

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

General Trial Information

Study Director: Anthony Dobbels
Investigator: Dr. Mark M. Loux

Trial Status: E established

ARM Trial Created On: Nov-18-2019

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 °: 39.85879 N
Longitude of LL Corner °: -83.67204 W
Altitude of LL Corner: 1091.00 FT

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: Anthony Dobbels

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: C	ZEAMX Zea mays	Corn	BBCH Scale: BCOR
	Entry Date: May-8-2020		Stage Scale: BBCH
	Variety: Seed Consultants SCS1105AM		
	Attributes: Glyphosate Glufosinate Tolerance		
	Planting Date: May-7-2020		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: MEDTRA medium/trashy
	Soil Temperature: 48 F		Soil Moisture: NORMAL normal, adequate
	Emergence Date: May-21-2020		

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Description

Pest 1 Type: W **Code:** LAMPU *Lamium purpureum*
Common Name: Purple deadnettle **Entry Date:** Nov-20-2019

Pest 2 Type: W **Code:** STEME *Stellaria media*
Common Name: Common chickweed **Entry Date:** Nov-20-2019

Pest 3 Type: W **Code:** TAROF *Taraxacum officinale*
Common Name: Blowball **Entry Date:** Nov-20-2019

Pest 4 Type: W **Code:** CARPE *Cardamine pensylvanica*
Common Name: Pennsylvania bittercress **Entry Date:** Nov-20-2019

Pest 5 Type: W **Code:** CAPBP *Capsella bursa-pastoris*
Common Name: Shepherd's purse **Entry Date:** May-8-2020

Pest 6 Type: W **Code:** RANAB *Ranunculus abortivus*
Common Name: Smallflower buttercup **Entry Date:** May-8-2020

Pest 7 Type: W **Code:** VERAG *Veronica agrestis*
Common Name: Field speedwell **Entry Date:** May-8-2020

Pest 8 Type: W **Code:** DRBSS *Draba sp.*
Common Name: Whitlow-grass **Entry Date:** May-8-2020

Pest 9 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed **Entry Date:** May-8-2020

Pest10 Type: W **Code:** SETFA *Setaria faberi*
Common Name: Giant foxtail **Entry Date:** May-28-2020

Pest11 Type: W **Code:** CHEAL *Chenopodium album*
Common Name: common lambsquarters **Entry Date:** May-28-2020

Pest12 Type: W **Code:** ERICA *Erigeron canadensis*
Common Name: Canada horseweed **Entry Date:** May-28-2020

Pest13 Type: W **Code:** ABUTH *Abitilon theophrasti*
Common Name: velvetleaf **Entry Date:** Jun-9-2020

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 300 FT² **Treatments:** 10 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB L Randomized Complete Block (RCB)

Previous

No. Crop Year
 1. SOYBEAN 2019

Soil Description

Description Name: F-9 West **Texture:** SICL silty clay loam
% Sand: 32 **% OM:** 1.6 **Soil Name:** Crosby
% Silt: 53 **pH:** 6 **Fert. Level:** G good
% Clay: 15 **CEC:** 8.6
Soil Drainage: G good

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Application Description

	A	B	C	D	E
Application Date	Nov-20-2019	May-7-2020	May-27-2020	Jun-9-2020	Jun-18-2020
Appl. Start Time	10:00 AM	10:00 AM	10:00 AM	8:00 AM	8:30 AM
Appl. Stop Time	10:15 AM	10:30 AM	10:30 AM	8:30 AM	9:00 AM
Interval to Prev. Appl.		169 DAYS	20 DAYS	13 DAYS	9 DAYS
Application Method	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing	FALL	PRE	EPO	POST	POST
Application Placement	BROFOL	BROFOL	BROFOL	BRODFOL	BRODFOL
Applied By	Dobbels	Lamb	Dobbels	Ackley	Loux
Appl. Entry Date	Nov-20-2019	May-8-2020	May-28-2020	Jun-9-2020	Jun-22-2020
Air Temperature Start, Stop	43 43 F	55 55 F	73 75 F	69 69 F	67 67 F
% Relative Humidity Start, Stop	72 72	51 51	78 78	64 64	79 79
Wind Velocity+Dir. Start	3 MPH WNW	8 MPH WSW	7 MPH SSE	8 MPH ESE	3 MPH NE
Wind Velocity+Dir. Stop	3 MPH WNW	8 MPH WSW	7 MPH SSE	8 MPH ESE	3 MPH NE
Wind Velocity+Dir. Max	3 MPH WNW	10 MPH WSW	7 MPH SSE	8 MPH ESE	3 MPH NE
Wet Leaves (Y/N)	N no	N no	N no	N no	N no
Soil Temperature	39 F	48 F	72 F	68 F	68 F
Soil Moisture	MOIST	NORMAL	DRY	DRY	DRY
Soil Surface Condition	MEDTRA	MEDTRA	MEDTRA	MEDTRA	MEDTRA
% Cloud Cover	60	0	15	15	70
Next Moisture Occurred On	Nov-22-2019	May-8-2020	May-28-2020	Jun-10-2020	Jun-18-2020
Time to Next Moisture	2 DAY	24 HR	16 HR	10 HR	5 HR
Moisture 6 Hours after Appl.	0 IN	0 IN	0 IN	0 IN	0.05 IN
Moisture 1 Week after Appl.	0.72 IN	0.65 IN	0.95 IN	0.37 IN	0.9 IN

Crop Stage At Each Application

	A		B		C		D		E	
Crop 1 Code, BBCH Scale	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR
Days after Emergence	-183		-14		6		19		28	
Stage Scale Used	BBCH		BBCH		BBCH		BBCH		BBCH	
Stage Majority, Percent			00	100	13	100	14	100	15	100
Height Average					4	IN	15	IN	18	IN

Pest Stage At Each Application

	A		B		C		D		E	
Pest 1 Code, Type, Scale	LAMPU	W	LAMPU	W	LAMPU	W	LAMPU	W	LAMPU	W
Stage Majority, Percent	16	90	65	90						
Stage Minimum, Percent	14	10	69	10						
Stage Maximum, Percent	16	90	69	10						
Diameter	2	IN	3	IN						
Height Average	1	IN	5	IN						
Height Minimum, Maximum	0.5	1	5	7						
Density Average	30	PLA/m2	30	PLA/M2						
Density Min, Max	5	50	3	50						
Pest 2 Code, Type, Scale	STEME	W	STEME	W	STEME	W	STEME	W	STEME	W
Stage Majority, Percent	14	80	65	80						
Stage Minimum, Percent	12	10	69	10						
Stage Maximum, Percent	16	10	69	10						
Diameter	0.25	IN	8	IN						
Height Average	0.5	IN	3	IN						
Height Minimum, Maximum	0.25	0.5	3	4						
Density Average	0.33	PLA/m2	5	PLA/m2						
Density Min, Max	0.33	3	0.33	10						
Pest 3 Code, Type, Scale	TAROF	W	TAROF	W	TAROF	W	TAROF	W	TAROF	W
Stage Majority, Percent	16	80	60	80			11	100		
Stage Minimum, Percent	14	10	60	80						
Stage Maximum, Percent	18	10	65	10						
Diameter	6	IN	6	IN						
Height Average	1	IN	3	IN			3	IN		
Height Minimum, Maximum	0.5	1.5	2	4						
Density Average	6	PLA/m2	1	PLA/M2						
Density Min, Max	0	20	0	10						
Pest 4 Code, Type, Scale	CARPE	W	CARPE	W	CARPE	W	CARPE	W	CARPE	W
Stage Majority, Percent	14	80	89	90						
Stage Minimum, Percent	12	10	89	90						
Stage Maximum, Percent	16	10	97	10						
Diameter	0.5	IN	1	IN						
Height Average	0.5	IN	3	IN						
Height Minimum, Maximum	0.25	0.5	3	4						
Density Average	0.33	PLA/m2	6	PLA/m2						
Density Min, Max	0	3	0	12						
Pest 5 Code, Type, Scale	CAPBP	W	CAPBP	W	CAPBP	W	CAPBP	W	CAPBP	W
Stage Majority, Percent			65	75						
Stage Minimum, Percent			65	75						

