

Waterhemp Management in Early Planted Enlist Soybean (Brooklyn, WI 2022)

Trial Information

Trial Sponsor(s): Syngenta

Objective: Compare Syngenta soybean herbicide programs to industry standards for waterhemp management in early planted Enlist soybeans

Crop: Enlist Soybean

Variety: NK24-G7E3

Weed species (pressure): waterhemp (high-very high)
velvetleaf (moderate)

Herbicide Application(s): PRE – 4/27
PPOST – 6/16 (V3/V4 soybean)

For the full report see trial #22-BRO-SB11 in the [2022 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

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Trt #	Herbicide (rate acre ⁻¹)	Injury (%)		Waterhemp (%)					Yield ^b bu acre ⁻¹
		6/3	6/29	6/3	6/14	6/29	7/13	9/29	
1	Untreated Check	0	0	0	0	0	0	0	26 b
Two Pass – PRE (4/27) <i>fb</i> POST (6/16)		POST		POST					
2	Boundary (2 pt) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	3.3	4.5	94	55	69	72	76	68 a
3	Tendovo (2.1 qt) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	4.0	4.3	92	64	71	70	75	64 a
4	Boundary (2 pt) <i>fb</i> Prefix (2 pt) + Roundup PM3 (26 oz) + Enlist One (32 oz) + AMS*	3.8	15.0	82	51	77	74	66	65 a
5	Tendovo (2.1 qt) <i>fb</i> Prefix (2 pt) + Roundup PM3 (26 oz) + Enlist One (32 oz) + AMS*	3.8	15.0	89	61	79	75	70	66 a
6	Prefix (2 pt) + Canopy (2.25 oz) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	4.5	4.0	97	81	78	80	80	68 a
7	Sonic (6 oz) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	3.3	4.3	91	61	69	74	85	68 a
8	Zidua PRO (6 oz) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	3.3	4.3	98	78	81	78	78	66 a
9	Fierce XLT (3.75 oz) <i>fb</i> Roundup PM3 (26 oz) + Enlist One (32 oz) + Warrant (48 oz) + AMS*	4.5	3.5	98	80	86	84	82	68 a
LSD ($\alpha=0.10$)		ns	0.6	7	10	5	6	5	5
p value		0.452	<.001	0.013	<.001	<.001	0.019	<.001	<.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.

*Spray grade AMS applied at 8.5 lb/100 gal.

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Plot pictures taken on 6/3
37 days after the PRE application

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









37 days after PRE (6/3)

PRE: 6 oz Sonic

91%



37 days after PRE (6/3)
PRE: 6 fl oz Zidua PRO

98%





Waterhemp Management in Early Planted Enlist Soybean (Brooklyn, WI 2022)

Plot pictures taken on 6/14
48 days after the PRE application
2 days before the POST application

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

48 days after PRE (6/14)

0%

Untreated Check



48 days after PRE (6/14)
PRE: 2 pt Boundary

53%



48 days after PRE (6/14)
PRE: 2.1 qt Tendovo

63%



48 days after PRE (6/14)
PRE: 2 pt Prefix + 2.25 oz Canopy

81%



48 days after PRE (6/14)

PRE: 6 oz Sonic

61%



48 days after PRE (6/14)
PRE: 6 fl oz Zidua PRO

78%



48 days after PRE (6/14)
PRE: 3.75 oz Fierce XLT

80%



Waterhemp Management in Early Planted Enlist Soybean (Brooklyn, WI 2022)

Plot pictures taken on 7/13

77 days after the PRE application

27 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 (7/13)

0%

Untreated Check



27 days after POST (7/13)

PRE: 2 pt Boundary *fb*

72%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



27 days after POST (7/13)

PRE: 2.1 qt Tendofo *fb*

70%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



27 days after POST (7/13)

PRE: 2 pt Boundary *fb*

74%

POST: 2 pt Prefix + 26 fl oz Roundup PM3 + 32 fl oz Enlist One + AMS



27 days after POST (7/13)

PRE: 2.1 qt Tendovo *fb*

75%

POST: 2 pt Prefix + 26 fl oz Roundup PM3 + 32 fl oz Enlist One + AMS



27 days after POST (7/13)

PRE: 2 pt Prefix + 2.25 oz Canopy *fb*

80%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



27 days after POST (7/13)

PRE: 6 oz Sonic *fb*

74%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



27 days after POST (7/13)

PRE: 6 fl oz Zidua PRO *fb*

78%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



27 days after POST (7/13)

PRE: 3.75 oz Fierce XLT *fb*

84%

POST: 26 fl oz Roundup PM3 + 32 fl oz Enlist One + 48 fl oz Warrant + AMS



Waterhemp Management in Early Planted Enlist Soybean (Brooklyn, WI 2022)

Plot pictures taken on 9-29

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



End of Season (9/29)

PRE: 2 pt Boundary *fb*

76%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



End of Season (9/29)

PRE: 2.1 qt Tendovo *fb*

75%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



End of Season (9/29)

PRE: 2 pt Boundary *fb*

66%

POST: 2 pt Prefix + 26 fl oz Roundup PM3 + 32 fl oz Enlist One + AMS



End of Season (9/29)

PRE: 2.1 qt Tendovo *fb*

70%

POST: 2 pt Prefix + 26 fl oz Roundup PM3 + 32 fl oz Enlist One + AMS



End of Season (9/29)

PRE: 2 pt Prefix + 2.25 oz Canopy *fb*

80%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



End of Season (9/29)

PRE: 6 oz Sonic *fb*

85%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



End of Season (9/29)

PRE: 6 fl oz Zidua PRO *fb*

78%

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion



End of Season (9/29)

PRE: 3.75 oz Fierce XLT *fb*

82%

POST: 26 fl oz Roundup PM3 + 32 fl oz Enlist One + 48 fl oz Warrant + AMS

