

The Ohio State University

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: 20ACURONGT1PASS Location: Trial Year: 2020
 Protocol ID: HB1007A4-2020US Investigator: Dr. Mark M. Loux
 Master Protocol ID: Study Director: Anthony Dobbels
 Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial
 Conducted Under GEP: No

General Trial Information

Study Director: A
Investigator: Dr. Mark M. Loux

Discipline: H herbicide
Trial Status: E established
Trial Status Date: Apr-23-2020 11:07 AM
ARM Trial Created On: Mar-23-2020
Initiation Date: Apr-22-2020

Last Changed By: Dr. Mark M. Loux
Trial Usage/Type: 0 Research and Development

Protocol Revision Number: 1.0 **Protocol Revision Date:** Mar-23-2020

Trial Location

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

Latitude of LL Corner °: 39.8595 N
Longitude of LL Corner °: -83.67549 W
Altitude of LL Corner: 1094.00 FT

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: A

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: C ZEAMD Zea mays indentata Dent corn **BBCH Scale:** BCOR
Entry Date: Apr-23-2020 **Stage Scale:** BBCH
Variety: SCS1105AM
Attributes: Glyphosate and Glufosinate Resistant
Seed Lot No: B3BFD13011-N **Seed Source:** Seed Consultants
% Germination: 95 **Planting Rate:** 32097 S/A
Planting Date: Apr-22-2020 **Planting Method:** PLANTD planted
Depth: 2 IN **Planting Equipment:** FPP finger pickup planter
Rows per Plot: 4 **Seed Bed:** MEDIUM medium
Row Spacing: 30 IN **Soil Moisture:** NORMAL normal, adequate
Soil Temperature: 54 F
Emergence Date: May-14-2020

Pest Description

Pest 1 Type: W **Code:** SETFA *Setaria faberi*
Common Name: foxtail, giant **Entry Date:** May-28-2020

Pest 2 Type: W **Code:** ECHCG *Echinochloa crus-galli*
Common Name: Common barnyard grass **Entry Date:** Jun-9-2020

Pest 3 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: ragweed, giant **Entry Date:** May-28-2020

Pest 4 Type: W **Code:** ABUTH *Abutilon theophrasti*
Common Name: velvetleaf **Entry Date:** May-28-2020

Pest 5 Type: W **Code:** IPOHE *Ipomoea hederacea*
Common Name: ivy-leaf morning glory **Entry Date:** Jun-22-2020

Pest 6 Type: W **Code:** SIDSP *Sida spinosa*
Common Name: sida, prickly **Entry Date:** Jun-22-2020

Pest 7 Type: W **Code:** CHEAL *Chenopodium album*
Common Name: lambsquarters, common **Entry Date:** Jun-22-2020

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:** CONTIL conventional-till
Replications: 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

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Previous

No. Crop Year
 1. GLXMA 2019

Soil Description

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

Application Description

A

Application Date May-23-2020
Appl. Start Time 9:00 AM
Appl. Stop Time 9:47 AM
Application Method NONINC
Application Timing POSPOS
Application Placement BROFOL
Applied By Dobbels
Appl. Entry Date May-28-2020
Air Temperature Start, Stop 65 65 F
% Relative Humidity Start, Stop 90 90
Wind Velocity+Dir. Start 4 MPH E
Wind Velocity+Dir. Stop 4 MPH E
Wind Velocity+Dir. Max 4 MPH E
Wet Leaves (Y/N) N no
Soil Temperature 57 F
Soil Moisture WET
% Cloud Cover 33
Next Moisture Occurred On May-23-2020
Time to Next Moisture 8 HR
Moisture 1 Week after Appl. 1.07 IN

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale ZEAMD BCOR
Stage Majority, Percent 12 100
Height Average 3 IN
Height Minimum, Maximum 3 3

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Trial Year: 2020

Conducted Under GEP: No

Pest Stage At Each Application

	A	
Pest 1 Code, Type, Scale	SETFA	W BBCH
Stage Majority, Percent	11	90
Stage Minimum, Percent	11	90
Stage Maximum, Percent	12	10
Height Average	0.5	IN
Height Minimum, Maximum	0.5	0.75
Density Average	670	PLA/m2
Density Min, Max	200	1600
Pest 2 Code, Type, Scale	ECHCG	W BBCH
Stage Majority, Percent	11	100
Stage Minimum, Percent	11	100
Stage Maximum, Percent	11	100
Height Average	0.5	IN
Height Minimum, Maximum	0.25	0.5
Density Average	320	PLA/m2
Density Min, Max	0	800
Pest 3 Code, Type, Scale	AMBTR	W BBCH
Stage Majority, Percent	14	80
Stage Minimum, Percent	10	10
Stage Maximum, Percent	16	10
Height Average	2	IN
Height Minimum, Maximum	1	3
Density Average	27	PLA/m2
Density Min, Max	8	48
Pest 4 Code, Type, Scale	ABUTH	W BBCH
Stage Majority, Percent	10	100
Stage Minimum, Percent	10	100
Stage Maximum, Percent	10	100
Height Average	0.25	IN
Height Minimum, Maximum	0.25	0.25
Pest 5 Code, Type, Scale	IPOHE	W
Density Average	1	PLA/M2
Density Min, Max	0	2
Pest 6 Code, Type, Scale	SIDSP	W
Density Average	3	PLA/m2
Density Min, Max	0	12
Pest 7 Code, Type, Scale	CHEAL	W
Density Average	9	PLA/m2
Density Min, Max	0	36