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Stage Maximum, Percent		69	10						
Diameter		4	IN						
Height Average		10	IN						
Height Minimum, Maximum		10	12						
Density Average		3	PLA/m2						
Density Min, Max		0	5						
Pest 6 Code, Type, Scale	RANAB W	RANAB W	RANAB W	RANAB W	RANAB W	RANAB W			
Stage Majority, Percent		61	90						
Stage Minimum, Percent		51	10						
Stage Maximum, Percent		61	90						
Diameter		3	IN						
Height Average		10	IN						
Height Minimum, Maximum		8	12						
Density Average		3	PLA/m2						
Density Min, Max		0	6						
Pest 7 Code, Type, Scale	VERAG W	VERAG W	VERAG W	VERAG W	VERAG W	VERAG W			
Stage Majority, Percent		65	80						
Stage Minimum, Percent		65	80						
Stage Maximum, Percent		69	10						
Diameter		4	IN						
Height Average		0.5	IN						
Height Minimum, Maximum		0.25	0.5						
Density Average		3	PLA/m2						
Density Min, Max		0	5						
Pest 8 Code, Type, Scale	DRBSS W	DRBSS W	DRBSS W	DRBSS W	DRBSS W	DRBSS W			
Stage Majority, Percent		71	80						
Stage Minimum, Percent		71	80						
Stage Maximum, Percent		89	10						
Diameter		1	IN						
Height Average		2	IN						
Height Minimum, Maximum		2	3						
Density Average		5	PLA/m2						
Density Min, Max		0	15						
Pest 9 Code, Type, Scale	AMBTR W	AMBTR W	AMBTR W	AMBTR W	AMBTR W	AMBTR W			
Stage Majority, Percent		12	80	19	60	18	80	16	80
Stage Minimum, Percent		12	80	14	20	16	10	14	
Stage Maximum, Percent		14	10	21	20	19	10	19	
Diameter		2	IN						
Height Average		2	IN	12	IN	7	IN	16	IN
Height Minimum, Maximum		2	4	3	16	5	8	4	28
Density Average		6	PLA/m2						
Density Min, Max		0	12						
Pest10 Code, Type, Scale	SETFA W	SETFA W	SETFA W	SETFA W	SETFA W	SETFA W			
Stage Majority, Percent		12	80	13	80	16	80		
Stage Minimum, Percent		11	15	11	10	13			
Stage Maximum, Percent		13	5	14	10	19			
Height Average		2	IN	6	IN	7	IN		
Height Minimum, Maximum		1	3	3	8	2	12		
Pest11 Code, Type, Scale	CHEAL W	CHEAL W	CHEAL W	CHEAL W	CHEAL W	CHEAL W			
Stage Majority, Percent		18	80			17	80		
Stage Minimum, Percent		16	10			16			
Stage Maximum, Percent		19	10			19			
Height Average		2	IN			8	IN		
Height Minimum, Maximum		2	3			4	12		
Pest12 Code, Type, Scale	ERICA W	ERICA W	ERICA W	ERICA W	ERICA W	ERICA W			
Stage Majority, Percent		19	80	13	100	19	90		
Stage Minimum, Percent		18	10			18			
Stage Maximum, Percent		21	10			19			
Height Average		3	IN	3	IN	6	IN		
Height Minimum, Maximum		3	3			4	8		
Pest13 Code, Type, Scale	ABUTH W	ABUTH W	ABUTH W	ABUTH W	ABUTH W	ABUTH W			
Stage Majority, Percent				14	100	15	80		
Stage Minimum, Percent						14			
Stage Maximum, Percent						16			
Height Average				3	IN	3	IN		
Height Minimum, Maximum						2	4		

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Application Equipment

	A	B	C	D	E
Appl. Equipment	6' AIXR	6' AIXR	6' AIXR	6' AIXR	6' AIXR
Equipment Type	BACCAI	BACCAI	BACCAI	BACCAI	BACCAI
Operation Pressure	44 PSI	44 PSI	44 PSI	44 PSI	44 PSI
Nozzle Type	AIXR	AIXR	AIXR	AIXR	AIXR
Nozzle Size	11015	1110015	1110015	1110015	1110015
Nozzle Spacing	18 IN	18 IN	18 IN	18 IN	18 IN
Boom Length	6.67 FT	6.67 FT	6.67 FT	6.67 FT	6.67 FT
Boom Height	20 IN	20 IN	20 IN	20 IN	20 IN
Ground Speed	3 MPH	3 MPH	3 MPH	3 MPH	3 MPH
Carrier	WATER	WATER	WATER	WATER	WATER
Application Amount	15 gal/ac	15 GAL/AC	15 GAL/AC	15 GAL/AC	15 GAL/AC
Mix Size	1 L	1 L	1 L	1 L	1 L
Propellant	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2

Context	Date	By	Notes
STATUS Nov-18-2019	Dr. Mark M. Loux	Automatically added by ARM:	Trial Status updated to 'S' during trial creation.
STATUS Nov-20-2019	Dr. Mark M. Loux	Automatically added by ARM:	Trial Status updated to 'E' when Application Date entered.

Instructions:

OBJECTIVES: Observe Fall applications of UPL herbicides, Audit 1:1 at two different rates compared to metribuzin + sulfentrazone tankmix applied at two different rates effect upon control of fall and winter annual weeds as well length of residual followed up by various Spring herbicidie tre3atments.

DESIGN: Randomized Complete Block Design replicated 4 times.

TILLAGE: No-Tillage

TARGET WEEDS: Marestalk, cressleaf groundsel, corn speedwell, henbit, purple deadnettle, amd others.

PARAMETERS: Take weed control ratings for Fall applications in the Spring. Spring herbicide applications % weed control ratings need to be taken at 3, 7, 14, 30 days after treatment (DAT), as well as % crop reponse. Same for POST applications. Yields to be taken.

CONTINGENCIES:

1. Roundup formulation may be switched out to another Bayer (Monsanto) Glyphosate formulation.
2. Can switch out TRICOR 4F 6 oz to TRICOR 75 DF 4 oz and so on.
3. Can use Liquid AMS if you are comfortable withusing.

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	AMBTR	RANAB
Pest Scientific Name	Stellaria media	Lamium purpure>	Ambrosia trifi>	Ranunculus abo>
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed	Smallflower bu>
Crop Type, Code				
Crop Name				
Rating Date	May-7-2020	May-7-2020	May-7-2020	May-7-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	May-8-2020	May-8-2020	May-8-2020	May-8-2020
Days After First/Last Applic.	169 169	169 169	169 169	169 169
Trt-Eval Interval				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1
Days After Emergence	-14 DE-1	-14 DE-1	-14 DE-1	-14 DE-1
ARM Action Codes			AS	AL
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*
1 UNTREATED CHECK					0 c	0 d	0 -	0 c

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	AMBTR	RANAB
Pest Scientific Name	Stellaria media Lamium purpure> Ambrosia trifi> Ranunculus abo>			
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed	Smallflower bu>
Crop Type, Code				
Crop Name				
Rating Date	May-7-2020	May-7-2020	May-7-2020	May-7-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	May-8-2020	May-8-2020	May-8-2020	May-8-2020
Days After First/Last Applic.	169 169	169 169	169 169	169 169
Trt-Eval Interval				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1
Days After Emergence	-14 DE-1	-14 DE-1	-14 DE-1	-14 DE-1
ARM Action Codes			AS	AL
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	1*	2*	3*	4*
2 WEEDMASTER	32 fl oz/a		0.97 lb ai/a		A	88 b	100 a	5 -	91 b
2 ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A				
2 N Pak AMS	5 % v/v		5 % v/v		A				
2 Moccasin II PLus	1.24 lb ai/a		1.3 pt/a		B				
2 Tricor	0.094 lb ai/a		3 oz/a		B				
2 Interline	0.585 lb ai/a		32 oz/a		B				
2 AMSOL	5 % v/v		5 % v/v		B				
2 Interline	0.585 lb ai/a		32 oz/a		D				
2 AMSOL	5 % v/v		5 % v/v		D				
3 AUDIT 1:1	0.75 oz/a		0.0234 lb ai/a		A	95 a	93 bc	15 -	98 a
3 ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A				
3 N Pak AMS	5 % v/v		5 % v/v		A				
3 Tripzin ZC	0.91 lb ai/a		29 oz/a		B				
3 Interline	0.585 lb ai/a		32 oz/a		B				
3 AMSOL	5 % v/v		5 % v/v		B				
3 Interline	0.585 lb ai/a		32 oz/a		D				
3 AMSOL	5 % v/v		5 % v/v		D				
4 AUDIT 1:1	1 oz/a		0.0313 lb ai/a		A	98 a	92 c	15 -	100 a
4 ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A				
4 N Pak AMS	5 % v/v		5 % v/v		A				
4 Shutdown	0.0975 lb ai/a		3 oz/a		B				
4 Tricor	0.188 lb ai/a		6 oz/a		B				
4 Interline	0.585 lb ai/a		32 oz/a		B				
4 AMSOL	5 % v/v		5 % v/v		B				
4 Interline	0.585 lb ai/a		32 oz/a		D				
4 AMSOL	5 % v/v		5 % v/v		D				
5 SHUTDOWN	3 fl oz/a		0.0975 lb ai/a		A	100 a	98 ab	15 -	99 a
5 TRICOR	6 fl oz/a		0.188 lb ai/a		A				
5 ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A				
5 N Pak AMS	5 % v/v		5 % v/v		A				
5 Moccasin II PLus	1.24 lb ai/a		1.3 pt/a		B				
5 Resolve	0.0156 lb ai/a		1 oz/a		B				
5 Interline	0.585 lb ai/a		32 oz/a		B				
5 AMSOL	5 % v/v		5 % v/v		B				
5 Interline	0.585 lb ai/a		32 oz/a		D				
5 AMSOL	5 % v/v		5 % v/v		D				

