

# The Ohio State University

**Primary/Core PRE soil residual trial**

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

**Discipline:** H herbicide  
**Trial Status:** E established  
**Trial Reliability:** 1 usable data  
**ARM Trial Created On:** Mar-30-2021  
**Initiation Date:** Apr-28-2021

## Trial Location

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

**Latitude of LL Corner** °: 39.85872 N  
**Longitude of LL Corner** °: -83.67102 W  
**Altitude of LL Corner:** 1088.00 FT

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

**Study Rules:** Default

No.	Guideline Discipline	Description
1.	ADM-C-EMP CO	Confidentiality - Employee of Sponsor Conducts Trial

## Objectives:

To evaluate the premix concept of clopyralid plus mesotrione plus pyroxasulfone for use in field corn for pre-plant burndown program. Treatments will be applied alone and with atrazine (840 g ai/ ha). Measure of success is understanding of competitive position vs. Bicep II Magnum, Acuron and Resicore.

## Crop Description

<b>Crop 1:</b> C	ZEAM02 Zea mays subsp. indentata GMO Corn, BT/Roundup Ready	<b>BBCH Scale:</b> BCOR
<b>Entry Date:</b> May-10-2021	<b>Variety:</b> Mycogen UN14D38	<b>Stage Scale:</b> BBCH
<b>Attributes:</b> RR, LL, Enlist	<b>Planting Date:</b> Apr-28-2021	<b>Planting Rate:</b> 32097 S/A
<b>Planting Date:</b> Apr-28-2021	<b>Depth:</b> 2 IN	<b>Planting Method:</b> PLANTD planted
<b>Rows per Plot:</b> 4	<b>Row Spacing:</b> 30 IN	<b>Planting Equipment:</b> FPP finger pickup planter
<b>Soil Temperature:</b> 63 F		<b>Seed Bed:</b> MEDIUM medium
<b>Emergence Date:</b> May-14-2021		<b>Soil Moisture:</b> NORMAL normal, adequate
<b>Harvest Date:</b> Oct-11-2021		<b>Harvest Equipment:</b> Kincaid 8XP
<b>Moisture Meter:</b> Harvest Master		<b>Harvested Width:</b> 5 FT
<b>% Standard Moisture:</b> 15.5		<b>Harvested Length:</b> 30 FT
<b>Weighing Equipment:</b> Harvest Master HM800		

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## Pest Description

<b>Pest 1 Type:</b> W	<b>Code:</b> AMBTR Ambrosia trifida	<b>Common Name:</b> Giant ragweed	<b>Stage Scale:</b> BBCH
<b>Pest 2 Type:</b> W	<b>Code:</b> CAPSS Capsella sp.	<b>Common Name:</b> Shepherdspurse	<b>Stage Scale:</b> BBCH
<b>Pest 3 Type:</b> W	<b>Code:</b> ERICA Erigeron canadensis	<b>Common Name:</b> Canada horseweed	<b>Stage Scale:</b> BBCH
<b>Pest 4 Type:</b> W	<b>Code:</b> LAMAM Lamium amplexicaule	<b>Common Name:</b> Henbit	<b>Stage Scale:</b> BBCH
<b>Pest 5 Type:</b> W	<b>Code:</b> LAMPU Lamium purpureum	<b>Common Name:</b> Purple deadnettle	<b>Stage Scale:</b> BBCH
<b>Pest 6 Type:</b> W	<b>Code:</b> STEME Stellaria media	<b>Common Name:</b> Common chickweed	<b>Entry Date:</b> May-7-2021 <b>Stage Scale:</b> BBCH
<b>Pest 7 Type:</b> W	<b>Code:</b> TAROF Taraxacum officinale	<b>Common Name:</b> Blowball	<b>Entry Date:</b> May-7-2021 <b>Stage Scale:</b> BBCH
<b>Pest 8 Type:</b> W	<b>Code:</b> ERYRE Erysimum repandum	<b>Common Name:</b> Bushy wallflower	<b>Entry Date:</b> May-7-2021 <b>Stage Scale:</b> BBCH
<b>Pest 9 Type:</b> W	<b>Code:</b> RANAB Ranunculus abortivus	<b>Common Name:</b> Smallflower buttercup	<b>Entry Date:</b> May-7-2021 <b>Stage Scale:</b> BBCH
<b>Pest10 Type:</b> W	<b>Code:</b> SETFA Setaria faberi	<b>Common Name:</b> Giant foxtail	<b>Entry Date:</b> Jun-14-2021 <b>Stage Scale:</b> BBCH
<b>Pest11 Type:</b> W	<b>Code:</b> ABUTH Abutilon theophrasti	<b>Common Name:</b> velvetleaf	<b>Entry Date:</b> Jun-14-2021 <b>Stage Scale:</b> BBCH

## Site and Design

<b>Treated Plot Width:</b> 6.67 FT	<b>Site Type:</b> FIELD field
<b>Treated Plot Length:</b> 30 FT	<b>Experimental Unit:</b> 1 PLOT plot
<b>Treated Plot Area:</b> 200.1 FT <sup>2</sup>	<b>Treatments:</b> 6
<b>Replications:</b> 3	<b>Tillage Type:</b> NOTILL no-till
	<b>Study Design:</b> RACOBL Randomized Complete Block (RCB)

## Previous

No.	Crop	Year
1.	SOYBEAN	2020

## Soil Description

<b>Description Name:</b> F-9 East	<b>Texture:</b> SICL silty clay loam
<b>% Sand:</b> 36	<b>% OM:</b> 3
<b>% Silt:</b> 49	<b>pH:</b> 6.4
<b>% Clay:</b> 15	<b>Soil Name:</b> Kokomo
<b>Soil Drainage:</b> G	<b>CEC:</b> 17.8
	<b>Fert. Level:</b> G good
	good

