

Corn Herbicide Showcase with Atrazine

Janesville, WI 2022

Trial Information

Trial Sponsor(s): AMVAC, Bayer, BASF, Summit Agro

Objective: Evaluate multiple 1- and 2-pass corn herbicide programs containing atrazine for giant ragweed control and crop safety

Crop: Corn

Hybrid: Dekalb DKC 54-38 RIB

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

Herbicide Application(s): PRE – 5/11

POST – 6/1 (V3 corn)

For the full report see trial #22-ROK-CN02 in the [2022 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON



BASF

We create chemistry

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Trt #	Herbicide (rate acre ⁻¹)	Giant Ragweed Control (%)				Yield ^b bu acre ⁻¹
		6/1	6/16	6/28	10/26	
1	Check Untreated	0	0	0	0	8 g
One-Pass – PRE (5/11)						
2	TriVolt (20 oz) + atrazine (2 pt)	45	26	14	0	13 fg
3	Acuron (3 qt)	53	27	21	6	15 fg
4	Resicore (3 qt) + atrazine (2 pt)	80	59	44	24	39 f
Two-Pass – PRE (5/11) fb POST (6/1)						
		POST				
5	Trivolt (12 oz) + atrazine (1 pt) <i>fb</i> DiFlexx DUO (24 oz)+atrazine (1 pt)+Roundup PM3 (30 oz)+Class Act Ridion (1% v/v)	28	95	84	81	230 ab
6	Trivolt (12 oz) + atrazine (1 pt) <i>fb</i> Laudis (3 oz) + atrazine (1 pt) + Roundup PM3 (30 oz) + AMS (2.5% v/v)	20	92	80	76	215 bc
7	Trivolt (12 oz) + atrazine (1 pt) <i>fb</i> Capreno (3 oz) + atrazine (1 pt) + AMS (2.5% v/v)	30	86	74	63	162 e
8	Trivolt (12 oz) + atrazine (1 pt) <i>fb</i> Capreno (3 oz) + atrazine (1 pt) + Roundup PM3 (30 oz) + AMS (2.5% v/v)	32	93	79	74	184 de
9	Trivolt (12 oz) + atrazine (1 pt) <i>fb</i> Harness Max (40 oz) + atrazine (1 pt) + Roundup PM3 (30 oz) + AMS (2.5% v/v)	45	97	91	89	246 a
10	Lumax EZ (1.5 qt) <i>fb</i> Acuron GT (3.75 pt) + atrazine (0.7 pt) + NIS (0.25% v/v) + AMS (2.5% v/v)	41	93	86	86	243 ab
11	Acuron (1.5 qt) <i>fb</i> Acuron (1.5 qt) + Roundup PM3 (30 oz) + AMS (2.5% v/v)	15	94	86	88	226 ab
12	Resicore (2.5 qt) <i>fb</i> Shieldex (1.35 oz) + atrazine (2 pt) + COC (1% v/v) + AMS (2.5% v/v)	71	96	89	88	235 ab
13	Restraint (36 oz) <i>fb</i> Shieldex (1.35 oz) + atrazine (1 pt) + COC (1% v/v) + AMS (2.5% v/v)	68	88	72	58	155 e
14	Harness (2 pt) + Hornet WDG (3 oz) <i>fb</i> Impact (1.25 oz) + atrazine (1 pt) + MSO (1% v/v) + AMS (2.5 lb/a)	68	89	74	67	171 de
15	Harness (2 pt) + Hornet WDG (3 oz) <i>fb</i> Sinate (24 oz) + atrazine (1 pt) + MSO (1% v/v) + AMS (2.5 lb/a)	70	88	75	71	181 de
16	Verdict (16 oz) <i>fb</i> Status (5 oz) + Roundup PM3 (15 oz) + AMS (2.5% v/v)	33	94	84	79	219 abc
17	Verdict (16 oz) <i>fb</i> Armezon PRO (16 oz) + atrazine (1 pt) + Roundup PM3 (15 oz) + AMS (2.5% v/v)	19	93	83	73	193 cd
18	Verdict (10 oz) + Callisto (3 oz) <i>fb</i> Armezon PRO (16 oz) + atrazine (1 pt) + Roundup PM3 (15 oz) + AMS (2.5% v/v)	25	94	83	81	216 bc
LSD ($\alpha=0.10$)		28	8	7	11	29
p value		<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.

Corn Herbicide Showcase with Atrazine Janesville, WI 2022

Plot pictures taken on 6/1
21 days after the PRE application
Day of the POST application

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

21 days after PRE (6/1)
Untreated Check

0%



21 days after PRE (6/1)
PRE: 20 fl oz TriVolt + 2 pt Atrazine 4L

45%



21 days after PRE (6/1)
PRE: 3 qt Acuron

53%



21 days after PRE (6/1)

PRE: 3 qt Resicore + 2 pt Atrazine 4L

80%



21 days after PRE (6/1)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L

31%



21 days after PRE (6/1)
PRE: 1.5 qt Lumax EZ

41%



21 days after PRE (6/1)
PRE: 1.5 qt Acuron

15%



21 days after PRE (6/1)
PRE: 2.5 qt Resicore

71%



21 days after PRE (6/1)
PRE: 36 fl oz Restraint

68%



21 days after PRE (6/1)

PRE: 2 pt Harness + 3 oz Hornet WDG

69%



21 days after PRE (6/1)
PRE: 16 fl oz Verdict

26%



21 days after PRE (6/1)
PRE: 10 fl oz Verdict + 3 fl oz Callisto

25%



Corn Herbicide Showcase with Atrazine Janesville, WI 2022

Plot pictures taken on 6/16

36 days after the PRE application
15 days after the POST application

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

36 days after PRE (6/16)
Untreated Check

0%



36 days after PRE (6/16)
PRE: 20 fl oz TriVolt + 2 pt Atrazine 4L

26%



36 days after PRE (6/16)
PRE: 3 qt Acuron

27%



36 days after PRE (6/16)