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	AMBTR	RANAB
Pest Scientific Name	Stellaria media Lamium purpure> Ambrosia trifi> Ranunculus abo>			
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed	Smallflower bu>
Crop Type, Code				
Crop Name				
Rating Date	May-7-2020	May-7-2020	May-7-2020	May-7-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	May-8-2020	May-8-2020	May-8-2020	May-8-2020
Days After First/Last Applic.	169 169	169 169	169 169	169 169
Trt-Eval Interval				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1
Days After Emergence	-14 DE-1	-14 DE-1	-14 DE-1	-14 DE-1
ARM Action Codes			AS	AL
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	1*	2*	3*	4*
6 SHUTDOWN	4 fl oz/a		0.13 lb ai/a		A	98 a	99 a	5 -	99 a
6 TRICOR	8 fl oz/a		0.25 lb ai/a		A				
6 ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A				
6 N Pak AMS	5 % v/v		5 % v/v		A				
6 Moccasin II PPlus	1.24 lb ai/a		1.3 pt/a		C				
6 Resolve	0.0156 lb ai/a		1 oz/a		C				
6 Interline	0.585 lb ai/a		32 oz/a		C				
6 AMSOL	5 % v/v		5 % v/v		C				
6 Interline	0.585 lb ai/a		32 oz/a		E				
6 AMSOL	5 % v/v		5 % v/v		E				
7						0 c	0 d	0 -	0 c
7 Acruon XR	2.66 lb ai/a		3 qt/a		B				
7 COC	1 % v/v		1 % v/v		B				
7 Interline	0.585 lb ai/a		32 oz/a		D				
7 AMSOL	5 % v/v		5 % v/v		D				
8						0 c	0 d	0 -	0 c
8 Corvus	0.115 lb ai/a		5.6 oz/a		B				
8 Atrazine	1.5 lb ai/a		1.5 qt/a		B				
8 COC	1 % v/v		1 % v/v		B				
8 Interline	0.585 lb ai/a		32 oz/a		D				
8 AMSOL	5 % v/v		5 % v/v		D				
9						0 c	0 d	0 -	0 c
9 Resicore	2.06 lb ai/a		2.5 qt/a		B				
9 Atrazine	1.5 lb ai/a		1.5 qt/a		B				
9 COC	1 % v/v		1 % v/v		B				
9 Interline	0.585 lb ai/a		32 oz/a		D				
9 AMSOL	5 % v/v		5 % v/v		D				

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	STEME	LAMPU	AMBTR	RANAB				
Pest Scientific Name	Stellaria media	Lamium purpure>	Ambrosia trifi>	Ranunculus abo>				
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed	Smallflower bu>				
Crop Type, Code								
Crop Name								
Rating Date	May-7-2020	May-7-2020	May-7-2020	May-7-2020				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%				
Number of Subsamples	1	1	1	1				
Data Entry Date	May-8-2020	May-8-2020	May-8-2020	May-8-2020				
Days After First/Last Applic.	169 169	169 169	169 169	169 169				
Trt-Eval Interval								
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1				
Days After Emergence	-14 DE-1	-14 DE-1	-14 DE-1	-14 DE-1				
ARM Action Codes			AS	AL				
Number of Decimals	0	0	0	0				
Trt Treatment	Rate	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*
No. Name								
10					0 c	0 d	0 -	0 c
10 Verdict	0.696 lb ai/a	16 oz/a	B					
10 Atrazine	1.5 lb ai/a	1.5 qt/a	B					
10 COC	1 % v/v	1 % v/v	B					
10 Interline	0.585 lb ai/a	32 oz/a	D					
10 AMSOL	5 % v/v	5 % v/v	D					
LSD P=.05					5.6	5.8	14.8 - 26.1	4.4 - 4.6
Standard Deviation					3.3	3.4	1.9t	0.0t
CV					6.86	6.98	96.51t	1.19t
Grand Mean					48.0	48.3	2.0t	1.0t
Levene's F					1.87	2.124	0.556	2.203
Levene's Prob(F)					0.117	0.077	0.817	0.068
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Skewness					0.0196	0.0181	1.1117*	0.0006
Kurtosis					-2.1221*	-2.1236*	-0.8239	-2.1472*
Replicate F					0.231	2.125	1.465	1.414
Replicate Prob(F)					0.7962	0.1484	0.2573	0.2690
Treatment F					711.590	685.530	1.767	23522.736
Treatment Prob(F)					0.0001	0.0001	0.1452	0.0001

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CAPBP	CARPE	DRBSS	VERAG
Pest Scientific Name	Capsella bursa> Cardamine pens>		Draba sp. Veronica agres>	
Pest Name	Shepherd's pur> Pennsylvania b>		Whitlow-grass Field speedwell	
Crop Type, Code				
Crop Name				
Rating Date	May-7-2020	May-7-2020	May-7-2020	May-7-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	May-8-2020	May-8-2020	May-8-2020	May-8-2020
Days After First/Last Applic.	169 169	169 169	169 169	169 169
Trt-Eval Interval				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1
Days After Emergence	-14 DE-1	-14 DE-1	-14 DE-1	-14 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Rate	Rate	Rate
No. Name	Unit	Other Rate	Other Rate	Appl Unit Code
				5* 6* 7* 8*
1 UNTREATED CHECK		0 b	0 c	0 c 0 c

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CAPBP	CARPE	DRBSS	VERAG
Pest Scientific Name	Capsella bursa> Cardamine pens>		Draba sp. Veronica agres>	
Pest Name	Shepherd's pur>		Pennsylvania b> Whitlow-grass Field speedwell	
Crop Type, Code				
Crop Name				
Rating Date	May-7-2020	May-7-2020	May-7-2020	May-7-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	May-8-2020	May-8-2020	May-8-2020	May-8-2020
Days After First/Last Applic.	169 169	169 169	169 169	169 169
Trt-Eval Interval				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1
Days After Emergence	-14 DE-1	-14 DE-1	-14 DE-1	-14 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Other Rate	Other Unit	Appl Code	5*	6*	7*	8*
2	WEEDMASTER	32 fl oz/a	0.97 lb ai/a		A	100 a	27 bc	10 c	13 c
2	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
2	N Pak AMS	5 % v/v	5 % v/v		A				
2	Moccasin II PLus	1.24 lb ai/a	1.3 pt/a		B				
2	Tricor	0.094 lb ai/a	3 oz/a		B				
2	Interline	0.585 lb ai/a	32 oz/a		B				
2	AMSOL	5 % v/v	5 % v/v		B				
2	Interline	0.585 lb ai/a	32 oz/a		D				
2	AMSOL	5 % v/v	5 % v/v		D				
3	AUDIT 1:1	0.75 oz/a	0.0234 lb ai/a		A	100 a	53 ab	20 c	10 c
3	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
3	N Pak AMS	5 % v/v	5 % v/v		A				
3	Tripzin ZC	0.91 lb ai/a	29 oz/a		B				
3	Interline	0.585 lb ai/a	32 oz/a		B				
3	AMSOL	5 % v/v	5 % v/v		B				
3	Interline	0.585 lb ai/a	32 oz/a		D				
3	AMSOL	5 % v/v	5 % v/v		D				
4	AUDIT 1:1	1 oz/a	0.0313 lb ai/a		A	100 a	53 ab	27 bc	53 b
4	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
4	N Pak AMS	5 % v/v	5 % v/v		A				
4	Shutdown	0.0975 lb ai/a	3 oz/a		B				
4	Tricor	0.188 lb ai/a	6 oz/a		B				
4	Interline	0.585 lb ai/a	32 oz/a		B				
4	AMSOL	5 % v/v	5 % v/v		B				
4	Interline	0.585 lb ai/a	32 oz/a		D				
4	AMSOL	5 % v/v	5 % v/v		D				
5	SHUTDOWN	3 fl oz/a	0.0975 lb ai/a		A	100 a	63 ab	53 b	58 ab
5	TRICOR	6 fl oz/a	0.188 lb ai/a		A				
5	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
5	N Pak AMS	5 % v/v	5 % v/v		A				
5	Moccasin II PLus	1.24 lb ai/a	1.3 pt/a		B				
5	Resolve	0.0156 lb ai/a	1 oz/a		B				
5	Interline	0.585 lb ai/a	32 oz/a		B				
5	AMSOL	5 % v/v	5 % v/v		B				
5	Interline	0.585 lb ai/a	32 oz/a		D				
5	AMSOL	5 % v/v	5 % v/v		D				