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## Application Description

	A	B
Application Date	May-6-2021	Jun-14-2021
Appl. Start Time	12:30 PM	9:00 AM
Appl. Stop Time	1:00 PM	9:15 AM
Application Method	SPRAY	SPRAY
Application Timing	PREPOS	POSPOS
Application Placement	BROFOL	BROADC
Applied By	Dobbels	Dobbels
Appl. Entry Date	May-7-2021	Jun-14-2021
Air Temperature Start, Stop	57 57	F 78 78 F
% Relative Humidity Start, Stop	52 52	55 55
Wind Velocity+Dir. Start	8 MPH S	2 MPH WSW
Wind Velocity+Dir. Stop	8 MPH S	2 MPH WSW
Wind Velocity+Dir. Max	10 MPH S	2 MPH
Wet Leaves (Y/N)	N no	N no
Soil Temperature	58 F	71 F
Soil Moisture	SLIWET	dry
Soil Surface Condition	MEDIUM	MEDIUM
% Cloud Cover	50	45
Next Moisture Occurred On	May-6-2021	Jun-18-2021
Time to Next Moisture	8.7 HR	4.0 DAY
Moisture 6 Hours after Appl.	0 IN	0 IN
Moisture 1 Week after Appl.	0.81 IN	0.61 IN

## Protocol Application Directions:

Two application per plot/Two application timings

## Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale	ZEAM02 BCOR	ZEAM02 BCOR
Days after Emergence	-8	31
Stage Majority, Percent		16 100
Height Average		24 IN
Height Minimum, Maximum		22 24

## Pest Stage At Each Application

	A			B		
	AMBTR	W	BBCH	AMBTR	W	BBCH
Pest 1 Code, Type, Scale	14	100		18	60	
Stage Majority, Percent				16	10	
Stage Minimum, Percent				19	10	
Stage Maximum, Percent	6	IN		3	IN	
Diameter Average	2	IN		6	IN	
Height Average	1.5	3		6	8	
Height Minimum, Maximum	5	PLA/m2		1	PLA/m2	
Density Average	3	7		0	3	
Density Minimum, Maximum						
Pest 2 Code, Type, Scale	CAPSS	W	BBCH	CAPSS	W	BBCH
Stage Majority, Percent	65	100				
Diameter Average	14	IN				
Height Average	17	IN				
Height Minimum, Maximum	14	18				
Density Average	1	PLA/m2				
Density Minimum, Maximum	0	3				
Pest 3 Code, Type, Scale	ERICA	W	BBCH	ERICA	W	BBCH
Stage Majority, Percent	19	100				
Diameter Average	2	IN				
Height Average	2	IN				
Height Minimum, Maximum	1.5	3				
Density Average	2	PLA/m2				
Density Minimum, Maximum	0	4				
Pest 4 Code, Type, Scale	LAMAM	W	BBCH	LAMAM	W	BBCH
Stage Majority, Percent	51	100				
Diameter Average	2	IN				
Height Average	3	IN				
Height Minimum, Maximum	2	4				
Density Average	2	PLA/m2				
Density Minimum, Maximum	0	3				
Pest 5 Code, Type, Scale	LAMPU	W	BBCH	LAMPU	W	BBCH
Stage Majority, Percent	65	100				
Diameter Average	4	IN				
Height Average	3	IN				
Height Minimum, Maximum	2.5	5				
Density Average	5	PLA/m2				
Density Minimum, Maximum	3	7				

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<b>Pest 6 Code, Type, Scale</b>	STEME W BBCH	STEME W BBCH
Stage Majority, Percent	63 100	
Diameter Average	6 IN	
Height Average	2 IN	
Height Minimum, Maximum	2 3	
Density Average	3 PLA/m2	
Density Minimum, Maximum	2 4	
<b>Pest 7 Code, Type, Scale</b>	TAROF W BBCH	TAROF W BBCH
Stage Majority, Percent	65 100	
Diameter Average	2 IN	
Height Average	2 IN	
Height Minimum, Maximum	2 4	
Density Average	1 PLA/m2	
Density Minimum, Maximum	0 3	
<b>Pest 8 Code, Type, Scale</b>	ERYRE W BBCH	ERYRE W BBCH
Stage Majority, Percent	65 100	
Diameter Average	6 IN	
Height Average	21 IN	
Height Minimum, Maximum	18 23	
Density Average	2 PLA/m2	
Density Minimum, Maximum	1 3	
<b>Pest 9 Code, Type, Scale</b>	RANAB W BBCH	RANAB W BBCH
Stage Majority, Percent	61 100	
Diameter Average	9 IN	
Height Average	12 IN	
Height Minimum, Maximum	9 13	
Density Average	1 PLA/m2	
Density Minimum, Maximum	1 3	
<b>Pest10 Code, Type, Scale</b>	SETFA W BBCH	SETFA W BBCH
Stage Majority, Percent		13 80
Stage Minimum, Percent		13 80
Stage Maximum, Percent		15 20
Height Average		8 IN
Height Minimum, Maximum		8 9
Density Average		56 PLA/m2
Density Minimum, Maximum		25 125
<b>Pest11 Code, Type, Scale</b>	ABUTH W BBCH	ABUTH W BBCH
Stage Majority, Percent		14 80
Stage Minimum, Percent		13 20
Stage Maximum, Percent		14 80
Height Average		4 IN
Height Minimum, Maximum		3 4
Density Average		1 PLA/m2
Density Minimum, Maximum		0 5