PRE: 3 qt Resicore + 2 pt Atrazine 4L

59%



15 days after POST (6/16)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

95%

POST: 24 fl oz Diflexx Duo + 1 pt Atrazine 4L + 30 fl oz Roundup PM3



15 days after POST (6/16)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

92%

POST: 3 fl oz Laudis + 1 pt Atrazine 4L + 30 fl oz Roundup PM3



15 days after POST (6/16)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

86%

POST: 3 fl oz Capreno + 1 pt Atrazine 4L



15 days after POST (6/16)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

93%

POST: 3 fl oz Capreno + 1 pt Atrazine 4L + 30 fl oz Roundup PM3



15 days after POST (6/16)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

97%

POST: 40 fl oz Harness Max + 1 pt Atrazine 4L + 30 fl oz Roundup PM3



15 days after POST (6/16)

PRE: 1.5 qt Lumax EZ *fb*

POST: 3.75 pt Acuron GT + 0.7 pt AAtrex 4L

93%



15 days after POST (6/16)

PRE: 1.5 qt Acuron *fb*

POST: 1.5 qt Acuron + 30 fl oz Roundup PM3

94%



15 days after POST (6/16)

PRE: 2.5 qt Resicore *fb*

POST: 1.35 fl oz Shieldex + 2 pt Atrazine 4L

96%



15 days after POST (6/16)

PRE: 36 fl oz Restraint *fb*

88%

POST: 1.35 fl oz Shieldex + 1 pt Atrazine 4L



15 days after POST (6/16)

PRE: 2 pt Harness + 3 oz Hornet WDG *fb*

89%

POST: 1.25 fl oz Impact + 1 pt Atrazine 4L



15 days after POST (6/16)

PRE: 2 pt Harness + 3 oz Hornet WDG *fb*

88%

POST: 24 fl oz Sinate + 1 pt Atrazine 4L



15 days after POST (6/16)

PRE: 16 fl oz Verdict *fb*

POST: 5 oz Status + 15 fl oz Roundup PM3

94%



15 days after POST (6/16)

PRE: 16 fl oz Verdict *fb*

93%

POST: 16 fl oz Armezon PRO + 1 pt Atrazine 4L + 15 fl oz Roundup PM3



15 days after POST (6/16)

PRE: 10 fl oz Verdict + 3 fl oz Callisto *fb*

94%

POST: 16 fl oz Armezon PRO + 1 pt Atrazine 4L + 15 fl oz Roundup PM3



Corn Herbicide Showcase with Atrazine Janesville, WI 2022

Plot pictures taken on 6/28
48 days after the PRE application
27 days after the POST application

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

48 days after PRE (6/28)

0%

Untreated Check



48 days after PRE (6/28)

PRE: 20 fl oz TriVolt + 2 pt Atrazine 4L

14%



48 days after PRE (6/28)

PRE: 3 qt Acuron

21%



48 days after PRE (6/28)

PRE: 3 qt Resicore + 2 pt Atrazine 4L

44%



27 days after POST (6/28)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

84%

POST: 24 fl oz Diflexx Duo + 1 pt Atrazine 4L + 30 fl oz Roundup PM3



27 days after POST (6/28)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

80%

POST: 3 fl oz Laudis + 1 pt Atrazine 4L + 30 fl oz Roundup PM3



27 days after POST (6/28)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

74%

POST: 3 fl oz Capreno + 1 pt Atrazine 4L



27 days after POST (6/28)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

79%

POST: 3 fl oz Capreno + 1 pt Atrazine 4L + 30 fl oz Roundup PM3



27 days after POST (6/28)

PRE: 12 fl oz TriVolt + 1 pt Atrazine 4L *fb*

91%

POST: 40 fl oz Harness Max + 1 pt Atrazine 4L + 30 fl oz Roundup PM3



27 days after POST (6/28)

PRE: 1.5 qt Lumax EZ *fb*

POST: 3.75 pt Acuron GT + 0.7 pt AAtrex 4L

86%



27 days after POST (6/28)

PRE: 1.5 qt Acuron *fb*

POST: 1.5 qt Acuron + 30 fl oz Roundup PM3

86%



27 days after POST (6/28)

PRE: 2.5 qt Resicore *fb*

POST: 1.35 fl oz Shieldex + 2 pt Atrazine 4L

89%



27 days after POST (6/28)

PRE: 36 fl oz Restraint *fb*

POST: 1.35 fl oz Shieldex + 1 pt Atrazine 4L

72%



27 days after POST (6/28)

PRE: 2 pt Harness + 3 oz Hornet WDG *fb*

74%

POST: 1.25 fl oz Impact + 1 pt Atrazine 4L



27 days after POST (6/28)

PRE: 2 pt Harness + 3 oz Hornet WDG *fb*

75%

POST: 24 fl oz Sinate + 1 pt Atrazine 4L



27 days after POST (6/28)

PRE: 16 fl oz Verdict *fb*

POST: 5 oz Status + 15 fl oz Roundup PM3

84%



27 days after POST (6/28)

PRE: 16 fl oz Verdict *fb*

83%

POST: 16 fl oz Armezon PRO + 1 pt Atrazine 4L + 15 fl oz Roundup PM3



27 days after POST (6/28)

PRE: 10 fl oz Verdict + 3 fl oz Callisto *fb*

83%

POST: 16 fl oz Armezon PRO + 1 pt Atrazine 4L + 15 fl oz Roundup PM3