Application Equipment

	A	
Appl. Equipment	10'	AIXR
Equipment Type	BACCAI	
Operation Pressure	44	PSI
Nozzle Type	AIXR	
Nozzle Size	110015	
Nozzle Spacing	18	IN
Boom Length	10	FT
Boom Height	20	IN
Ground Speed	3	MPH
Carrier	WATER	
Application Amount	15	GAL/AC
Mix Size	1	L
Propellant	COMCO2	

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Conducted Under GEP: No

Pest ID Code				1 W Weed
Pest Code				SETFA
Pest Scientific Name				Setaria faberi
Pest Name				foxtail, giant
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	May-29-2020	Jun-5-2020	Jun-5-2020	Jun-5-2020
SE Name	ZUSX001	ZUSX001	ZUSX001	ZUSW001
SE Description	%PHYTO-GENERAL	%PHYTO-GENERAL	%CONTROL	%CONTROL
Part Rated	GENERAL	PLANT -	PLANT -	PLANT -
Rating Type	PLANT C	PHYGEN	PHYGEN	CONTRO
Rating Unit	PHYGEN	PHYGEN	PHYGEN	PHYGEN
Calculation	%	%	%	%
Sample Size	NC	NC	NC	NC
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1
Assessed By	Dobbels	Ackley	Ackley	Ackley
Data Entry Date	May-29-2020	Jun-9-2020	Jun-9-2020	Jun-9-2020
Rating Timing	7 DAT	14 DAT	14 DAT	14 DAT
Days After First/Last Applic.	6 6	13 13	13 13	13 13
Trt-Eval Interval	6 DA-A	13 DA-A	13 DA-A	13 DA-A
Plant-Eval Interval	37 DP-1	44 DP-1	44 DP-1	44 DP-1
Days After Emergence	15 DE-1	22 DE-1	22 DE-1	22 DE-1
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	1*	2*	3*
1 UNTREATED CHECK						0 c	0 b	0 c
2 AMSOL	2.5 % v/v		2.5 % v/v		A	1 bc	0 b	99 b
2 NIS	0.25 % v/v		0.25 % v/v		A			
2 ACURON GT	32.3 oz ai/a		3.75 pt/a		A			
3 AMSOL	2.5 % v/v		2.5 % v/v		A	4 a	2 a	100 a
3 NIS	0.25 % v/v		0.25 % v/v		A			
3 HALEX GT 4.38 CS	31.5 oz ai/a		3.6 pt/a		A			
4 AMSOL	2.5 % v/v		2.5 % v/v		A	4 a	2 a	100 a
4 RESICORE 3.29 SC	16.4 oz ai/a		1.25 qt/a		A			
4 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a		26.6 fl oz/a		A			
5 AMSOL	2.5 % v/v		2.5 % v/v		A	4 a	3 a	100 a
5 CAPRENO 3.45 SC	1.29 oz ai/a		3 fl oz/a		A			
5 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a		26.6 fl oz/a		A			
5 SUPERB HC	0.5 % v/v		0.5 % v/v		A			
6 AMSOL	2.5 % v/v		2.5 % v/v		A	5 a	2 a	100 ab
6 HARNESS MAX 3.85 SC	19.3 oz ai/a		40 fl oz/a		A			
6 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a		26.6 fl oz/a		A			
7 AMSOL	2.5 % v/v		2.5 % v/v		A	5 a	2 a	100 a
7 ARMEZON PRO	13.38 oz ai/a		20 fl oz/a		A			
7 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a		26.6 fl oz/a		A			
8 AMSOL	2.5 % v/v		2.5 % v/v		A	0 c	0 b	100 a
8 LAUDIS 3.5 SC	1.31 oz ai/a		3 fl oz/a		A			
8 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a		26.6 fl oz/a		A			
8 SUPERB HC	0.5 % v/v		0.5 % v/v		A			

Means followed by same letter or symbol do not significantly differ (P= .05, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 * Adjusted means
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Conducted Under GEP: No