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CAPBP	CARPE	DRBSS	VERAG
Pest Scientific Name	Capsella bursa>	Cardamine pens>	Draba sp. Veronica	agres>
Pest Name	Shepherd's pur>	Pennsylvania b>	Whitlow-grass	Field speedwell
Crop Type, Code				
Crop Name				
Rating Date	May-7-2020	May-7-2020	May-7-2020	May-7-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	May-8-2020	May-8-2020	May-8-2020	May-8-2020
Days After First/Last Applic.	169 169	169 169	169 169	169 169
Trt-Eval Interval				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1
Days After Emergence	-14 DE-1	-14 DE-1	-14 DE-1	-14 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	5*	6*	7*	8*
6	SHUTDOWN	4 fl oz/a		0.13 lb ai/a		A	100 a	87 a	93 a	78 a
6	TRICOR	8 fl oz/a		0.25 lb ai/a		A				
6	ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A				
6	N Pak AMS	5 % v/v		5 % v/v		A				
6	Moccasin II PLus	1.24 lb ai/a		1.3 pt/a		C				
6	Resolve	0.0156 lb ai/a		1 oz/a		C				
6	Interline	0.585 lb ai/a		32 oz/a		C				
6	AMSOL	5 % v/v		5 % v/v		C				
6	Interline	0.585 lb ai/a		32 oz/a		E				
6	AMSOL	5 % v/v		5 % v/v		E				
7							0 b	0 c	0 c	0 c
7	Acruon XR	2.66 lb ai/a		3 qt/a		B				
7	COC	1 % v/v		1 % v/v		B				
7	Interline	0.585 lb ai/a		32 oz/a		D				
7	AMSOL	5 % v/v		5 % v/v		D				
8							0 b	0 c	0 c	0 c
8	Corvus	0.115 lb ai/a		5.6 oz/a		B				
8	Atrazine	1.5 lb ai/a		1.5 qt/a		B				
8	COC	1 % v/v		1 % v/v		B				
8	Interline	0.585 lb ai/a		32 oz/a		D				
8	AMSOL	5 % v/v		5 % v/v		D				
9							0 b	0 c	0 c	0 c
9	Resicore	2.06 lb ai/a		2.5 qt/a		B				
9	Atrazine	1.5 lb ai/a		1.5 qt/a		B				
9	COC	1 % v/v		1 % v/v		B				
9	Interline	0.585 lb ai/a		32 oz/a		D				
9	AMSOL	5 % v/v		5 % v/v		D				

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CAPBP	CARPE	DRBSS	VERAG
Pest Scientific Name	Capsella bursa>	Cardamine pens>	Draba sp. Veronica	agres>
Pest Name	Shepherd's pur>	Pennsylvania b>	Whitlow-grass	Field speedwell
Crop Type, Code				
Crop Name				
Rating Date	May-7-2020	May-7-2020	May-7-2020	May-7-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	May-8-2020	May-8-2020	May-8-2020	May-8-2020
Days After First/Last Applic.	169 169	169 169	169 169	169 169
Trt-Eval Interval				
Plant-Eval Interval	0 DP-1	0 DP-1	0 DP-1	0 DP-1
Days After Emergence	-14 DE-1	-14 DE-1	-14 DE-1	-14 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No. Name	Treatment	Rate	Unit	Other Rate	Other Unit	Appl Code	5*	6*	7*	8*
10	Verdict	0.696	lb ai/a	16	oz/a	B	0 b	0 c	0 c	0 c
10	Atrazine	1.5	lb ai/a	1.5	qt/a	B				
10	COC	1	% v/v	1	% v/v	B				
10	Interline	0.585	lb ai/a	32	oz/a	D				
10	AMSOL	5	% v/v	5	% v/v	D				

LSD P=.05	.	40.8	31.8	20.5
Standard Deviation	0.0	23.8	18.5	11.8
CV	0.0	84.04	91.23	69.12
Grand Mean	50.0	28.3	20.3	17.0
Levene's F	0.00	1.461	0.676	1.757
Levene's Prob(F)	.	0.229	0.722	0.152
Rank X2	.	.	.	.
P(Rank X2)	.	.	.	.
Skewness	0.0	0.8824*	1.5738*	1.4042*
Kurtosis	-2.1481*	-1.0235	1.0468	0.4162
Replicate F	0.000	6.108	4.079	3.017
Replicate Prob(F)	1.0000	0.0094	0.0346	0.0792
Treatment F	0.000	5.816	8.363	15.261
Treatment Prob(F)	1.0000	0.0008	0.0001	0.0001

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	AMBTR	RANAB
Pest Scientific Name	Stellaria media	Lamium purpure>	Ambrosia trifi>	Ranunculus abo>
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed	Smallflower bu>
Crop Type, Code				
Crop Name				
Rating Date	May-21-2020	May-21-2020	May-21-2020	May-21-2020
Rating Type			CONTRO	CONTRO
Rating Unit			%	%
Number of Subsamples	1	1	1	1
Data Entry Date	May-28-2020	May-28-2020	May-28-2020	May-28-2020
Days After First/Last Applic.	183 14	183 14	183 14	183 14
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1
Days After Emergence	0 DE-1	0 DE-1	0 DE-1	0 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0
Trt Treatment				
No. Name	Rate	Unit	Rate	Unit
	9*		10*	
			11*	
				12*
1 UNTREATED CHECK	0 d		0 d	
			0 c	
				0 e

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPJU	AMBTR	RANAB
Pest Scientific Name	Stellaria media Lamium purpure> Ambrosia trifi> Ranunculus abo>			
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed	Smallflower bu>
Crop Type, Code				
Crop Name				
Rating Date	May-21-2020	May-21-2020	May-21-2020	May-21-2020
Rating Type			CONTRO	CONTRO
Rating Unit			%	%
Number of Subsamples	1	1	1	1
Data Entry Date	May-28-2020	May-28-2020	May-28-2020	May-28-2020
Days After First/Last Applic.	183 14	183 14	183 14	183 14
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1
Days After Emergence	0 DE-1	0 DE-1	0 DE-1	0 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Appl Code	9*	10*	11*	12*
2	WEEDMASTER	32 fl oz/a	0.97 lb ai/a		A	88 ab	87 bc	77 b	75 bc
2	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
2	N Pak AMS	5 % v/v	5 % v/v		A				
2	Moccasin II PLus	1.24 lb ai/a	1.3 pt/a		B				
2	Tricor	0.094 lb ai/a	3 oz/a		B				
2	Interline	0.585 lb ai/a	32 oz/a		B				
2	AMSOL	5 % v/v	5 % v/v		B				
2	Interline	0.585 lb ai/a	32 oz/a		D				
2	AMSOL	5 % v/v	5 % v/v		D				
3	AUDIT 1:1	0.75 oz/a	0.0234 lb ai/a		A	92 ab	85 bc	67 b	93 ab
3	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
3	N Pak AMS	5 % v/v	5 % v/v		A				
3	Tripzin ZC	0.91 lb ai/a	29 oz/a		B				
3	Interline	0.585 lb ai/a	32 oz/a		B				
3	AMSOL	5 % v/v	5 % v/v		B				
3	Interline	0.585 lb ai/a	32 oz/a		D				
3	AMSOL	5 % v/v	5 % v/v		D				
4	AUDIT 1:1	1 oz/a	0.0313 lb ai/a		A	93 ab	77 c	72 b	100 a
4	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
4	N Pak AMS	5 % v/v	5 % v/v		A				
4	Shutdown	0.0975 lb ai/a	3 oz/a		B				
4	Tricor	0.188 lb ai/a	6 oz/a		B				
4	Interline	0.585 lb ai/a	32 oz/a		B				
4	AMSOL	5 % v/v	5 % v/v		B				
4	Interline	0.585 lb ai/a	32 oz/a		D				
4	AMSOL	5 % v/v	5 % v/v		D				
5	SHUTDOWN	3 fl oz/a	0.0975 lb ai/a		A	98 a	92 ab	72 b	90 ab
5	TRICOR	6 fl oz/a	0.188 lb ai/a		A				
5	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
5	N Pak AMS	5 % v/v	5 % v/v		A				
5	Moccasin II PLus	1.24 lb ai/a	1.3 pt/a		B				
5	Resolve	0.0156 lb ai/a	1 oz/a		B				
5	Interline	0.585 lb ai/a	32 oz/a		B				
5	AMSOL	5 % v/v	5 % v/v		B				
5	Interline	0.585 lb ai/a	32 oz/a		D				
5	AMSOL	5 % v/v	5 % v/v		D				