**Application Equipment**

	<b>A</b>	<b>B</b>
Appl. Equipment	6' TT	10' AIXR
Equipment Type	BACCAI	BACCAI
Operation Pressure	44 PSI	44 PSI
Nozzle Model	110015	110015
Nozzle Type	TT	AI XR
Nozzle TradeName	TeeJet	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
Application Amount	15 GAL/AC	15 GAL/AC
Mix Overage		25 mL
Mix Size	1 L	2 L
Spray pH		7.8
Propellant	COMCO2	COMCO2
Tank Mix (Y/N)		Y yes

**Notes**

<b>Context</b>	<b>Date</b>	<b>By</b>		<b>Notes</b>
STATUS Mar-30-2021	Dr. Mark M. Loux	Automatically added by ARM:		Trial Status updated to 'S' during trial creation.
STATUS May-7-2021	Dr. Mark M. Loux	Automatically added by ARM:		Trial Status updated to 'E' when Application Date entered.

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**Instructions:**

1. Make postemergence applications 42 days after NTLL application.

**Cropping Considerations:**

Place trial in area of moderate weed pressure.

**Data to Collect:**

Efficacy: 14, 28, 42 and 56 DAT Crop Tolerance: 14 and 28 D AT

Pest Type	W Weed	W Weed	W Weed
Pest Code	ERICA	STEME	TAROF
Pest Scientific Name	Erigeron canadensis	Stellaria media	Taraxacum officinale
Pest Name	Canada horseweed	Common chickweed	Blowball
Crop Type, Code	C ZEAM02		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays subsp. indica		
Crop Name	Corn, BT/Roundup		
Rating Date	May-21-2021	May-21-2021	May-21-2021
Part Rated	PLANT C	- P	- P
Rating Type	PHYGEN	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100
Sample Size			
Number of Subsamples	1	1	1
Data Entry Date	Jul-26-2021	May-25-2021	May-25-2021
Days After First/Last Applic.	15 15	15 15	15 15
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A
Plant-Eval Interval	23 DP-1	23 DP-1	23 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes		AS	
Number of Decimals	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2* dAS	3*	4*
1	UTC				0 -	0 b	0 -	0 b
2	ACURON HERBICIDE	3 qt/a		A	0 -	100 a	100 -	82 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
3	BICEP II MAGNUM	2.1 qt/a		A	0 -	100 a	100 -	77 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
4	RESICORE	88 fl oz/a		A	0 -	100 a	100 -	88 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				

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Pest Type	W Weed	W Weed	W Weed
Pest Code	ERICA	STEME	TAROF
Pest Scientific Name	Erigeron canad>	Stellaria media	Taraxacum offic>
Pest Name	Canada horseweed	Common chickweed	Blowball

Crop Type, Code	C ZEAM02			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays subsp.>			
Crop Name	Corn, BT/Roundu>			
Rating Date	May-21-2021	May-21-2021	May-21-2021	May-21-2021
Part Rated	PLANT C	- P	- P	- P
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100

Sample Size				
Number of Subsamples	1	1	1	1
Data Entry Date	Jul-26-2021	May-25-2021	May-25-2021	May-25-2021
Days After First/Last Applic.	15 15	15 15	15 15	15 15
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A
Plant-Eval Interval	23 DP-1	23 DP-1	23 DP-1	23 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes	AS			
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	1*	2* dAS	3*	4*
5	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	0 -	98 a	100 -	80 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
6	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	0 -	100 a	100 -	85 a
	AATREX	0.75 lb ai/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
	LSD P=.05					2.2 - 2.2		10.6
	Standard Deviation				0.0	0.1t	0.0	5.7
	CV				0.0	0.7t	0.0	8.46
	Levene's F^				.	0.533	.	1.345
	Levene's Prob(F)				.	0.747	.	0.316
	Skewness^				.	-1.3829*	.	-0.2339
	Kurtosis^				.	4.8663*	.	-0.7846
	Replicate F				0.000	1.000	0.000	0.802
	Replicate Prob(F)				1.0000	0.4019	1.0000	0.4782
	Treatment F				0.000	12207.134	0.000	103.322
	Treatment Prob(F)				1.0000	0.0001	1.0000	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	VERAG	CAPBP	ERYRE	RANAB
Pest Scientific Name	Veronica agrest>	Capsella bursa->	Erysimum repand>	Ranunculus abor>
Pest Name	Field speedwell	Shepherd's purse	Bushy wallflower	Smallflower but>
Crop Type, Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	May-21-2021	May-21-2021	May-21-2021	May-21-2021
Part Rated	- P	- P	- P	- P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100
Sample Size				
Number of Subsamples	1	1	1	1
Data Entry Date	May-25-2021	May-25-2021	May-25-2021	May-25-2021
Days After First/Last Applic.	15 15	15 15	15 15	15 15
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A
Plant-Eval Interval	23 DP-1	23 DP-1	23 DP-1	23 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes	AS	EC		
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	5* dAS	6*	7*	8*
1	UTC				0 c	0	0 b	0 b
2	ACURON HERBICIDE	3 qt/a		A	100 a	92 -	90 a	85 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
3	BICEP II MAGNUM	2.1 qt/a		A	100 a	90 -	85 a	85 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
4	RESICORE	88 fl oz/a		A	83 b	87 -	87 a	85 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	VERAG	CAPBP	ERYRE	RANAB
Pest Scientific Name	Veronica agrest>	Capsella bursa->	Erysimum repand>	Ranunculus abor>
Pest Name	Field speedwell	Shepherd's purse	Bushy wallflower	Smallflower but>

