

Syngenta Corn Herbicides Residual Waterhemp Control (Janesville, WI 2024)

Trial Information

Trial Sponsor: Syngenta

Objective: Compare various rates of Syngenta corn herbicides and determine how many days it takes for each to fall below 90% waterhemp control

Crop: none

Variety: -

Weed species (pressure): glyphosate-resistant waterhemp (high-very high)

Herbicide Application(s): PRE – 5/13
POST – 6/6

For the full report see trial #24-ROK-BG09 in the [2024 Wisconsin Weed Science Research Report](#)

The Syngenta logo features the word "syngenta" in a bold, blue, lowercase sans-serif font. A single green leaf is positioned above the letter 'g'.

Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

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Trt # Herbicide (rate acre ⁻¹)	Waterhemp (%)				
	22 DAT	35 DAT	49 DAT	64 DAT	77 DAT
1 Untreated Check	0	0	0	0	0
One-Pass – PRE (5/13)					
2 Acuron (1.25 qt)	100	100	83	62	44
3 Acuron (1.5 qt)	100	100	88	65	43
4 Acuron (1.75 qt)	100	99	85	65	45
5 Acuron (2 qt)	100	100	92	66	44
6 Acuron (3 qt)	100	100	95	75	56
7 Storen (1 qt) + AAtrex (0.75 pt)	100	100	95	71	50
8 Storen (1.2 qt) + AAtrex (0.75 pt)	100	100	97	77	68
9 Storen (1.4 qt) + AAtrex (0.75 pt)	100	100	97	81	69
10 Storen (1.6 qt) + AAtrex (1 pt)	100	100	98	81	66
11 Storen (2 qt) + AAtrex (1.25 pt)	100	100	99	91	81
12 Storen (2.4 qt) + AAtrex (1.5 pt)	100	100	99	92	84
13 Lexar EZ (1.75 qt)	100	99	84	61	33
Two-Pass – PRE (5/13) <i>fb</i> POST (6/6)					
14 Acuron (1.5 qt) <i>fb</i> Acuron (1.5 qt) + Roundup PM3 (28 oz) + AMS ^b	100	100	100	92	80
15 Storen (1.3 qt) + AAtrex (0.75 pt) <i>fb</i> Storen (1.1 qt) + AAtrex (0.75 pt) + RU PM3 (28 oz) + AMS ^b	100	100	100	98	94
LSD ($\alpha=0.10$)	ns	0.5	4	8	14
p value	0.470	0.028	<0.001	<0.001	<0.001

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

^bAMSOL (liquid) applied at 2.5% v/v

Syngenta Corn Herbicides Residual Waterhemp Control (Janesville, WI 2024)

Plot pictures taken on 6/17

35 days after the PRE application
11 days after the POST application

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

35 days after PRE (6/17)
Untreated Check

0%



35 days after PRE (6/17)
Untreated Check

0%



35 days after PRE (6/17)
PRE: 1.25 qt Acuron

100%



35 days after PRE (6/17)
PRE: 1.5 qt Acuron

100%



35 days after PRE (6/17)
PRE: 1.75 qt Acuron

99%



35 days after PRE (6/17)
PRE: 2 qt Acuron

100%



35 days after PRE (6/17)
PRE: 3 qt Acuron

100%



35 days after PRE (6/17)
PRE: 1 qt Storen + 0.75 pt AAtrex

100%



35 days after PRE (6/17)
PRE: 1.2 qt Storen + 0.75 pt AAtrex

100%



35 days after PRE (6/17)
PRE: 1.4 qt Storen + 0.75 pt AAtrex

100%



35 days after PRE (6/17)
PRE: 1.6 qt Storen + 1 pt AAtrex

100%



35 days after PRE (6/17)
PRE: 2 qt Storen + 1.25 pt AAtrex

100%



35 days after PRE (6/17)
PRE: 2.4 qt Storen + 1.5 pt AAtrex

100%



35 days after PRE (6/17)
PRE: 1.75 qt Lexar EZ

99%



11 days after POST (6/17)

PRE: 1.5 qt Acuron *fb*

100%

POST: 1.5 qt Acuron + 28 oz Roundup PowerMAX3 + AMS



11 days after POST (6/17)

PRE: 1.3 qt Storen + 0.75 pt AAtrex *fb*

100%

POST: 1.1 qt Storen + 0.75 pt AAtrex + 28 oz Roundup PowerMAX3 + AMS



Syngenta Corn Herbicides Residual Waterhemp Control (Janesville, WI 2024)

Plot pictures taken on 7/1
49 days after the PRE application
25 days after the POST application

