

Evaluation of Acuron GT in a Two-Pass System

Janesville, WI 2021

Trial Information

Trial Sponsor(s): Syngenta

Objective: Evaluate differences in weed control and crop safety among 2-pass programs containing Acuron GT and other competitor programs

Crop: Corn

Hybrid: NK9653-5222 EZ

Weed species (pressure): Giant ragweed (high-very high)

Herbicide Application(s): PRE – 4/27
POST – 5/26 (V3/V4 corn)

For the full report see trial #21-ROK-CN13 in the [2021 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

syngenta

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Trt #	Herbicide (rate acre ⁻¹)	Crop Injury (%) ^c		Giant Ragweed ^a (%)				Yield ^b bu acre ⁻¹	
		6/2	6/23	5/26	6/23	7/20	11/3		
1	Untreated Check	0	0	0	0	0	0	3 i	
One-Pass – PRE (4/27)									
10	Acuron Flexi XR (3 qt)	0.3	0.3	80	53	16	28	81 g	
11	Acuron XR (3 qt)	0	0	87	60	22	33	81 g	
12	Harness Max (75 fl oz)	0	0	71	25	11	11	28 h	
13	Acuron (3 qt)	0.3	1.5	88	60	21	26	88 fg	
Two-Pass – PRE (4/27) <i>fb</i> POST (5/36)									
2	Bicep Lite II Magnum (1 qt) <i>fb</i> Acuron GT (3.75 pt) + NIS 0.25% v/v + AMS (2.5 qt)	5.3	6.0	11	75	44	47	135 bcd	
3	Lumax EZ (1.5 qt) <i>fb</i> Acuron GT (3.75 pt) + NIS 0.25% v/v + AMS (2.5 qt)	4.8	6.0	67	81	49	62	161 a	
4	Surestart II (1.75 pt) <i>fb</i> Acuron GT (3.75 pt) + NIS 0.25% v/v + AMS (2.5 qt)	5.8	5.5	64	70	38	38	123 de	
5	Harness (1.5 pt) <i>fb</i> Acuron GT (3.75 pt) + NIS 0.25% v/v + AMS (2.5 qt)	5.3	5.8	29	74	41	48	134 bcd	
6	Verdict (14 fl oz) <i>fb</i> Acuron GT (3.75 pt) + NIS 0.25% v/v + AMS (2.5 qt)	6.0	5.8	79	81	52	53	146 abc	
7	Surestart II (1.75 pt) <i>fb</i> Resicore (1.25 qt) + Roundup PM (26.6 oz) + AMS (2.5 qt)	5.8	5.5	74	80	52	55	149 ab	
8	Harness (1.5 pt) <i>fb</i> Laudis (3 oz)+Roundup PM (26.6 oz)+Superb HC 0.5% v/v	4.0	4.3	24	65	28	28	107 ef	
9	Verdict (10 fl oz) <i>fb</i> Armezon PRO(18 oz)+Roundup PM(26.6 oz)+AMS(2.5 qt)	7.3	4.8	61	79	45	37	124 de	
14	Harness Max (37.5 oz) <i>fb</i> Harness Max(37.5 oz)+Roundup PM(26.6 oz)+AMS 2.5% v/v	5.3	6.0	64	76	43	38	127 cd	
15	Acuron (1.5 qt) <i>fb</i> Acuron (1.5 qt) + Roundup PM (26.6 oz) + AMS 2.5% v/v	6.8	6.0	68	80	46	53	148 ab	
		LSD ($\alpha=0.10$)	1.1	1.1	12	6	9	10	19
		p value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

^aVisual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

^bYield values with the same letter are not significantly different.

^cCrop injury symptoms included leaf necrosis.

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Plot pictures taken on 5/26

29 days after the PRE application
The day of the POST application

The number in the upper right-hand corner is the average % giant ragweed control of 4 replications

29 days after PRE (5/26)

Untreated Check

0%



29 days after PRE (5/26)

PRE: 3 qt Acuron Flexi

80%



29 days after PRE (5/26)

PRE: 3 qt Acuron XR

87%



**29 days after PRE (5/26)
PRE: 75 fl oz Harness MAX**

71%



29 days after PRE (5/26)

PRE: 3 qt Acuron

88%



2

29 days after PRE (5/26)
PRE: 1 qt Bicep Lite II Magnum

11%



29 days after PRE (5/26)

PRE: 1.5 qt Lumax EZ

67%



29 days after PRE (5/26)
PRE: 1.75 pt SureStart II

69%



29 days after PRE (5/26)

PRE: 1.5 pt Harness

27%



2

29 days after PRE (5/26)

PRE: 14 fl oz Verdict

79%



2

29 days after PRE (5/26)

PRE: 10 fl oz Verdict

61%



**29 days after PRE (5/26)
PRE: 37.5 fl oz Harness MAX**

64%



29 days after PRE (5/26)