Crop Type, Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	May-21-2021	May-21-2021	May-21-2021	May-21-2021
Part Rated	- P	- P	- P	- P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100

Sample Size				
Number of Subsamples	1	1	1	1
Data Entry Date	May-25-2021	May-25-2021	May-25-2021	May-25-2021
Days After First/Last Applic.	15 15	15 15	15 15	15 15
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A
Plant-Eval Interval	23 DP-1	23 DP-1	23 DP-1	23 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1
ARM Action Codes	AS	EC		
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	5* dAS	6*	7*	8*
5	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	80 b	85 -	88 a	87 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
6	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	100 a	88 -	92 a	90 a
	AATREX	0.75 lb ai/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
	LSD P=.05				4.2 - 4.6	12.0	5.7	4.3
	Standard Deviation				0.1t	6.4	3.1	2.4
	CV				1.56t	7.23	4.24	3.28
	Levene's F^				0.533	0.20	0.391	1.20
	Levene's Prob(F)				0.747	0.933	0.846	0.366
	Skewness^				1.3829*	-0.0366	0.1419	0.484
	Kurtosis^				4.8663*	-1.0897	-0.7698	1.9593
	Replicate F				1.000	2.122	2.714	1.000
	Replicate Prob(F)				0.4019	0.1822	0.1144	0.4019
	Treatment F				2495.629	0.510	403.000	672.850
	Treatment Prob(F)				0.0001	0.7306	0.0001	0.0001

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type		W Weed	W Weed	W Weed
Pest Code		STEME	ERICA	SETFA
Pest Scientific Name		Stellaria media	Erigeron canad>	Setaria faberi
Pest Name		Common chickweed	Canada horseweed	Giant foxtail
Crop Type, Code	C ZEAM02			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays subsp.>			
Crop Name	Corn, BT/Roundu>			
Rating Date	Jun-4-2021	Jun-4-2021	Jun-4-2021	Jun-4-2021
Part Rated	PLANT C	- P	- P	- P
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100
Sample Size				
Number of Subsamples	1	1	1	1
Data Entry Date	Jul-26-2021	Jun-4-2021	Jun-4-2021	Jun-4-2021
Days After First/Last Applic.	29 29	29 29	29 29	29 29
Trt-Eval Interval		29 DA-A	29 DA-A	29 DA-A
Plant-Eval Interval	37 DP-1	37 DP-1	37 DP-1	37 DP-1
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	9*	10*	11*	12*
1	UTC				0 -	0 -	0 -	0 b
2	ACURON HERBICIDE	3 qt/a		A	0 -	100 -	100 -	91 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
3	BICEP II MAGNUM	2.1 qt/a		A	0 -	100 -	100 -	83 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
4	RESICORE	88 fl oz/a		A	0 -	100 -	100 -	76 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed
Pest Code	STEME	ERICA	SETFA
Pest Scientific Name	Stellaria media	Erigeron canad>	Setaria faberi

Pest Name	Common chickweed	Canada horseweed	Giant foxtail
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Crop Type, Code	C	ZEAM02		
BBCH Scale		BCOR		
Crop Scientific Name		Zea mays subsp.>		
Crop Name		Corn, BT/Roundu>		
Rating Date	Jun-4-2021	Jun-4-2021	Jun-4-2021	Jun-4-2021
Part Rated	PLANT C	- P	- P	- P
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100

Sample Size				
Number of Subsamples	1	1	1	1
Data Entry Date	Jul-26-2021	Jun-4-2021	Jun-4-2021	Jun-4-2021
Days After First/Last Applic.	29 29	29 29	29 29	29 29
Trt-Eval Interval		29 DA-A	29 DA-A	29 DA-A
Plant-Eval Interval	37 DP-1	37 DP-1	37 DP-1	37 DP-1
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	9*	10*	11*	12*
5	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	0 -	100 -	100 -	84 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
6	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	0 -	100 -	100 -	82 a
	AATREX	0.75 lb ai/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
	LSD P=.05				.	.	.	12.0
	Standard Deviation				0.0	0.0	0.0	6.6
	CV				0.0	0.0	0.0	9.49
	Levene's F^				.	.	.	0.735
	Levene's Prob(F)				.	.	.	0.611
	Skewness^				.	.	.	-0.8502
	Kurtosis^				.	.	.	2.0993*
	Replicate F				0.000	0.000	0.000	0.931
	Replicate Prob(F)				1.0000	1.0000	1.0000	0.4259
	Treatment F				0.000	0.000	0.000	81.670
	Treatment Prob(F)				1.0000	1.0000	1.0000	0.0001

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	TAROF	ERICA
Pest Scientific Name	Ambrosia trifida	Taraxacum offic>	Erigeron canad>
Pest Name	Giant ragweed	Blowball	Canada horseweed
Crop Type, Code			C ZEAM02
BBCH Scale			BCOR
Crop Scientific Name			Zea mays subsp.>
Crop Name			Corn, BT/Roundu>
Rating Date	Jun-4-2021	Jun-4-2021	Jun-10-2021
Part Rated	- P	- P	- P
Rating Type	CONTRO	CONTRO	PHYGEN
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100
Sample Size			
Number of Subsamples	1	1	1
Data Entry Date	Jun-4-2021	Jun-4-2021	Jul-26-2021
Days After First/Last Applic.	29 29	29 29	35 35
Trt-Eval Interval	29 DA-A	29 DA-A	35 DA-A
Plant-Eval Interval	37 DP-1	37 DP-1	43 DP-1
Days After Emergence	21 DE-1	21 DE-1	27 DE-1
ARM Action Codes	EC	ET6	
Number of Decimals	0	0	0