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	AMBTR	RANAB
Pest Scientific Name	Stellaria media Lamium purpure> Ambrosia trifi> Ranunculus abo>			
Pest Name	Common chickwe>	Purple deadnet>	Giant ragweed	Smallflower bu>
Crop Type, Code				
Crop Name				
Rating Date	May-21-2020	May-21-2020	May-21-2020	May-21-2020
Rating Type	CONTRO			CONTRO
Rating Unit	%			%
Number of Subsamples	1	1	1	1
Data Entry Date	May-28-2020	May-28-2020	May-28-2020	May-28-2020
Days After First/Last Applic.	183 14	183 14	183 14	183 14
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1
Days After Emergence	0 DE-1	0 DE-1	0 DE-1	0 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	9*	10*	11*	12*
6	SHUTDOWN	4 fl oz/a		0.13 lb ai/a		A	73 c	75 c	10 c	93 ab
6	TRICOR	8 fl oz/a		0.25 lb ai/a		A				
6	ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A				
6	N Pak AMS	5 % v/v		5 % v/v		A				
6	Moccasin II PLus	1.24 lb ai/a		1.3 pt/a		C				
6	Resolve	0.0156 lb ai/a		1 oz/a		C				
6	Interline	0.585 lb ai/a		32 oz/a		C				
6	AMSOL	5 % v/v		5 % v/v		C				
6	Interline	0.585 lb ai/a		32 oz/a		E				
6	AMSOL	5 % v/v		5 % v/v		E				
7							90 ab	97 ab	100 a	63 c
7	Acruon XR	2.66 lb ai/a		3 qt/a		B				
7	COC	1 % v/v		1 % v/v		B				
7	Interline	0.585 lb ai/a		32 oz/a		D				
7	AMSOL	5 % v/v		5 % v/v		D				
8							88 ab	93 ab	100 a	40 d
8	Corvus	0.115 lb ai/a		5.6 oz/a		B				
8	Atrazine	1.5 lb ai/a		1.5 qt/a		B				
8	COC	1 % v/v		1 % v/v		B				
8	Interline	0.585 lb ai/a		32 oz/a		D				
8	AMSOL	5 % v/v		5 % v/v		D				
9							92 ab	97 ab	100 a	57 cd
9	Resicore	2.06 lb ai/a		2.5 qt/a		B				
9	Atrazine	1.5 lb ai/a		1.5 qt/a		B				
9	COC	1 % v/v		1 % v/v		B				
9	Interline	0.585 lb ai/a		32 oz/a		D				
9	AMSOL	5 % v/v		5 % v/v		D				

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	STEME	LAMPU	AMBTR	RANAB				
Pest Scientific Name	Stellaria media Lamium purpure> Ambrosia trifi> Ranunculus abo>							
Pest Name	Common chickwe> Purple deadnet> Giant ragweed Smallflower bu>							
Crop Type, Code								
Crop Name								
Rating Date	May-21-2020	May-21-2020	May-21-2020	May-21-2020				
Rating Type	CONTRO			CONTRO				
Rating Unit	%			%				
Number of Subsamples	1	1	1	1				
Data Entry Date	May-28-2020	May-28-2020	May-28-2020	May-28-2020				
Days After First/Last Applic.	183 14	183 14	183 14	183 14				
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B				
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1				
Days After Emergence	0 DE-1	0 DE-1	0 DE-1	0 DE-1				
ARM Action Codes								
Number of Decimals	0	0	0	0				
Trt Treatment	Rate	Other Rate	Other Rate	Appl Unit Code	9*	10*	11*	12*
No. Name								
10					82 bc	100 a	95 a	92 ab
10 Verdict	0.696 lb ai/a	16 oz/a		B				
10 Atrazine	1.5 lb ai/a	1.5 qt/a		B				
10 COC	1 % v/v	1 % v/v		B				
10 Interline	0.585 lb ai/a	32 oz/a		D				
10 AMSOL	5 % v/v	5 % v/v		D				
LSD P=.05					12.7	12.0	17.0	19.7
Standard Deviation					7.4	7.0	9.9	11.4
CV					9.29	8.71	14.3	16.34
Grand Mean					79.7	80.2	69.2	69.8
Levene's F					0.624	1.244	0.817	0.475
Levene's Prob(F)					0.763	0.324	0.608	0.873
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Skewness					-2.3505*	-2.2622*	-1.1073*	-1.0615*
Kurtosis					4.5837*	4.2875*	-0.0977	0.1604
Replicate F					0.426	0.222	0.034	1.032
Replicate Prob(F)					0.6597	0.8031	0.9665	0.3789
Treatment F					45.432	53.110	40.497	22.226
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed	
Pest Code	CAPBP	CARPE	DRBSS	VERAG	
Pest Scientific Name	Capsella bursa> Cardamine pens>		Draba sp. Veronica agres>		
Pest Name	Shepherd's pur> Pennsylvania b> Whitlow-grass		Field speedwell		
Crop Type, Code					C ZEAMX
Crop Name					Corn
Rating Date	May-21-2020	May-21-2020	May-21-2020	May-21-2020	Jun-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Data Entry Date	May-28-2020	May-28-2020	May-28-2020	May-28-2020	Jun-8-2020
Days After First/Last Applic.	183 14	183 14	183 14	183 14	201 12
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B	12 DA-C
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1	32 DP-1
Days After Emergence	0 DE-1	0 DE-1	0 DE-1	0 DE-1	18 DE-1
ARM Action Codes					
Number of Decimals	0	0	0	0	0
Trt Treatment					
No. Name	Rate	Unit	Rate	Unit	Code
	13*		14*		15*
					16*
					17*
1 UNTREATED CHECK	0 c		0 b		0 b
					0 e
					0 -

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CAPBP	CARPE	DRBSS	VERAG
Pest Scientific Name	Capsella bursa> Cardamine pens>		Draba sp. Veronica agres>	
Pest Name	Shepherd's pur>	Pennsylvania b>	Whitlow-grass	Field speedwell
Crop Type, Code				C ZEAMX
Crop Name				Corn
Rating Date	May-21-2020	May-21-2020	May-21-2020	May-21-2020 Jun-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO PHYGEN
Rating Unit	%	%	%	% %
Number of Subsamples	1	1	1	1 1
Data Entry Date	May-28-2020	May-28-2020	May-28-2020	May-28-2020 Jun-8-2020
Days After First/Last Applic.	183 14	183 14	183 14	183 14 201 12
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B 12 DA-C
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1 32 DP-1
Days After Emergence	0 DE-1	0 DE-1	0 DE-1	0 DE-1 18 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0 0

Trt No.	Treatment Name	Rate	Other Unit	Other Rate	Other Unit	Appl Code	13*	14*	15*	16*	17*
2	WEEDMASTER	32 fl oz/a		0.97 lb ai/a		A	100 ab	100 a	100 a	70 bc	0-
2	ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A					
2	N Pak AMS	5 % v/v		5 % v/v		A					
2	Moccasin II PLus	1.24 lb ai/a		1.3 pt/a		B					
2	Tricor	0.094 lb ai/a		3 oz/a		B					
2	Interline	0.585 lb ai/a		32 oz/a		B					
2	AMSOL	5 % v/v		5 % v/v		B					
2	Interline	0.585 lb ai/a		32 oz/a		D					
2	AMSOL	5 % v/v		5 % v/v		D					
3	AUDIT 1:1	0.75 oz/a		0.0234 lb ai/a		A	100 ab	100 a	100 a	66 c	0-
3	ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A					
3	N Pak AMS	5 % v/v		5 % v/v		A					
3	Tripzin ZC	0.91 lb ai/a		29 oz/a		B					
3	Interline	0.585 lb ai/a		32 oz/a		B					
3	AMSOL	5 % v/v		5 % v/v		B					
3	Interline	0.585 lb ai/a		32 oz/a		D					
3	AMSOL	5 % v/v		5 % v/v		D					
4	AUDIT 1:1	1 oz/a		0.0313 lb ai/a		A	100 a	100 a	100 a	62 c	0-
4	ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A					
4	N Pak AMS	5 % v/v		5 % v/v		A					
4	Shutdown	0.0975 lb ai/a		3 oz/a		B					
4	Tricor	0.188 lb ai/a		6 oz/a		B					
4	Interline	0.585 lb ai/a		32 oz/a		B					
4	AMSOL	5 % v/v		5 % v/v		B					
4	Interline	0.585 lb ai/a		32 oz/a		D					
4	AMSOL	5 % v/v		5 % v/v		D					
5	SHUTDOWN	3 fl oz/a		0.0975 lb ai/a		A	100 a	100 a	100 a	87 ab	0-
5	TRICOR	6 fl oz/a		0.188 lb ai/a		A					
5	ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A					
5	N Pak AMS	5 % v/v		5 % v/v		A					
5	Moccasin II PLus	1.24 lb ai/a		1.3 pt/a		B					
5	Resolve	0.0156 lb ai/a		1 oz/a		B					
5	Interline	0.585 lb ai/a		32 oz/a		B					
5	AMSOL	5 % v/v		5 % v/v		B					
5	Interline	0.585 lb ai/a		32 oz/a		D					
5	AMSOL	5 % v/v		5 % v/v		D					