Pest ID Code				1 W Weed
Pest Code				SETFA
Pest Scientific Name				Setaria faberi
Pest Name				foxtail, giant
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	May-29-2020	Jun-5-2020	Jun-5-2020	Jun-5-2020
SE Name	ZUSX001	ZUSX001	ZUSX001	ZUSX001
SE Description	%PHYTO-GENERAL	%PHYTO-GENERAL	%PHYTO-GENERAL	%CONTROL
Part Rated	PLANT C	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	PHYGEN	PHYGEN	CONTRO
Rating Unit	%	%	%	%
Calculation	NC	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1
Assessed By	Dobbels	Ackley	Ackley	Ackley
Data Entry Date	May-29-2020	Jun-9-2020	Jun-9-2020	Jun-9-2020
Rating Timing	7 DAT	14 DAT	14 DAT	14 DAT
Days After First/Last Applic.	6 6	13 13	13 13	13 13
Trt-Eval Interval	6 DA-A	13 DA-A	13 DA-A	13 DA-A
Plant-Eval Interval	37 DP-1	44 DP-1	44 DP-1	44 DP-1
Days After Emergence	15 DE-1	22 DE-1	22 DE-1	22 DE-1
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate	Rate Unit	Other Rate	Other Unit	Appl Code	1*	2*	3*
9 LAUDIS 3.5 SC	1.31	oz ai/a	3	fl oz/a	A	2 b	0 b	100 a
9 INTACT	0.5	% v/v	0.5	% v/v	A			
9 CLASS ACT RIDION	1	% v/v	1	% v/v	A			
9 XTENDIMAX 2.9 SL	6.2	oz ae/a	17	fl oz/a	A			
9 ROUNDUP POWERMAX 4.5 SL	15	oz ae/a	26.6	fl oz/a	A			
10 AMSOL	2.5	% v/v	2.5	% v/v	A	1 bc	0 b	100 a
10 ANTHEM MAXX 4.3 SC	2.43	oz ai/a	4.5	fl oz/a	A			
10 ATRAZINE 4L 4 SC	8	oz ai/a	16	fl oz/a	A			
10 ROUNDUP POWERMAX 4.5 SL	15	oz ae/a	26.6	fl oz/a	A			
LSD P=.05						1.7	1.2	1.2
Standard Deviation						1.2	0.8	0.8
CV						45.22	70.69	0.89
Grand Mean						2.6	1.1	89.8
Levene's F						2.00	0.636	1.071
Levene's Prob(F)						0.075	0.757	0.411
Rank X2						.	.	.
P(Rank X2)						.	.	.
Skewness						0.2518	0.4574	-2.7681*
Kurtosis						-1.0301	-1.4565	5.9664*
Replicate F						0.526	0.356	1.289
Replicate Prob(F)						0.6679	0.7853	0.2981
Treatment F						13.028	7.138	6228.543
Treatment Prob(F)						0.0001	0.0001	0.0001

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 Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial

Conducted Under GEP: No

	2 W Weed	3 W Weed	7 W Weed
Pest ID Code	ECHCG	AMBTR	CHEAL
Pest Code	ECHCG	AMBTR	CHEAL
Pest Scientific Name	Echinochloa crus-ga>	Ambrosia trifida	Chenopodium album
Pest Name	Common barnyard gra>	ragweed, giant	lambsquarters, comm>
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	Jun-5-2020	Jun-5-2020	Jun-5-2020
SE Name	ZUSW001	ZUSW001	ZUSW001
SE Description	%CONTROL	%CONTROL	%CONTROL
Part Rated	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By	Ackley	Ackley	Ackley
Data Entry Date	Jun-9-2020	Jun-9-2020	Jun-9-2020
Rating Timing	14 DAT	14 DAT	14 DAT
Days After First/Last Applic.	13 13	13 13	13 13
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A
Plant-Eval Interval	44 DP-1	44 DP-1	44 DP-1
Days After Emergence	22 DE-1	22 DE-1	22 DE-1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	4*	5*	6*
1	UNTREATED CHECK						0 c	0 d	0 b
2	AMSOL	2.5 %	v/v	2.5 %	v/v	A	99 b	88 a	100 a
2	NIS	0.25 %	v/v	0.25 %	v/v	A			
2	ACURON GT	32.3 oz	ai/a	3.75 pt	a	A			
3	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	78 bc	100 a
3	NIS	0.25 %	v/v	0.25 %	v/v	A			
3	HALEX GT 4.38 CS	31.5 oz	ai/a	3.6 pt	a	A			
4	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	84 ab	100 a
4	RESICORE 3.29 SC	16.4 oz	ai/a	1.25 qt	a	A			
4	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	80 abc	100 a
5	CAPRENO 3.45 SC	1.29 oz	ai/a	3 fl	oz/a	A			
5	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			
6	AMSOL	2.5 %	v/v	2.5 %	v/v	A	99 ab	78 bc	100 a
6	HARNESS MAX 3.85 SC	19.3 oz	ai/a	40 fl	oz/a	A			
6	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
7	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	84 ab	100 a
7	ARMEZON PRO	13.38 oz	ai/a	20 fl	oz/a	A			
7	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	73 c	100 a
8	LAUDIS 3.5 SC	1.31 oz	ai/a	3 fl	oz/a	A			
8	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			

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Pest Name	Common barnyard gra>	ragweed, giant	lambsquarters, comm>
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	Jun-5-2020	Jun-5-2020	Jun-5-2020
SE Name	ZUSW001	ZUSW001	ZUSW001
SE Description	%CONTROL	%CONTROL	%CONTROL
Part Rated	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By	Ackley	Ackley	Ackley
Data Entry Date	Jun-9-2020	Jun-9-2020	Jun-9-2020
Rating Timing	14 DAT	14 DAT	14 DAT
Days After First/Last Applic.	13 13	13 13	13 13
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A
Plant-Eval Interval	44 DP-1	44 DP-1	44 DP-1
Days After Emergence	22 DE-1	22 DE-1	22 DE-1
Number of Decimals	0	0	0