Trt	Treatment No. Name	Other Rate	Other Rate	Appl Unit Code	13*	14*	15*	16*
1	UTC				0	0 c	0 -	0 -
2	ACURON HERBICIDE	3 qt/a		A	91 -	86 b	0 -	100 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
3	BICEP II MAGNUM	2.1 qt/a		A	88 -	85 b	0 -	100 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
4	RESICORE	88 fl oz/a		A	79 -	99 a	0 -	100 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	TAROF	ERICA
Pest Scientific Name	Ambrosia trifida	Taraxacum offic>	Erigeron canad>
Pest Name	Giant ragweed	Blowball	Canada horseweed

Crop Type, Code	C ZEAM02			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays subsp.>			
Crop Name	Corn, BT/Roundu>			
Rating Date	Jun-4-2021	Jun-4-2021	Jun-10-2021	Jun-10-2021
Part Rated	- P	- P	PLANT C	- P
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100

Sample Size				
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-4-2021	Jun-4-2021	Jul-26-2021	Jun-10-2021
Days After First/Last Applic.	29 29	29 29	35 35	35 35
Trt-Eval Interval	29 DA-A	29 DA-A	35 DA-A	35 DA-A
Plant-Eval Interval	37 DP-1	37 DP-1	43 DP-1	43 DP-1
Days After Emergence	21 DE-1	21 DE-1	27 DE-1	27 DE-1
ARM Action Codes	EC	ET6		
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	13*	14*	15*	16*
5	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	86 -	84 b	0 -	100 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
6	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	83 -	90	0 -	100 -
	AATREX	0.75 lb ai/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
	LSD P=.05				14.8	5.0	.	.
	Standard Deviation				7.8	2.2	0.0	0.0
	CV				9.19	3.45	0.0	0.0
	Levene's F^				1.422	0.323	.	.
	Levene's Prob(F)				0.296	0.853	.	.
	Skewness^				-0.2626	0.594	.	.
	Kurtosis^				1.1332	0.4167	.	.
	Replicate F				2.116	1.000	0.000	0.000
	Replicate Prob(F)				0.1830	0.4444	1.0000	1.0000
	Treatment F				1.117	876.552	0.000	0.000
	Treatment Prob(F)				0.4125	0.0001	1.0000	1.0000

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	AMBEL	CHEAL
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Ambrosia artemi>	Chenopodium alb>
Pest Name	Giant foxtail	Giant ragweed	Common ragweed	common lambsqua>
Crop Type, Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	Jun-10-2021	Jun-10-2021	Jun-10-2021	Jun-10-2021
Part Rated	- P	- P	- P	- P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 %	0 100	% 0 100	% 0 100
Sample Size	100			
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-10-2021	Jun-10-2021	Jun-10-2021	Jun-10-2021
Days After First/Last Applic.	35 35	35 35	35 35	35 35
Trt-Eval Interval	35 DA-A	35 DA-A	35 DA-A	35 DA-A
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1
Days After Emergence	27 DE-1	27 DE-1	27 DE-1	27 DE-1
ARM Action Codes	EC	EC		
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	17*	18*	19*	20*
1	UTC				0	0	0 b	0 -
2	ACURON HERBICIDE	3 qt/a		A	82 -	87 -	100 a	100 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
3	BICEP II MAGNUM	2.1 qt/a		A	78 -	76 -	100 a	100 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
4	RESICORE	88 fl oz/a		A	53 -	62 -	88 a	100 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	AMBEL	CHEAL
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Ambrosia artemisiifolia	Chenopodium album
Pest Name	Giant foxtail	Giant ragweed	Common ragweed	common lambsquarters

Crop Type, Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	Jun-10-2021	Jun-10-2021	Jun-10-2021	Jun-10-2021
Part Rated	- P	- P	- P	- P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 %	0 100	% 0 100	% 0 100

Sample Size				
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-10-2021	Jun-10-2021	Jun-10-2021	Jun-10-2021
Days After First/Last Applic.	35 35	35 35	35 35	35 35
Trit-Eval Interval	35 DA-A	35 DA-A	35 DA-A	35 DA-A
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1
Days After Emergence	27 DE-1	27 DE-1	27 DE-1	27 DE-1
ARM Action Codes	EC	EC		
Number of Decimals	0	0	0	0

Trit Treatment No. Name	Other Rate	Other Rate Unit Code	Appl	17*	18*	19*	20*
5 V-10494 2.04 LBAI/GAL SC 2146	1 qt/a	A	A	70 -	68 -	100 a	100 -
ROUNDUP POWER MAX(AE)	1 qt/a	A					
INDUCE	0.25 % v/v	A					
DRY AMMONIUM SULFATE	3 lb/a	A					
ROUNDUP POWER MAX(AE)	1 qt/a	B					
STATUS HERBICIDE	2.5 oz/a	B					
INDUCE	0.25 % v/v	B					
DRY AMMONIUM SULFATE	3 lb/a	B					
6 V-10494 2.04 LBAI/GAL SC 2146	1 qt/a	A	A	67 -	72 -	90 a	100 -
AATREX	0.75 lb ai/a	A					
ROUNDUP POWER MAX(AE)	1 qt/a	A					
INDUCE	0.25 % v/v	A					
DRY AMMONIUM SULFATE	3 lb/a	A					
ROUNDUP POWER MAX(AE)	1 qt/a	B					
STATUS HERBICIDE	2.5 oz/a	B					
INDUCE	0.25 % v/v	B					
DRY AMMONIUM SULFATE	3 lb/a	B					
LSD P=.05				18.7	20.9	15.7	.
Standard Deviation				9.9	11.1	8.5	0.0
CV				14.17	15.27	10.69	0.0
Levene's F^				0.357	1.503	0.82	.
Levene's Prob(F)				0.834	0.273	0.56	.
Skewness^				-0.1878	-0.2024	-0.7962	.
Kurtosis^				-0.9952	0.8686	1.2514	.
Replicate F				0.661	1.465	1.061	0.000
Replicate Prob(F)				0.5424	0.2871	0.3857	1.0000
Treatment F				3.771	2.107	64.604	0.000
Treatment Prob(F)				0.0521	0.1717	0.0001	1.0000