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

49 days after PRE (7/1)
Untreated Check

0%



49 days after PRE (7/1)
PRE: 1.25 qt Acuron

83%



49 days after PRE (7/1)
PRE: 1.5 qt Acuron

88%



49 days after PRE (7/1)
PRE: 1.75 qt Acuron

85%



49 days after PRE (7/1)
PRE: 2 qt Acuron

92%



49 days after PRE (7/1)
PRE: 3 qt Acuron

95%



49 days after PRE (7/1)
PRE: 1 qt Storen + 0.75 pt AAtrex

95%



49 days after PRE (7/1)
PRE: 1.2 qt Storen + 0.75 pt AAtrex

97%



49 days after PRE (7/1)
PRE: 1.4 qt Storen + 0.75 pt AAtrex

97%



49 days after PRE (7/1)
PRE: 1.6 qt Storen + 1 pt AAtrex

98%



49 days after PRE (7/1)
PRE: 2 qt Storen + 1.25 pt AAtrex

99%



49 days after PRE (7/1)
PRE: 2.4 qt Storen + 1.5 pt AAtrex

99%



49 days after PRE (7/1)
PRE: 1.75 qt Lexar EZ

84%



25 days after POST (7/1)

PRE: 1.5 qt Acuron *fb*

100%

POST: 1.5 qt Acuron + 28 oz Roundup PowerMAX3 + AMS



25 days after POST (7/1)

PRE: 1.3 qt Storen + 0.75 pt AAtrex *fb*

100%

POST: 1.1 qt Storen + 0.75 pt AAtrex + 28 oz Roundup PowerMAX3 + AMS



Syngenta Corn Herbicides Residual Waterhemp Control (Janesville, WI 2024)

Plot pictures taken on 7/16

64 days after the PRE application
40 days after the POST application

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

64 days after PRE (7/16)
Untreated Check

0%



64 days after PRE (7/16)
PRE: 1.25 qt Acuron

62%



64 days after PRE (7/16)
PRE: 1.5 qt Acuron

65%



64 days after PRE (7/16)
PRE: 1.75 qt Acuron

65%



64 days after PRE (7/16)
PRE: 2 qt Acuron

66%



64 days after PRE (7/16)
PRE: 3 qt Acuron

75%



64 days after PRE (7/16)
PRE: 1 qt Storen + 0.75 pt AAtrex

71%



64 days after PRE (7/16)
PRE: 1.2 qt Storen + 0.75 pt AAtrex

77%



64 days after PRE (7/16)
PRE: 1.4 qt Storen + 0.75 pt AAtrex

81%



64 days after PRE (7/16)
PRE: 1.6 qt Storen + 1 pt AAtrex

81%



64 days after PRE (7/16)
PRE: 2 qt Storen + 1.25 pt AAtrex

91%



64 days after PRE (7/16)
PRE: 2.4 qt Storen + 1.5 pt AAtrex

92%



64 days after PRE (7/16)
PRE: 1.75 qt Lexar EZ

61%



40 days after POST (7/16)

PRE: 1.5 qt Acuron *fb*

92%

POST: 1.5 qt Acuron + 28 oz Roundup PowerMAX3 + AMS



40 days after POST (7/16)

PRE: 1.3 qt Storen + 0.75 pt AAtrex *fb*

98%

POST: 1.1 qt Storen + 0.75 pt AAtrex + 28 oz Roundup PowerMAX3 + AMS



Syngenta Corn Herbicides Residual Waterhemp Control (Janesville, WI 2024)

Plot pictures taken on 7/29

77 days after the PRE application

53 days after the POST application

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

77 days after PRE (7/29)

0%

Untreated Check



77 days after PRE (7/29)

PRE: 1.25 qt Acuron

44%



77 days after PRE (7/29)

PRE: 1.5 qt Acuron

43%



77 days after PRE (7/29)
PRE: 1.75 qt Acuron

45%



77 days after PRE (7/29)

PRE: 2 qt Acuron

44%



77 days after PRE (7/29)

PRE: 3 qt Acuron

56%



77 days after PRE (7/29)
PRE: 1 qt Storen + 0.75 pt AAtrex

50%



77 days after PRE (7/29)
PRE: 1.2 qt Storen + 0.75 pt AAtrex

68%



77 days after PRE (7/29)
PRE: 1.4 qt Storen + 0.75 pt AAtrex

69%



77 days after PRE (7/29)
PRE: 1.6 qt Storen + 1 pt AAtrex

66%



77 days after PRE (7/29)
PRE: 2 qt Storen + 1.25 pt AAtrex

81%



77 days after PRE (7/29)

PRE: 2.4 qt Storen + 1.5 pt AAtrex

84%



77 days after PRE (7/29)

PRE: 1.75 qt Lexar EZ

33%



53 days after POST (7/29)

PRE: 1.5 qt Acuron *fb*

80%

POST: 1.5 qt Acuron + 28 oz Roundup PowerMAX3 + AMS



53 days after POST (7/29)

PRE: 1.3 qt Storen + 0.75 pt AAtrex *fb*

94%

POST: 1.1 qt Storen + 0.75 pt AAtrex + 28 oz Roundup PowerMAX3 + AMS

