	A		99-	69cd	86bc	100-	100-	99-
3	Sinate	0.48 lb ai/a	B							
3	Atrazine	0.5 lb ai/a	B							
3	HC MSO	0.5 % v/v	B							
3	N Pak AMS	2.5 % v/v	B							
4	Bicep II Magnum	2.06 lb ai/a	A		98-	68d	83bc	100-	100-	100-
4	Shieldex	0.035 lb ai/a	B							
4	Atrazine	0.5 lb ai/a	B							
4	COC	1 % v/v	B							
4	N Pak AMS	2.5 % v/v	B							
5	Restraint	1.83 lb ai/a	A		99-	76bcd	69d	100-	100-	100-
5	Shieldex	0.035 lb ai/a	B							
5	COC	1 % v/v	B							
5	N Pak AMS	2.5 % v/v	B							
6	SURESTART II	1.38 lb ai/a	A		100-	94a	98a	100-	100-	100-
6	Resicore XL	1.22 lb ai/a	B							
6	Atrazine	1 lb ai/a	B							
6	Durango DMA	1 lb ae/a	B							
6	NIS	0.25 % v/v	B							
6	N Pak AMS	2.5 % v/v	B							
7	Trivolt	0.57 lb ai/a	A		100-	99a	99a	100-	100-	100-
7	Harness Max	1.22 lb ai/a	B							
7	Atrazine	1 lb ai/a	B							
7	Roundup Powermax 3	1 lb ae/a	B							
7	NIS	0.25 % v/v	B							
7	N Pak AMS	2.5 % v/v	B							
8	Maverick	0.287 lb ai/a	A		100-	94a	99a	100-	100-	100-
8	Maverick	0.223 lb ai/a	B							
8	Atrazine	1 lb ai/a	B							
8	Roundup Powermax 3	1 lb ae/a	B							
8	NIS	0.25 % v/v	B							
8	N Pak AMS	2.5 % v/v	B							

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
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 * Adjusted means
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 ^Calculated from residual.

The Ohio State University

Trial ID: 22CORNSHOW Cooperator Trial ID:
 Protocol ID: 22CORNSHOW Location: Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director:
 Investigator (Creator): Dr. Mark M. Loux Sponsor Contact:

Pest Type	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed			
Pest Code	ECHCG	AMBTR	IPOHE	CHEAL	ABUTH	SETFA			
Pest Name	common barnyard	Giant ragweed	ivy-leaf mornin	common lambsqua	velvetleaf	Giant foxtail			
Crop Type, Code									
Crop Name									
Rating Date	Jun-17-2022	Jun-17-2022	Jun-17-2022	Jun-17-2022	Jun-17-2022	Jul-1-2022			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100			
Number of Subsamples	1	1	1	1	1	1			
Data Entry Date	Jun-24-2022	Jun-24-2022	Jun-24-2022	Jun-24-2022	Jul-20-2022	Jul-8-2022			
Rating Timing									
Days After First/Last Applic.	46, 14	46, 14	46, 14	46, 14	46, 14	60, 28			
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B	14 DA-B	28 DA-B			
Days After Emergence	32 DE-1	32 DE-1	32 DE-1	32 DE-1	32 DE-1	46 DE-1			
ARM Action Codes									
Number of Decimals	0	0	0	0	0	0			
Trt Treatment	Rate	Rate Unit	Appl Code	14*	15*	16*	17*	18*	19*
9Acuron	1.29lb ai/a	A		99-	84b	91 ab	100-	100-	100-
9Acuron GT	2.01lb ai/a	B							
9Atrazine	1 lb ai/a	B							
9NIS	0.25% v/v	B							
9N Pak AMS	2.5% v/v	B							
10Bicep II Magnum	2.9lb ai/a	A		100-	79bc	84 bc	98-	98-	100-
10Roundup Powermax 3	0.75lb ae/a	B							
10Status	0.0875lb ai/a	B							
10N Pak AMS	2.5% v/v	B							
LSD P=.05				2.8	7.6	8.1	2.3	2.3	3.7
Standard Deviation				1.9	5.2	5.6	1.6	1.6	2.6
CV				1.91	6.47	6.4	1.59	1.59	2.59
Grand Mean				99.3	80.6	87.1	99.8	99.8	99.4
Levene's F^				1.166	0.332	1.579	0.711	0.711	0.603
Levene's Prob(F)				0.351	0.957	0.167	0.694	0.694	0.784
Rank X2				.	.	.	.	.	.
P(Rank X2)				.	.	.	.	.	.
Skewness^				-1.1522*	0.301	0.0636	-3.2005*	-3.2005*	-2.437*
Kurtosis^				1.0816	0.39	-0.1332	18.2785*	18.2785*	11.1854*
Replicate F				0.231	3.167	3.633	1.000	1.000	1.348
Replicate Prob(F)				0.8741	0.0405	0.0254	0.4079	0.4079	0.2796
Treatment F				0.846	19.949	11.925	1.000	1.000	0.889
Treatment Prob(F)				0.5817	0.0001	0.0001	0.4635	0.4635	0.5478