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMARE	ABUTH	SETFA
Pest Scientific Name	Amaranthus retr>	Abutilon theoph>	Setaria faberi
Pest Name	Redroot pigweed	velvetleaf	Giant foxtail
Crop Type, Code			C ZEAM02
BBCH Scale			BCOR
Crop Scientific Name			Zea mays subsp.>
Crop Name			Corn, BT/Roundu>
Rating Date	Jun-10-2021	Jun-10-2021	Jul-13-2021
Part Rated	- P	- P	- P
Rating Type	CONTRO	CONTRO	PHYGEN
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100
Sample Size			
Number of Subsamples	1	1	1
Data Entry Date	Jun-10-2021	Jun-10-2021	Jul-26-2021
Days After First/Last Applic.	35 35	35 35	68 29
Trt-Eval Interval	35 DA-A	35 DA-A	29 DA-B
Plant-Eval Interval	43 DP-1	43 DP-1	76 DP-1
Days After Emergence	27 DE-1	27 DE-1	60 DE-1
ARM Action Codes		AA	AS
Number of Decimals	0	0	0

Trt Treatment No. Name	Other Rate	Other Rate Unit	Appl Code	21*	22* dAA	23*	24* dAS
1 UTC				0 b	0 b	0 -	0 b
2 ACURON HERBICIDE	3 qt/a		A	100 a	100 a	0 -	100 a
ROUNDUP POWER MAX(AE)	1 qt/a		A				
INDUCE	0.25 % v/v		A				
DRY AMMONIUM SULFATE	3 lb/a		A				
ROUNDUP POWER MAX(AE)	1 qt/a		B				
STATUS HERBICIDE	2.5 oz/a		B				
INDUCE	0.25 % v/v		B				
DRY AMMONIUM SULFATE	3 lb/a		B				
3 BICEP II MAGNUM	2.1 qt/a		A	100 a	83 a	0 -	99 a
ROUNDUP POWER MAX(AE)	1 qt/a		A				
INDUCE	0.25 % v/v		A				
DRY AMMONIUM SULFATE	3 lb/a		A				
ROUNDUP POWER MAX(AE)	1 qt/a		B				
STATUS HERBICIDE	2.5 oz/a		B				
INDUCE	0.25 % v/v		B				
DRY AMMONIUM SULFATE	3 lb/a		B				
4 RESICORE	88 fl oz/a		A	73 a	100 a	0 -	100 a
ROUNDUP POWER MAX(AE)	1 qt/a		A				
INDUCE	0.25 % v/v		A				
DRY AMMONIUM SULFATE	3 lb/a		A				
ROUNDUP POWER MAX(AE)	1 qt/a		B				
STATUS HERBICIDE	2.5 oz/a		B				
INDUCE	0.25 % v/v		B				
DRY AMMONIUM SULFATE	3 lb/a		B				

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed
Pest Code	AMARE	ABUTH	SETFA
Pest Scientific Name	Amaranthus retr>	Abutilon theoph>	Setaria faberi
Pest Name	Redroot pigweed	velvetleaf	Giant foxtail

Crop Type, Code	C ZEAM02		
BBCH Scale	BCOR		
Crop Scientific Name	Zea mays subsp.>		
Crop Name	Corn, BT/Roundu>		
Rating Date	Jun-10-2021	Jun-10-2021	Jul-13-2021
Part Rated	- P	- P	PLANT C
Rating Type	CONTRO	CONTRO	PHYGEN
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100

Sample Size	1		
Number of Subsamples	1		
Data Entry Date	Jun-10-2021	Jun-10-2021	Jul-26-2021
Days After First/Last Applic.	35 35	35 35	68 29
Trt-Eval Interval	35 DA-A	35 DA-A	29 DA-B
Plant-Eval Interval	43 DP-1	43 DP-1	76 DP-1
Days After Emergence	27 DE-1	27 DE-1	60 DE-1
ARM Action Codes	AA		
Number of Decimals	0		