Trt Treatment	Rate	Other	Other	Appl	4*	5*	6*
No. Name	Rate Unit	Rate Unit	Rate Unit	Code			
9 LAUDIS 3.5 SC	1.31 oz ai/a	3 fl oz/a		A	100 a	80 abc	100 a
9 INTACT	0.5 % v/v	0.5 % v/v		A			
9 CLASS ACT RIDION	1 % v/v	1 % v/v		A			
9 XTENDIMAX 2.9 SL	6.2 oz ae/a	17 fl oz/a		A			
9 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a	26.6 fl oz/a		A			
10 AMSOL	2.5 % v/v	2.5 % v/v		A	100 a	81 abc	100 a
10 ANTHEM MAXX 4.3 SC	2.43 oz ai/a	4.5 fl oz/a		A			
10 ATRAZINE 4L 4 SC	8 oz ai/a	16 fl oz/a		A			
10 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a	26.6 fl oz/a		A			
LSD P=.05					1.2	9.7	.
Standard Deviation					0.8	6.7	0.0
CV					0.91	9.27	0.0
Grand Mean					89.8	72.4	90.0
Levene's F					1.179	1.012	0.00
Levene's Prob(F)					0.343	0.452	.
Rank X2					.	.	.
P(Rank X2)					.	.	.
Skewness					-2.7677*	-2.3456*	-2.7717*
Kurtosis					5.9651*	4.6003*	5.9791*
Replicate F					1.691	2.163	0.000
Replicate Prob(F)					0.1926	0.1156	1.0000
Treatment F					5941.476	59.026	0.000
Treatment Prob(F)					0.0001	0.0001	1.0000

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Pest Code		SETFA	ECHCG
Pest Scientific Name		Setaria faberi	Echinochloa crus-ga>
Pest Name		foxtail, giant	Common barnyard gra>
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	Jun-19-2020	Jun-19-2020	Jun-19-2020
SE Name	ZUSX001	ZUSW001	ZUSW001
SE Description	%PHYTO-GENERAL	%CONTROL	%CONTROL
Part Rated	PLANT -	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO	CONTRO
Rating Unit	%	%	%
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By			
Data Entry Date	Jun-22-2020	Jun-22-2020	Jun-22-2020
Rating Timing			
Days After First/Last Applic.	27 27	27 27	27 27
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A
Plant-Eval Interval	58 DP-1	58 DP-1	58 DP-1
Days After Emergence	36 DE-1	36 DE-1	36 DE-1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	7*	8*	9*
1	UNTREATED CHECK					A	0 -	0 d	0 d
2	AMSOL	2.5 %	v/v	2.5 %	v/v	A	0 -	98 ab	98 a
2	NIS	0.25 %	v/v	0.25 %	v/v	A			
2	ACURON GT	32.3 oz	ai/a	3.75 pt	a	A			
3	AMSOL	2.5 %	v/v	2.5 %	v/v	A	0 -	98 a	98 ab
3	NIS	0.25 %	v/v	0.25 %	v/v	A			
3	HALEX GT 4.38 CS	31.5 oz	ai/a	3.6 pt	a	A			
4	AMSOL	2.5 %	v/v	2.5 %	v/v	A	0 -	99 a	99 a
4	RESICORE 3.29 SC	16.4 oz	ai/a	1.25 qt	a	A			
4	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	AMSOL	2.5 %	v/v	2.5 %	v/v	A	0 -	99 a	100 a
5	CAPRENO 3.45 SC	1.29 oz	ai/a	3 fl	oz/a	A			
5	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			
6	AMSOL	2.5 %	v/v	2.5 %	v/v	A	0 -	94 c	96 bc
6	HARNESS MAX 3.85 SC	19.3 oz	ai/a	40 fl	oz/a	A			
6	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
7	AMSOL	2.5 %	v/v	2.5 %	v/v	A	0 -	98 a	98 ab
7	ARMEZON PRO	13.38 oz	ai/a	20 fl	oz/a	A			
7	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	AMSOL	2.5 %	v/v	2.5 %	v/v	A	0 -	95 bc	95 c
8	LAUDIS 3.5 SC	1.31 oz	ai/a	3 fl	oz/a	A			
8	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			

Means followed by same letter or symbol do not significantly differ (P=0.05, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 6,7,11 because error mean square = 0.

The Ohio State University

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: 20ACURONGT1PASS
 Protocol ID: HBI007A4-2020US
 Master Protocol ID:

Location: Trial Year: 2020
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial