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The Ohio State University

Trial ID: 22CORNSHOW Cooperator Trial ID:
 Protocol ID: 22CORNSHOW Location: Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director:
 Investigator (Creator): Dr. Mark M. Loux Sponsor Contact:

Pest Type	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed
Pest Code	SETPU	ECHCG	AMBTR	IPHOE	CHEAL	ABUTH
Pest Name	yellow foxtail common	barnyard>	Giant ragweed	ivy-leaf mornin>	common lambsqua>	velvetleaf
Crop Type, Code						
Crop Name						
Rating Date	Jul-1-2022	Jul-1-2022	Jul-1-2022	Jul-1-2022	Jul-1-2022	Jul-1-2022
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Number of Subsamples	1	1	1	1	1	1
Data Entry Date	Jul-8-2022	Jul-8-2022	Jul-8-2022	Jul-8-2022	Jul-8-2022	Jul-20-2022
Rating Timing						
Days After First/Last Applic.	60, 28	60, 28	60, 28	60, 28	60, 28	60, 28
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B
Days After Emergence	46 DE-1	46 DE-1	46 DE-1	46 DE-1	46 DE-1	46 DE-1
ARM Action Codes						
Number of Decimals	0	0	0	0	0	0

Trt Treatment No. Name	Rate	Rate Unit	Appl Code	20*	21*	22*	23*	24*	25*
1 Bicep II Magnum	2.06 lb ai/a	A		100-	96-	65 c	79 c	100-	100-
1 Impact	0.0219 lb ai/a	B							
1 Atrazine	0.5 lb ai/a	B							
1 HC MSO	0.5 % v/v	B							
1 N Pak AMS	2.5 % v/v	B							
2 Bicep II Magnum	2.06 lb ai/a	A		100-	89-	78 b	83 bc	100-	100-
2 Impact Core	1.68 lb ai/a	B							
2 Atrazine	0.5 lb ai/a	B							
2 HC MSO	0.5 % v/v	B							
2 N Pak AMS	2.5 % v/v	B							
3 Bicep II Magnum	2.06 lb ai/a	A		98-	91-	69 bc	83 bc	100-	100-
3 Sinate	0.48 lb ai/a	B							
3 Atrazine	0.5 lb ai/a	B							
3 HC MSO	0.5 % v/v	B							
3 N Pak AMS	2.5 % v/v	B							
4 Bicep II Magnum	2.06 lb ai/a	A		100-	95-	70 bc	76 cd	100-	100-
4 Shieldex	0.035 lb ai/a	B							
4 Atrazine	0.5 lb ai/a	B							
4 COC	1 % v/v	B							
4 N Pak AMS	2.5 % v/v	B							
5 Restraint	1.83 lb ai/a	A		100-	95-	71 bc	66 d	100-	100-
5 Shieldex	0.035 lb ai/a	B							
5 COC	1 % v/v	B							
5 N Pak AMS	2.5 % v/v	B							
6 SURESTART II	1.38 lb ai/a	A		100-	100-	98 a	98 a	100-	100-
6 Resicore XL	1.22 lb ai/a	B							
6 Atrazine	1 lb ai/a	B							
6 Durango DMA	1 lb ae/a	B							
6 NIS	0.25 % v/v	B							
6 N Pak AMS	2.5 % v/v	B							
7 Trivolt	0.57 lb ai/a	A		100-	100-	100 a	95 ab	100-	100-
7 Harness Max	1.22 lb ai/a	B							
7 Atrazine	1 lb ai/a	B							
7 Roundup Powermax 3	1 lb ae/a	B							
7 NIS	0.25 % v/v	B							
7 N Pak AMS	2.5 % v/v	B							
8 Maverick	0.287 lb ai/a	A		100-	100-	100 a	100 a	100-	100-
8 Maverick	0.223 lb ai/a	B							
8 Atrazine	1 lb ai/a	B							
8 Roundup Powermax 3	1 lb ae/a	B							
8 NIS	0.25 % v/v	B							
8 N Pak AMS	2.5 % v/v	B							