Trt Treatment No. Name	Other Rate	Other Rate Unit Code	Appl	21*	22* dAA	23*	24* dAS
5 V-10494 2.04 LBAI/GAL SC 2146	1 qt/a	A	A	100 a	100 a	0 -	100 a
ROUNDUP POWER MAX(AE)	1 qt/a	A	A				
INDUCE	0.25 % v/v	A	A				
DRY AMMONIUM SULFATE	3 lb/a	A	A				
ROUNDUP POWER MAX(AE)	1 qt/a	B	B				
STATUS HERBICIDE	2.5 oz/a	B	B				
INDUCE	0.25 % v/v	B	B				
DRY AMMONIUM SULFATE	3 lb/a	B	B				
6 V-10494 2.04 LBAI/GAL SC 2146	1 qt/a	A	A	93 a	90 a	0 -	100 a
AATREX	0.75 lb ai/a	A	A				
ROUNDUP POWER MAX(AE)	1 qt/a	A	A				
INDUCE	0.25 % v/v	A	A				
DRY AMMONIUM SULFATE	3 lb/a	A	A				
ROUNDUP POWER MAX(AE)	1 qt/a	B	B				
STATUS HERBICIDE	2.5 oz/a	B	B				
INDUCE	0.25 % v/v	B	B				
DRY AMMONIUM SULFATE	3 lb/a	B	B				
LSD P=.05				20.7	7.8 - 16.4	.	0.8 - 0.8
Standard Deviation				11.4	10.7t	0.0	0.0t
CV				14.6	17.09t	0.0	0.26t
Levene's F^				0.644	0.153	.	0.593
Levene's Prob(F)				0.671	0.974	.	0.706
Skewness^				0.8118	-0.0458	.	-0.4191
Kurtosis^				3.2071*	-1.1518	.	0.3901
Replicate F				0.172	3.006	0.000	0.294
Replicate Prob(F)				0.8441	0.1142	1.0000	0.7514
Treatment F				36.276	27.892	0.000	91667.281
Treatment Prob(F)				0.0001	0.0002	1.0000	0.0001

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ECHCG	AMBTR	CHEAL	AMARE
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>	Amaranthus retr>
Pest Name	Common barnyard>	Giant ragweed	common lambsqua>	Redroot pigweed
Crop Type, Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	Jul-13-2021	Jul-13-2021	Jul-13-2021	Jul-13-2021
Part Rated	- P	- P	- P	- P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100
Sample Size				
Number of Subsamples	1	1	1	1
Data Entry Date	Jul-13-2021	Jul-13-2021	Jul-13-2021	Jul-13-2021
Days After First/Last Applic.	68 29	68 29	68 29	68 29
Trt-Eval Interval	29 DA-B	29 DA-B	29 DA-B	29 DA-B
Plant-Eval Interval	76 DP-1	76 DP-1	76 DP-1	76 DP-1
Days After Emergence	60 DE-1	60 DE-1	60 DE-1	60 DE-1
ARM Action Codes	AS	AS	AS	AS
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	25* dAS	26*	27* dAS	28*
1	UTC				0 b	0 -	0 b	0.0 -
2	ACURON HERBICIDE	3 qt/a		A	100 a	100 -	100 a	100.0 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
3	BICEP II MAGNUM	2.1 qt/a		A	99 a	100 -	100 a	100.0 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
4	RESICORE	88 fl oz/a		A	100 a	100 -	100 a	100.0 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				

# The Ohio State University

**Primary/Core PRE soil residual trial**

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ECHCG	AMBTR	CHEAL	AMARE
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>	Amaranthus retr>
Pest Name	Common barnyard>	Giant ragweed	common lambsqua>	Redroot pigweed

Crop Type, Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	Jul-13-2021	Jul-13-2021	Jul-13-2021	Jul-13-2021
Part Rated	- P	- P	- P	- P
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100

Sample Size				
Number of Subsamples	1	1	1	1
Data Entry Date	Jul-13-2021	Jul-13-2021	Jul-13-2021	Jul-13-2021
Days After First/Last Applic.	68 29	68 29	68 29	68 29
Trt-Eval Interval	29 DA-B	29 DA-B	29 DA-B	29 DA-B
Plant-Eval Interval	76 DP-1	76 DP-1	76 DP-1	76 DP-1
Days After Emergence	60 DE-1	60 DE-1	60 DE-1	60 DE-1
ARM Action Codes	AS	AS	AS	AS
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	25* dAS	26*	27* dAS	28*
5	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	100 a	100 -	100 a	100.0 -
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
6	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	100 a	100 -	100 a	100.0 -
	AATREX	0.75 lb ai/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		A				
	INDUCE	0.25 % v/v		A				
	DRY AMMONIUM SULFATE	3 lb/a		A				
	ROUNDUP POWER MAX(AE)	1 qt/a		B				
	STATUS HERBICIDE	2.5 oz/a		B				
	INDUCE	0.25 % v/v		B				
	DRY AMMONIUM SULFATE	3 lb/a		B				
	LSD P=.05				0.8 - 0.8		0.4 - 0.4	
	Standard Deviation				0.0t	0.0	0.0t	0.00
	CV				0.26t	0.0	0.14t	0.0
	Levene's F^				0.593	.	0.533	.
	Levene's Prob(F)				0.706	.	0.747	.
	Skewness^				-0.4191	.	-1.3829*	.
	Kurtosis^				0.3901	.	4.8663*	.
	Replicate F				0.294	0.000	1.000	0.000
	Replicate Prob(F)				0.7514	1.0000	0.4019	1.0000
	Treatment F				91667.281	0.000	312336.641	0.000
	Treatment Prob(F)				0.0001	1.0000	0.0001	1.0000

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type W Weed  
 Pest Code SIDSP  
 Pest Scientific Name Sida spinosa  
 Pest Name Prickly sida  
 Crop Type, Code  
 BBCH Scale  
 Crop Scientific Name  
 Crop Name  
 Rating Date Jul-13-2021  
 Part Rated - P  
 Rating Type CONTRO  
 Rating Unit/Min/Max % 0  
 100  
 Sample Size  
 Number of Subsamples 1  
 Data Entry Date Jul-13-2021  
 Days After First/Last Applic. 68 29  
 Trt-Eval Interval 29 DA-B  
 Plant-Eval Interval 76 DP-1  
 Days After Emergence 60 DE-1  
 ARM Action Codes  
 Number of Decimals