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CAPBP	CARPE	DRBSS	VERAG
Pest Scientific Name	Capsella bursa> Cardamine pens>		Draba sp. Veronica agres>	
Pest Name	Shepherd's pur>	Pennsylvania b>	Whitlow-grass	Field speedwell
Crop Type, Code				C ZEAMX
Crop Name				Corn
Rating Date	May-21-2020	May-21-2020	May-21-2020	May-21-2020 Jun-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO PHYGEN
Rating Unit	%	%	%	% %
Number of Subsamples	1	1	1	1 1
Data Entry Date	May-28-2020	May-28-2020	May-28-2020	May-28-2020 Jun-8-2020
Days After First/Last Applic.	183 14	183 14	183 14	183 14 201 12
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B 12 DA-C
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1 32 DP-1
Days After Emergence	0 DE-1	0 DE-1	0 DE-1	0 DE-1 18 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0 0

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	13*	14*	15*	16*	17*
6	SHUTDOWN	4 fl oz/a		0.13 lb ai/a		A	100 ab	100 a	100 a	32 d	0-
6	TRICOR	8 fl oz/a		0.25 lb ai/a		A					
6	ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A					
6	N Pak AMS	5 % v/v		5 % v/v		A					
6	Moccasin II PLus	1.24 lb ai/a		1.3 pt/a		C					
6	Resolve	0.0156 lb ai/a		1 oz/a		C					
6	Interline	0.585 lb ai/a		32 oz/a		C					
6	AMSOL	5 % v/v		5 % v/v		C					
6	Interline	0.585 lb ai/a		32 oz/a		E					
6	AMSOL	5 % v/v		5 % v/v		E					
7							100 a	100 a	100 a	100 a	0-
7	Acruron XR	2.66 lb ai/a		3 qt/a		B					
7	COC	1 % v/v		1 % v/v		B					
7	Interline	0.585 lb ai/a		32 oz/a		D					
7	AMSOL	5 % v/v		5 % v/v		D					
8							98 b	100 a	100 a	100 a	0-
8	Corvus	0.115 lb ai/a		5.6 oz/a		B					
8	Atrazine	1.5 lb ai/a		1.5 qt/a		B					
8	COC	1 % v/v		1 % v/v		B					
8	Interline	0.585 lb ai/a		32 oz/a		D					
8	AMSOL	5 % v/v		5 % v/v		D					
9							100 a	100 a	100 a	100 a	0-
9	Resicore	2.06 lb ai/a		2.5 qt/a		B					
9	Atrazine	1.5 lb ai/a		1.5 qt/a		B					
9	COC	1 % v/v		1 % v/v		B					
9	Interline	0.585 lb ai/a		32 oz/a		D					
9	AMSOL	5 % v/v		5 % v/v		D					

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	CAPBP	CARPE	DRBSS	VERAG					
Pest Scientific Name	Capsella bursa> Cardamine pens>		Draba sp. Veronica agres>						
Pest Name	Shepherd's pur>	Pennsylvania b>	Whitlow-grass	Field speedwell					
Crop Type, Code	C ZEAMX								
Crop Name	Corn								
Rating Date	May-21-2020	May-21-2020	May-21-2020	May-21-2020 Jun-8-2020					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO PHYGEN					
Rating Unit	%	%	%	% %					
Number of Subsamples	1	1	1	1 1					
Data Entry Date	May-28-2020	May-28-2020	May-28-2020	May-28-2020 Jun-8-2020					
Days After First/Last Applic.	183 14	183 14	183 14	183 14 201 12					
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B 12 DA-C					
Plant-Eval Interval	14 DP-1	14 DP-1	14 DP-1	14 DP-1 32 DP-1					
Days After Emergence	0 DE-1	0 DE-1	0 DE-1	0 DE-1 18 DE-1					
ARM Action Codes									
Number of Decimals	0	0	0	0 0					
Trt Treatment	Rate	Other Rate	Other Rate	Appl Unit Code	13*	14*	15*	16*	17*
10					100 a	100 a	100 a	100 a	0-
10 Verdict	0.696 lb ai/a	16 oz/a		B					
10 Atrazine	1.5 lb ai/a	1.5 qt/a		B					
10 COC	1 % v/v	1 % v/v		B					
10 Interline	0.585 lb ai/a	32 oz/a		D					
10 AMSOL	5 % v/v	5 % v/v		D					
LSD P=.05					1.6	.	.	11.4	.
Standard Deviation					0.9	0.0	0.0	6.5	0.0
CV					1.04	0.0	0.0	8.66	0.0
Grand Mean					89.5	90.0	90.0	75.2	0.0
Levene's F					0.946	0.00	0.00	0.975	0.00
Levene's Prob(F)					0.51	.	.	0.489	.
Rank X2					.	.	.	.	.
P(Rank X2)					.	.	.	.	.
Skewness					-2.744*	-2.8091*	-2.8091*	-1.3619*	.
Kurtosis					5.9453*	6.3081*	6.3081*	0.795	.
Replicate F					1.063	0.000	0.000	2.192	0.000
Replicate Prob(F)					0.3675	1.0000	1.0000	0.1485	1.0000
Treatment F					3417.074	0.000	0.000	71.953	0.000
Treatment Prob(F)					0.0001	1.0000	1.0000	0.0001	1.0000

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	ERICA
Pest Scientific Name	Setaria Ambrosia trifi>	Chenopodium al>	Erigeron canad>	
Pest Name	faberi			
Crop Type, Code	Giant foxtail	Giant ragweed common	lambsqu>	Canada horsewe>
Crop Name				
Rating Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020
Days After First/Last Applic.	201 12	201 12	201 12	201 12
Trt-Eval Interval	12 DA-C	12 DA-C	12 DA-C	12 DA-C
Plant-Eval Interval	32 DP-1	32 DP-1	32 DP-1	32 DP-1
Days After Emergence	18 DE-1	18 DE-1	18 DE-1	18 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0
Trt Treatment				
No. Name	Rate	Unit	Rate	Unit
	18*		19*	
			20*	
				21*
1 UNTREATED CHECK	0 d		0 e	
			0 c	
				0 c