Conducted Under GEP: No

Pest ID Code	1 W Weed	2 W Weed
Pest Code	SETFA	ECHCG
Pest Scientific Name	Setaria faberi	Echinochloa crus-ga>
Pest Name	foxtail, giant	Common barnyard gra>
Crop ID Code	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM
Rating Date	Jun-19-2020	Jun-19-2020
SE Name	ZUSX001	ZUSW001
SE Description	%PHYTO-GENERAL	%CONTROL
Part Rated	PLANT -	PLANT -
Rating Type	PHYGEN	CONTRO
Rating Unit	%	%
Calculation	NC	NC
Sample Size	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT
Number of Subsamples	1	1
Assessed By		
Data Entry Date	Jun-22-2020	Jun-22-2020
Rating Timing		
Days After First/Last Applic.	27 27	27 27
Trt-Eval Interval	27 DA-A	27 DA-A
Plant-Eval Interval	58 DP-1	58 DP-1
Days After Emergence	36 DE-1	36 DE-1
Number of Decimals	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	7*	8*	9*
9	LAUDIS 3.5 SC	1.31 oz ai/a		3 fl oz/a		A	0 -	98 a	99 a
9	INTACT	0.5 % v/v		0.5 % v/v		A			
9	CLASS ACT RIDION	1 % v/v		1 % v/v		A			
9	XTENDIMAX 2.9 SL	6.2 oz ae/a		17 fl oz/a		A			
9	ROUNDUP POWERMAX 4.5 SL	15 oz ae/a		26.6 fl oz/a		A			
10	AMSOL	2.5 % v/v		2.5 % v/v		A	0 -	99 a	99 a
10	ANTHEM MAXX 4.3 SC	2.43 oz ai/a		4.5 fl oz/a		A			
10	ATRAZINE 4L 4 SC	8 oz ai/a		16 fl oz/a		A			
10	ROUNDUP POWERMAX 4.5 SL	15 oz ae/a		26.6 fl oz/a		A			
LSD P=.05							.	2.6	1.9
Standard Deviation							0.0	1.8	1.3
CV							0.0	2.08	1.47
Grand Mean							0.0	87.6	88.1
Levene's F							0.00	5.262	1.971
Levene's Prob(F)							.	0.001*	0.079
Rank X2							.	.	.
P(Rank X2)							.	.	.
Skewness							.	-2.7416*	-2.7524*
Kurtosis							.	5.8732*	5.9129*
Replicate F							0.000	1.034	3.942
Replicate Prob(F)							1.0000	0.3935	0.0187
Treatment F							0.000	1147.682	2293.845
Treatment Prob(F)							1.0000	0.0001	0.0001

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

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: 20ACURONGT1PASS
 Protocol ID: HBI007A4-2020US
 Master Protocol ID:

Location: Trial Year: 2020
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial

Conducted Under GEP: No

Pest ID Code	3 W Weed	7 W Weed	5 W Weed
Pest Code	AMBTR	CHEAL	IPOHE
Pest Scientific Name	Ambrosia trifida	Chenopodium album	Ipomoea hederacea
Pest Name	ragweed, giant lambsquarters, comm>	ivy-leaf morning gl>	
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	Jun-19-2020	Jun-19-2020	Jun-19-2020
SE Name	ZUSW001	ZUSW001	ZUSW001
SE Description	%CONTROL	%CONTROL	%CONTROL
Part Rated	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By			
Data Entry Date	Jun-22-2020	Jun-22-2020	Jun-22-2020
Rating Timing			
Days After First/Last Applic.	27 27	27 27	27 27
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A
Plant-Eval Interval	58 DP-1	58 DP-1	58 DP-1
Days After Emergence	36 DE-1	36 DE-1	36 DE-1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	10*	11*	12*
1	UNTREATED CHECK						0 d	0 b	0 c
2	AMSOL	2.5 %	v/v	2.5 %	v/v	A	88 a	100 a	98 a
2	NIS	0.25 %	v/v	0.25 %	v/v	A			
2	ACURON GT	32.3 oz	ai/a	3.75 pt	a	A			
3	AMSOL	2.5 %	v/v	2.5 %	v/v	A	60 bc	100 a	100 a
3	NIS	0.25 %	v/v	0.25 %	v/v	A			
3	HALEX GT 4.38 CS	31.5 oz	ai/a	3.6 pt	a	A			
4	AMSOL	2.5 %	v/v	2.5 %	v/v	A	61 bc	100 a	97 ab
4	RESICORE 3.29 SC	16.4 oz	ai/a	1.25 qt	a	A			
4	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	AMSOL	2.5 %	v/v	2.5 %	v/v	A	63 bc	100 a	100 a
5	CAPRENO 3.45 SC	1.29 oz	ai/a	3 fl	oz/a	A			
5	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			
6	AMSOL	2.5 %	v/v	2.5 %	v/v	A	58 bc	100 a	97 a
6	HARNESS MAX 3.85 SC	19.3 oz	ai/a	40 fl	oz/a	A			
6	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
7	AMSOL	2.5 %	v/v	2.5 %	v/v	A	63 bc	100 a	98 a
7	ARMEZON PRO	13.38 oz	ai/a	20 fl	oz/a	A			
7	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	AMSOL	2.5 %	v/v	2.5 %	v/v	A	48 c	100 a	93 b
8	LAUDIS 3.5 SC	1.31 oz	ai/a	3 fl	oz/a	A			
8	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			

Means followed by same letter or symbol do not significantly differ (P= .05, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 * Adjusted means
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The Ohio State University

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: 20ACURONGT1PASS
 Protocol ID: HBI007A4-2020US
 Master Protocol ID:

Location: Trial Year: 2020
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial