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	29*
1	UTC				0.0 b
2	ACURON HERBICIDE	3 qt/a		A	100.0 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A	
	INDUCE	0.25 % v/v		A	
	DRY AMMONIUM SULFATE	3 lb/a		A	
	ROUNDUP POWER MAX(AE)	1 qt/a		B	
	STATUS HERBICIDE	2.5 oz/a		B	
	INDUCE	0.25 % v/v		B	
	DRY AMMONIUM SULFATE	3 lb/a		B	
3	BICEP II MAGNUM	2.1 qt/a		A	99.7 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A	
	INDUCE	0.25 % v/v		A	
	DRY AMMONIUM SULFATE	3 lb/a		A	
	ROUNDUP POWER MAX(AE)	1 qt/a		B	
	STATUS HERBICIDE	2.5 oz/a		B	
	INDUCE	0.25 % v/v		B	
	DRY AMMONIUM SULFATE	3 lb/a		B	
4	RESICORE	88 fl oz/a		A	99.7 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A	
	INDUCE	0.25 % v/v		A	
	DRY AMMONIUM SULFATE	3 lb/a		A	
	ROUNDUP POWER MAX(AE)	1 qt/a		B	
	STATUS HERBICIDE	2.5 oz/a		B	
	INDUCE	0.25 % v/v		B	
	DRY AMMONIUM SULFATE	3 lb/a		B	

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

Pest Type W Weed  
 Pest Code SIDSP  
 Pest Scientific Name Sida spinosa  
 Pest Name Prickly sida  
 Crop Type, Code  
 BBCH Scale  
 Crop Scientific Name  
 Crop Name  
 Rating Date Jul-13-2021  
 Part Rated - P  
 Rating Type CONTRO  
 Rating Unit/Min/Max % 0  
 100  
 Sample Size  
 Number of Subsamples 1  
 Data Entry Date Jul-13-2021  
 Days After First/Last Applic. 68 29  
 Trt-Eval Interval 29 DA-B  
 Plant-Eval Interval 76 DP-1  
 Days After Emergence 60 DE-1  
 ARM Action Codes  
 Number of Decimals

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	29*
5	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	99.7 a
	ROUNDUP POWER MAX(AE)	1 qt/a		A	
	INDUCE	0.25 % v/v		A	
	DRY AMMONIUM SULFATE	3 lb/a		A	
	ROUNDUP POWER MAX(AE)	1 qt/a		B	
	STATUS HERBICIDE	2.5 oz/a		B	
	INDUCE	0.25 % v/v		B	
	DRY AMMONIUM SULFATE	3 lb/a		B	
6	V-10494 2.04 LBAI/GAL SC 2146	1 qt/a		A	99.0 a
	AATREX	0.75 lb ai/a		A	
	ROUNDUP POWER MAX(AE)	1 qt/a		A	
	INDUCE	0.25 % v/v		A	
	DRY AMMONIUM SULFATE	3 lb/a		A	
	ROUNDUP POWER MAX(AE)	1 qt/a		B	
	STATUS HERBICIDE	2.5 oz/a		B	
	INDUCE	0.25 % v/v		B	
	DRY AMMONIUM SULFATE	3 lb/a		B	
	LSD P=.05				0.94
	Standard Deviation				0.52
	CV				0.62
	Levene's F^				0.533
	Levene's Prob(F)				0.747
	Skewness^				0.0
	Kurtosis^				-0.5844
	Replicate F				2.500
	Replicate Prob(F)				0.1317
	Treatment F				18601.502
	Treatment Prob(F)				0.0001

# The Ohio State University

Primary/Core PRE soil residual trial

Trial ID: 21V10494NT  
 Protocol ID: VUSA2021V10494MD68.04 Investigator (Creator): Dr. Mark M. Loux  
 Project ID: 201510 Study Director:  
 Sponsor Contact:

## Pest Type

W, Weed = Weed or volunteer crop

## Pest Code

ERICA, Erigeron canadensis, Canada horseweed = US  
 STEME, Stellaria media, Common chickweed = US  
 TAROF, Taraxacum officinale, Blowball = US  
 VERAG, Veronica agrestis, Field speedwell = US  
 CAPBP, Capsella bursa-pastoris, Shepherd's purse = US  
 ERYRE, Erysimum repandum, Bushy wallflower = US  
 RANAB, Ranunculus abortivus, Smallflower buttercup = US  
 SETFA, Setaria faberi, Giant foxtail = US  
 AMBTR, Ambrosia trifida, Giant ragweed = US  
 AMBEL, Ambrosia artemisiifolia, Common ragweed = US  
 CHEAL, Chenopodium album, common lambsquarters = US  
 AMARE, Amaranthus retroflexus, Redroot pigweed = US  
 ABUTH, Abutilon theophrasti, velvetleaf = US  
 ECHCG, Echinochloa crus-galli, Common barnyard grass = US  
 SIDSP, Sida spinosa, Prickly sida = US

## Crop Type Code

C = EPP0 species (Bayer) codes

## Part Rated

PLANT = plant

C = Crop is Part Rated

P = Pest is Part Rated

## Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

## Rating Unit/Min/Max

%, 0, 100 = percent

## Plant-Eval Interval

23 DP-1 = 1 ZEAM02 Apr-28-2021

37 DP-1 = 1 ZEAM02 Apr-28-2021

43 DP-1 = 1 ZEAM02 Apr-28-2021

76 DP-1 = 1 ZEAM02 Apr-28-2021

## ARM Action Codes

AS = Automatic square root transformation of X+0.5

EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table

ET6 = Excluded treatment 6

AA = Automatic arcsine square root % transformation