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 Protocol ID: 22CORNSHOW Location: Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director:
 Investigator (Creator): Dr. Mark M. Loux Sponsor Contact:

Pest Type	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed			
Pest Code	SETPU	ECHCG	AMBTR	IPOHE	CHEAL	ABUTH			
Pest Name	yellow foxtail	common barnyard	> Giant ragweed	ivy-leaf mornin	> common lambsqua	> velvetleaf			
Crop Type, Code									
Crop Name									
Rating Date	Jul-1-2022	Jul-1-2022	Jul-1-2022	Jul-1-2022	Jul-1-2022	Jul-1-2022			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100			
Number of Subsamples	1	1	1	1	1	1			
Data Entry Date	Jul-8-2022	Jul-8-2022	Jul-8-2022	Jul-8-2022	Jul-8-2022	Jul-20-2022			
Rating Timing									
Days After First/Last Applic.	60, 28	60, 28	60, 28	60, 28	60, 28	60, 28			
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B			
Days After Emergence	46 DE-1	46 DE-1	46 DE-1	46 DE-1	46 DE-1	46 DE-1			
ARM Action Codes									
Number of Decimals	0	0	0	0	0	0			
Trt Treatment	Rate	Rate Unit	Appl Code	20*	21*	22*	23*	24*	25*
9Acuron	1.29lb ai/a	A		100-	100-	99a	90abc	100-	100-
9Acuron GT	2.01lb ai/a	B							
9Atrazine	1 lb ai/a	B							
9NIS	0.25% v/v	B							
9N Pak AMS	2.5% v/v	B							
10Bicep II Magnum	2.9lb ai/a	A		100-	100-	74bc	81bc	98-	98-
10Roundup Powermax 3	0.75lb ae/a	B							
10Status	0.0875lb ai/a	B							
10N Pak AMS	2.5% v/v	B							
LSD P=.05				2.3	8.7	6.3	10.2	2.3	2.3
Standard Deviation				1.6	6.0	4.3	7.1	1.6	1.6
CV				1.59	6.19	5.25	8.32	1.59	1.59
Grand Mean				99.8	96.6	82.3	84.9	99.8	99.8
Levene's F^				0.711	2.671	0.875	1.051	0.711	0.711
Levene's Prob(F)				0.694	0.021*	0.557	0.425	0.694	0.694
Rank X2				.	.	.	.	.	.
P(Rank X2)				.	.	.	.	.	.
Skewness^				-3.2005*	-0.2902	0.2364	0.1036	-3.2005*	-3.2005*
Kurtosis^				18.2785*	0.443	1.0035	-0.333	18.2785*	18.2785*
Replicate F				1.000	1.791	1.299	1.522	1.000	1.000
Replicate Prob(F)				0.4079	0.1727	0.2952	0.2314	0.4079	0.4079
Treatment F				1.000	1.907	47.299	8.966	1.000	1.000
Treatment Prob(F)				0.4635	0.0941	0.0001	0.0001	0.4635	0.4635

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
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The Ohio State University

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 Protocol ID: 22CORNSHOW Location: Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director:
 Investigator (Creator): Dr. Mark M. Loux Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
 ECHCG, Echinochloa crus-galli, common barnyardgrass = US
 AMBTR, Ambrosia trifida, Giant ragweed = US
 CHEAL, Chenopodium album, common lambsquarters = US
 ABUTH, Abutilon theophrasti, velvetleaf = US
 IPOHE, Ipomoea hederacea, ivy-leaf morning glory = US
 SETPU, Setaria helvola, yellow foxtail = US

Crop Type Code

C = EPP0 species (Bayer) codes
 ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

PHYGEN = phytotoxicity - general / injury
 PHYSTU = phytotoxicity - stunting
 PHYCHL = phytotoxicity - chlorosis
 PHYNEC = phytotoxicity - necrosis /burn
 PHYLMA = phytotoxicity - leaf malformation
 CONTRO = control / burndown or knockdown

Rating Unit/Min/Max

%, 0, 100 = percent