Conducted Under GEP: No

Pest ID Code	3 W Weed	7 W Weed	5 W Weed
Pest Code	AMBTR	CHEAL	IPOHE
Pest Scientific Name	Ambrosia trifida	Chenopodium album	Ipomoea hederacea
Pest Name	ragweed, giant lambsquarters, comm>	ivy-leaf morning gl>	
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	Jun-19-2020	Jun-19-2020	Jun-19-2020
SE Name	ZUSW001	ZUSW001	ZUSW001
SE Description	%CONTROL	%CONTROL	%CONTROL
Part Rated	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By			
Data Entry Date	Jun-22-2020	Jun-22-2020	Jun-22-2020
Rating Timing			
Days After First/Last Applic.	27 27	27 27	27 27
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A
Plant-Eval Interval	58 DP-1	58 DP-1	58 DP-1
Days After Emergence	36 DE-1	36 DE-1	36 DE-1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	10*	11*	12*
9	LAUDIS 3.5 SC	1.31 oz ai/a		3 fl oz/a		A	73 ab	100 a	100 a
9	INTACT	0.5 % v/v		0.5 % v/v		A			
9	CLASS ACT RIDION	1 % v/v		1 % v/v		A			
9	XTENDIMAX 2.9 SL	6.2 oz ae/a		17 fl oz/a		A			
9	ROUNDUP POWERMAX 4.5 SL	15 oz ae/a		26.6 fl oz/a		A			
10	AMSOL	2.5 % v/v		2.5 % v/v		A	74 ab	100 a	100 a
10	ANTHEM MAXX 4.3 SC	2.43 oz ai/a		4.5 fl oz/a		A			
10	ATRAZINE 4L 4 SC	8 oz ai/a		16 fl oz/a		A			
10	ROUNDUP POWERMAX 4.5 SL	15 oz ae/a		26.6 fl oz/a		A			
LSD P=.05							18.1	.	4.6
Standard Deviation							12.4	0.0	3.2
CV							21.28	0.0	3.62
Grand Mean							58.5	90.0	88.0
Levene's F							0.803	0.00	0.638
Levene's Prob(F)							0.617	.	0.755
Rank X2							.	.	.
P(Rank X2)							.	.	.
Skewness							-0.9621*	-2.7717*	-2.6947*
Kurtosis							0.1699	5.9791*	5.7037*
Replicate F							9.048	0.000	2.793
Replicate Prob(F)							0.0003	1.0000	0.0595
Treatment F							13.931	0.000	378.806
Treatment Prob(F)							0.0001	1.0000	0.0001

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

* Adjusted means

Could not calculate LSD (% mean diff) for columns 6,7,11 because error mean square = 0.

The Ohio State University

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: 20ACURONGT1PASS
 Protocol ID: HBI007A4-2020US
 Master Protocol ID:

Location: Trial Year: 2020
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial

Conducted Under GEP: No

	1 W Weed	2 W Weed	3 W Weed
Pest ID Code	SETFA	ECHCG	AMBTR
Pest Code	SETFA	ECHCG	AMBTR
Pest Scientific Name	Setaria faberi	Echinochloa crus-ga>	Ambrosia trifida
Pest Name	foxtail, giant	Common barnyard gra>	ragweed, giant
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	Jul-16-2020	Jul-16-2020	Jul-16-2020
SE Name	ZUSW001	ZUSW001	ZUSW001
SE Description	%CONTROL	%CONTROL	%CONTROL
Part Rated	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By			
Data Entry Date	Jul-27-2020	Jul-27-2020	Jul-27-2020
Rating Timing			
Days After First/Last Applic.	54 54	54 54	54 54
Trt-Eval Interval	60 DA-A	54 DA-A	54 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1
Days After Emergence	63 DE-1	63 DE-1	63 DE-1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	13*	14*	15*
1	UNTREATED CHECK						0 d	0 d	0 e
2	AMSOL	2.5 %	v/v	2.5 %	v/v	A	94 ab	94 ab	78 a
2	NIS	0.25 %	v/v	0.25 %	v/v	A			
2	ACURON GT	32.3 oz	ai/a	3.75 pt	a	A			
3	AMSOL	2.5 %	v/v	2.5 %	v/v	A	94 ab	94 ab	35 d
3	NIS	0.25 %	v/v	0.25 %	v/v	A			
3	HALEX GT 4.38 CS	31.5 oz	ai/a	3.6 pt	a	A			
4	AMSOL	2.5 %	v/v	2.5 %	v/v	A	95 ab	95 ab	43 cd
4	RESICORE 3.29 SC	16.4 oz	ai/a	1.25 qt	a	A			
4	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	AMSOL	2.5 %	v/v	2.5 %	v/v	A	96 a	96 a	38 cd
5	CAPRENO 3.45 SC	1.29 oz	ai/a	3 fl	oz/a	A			
5	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			
6	AMSOL	2.5 %	v/v	2.5 %	v/v	A	93 bc	93 bc	38 cd
6	HARNESS MAX 3.85 SC	19.3 oz	ai/a	40 fl	oz/a	A			
6	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
7	AMSOL	2.5 %	v/v	2.5 %	v/v	A	93 bc	93 bc	45 cd
7	ARMEZON PRO	13.38 oz	ai/a	20 fl	oz/a	A			
7	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	AMSOL	2.5 %	v/v	2.5 %	v/v	A	90 c	90 c	35 d
8	LAUDIS 3.5 SC	1.31 oz	ai/a	3 fl	oz/a	A			
8	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			

Means followed by same letter or symbol do not significantly differ (P=0.05, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
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The Ohio State University

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: 20ACURONGT1PASS
 Protocol ID: HBI007A4-2020US
 Master Protocol ID:

Location: Trial Year: 2020
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial