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	ERICA
Pest Scientific Name	Setaria Ambrosia trifi> faberi	Chenopodium ai>	Erigeron canad>	
Pest Name	Giant foxtail Giant ragweed common lambsqu> Canada horsewe>			
Crop Type, Code				
Crop Name				
Rating Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020
Days After First/Last Applic.	201 12	201 12	201 12	201 12
Trt-Eval Interval	12 DA-C	12 DA-C	12 DA-C	12 DA-C
Plant-Eval Interval	32 DP-1	32 DP-1	32 DP-1	32 DP-1
Days After Emergence	18 DE-1	18 DE-1	18 DE-1	18 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Appl Code	18*	19*	20*	21*
2	WEEDMASTER	32 fl oz/a	0.97 lb ai/a		A	60 b	47 cd	50 b	90 ab
2	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
2	N Pak AMS	5 % v/v	5 % v/v		A				
2	Moccasin II PLus	1.24 lb ai/a	1.3 pt/a		B				
2	Tricor	0.094 lb ai/a	3 oz/a		B				
2	Interline	0.585 lb ai/a	32 oz/a		B				
2	AMSOL	5 % v/v	5 % v/v		B				
2	Interline	0.585 lb ai/a	32 oz/a		D				
2	AMSOL	5 % v/v	5 % v/v		D				
3	AUDIT 1:1	0.75 oz/a	0.0234 lb ai/a		A	10 cd	43 d	37 b	100 a
3	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
3	N Pak AMS	5 % v/v	5 % v/v		A				
3	Tripzin ZC	0.91 lb ai/a	29 oz/a		B				
3	Interline	0.585 lb ai/a	32 oz/a		B				
3	AMSOL	5 % v/v	5 % v/v		B				
3	Interline	0.585 lb ai/a	32 oz/a		D				
3	AMSOL	5 % v/v	5 % v/v		D				
4	AUDIT 1:1	1 oz/a	0.0313 lb ai/a		A	27 c	47 cd	87 a	100 a
4	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
4	N Pak AMS	5 % v/v	5 % v/v		A				
4	Shutdown	0.0975 lb ai/a	3 oz/a		B				
4	Tricor	0.188 lb ai/a	6 oz/a		B				
4	Interline	0.585 lb ai/a	32 oz/a		B				
4	AMSOL	5 % v/v	5 % v/v		B				
4	Interline	0.585 lb ai/a	32 oz/a		D				
4	AMSOL	5 % v/v	5 % v/v		D				
5	SHUTDOWN	3 fl oz/a	0.0975 lb ai/a		A	60 b	50 bcd	87 a	82 b
5	TRICOR	6 fl oz/a	0.188 lb ai/a		A				
5	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A				
5	N Pak AMS	5 % v/v	5 % v/v		A				
5	Moccasin II PLus	1.24 lb ai/a	1.3 pt/a		B				
5	Resolve	0.0156 lb ai/a	1 oz/a		B				
5	Interline	0.585 lb ai/a	32 oz/a		B				
5	AMSOL	5 % v/v	5 % v/v		B				
5	Interline	0.585 lb ai/a	32 oz/a		D				
5	AMSOL	5 % v/v	5 % v/v		D				

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	ERICA
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Erigeron canadensis
Pest Name	Giant foxtail	Giant ragweed	common lambsquarters	Canada horseweed
Crop Type, Code				
Crop Name				
Rating Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020
Days After First/Last Applic.	201 12	201 12	201 12	201 12
Trt-Eval Interval	12 DA-C	12 DA-C	12 DA-C	12 DA-C
Plant-Eval Interval	32 DP-1	32 DP-1	32 DP-1	32 DP-1
Days After Emergence	18 DE-1	18 DE-1	18 DE-1	18 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	18*	19*	20*	21*
6	SHUTDOWN	4 fl oz/a		0.13 lb ai/a		A	92 a	60 a-d	100 a	100 a
6	TRICOR	8 fl oz/a		0.25 lb ai/a		A				
6	ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A				
6	N Pak AMS	5 % v/v		5 % v/v		A				
6	Moccasin II PLus	1.24 lb ai/a		1.3 pt/a		C				
6	Resolve	0.0156 lb ai/a		1 oz/a		C				
6	Interline	0.585 lb ai/a		32 oz/a		C				
6	AMSOL	5 % v/v		5 % v/v		C				
6	Interline	0.585 lb ai/a		32 oz/a		E				
6	AMSOL	5 % v/v		5 % v/v		E				
7							70 b	67 ab	100 a	93 ab
7	Acruon XR	2.66 lb ai/a		3 qt/a		B				
7	COC	1 % v/v		1 % v/v		B				
7	Interline	0.585 lb ai/a		32 oz/a		D				
7	AMSOL	5 % v/v		5 % v/v		D				
8							67 b	65 abc	100 a	100 a
8	Corvus	0.115 lb ai/a		5.6 oz/a		B				
8	Atrazine	1.5 lb ai/a		1.5 qt/a		B				
8	COC	1 % v/v		1 % v/v		B				
8	Interline	0.585 lb ai/a		32 oz/a		D				
8	AMSOL	5 % v/v		5 % v/v		D				
9							55 b	77 a	100 a	100 a
9	Resicore	2.06 lb ai/a		2.5 qt/a		B				
9	Atrazine	1.5 lb ai/a		1.5 qt/a		B				
9	COC	1 % v/v		1 % v/v		B				
9	Interline	0.585 lb ai/a		32 oz/a		D				
9	AMSOL	5 % v/v		5 % v/v		D				

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	ERICA
Pest Scientific Name	Setaria Ambrosia trifi> faberi	Chenopodium a|>	Erigeron canad>	
Pest Name	Giant foxtail	Giant ragweed	common lambsqu>	Canada horsewe>
Crop Type, Code				
Crop Name				
Rating Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-8-2020	Jun-8-2020	Jun-8-2020	Jun-8-2020
Days After First/Last Applic.	201 12	201 12	201 12	201 12
Trt-Eval Interval	12 DA-C	12 DA-C	12 DA-C	12 DA-C
Plant-Eval Interval	32 DP-1	32 DP-1	32 DP-1	32 DP-1
Days After Emergence	18 DE-1	18 DE-1	18 DE-1	18 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	18*	19*	20*	21*
10						53 b	53 bcd	100 a	100 a
10 Verdict	0.696 lb ai/a		16 oz/a		B				
10 Atrazine	1.5 lb ai/a		1.5 qt/a		B				
10 COC	1 % v/v		1 % v/v		B				
10 Interline	0.585 lb ai/a		32 oz/a		D				
10 AMSOL	5 % v/v		5 % v/v		D				
LSD P=.05						21.6	19.3	23.4	15.7
Standard Deviation						12.6	11.2	13.6	9.1
CV						25.48	22.11	17.92	10.55
Grand Mean						49.3	50.8	76.0	86.5
Levene's F						0.73	1.015	1.25	1.308
Levene's Prob(F)						0.677	0.461	0.321	0.293
Rank X2						.	.	.	.
P(Rank X2)						.	.	.	.
Skewness						-0.5701	-1.2357*	-1.3363*	-2.394*
Kurtosis						-0.5076	0.9536	0.4393	4.5577*
Replicate F						1.018	0.106	0.701	1.111
Replicate Prob(F)						0.3813	0.9004	0.5093	0.3507
Treatment F						15.374	10.253	19.952	34.671
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	ECHCG	AMBTR	CHEAL
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>
Pest Name	foxtail, giant	barnyardgrass	ragweed, giant	lambsquarters,>
Crop Type, Code				
Crop Name				
Rating Date	Jul-8-2020	Jul-8-2020	Jul-8-2020	Jul-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1 1 1
Data Entry Date	Jul-9-2020	Jul-9-2020	Jul-9-2020	Jul-9-2020
Days After First/Last Applic.	231 20	231 20	231 20	231 20
Trt-Eval Interval	42 DA-C	42 DA-C	42 DA-C	42 DA-C
Plant-Eval Interval	62 DP-1	62 DP-1	62 DP-1	62 DP-1
Days After Emergence	48 DE-1	48 DE-1	48 DE-1	48 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0
Trt Treatment				
No. Name	Rate	Rate	Rate	Rate
	Unit	Unit	Unit	Unit
	Other Rate	Other Rate	Other Rate	Other Rate
	Appl Code	Appl Code	Appl Code	Appl Code
	22*	23*	24*	25*
	26 27			
1 UNTREATED CHECK	0 d	0 d	0 d	0 g