PRE: 1.5 qt Acuron

68%



Evaluation of Acuron GT in a Two-Pass System

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Plot pictures taken on 6/2

36 days after the PRE application
7 days after the POST application

The number in the upper right-hand corner is the average % corn injury (leaf necrosis) of 4 replications

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Corn Injury -7 days after the POST application



Evaluation of Acuron GT in a Two-Pass System

Janesville, WI 2021

Corn Injury -7 days after the POST application



36 days after PRE (6/2)
Untreated Check

0%



36 days after PRE (6/2)
PRE: 3 qt Acuron Flexi

0%



36 days after PRE (6/2)
PRE: 3 qt Acuron XR

0%



36 days after PRE (6/2)
PRE: 75 fl oz Harness MAX

0%



1

36 days after PRE (6/2)
PRE: 3 qt Acuron

0%



7 days after POST (6/2)

PRE: 1 qt Bicep Lite II Magnum *fb*

POST: 3.75 Acuron GT + NIS + AMS

5%



7 days after POST (6/2)

PRE: 1.5 qt Lumax EZ fb

POST: 3.75 Acuron GT + NIS + AMS

5%



7 days after POST (6/2)

PRE: 1.75 pt SureStart II *fb*

POST: 3.75 Acuron GT + NIS + AMS

6%



7 days after POST (6/2)

PRE: 1.75 pt SureStart II *fb*

POST: 1.25 qt Resicore + 26.6 fl oz Roundup PM + AMS

6%



7 days after POST (6/2)

PRE: 1.5 pt Harness *fb*

POST: 3.75 Acuron GT + NIS + AMS

5%



7 days after POST (6/2)

PRE: 1.5 pt Harness *fb*

POST: 3 fl oz Laudis + 26.6 fl oz Roundup PM + Superb HC + AMS

4%



7 days after POST (6/2)

PRE: 14 fl oz Verdict *fb*

POST: 3.75 Acuron GT + NIS + AMS

6%



7 days after POST (6/2)

PRE: 10 fl oz Verdict *fb*

POST: 18 fl oz Armezon PRO + 26.6 fl oz Roundup PM + AMS

7%



7 days after POST (6/2)

PRE: 37.5 fl oz Harness MAX *fb*

POST: 37.5 fl oz Harness MAX + 26.6 fl oz Roundup PM + AMS

5%



7 days after POST (6/2)

PRE: 1.5 qt Acuron *fb*

POST: 1.5 qt Acuron + 26.6 fl oz Roundup PM + AMS

7%



Evaluation of Acuron GT in a Two-Pass System

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Plot pictures taken on 6/23

57 days after the PRE application
28 days after the POST application

The number in the upper right-hand corner is the average % giant ragweed control of 4 replications

57 days after PRE (6/23)

Untreated Check

0%



57 days after PRE (6/23)

PRE: 3 qt Acuron Flexi

53%



57 days after PRE (6/23)
PRE: 3 qt Acuron XR

60%



57 days after PRE (6/23)
PRE: 75 fl oz Harness MAX

25%



57 days after PRE (6/23)

PRE: 3 qt Acuron

60%



28 days after POST (6/23)

PRE: 1 qt Bicep Lite II Magnum *fb*

POST: 3.75 Acuron GT + NIS + AMS

75%



28 days after POST (6/23)

PRE: 1.5 qt Lumax EZ fb

POST: 3.75 Acuron GT + NIS + AMS

81%



28 days after POST (6/23)

PRE: 1.75 pt SureStart II fb

POST: 3.75 Acuron GT + NIS + AMS

70%



28 days after POST (6/23)

PRE: 1.75 pt SureStart II fb

POST: 1.25 qt Resicore + 26.6 fl oz Roundup PM + AMS

80%



28 days after POST (6/23)

PRE: 1.5 pt Harness *fb*

POST: 3.75 Acuron GT + NIS + AMS

74%



28 days after POST (6/23)

PRE: 1.5 pt Harness *fb*

POST: 3 fl oz Laudis + 26.6 fl oz Roundup PM + Superb HC + AMS

65%



28 days after POST (6/23)

PRE: 14 fl oz Verdict *fb*

POST: 3.75 Acuron GT + NIS + AMS

81%



28 days after POST (6/23)

PRE: 10 fl oz Verdict *fb*

POST: 18 fl oz Armezon PRO + 26.6 fl oz Roundup PM + AMS

79%



28 days after POST (6/23)

PRE: 37.5 fl oz Harness MAX *fb*

POST: 37.5 fl oz Harness MAX + 26.6 fl oz Roundup PM + AMS

76%



28 days after POST (6/23)

PRE: 1.5 qt Acuron *fb*

POST: 1.5 qt Acuron + 26.6 fl oz Roundup PM + AMS

80%