Conducted Under GEP: No

Pest ID Code	1 W Weed	2 W Weed	3 W Weed
Pest Code	SETFA	ECHCG	AMBTR
Pest Scientific Name	Setaria faberi	Echinochloa crus-ga>	Ambrosia trifida
Pest Name	foxtail, giant	Common barnyard gra>	ragweed, giant
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	Jul-16-2020	Jul-16-2020	Jul-16-2020
SE Name	ZUSW001	ZUSW001	ZUSW001
SE Description	%CONTROL	%CONTROL	%CONTROL
Part Rated	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By			
Data Entry Date	Jul-27-2020	Jul-27-2020	Jul-27-2020
Rating Timing			
Days After First/Last Applic.	54 54	54 54	54 54
Trt-Eval Interval	60 DA-A	54 DA-A	54 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1
Days After Emergence	63 DE-1	63 DE-1	63 DE-1
Number of Decimals	0	0	0

Trt Treatment No. Name	Rate	Other Rate	Other Unit	Appl Unit Code	13*	14*	15*
9 LAUDIS 3.5 SC	1.31 oz ai/a	3 fl oz/a		A	93 bc	93 bc	53 bc
9 INTACT	0.5 % v/v	0.5 % v/v		A			
9 CLASS ACT RIDION	1 % v/v	1 % v/v		A			
9 XTENDIMAX 2.9 SL	6.2 oz ae/a	17 fl oz/a		A			
9 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a	26.6 fl oz/a		A			
10 AMSOL	2.5 % v/v	2.5 % v/v		A	93 bc	93 bc	63 ab
10 ANTHEM MAXX 4.3 SC	2.43 oz ai/a	4.5 fl oz/a		A			
10 ATRAZINE 4L 4 SC	8 oz ai/a	16 fl oz/a		A			
10 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a	26.6 fl oz/a		A			
LSD P=.05					3.3	3.3	16.5
Standard Deviation					2.3	2.3	11.4
CV					2.71	2.71	26.77
Grand Mean					83.9	83.9	42.5
Levene's F					2.556	2.556	0.982
Levene's Prob(F)					0.026*	0.026*	0.474
Rank X2					.	.	.
P(Rank X2)					.	.	.
Skewness					-2.7294*	-2.7294*	-0.0281
Kurtosis					5.8353*	5.8353*	-0.169
Replicate F					1.090	1.090	3.103
Replicate Prob(F)					0.3703	0.3703	0.0432
Treatment F					675.188	675.188	12.704
Treatment Prob(F)					0.0001	0.0001	0.0001

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 6,7,11 because error mean square = 0.

The Ohio State University

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: 20ACURONGT1PASS
 Protocol ID: HBI007A4-2020US
 Master Protocol ID:

Location:
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial

Trial Year: 2020

Conducted Under GEP: No

Pest ID Code	7 W Weed	5 W Weed	6 W Weed
Pest Code	CHEAL	IPOHE	SIDSP
Pest Scientific Name	Chenopodium album	Ipomoea hederacea	Sida spinosa
Pest Name	lambquarters, comm>	ivy-leaf morning gl>	sida, prickly
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	Jul-16-2020	Jul-16-2020	Jul-16-2020
SE Name	ZUSW001	ZUSW001	ZUSW001
SE Description	%CONTROL	%CONTROL	%CONTROL
Part Rated	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By			
Data Entry Date	Jul-27-2020	Jul-27-2020	Jul-27-2020
Rating Timing			
Days After First/Last Applic.	54 54	54 54	54 54
Trt-Eval Interval	54 DA-A	54 DA-A	54 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1
Days After Emergence	63 DE-1	63 DE-1	63 DE-1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	16*	17*	18*
1	UNTREATED CHECK						0 c	0 d	0 b
2	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	98 ab	99 a
2	NIS	0.25 %	v/v	0.25 %	v/v	A			
2	ACURON GT	32.3 oz	ai/a	3.75 pt	a	A			
3	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	95 bc	99 a
3	NIS	0.25 %	v/v	0.25 %	v/v	A			
3	HALEX GT 4.38 CS	31.5 oz	ai/a	3.6 pt	a	A			
4	AMSOL	2.5 %	v/v	2.5 %	v/v	A	99 ab	98 ab	99 a
4	RESICORE 3.29 SC	16.4 oz	ai/a	1.25 qt	a	A			
4	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	98 ab	98 a
5	CAPRENO 3.45 SC	1.29 oz	ai/a	3 fl	oz/a	A			
5	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
5	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			
6	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	97 ab	100 a
6	HARNESS MAX 3.85 SC	19.3 oz	ai/a	40 fl	oz/a	A			
6	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
7	AMSOL	2.5 %	v/v	2.5 %	v/v	A	100 a	96 abc	100 a
7	ARMEZON PRO	13.38 oz	ai/a	20 fl	oz/a	A			
7	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	AMSOL	2.5 %	v/v	2.5 %	v/v	A	93 b	93 c	100 a
8	LAUDIS 3.5 SC	1.31 oz	ai/a	3 fl	oz/a	A			
8	ROUNDUP POWERMAX 4.5 SL	15 oz	ae/a	26.6 fl	oz/a	A			
8	SUPERB HC	0.5 %	v/v	0.5 %	v/v	A			

Means followed by same letter or symbol do not significantly differ (P= .05, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 6,7,11 because error mean square = 0.