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	ECHCG	AMBTR	CHEAL
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>
Pest Name	foxtail, giant	barnyardgrass	ragweed, giant	lambsquarters,>
Crop Type, Code				
Crop Name				
Rating Date	Jul-8-2020	Jul-8-2020	Jul-8-2020	Jul-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1 1 1
Data Entry Date	Jul-9-2020	Jul-9-2020	Jul-9-2020	Jul-9-2020
Days After First/Last Applic.	231 20	231 20	231 20	231 20
Trt-Eval Interval	42 DA-C	42 DA-C	42 DA-C	42 DA-C
Plant-Eval Interval	62 DP-1	62 DP-1	62 DP-1	62 DP-1
Days After Emergence	48 DE-1	48 DE-1	48 DE-1	48 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Other Rate	Other Rate Unit	Appl Code	22*	23*	24*	25*	26 27
2	WEEDMASTER	32 fl oz/a	0.97 lb ai/a		A	37 b	37 b	87 a		17 fg
2	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A					
2	N Pak AMS	5 % v/v	5 % v/v		A					
2	Moccasin II PLus	1.24 lb ai/a	1.3 pt/a		B					
2	Tricor	0.094 lb ai/a	3 oz/a		B					
2	Interline	0.585 lb ai/a	32 oz/a		B					
2	AMSOL	5 % v/v	5 % v/v		B					
2	Interline	0.585 lb ai/a	32 oz/a		D					
2	AMSOL	5 % v/v	5 % v/v		D					
3	AUDIT 1:1	0.75 oz/a	0.0234 lb ai/a		A	0 d	0 d	73 abc		27 ef
3	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A					
3	N Pak AMS	5 % v/v	5 % v/v		A					
3	Tripzin ZC	0.91 lb ai/a	29 oz/a		B					
3	Interline	0.585 lb ai/a	32 oz/a		B					
3	AMSOL	5 % v/v	5 % v/v		B					
3	Interline	0.585 lb ai/a	32 oz/a		D					
3	AMSOL	5 % v/v	5 % v/v		D					
4	AUDIT 1:1	1 oz/a	0.0313 lb ai/a		A	10 bcd	10 bcd	57 c		57 cd
4	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A					
4	N Pak AMS	5 % v/v	5 % v/v		A					
4	Shutdown	0.0975 lb ai/a	3 oz/a		B					
4	Tricor	0.188 lb ai/a	6 oz/a		B					
4	Interline	0.585 lb ai/a	32 oz/a		B					
4	AMSOL	5 % v/v	5 % v/v		B					
4	Interline	0.585 lb ai/a	32 oz/a		D					
4	AMSOL	5 % v/v	5 % v/v		D					
5	SHUTDOWN	3 fl oz/a	0.0975 lb ai/a		A	33 bc	33 bc	60 bc		40 de
5	TRICOR	6 fl oz/a	0.188 lb ai/a		A					
5	ROUNDUP POWER MAX	32 fl oz/a	1.38 lb ae/a		A					
5	N Pak AMS	5 % v/v	5 % v/v		A					
5	Moccasin II PLus	1.24 lb ai/a	1.3 pt/a		B					
5	Resolve	0.0156 lb ai/a	1 oz/a		B					
5	Interline	0.585 lb ai/a	32 oz/a		B					
5	AMSOL	5 % v/v	5 % v/v		B					
5	Interline	0.585 lb ai/a	32 oz/a		D					
5	AMSOL	5 % v/v	5 % v/v		D					

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	ECHCG	AMBTR	CHEAL
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>
Pest Name	foxtail, giant	barnyardgrass	ragweed, giant	lambsquarters,>
Crop Type, Code				
Crop Name				
Rating Date	Jul-8-2020	Jul-8-2020	Jul-8-2020	Jul-8-2020
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1 1 1
Data Entry Date	Jul-9-2020	Jul-9-2020	Jul-9-2020	Jul-9-2020
Days After First/Last Applic.	231 20	231 20	231 20	231 20
Trt-Eval Interval	42 DA-C	42 DA-C	42 DA-C	42 DA-C
Plant-Eval Interval	62 DP-1	62 DP-1	62 DP-1	62 DP-1
Days After Emergence	48 DE-1	48 DE-1	48 DE-1	48 DE-1
ARM Action Codes				
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	22*	23*	24*	25*	26 27
6	SHUTDOWN	4 fl oz/a		0.13 lb ai/a		A	77 a	73 a	83 ab	73 bc	
6	TRICOR	8 fl oz/a		0.25 lb ai/a		A					
6	ROUNDUP POWER MAX	32 fl oz/a		1.38 lb ae/a		A					
6	N Pak AMS	5 % v/v		5 % v/v		A					
6	Moccasin II PLus	1.24 lb ai/a		1.3 pt/a		C					
6	Resolve	0.0156 lb ai/a		1 oz/a		C					
6	Interline	0.585 lb ai/a		32 oz/a		C					
6	AMSOL	5 % v/v		5 % v/v		C					
6	Interline	0.585 lb ai/a		32 oz/a		E					
6	AMSOL	5 % v/v		5 % v/v		E					
7							37 b	30 bc	83 ab	100 a	
7	Acruon XR	2.66 lb ai/a		3 qt/a		B					
7	COC	1 % v/v		1 % v/v		B					
7	Interline	0.585 lb ai/a		32 oz/a		D					
7	AMSOL	5 % v/v		5 % v/v		D					
8							23 bcd	23 bcd	87 a	87 ab	
8	Corvus	0.115 lb ai/a		5.6 oz/a		B					
8	Atrazine	1.5 lb ai/a		1.5 qt/a		B					
8	COC	1 % v/v		1 % v/v		B					
8	Interline	0.585 lb ai/a		32 oz/a		D					
8	AMSOL	5 % v/v		5 % v/v		D					
9							23 bcd	23 bcd	88 a	100 a	
9	Resicore	2.06 lb ai/a		2.5 qt/a		B					
9	Atrazine	1.5 lb ai/a		1.5 qt/a		B					
9	COC	1 % v/v		1 % v/v		B					
9	Interline	0.585 lb ai/a		32 oz/a		D					
9	AMSOL	5 % v/v		5 % v/v		D					

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	ECHCG	AMBTR	CHEAL					
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>					
Pest Name	foxtail, giant	barnyardgrass	ragweed, giant	lambsquarters,>					
Crop Type, Code									
Crop Name									
Rating Date	Jul-8-2020	Jul-8-2020	Jul-8-2020	Jul-8-2020					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%					
Number of Subsamples	1	1	1	1 1 1					
Data Entry Date	Jul-9-2020	Jul-9-2020	Jul-9-2020	Jul-9-2020					
Days After First/Last Applic.	231 20	231 20	231 20	231 20					
Trt-Eval Interval	42 DA-C	42 DA-C	42 DA-C	42 DA-C					
Plant-Eval Interval	62 DP-1	62 DP-1	62 DP-1	62 DP-1					
Days After Emergence	48 DE-1	48 DE-1	48 DE-1	48 DE-1					
ARM Action Codes									
Number of Decimals	0	0	0	0					
Trt Treatment No. Name	Rate	Other Rate	Other Rate	Appl Unit Code	22*	23*	24*	25*	26 27
10					7 cd	7 cd	90 a	100 a	
10 Verdict	0.696 lb ai/a	16 oz/a		B					
10 Atrazine	1.5 lb ai/a	1.5 qt/a		B					
10 COC	1 % v/v	1 % v/v		B					
10 Interline	0.585 lb ai/a	32 oz/a		D					
10 AMSOL	5 % v/v	5 % v/v		D					
LSD P=.05					27.7	29.6	23.7	21.7	. . .
Standard Deviation					16.1	17.2	13.8	12.6	. . .
CV					65.37	72.87	19.47	21.06	. . .
Grand Mean					24.7	23.7	70.8	60.0	. . .
Levene's F					0.541	0.50	0.564	0.691	. . .
Levene's Prob(F)					0.828	0.857	0.81	0.709	. . .
Rank X2					.	.	.	.	. . .
P(Rank X2)					.	.	.	.	. . .
Skewness					0.8097	0.8186	-1.4202*	-0.2961	. . .
Kurtosis					-0.5194	-0.5168	1.5939	-1.4141	. . .
Replicate F					2.667	3.105	0.766	0.188	
Replicate Prob(F)					0.0968	0.0694	0.4793	0.8303	
Treatment F					6.188	4.893	11.964	26.497	
Treatment Prob(F)					0.0005	0.0021	0.0001	0.0001	

The Ohio State University

UPL Fall - Spring Burndown Programs in Corn

Trial ID: 20FALLCORN1
 Protocol ID: FALL /SPRING CORN-SOY
 Project ID: 20FALLCORN1

Location: Western Branch F-9 West Trial Year: 2019
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, UPL

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

STEME, Stellaria media, Common chickweed = US
 LAMPU, Lamium purpureum, Purple deadnettle = US
 AMBTR, Ambrosia trifida, Giant ragweed = US
 RANAB, Ranunculus abortivus, Smallflower buttercup = US
 CAPBP, Capsella bursa-pastoris, Shepherd's purse = US
 CARPE, Cardamine pensylvanica, Pennsylvania bittercress = US
 DRBSS, Draba sp., Whitlow-grass = US
 VERAG, Veronica agrestis, Field speedwell = US
 SETFA, Setaria faberi, Giant foxtail = US
 CHEAL, Chenopodium album, common lambsquarters = US
 ERICA, Erigeron canadensis, Canada horseweed = US
 SETFA, Setaria faberi, foxtail, giant = US
 ECHCG, Echinochloa crus-galli, barnyardgrass = US
 AMBTR, Ambrosia trifida, ragweed, giant = US
 CHEAL, Chenopodium album, lambsquarters, common = US

Crop Type, Code

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

Rating Type

CONTRO = control / burndown or knockdown
 PHYGEN = phytotoxicity - general / injury

Rating Unit

% = percent

Plant-Eval Interval

0 DP-1 = 1 ZEAMX May-7-2020
 14 DP-1 = 1 ZEAMX May-7-2020
 32 DP-1 = 1 ZEAMX May-7-2020
 62 DP-1 = 1 ZEAMX May-7-2020

ARM Action Codes

AS = Automatic square root transformation of X+0.5
 AL = Automatic log transformation of X+1