The Ohio State University

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: 20ACURONGT1PASS
 Protocol ID: HBI007A4-2020US
 Master Protocol ID:

Location: Trial Year: 2020
 Investigator: Dr. Mark M. Loux
 Study Director: Anthony Dobbels
 Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial

Conducted Under GEP: No

Pest ID Code	7 W Weed	5 W Weed	6 W Weed
Pest Code	CHEAL	IPOHE	SIDSP
Pest Scientific Name	Chenopodium album	Ipomoea hederacea	Sida spinosa
Pest Name	lambsquarters, comm>	ivy-leaf morning gl>	sida, prickly
Crop ID Code	1 ZEAMD	1 ZEAMD	1 ZEAMD
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays indentata	Zea mays indentata	Zea mays indentata
Crop Name	Dent corn	Dent corn	Dent corn
Crop Variety	SCS1105AM	SCS1105AM	SCS1105AM
Rating Date	Jul-16-2020	Jul-16-2020	Jul-16-2020
SE Name	ZUSW001	ZUSW001	ZUSW001
SE Description	%CONTROL	%CONTROL	%CONTROL
Part Rated	PLANT -	PLANT -	PLANT -
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Calculation	NC	NC	NC
Sample Size	1 PLOT	1 PLOT	1 PLOT
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Reporting Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By			
Data Entry Date	Jul-27-2020	Jul-27-2020	Jul-27-2020
Rating Timing			
Days After First/Last Applic.	54 54	54 54	54 54
Trt-Eval Interval	54 DA-A	54 DA-A	54 DA-A
Plant-Eval Interval	85 DP-1	85 DP-1	85 DP-1
Days After Emergence	63 DE-1	63 DE-1	63 DE-1
Number of Decimals	0	0	0

Trt Treatment No. Name	Rate	Other Rate	Other Unit	Appl Unit Code	16*	17*	18*
9 LAUDIS 3.5 SC	1.31 oz ai/a	3 fl oz/a		A	100 a	100 a	100 a
9 INTACT	0.5 % v/v	0.5 % v/v		A			
9 CLASS ACT RIDION	1 % v/v	1 % v/v		A			
9 XTENDIMAX 2.9 SL	6.2 oz ae/a	17 fl oz/a		A			
9 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a	26.6 fl oz/a		A			
10 AMSOL	2.5 % v/v	2.5 % v/v		A	100 a	100 a	100 a
10 ANTHEM MAXX 4.3 SC	2.43 oz ai/a	4.5 fl oz/a		A			
10 ATRAZINE 4L 4 SC	8 oz ai/a	16 fl oz/a		A			
10 ROUNDUP POWERMAX 4.5 SL	15 oz ae/a	26.6 fl oz/a		A			
LSD P=.05					6.9	4.6	3.0
Standard Deviation					4.8	3.1	2.1
CV					5.37	3.61	2.32
Grand Mean					89.2	87.4	89.4
Levene's F					0.978	0.879	0.684
Levene's Prob(F)					0.477	0.554	0.717
Rank X2					.	.	.
P(Rank X2)					.	.	.
Skewness					-2.67*	-2.6892*	-2.7498*
Kurtosis					5.546*	5.6898*	5.9001*
Replicate F					0.927	4.090	1.215
Replicate Prob(F)					0.4410	0.0162	0.3233
Treatment F					172.503	381.840	915.918
Treatment Prob(F)					0.0001	0.0001	0.0001

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 6,7,11 because error mean square = 0.

The Ohio State University

Acuron GT: Evaluation of weed control and crop tolerance in a one pass system

Trial ID: 20ACURONGT1PASS Location: Trial Year: 2020
 Protocol ID: HBI007A4-2020US Investigator: Dr. Mark M. Loux
 Master Protocol ID: Study Director: Anthony Dobbels
 Conducted Under GEP: No Sponsor Contact: Dain Bruns, Syngenta
 Trial Origin: P public institution trial

Pest ID Code

1, W, Weed, SETFA, Setaria faberi, foxtail, giant, = 1, W, Weed, SETFA, Setaria faberi, foxtail, giant,
 2, W, Weed, ECHCG, Echinochloa crus-galli, Common barnyard grass, = 2, W, Weed, ECHCG, Echinochloa crus-galli, Common barnyard grass,
 3, W, Weed, AMBTR, Ambrosia trifida, ragweed, giant, = 3, W, Weed, AMBTR, Ambrosia trifida, ragweed, giant,
 7, W, Weed, CHEAL, Chenopodium album, lambsquarters, common, = 7, W, Weed, CHEAL, Chenopodium album, lambsquarters, common,
 5, W, Weed, IPOHE, Ipomoea hederacea, ivy-leaf morning glory, = 5, W, Weed, IPOHE, Ipomoea hederacea, ivy-leaf morning glory,
 6, W, Weed, SIDSP, Sida spinosa, sida, prickly, = 6, W, Weed, SIDSP, Sida spinosa, sida, prickly,

Crop ID Code

1, ZEAMD, BCOR, Zea mays indentata, Dent corn, SCS1105AM = Glyphosate and Glufosinate Resistant

Part Rated

PLANT = plant
 C = Crop is Part Rated

Rating Type

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

Rating Unit

% = percent

Calculation

NC = no calculation

PLOT = total plot

PLOT = total plot

PLOT = total plot

Plant-Eval Interval

37 DP-1 = 1 ZEAMD Apr-22-2020

44 DP-1 = 1 ZEAMD Apr-22-2020

58 DP-1 = 1 ZEAMD Apr-22-2020

85 DP-1 = 1 ZEAMD Apr-22-2020