

Syngenta Herbicide Programs in Enlist Soybean Brooklyn, WI 2020

Trial Information

Trial Sponsor: Syngenta

Objective: Evaluate the efficacy and crop safety of Syngenta herbicides and similar competitor programs in Enlist soybeans

Crop: Enlist soybean

Variety: S20-J5E

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

Herbicide Application(s): PRE – 5/22

EPOST – 6/8 (VC/V1 soybean)

POST – 6/23 (V3/V4 soybean)

For the full report see trial #20-BRO-SB11 in the [2020 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

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Herbicide Treatment*	APP Timing	Gly-R Waterhemp Control %			
		6/12	6/22	7/8	10/9
2 pt Prefix + 6 oz Tricor <i>fb</i> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	98	92	98	89
2 pt Prefix + 6 oz Tricor <i>fb</i> 32 fl oz Enlist One + 3 pt Sequence	PRE POST	98	92	98	89
2 pt Prefix + 0.4 oz FirstRate + 32 fl oz Enlist One + 28 fl oz Roundup PMAX	EPOST	100	97	86	51
1.8 pt Boundary <i>fb</i> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	94	79	94	83
1.8 pt Boundary <i>fb</i> 32 fl oz Enlist One + 3 pt Sequence	PRE POST	96	84	97	89
2 pt Prefix + 0.4 oz FirstRate <i>fb</i> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	98	90	97	90
4.5 oz Sonic <i>fb</i> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	93	80	90	78
6 fl oz Zidua PRO <i>fb</i> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	99	91	99	85
1.8 pt Boundary + 0.4 oz FirstRate <i>fb</i> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	99	90	98	83
Untreated Check	-	0	0	0	0
	LSD (0.10)	ns	5.5	4	11
	p-value	ns	<0.01	<0.01	<0.01

*All POST herbicide applications included Request @ 0.5% v/v

Day of EPOST (6/8)



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Plot pictures taken on 6/12

21 days after the PRE application
4 days after the EPOST application

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



21 days after PRE (6/12)

PRE: 2 pt Prefix + 6 oz Tricor DF

98%



4 days after EPOST (6/12)

EPOST: 2 pt Prefix + 0.4 oz FirstRate + 32 fl oz Enlist One + 32 fl oz Roundup

100%



21 days after PRE (6/12)
PRE: 1.8 pt Boundary

95%



21 days after PRE (6/12)
PRE: 2 pt Prefix + 0.4 oz FirstRate

98%



21 days after PRE (6/12)

PRE: 4.5 oz Sonic

93%



21 days after PRE (6/12)
PRE: 6 fl oz Zidua PRO

99%



21 days after PRE (6/12)
PRE: 1.8 pt Boundary + 0.4 oz FirstRate

99%



Syngenta Herbicide Programs in Enlist Soybean Brooklyn, WI 2020

Plot pictures taken on 6/22

31 days after the PRE application

14 days after the EPOST application

The day prior to the POST application

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

31 days after PRE (6/22)
Untreated Check

0%



31 days after PRE (6/22)

PRE: 2 pt Prefix + 6 oz Tricor DF

92%



14 days after EPOST (6/22)

EPOST: 2 pt Prefix + 0.4 oz FirstRate + 32 fl oz Enlist One + 32 fl oz Roundup

97%



31 days after PRE (6/22)
PRE: 1.8 pt Boundary

81%



31 days after PRE (6/22)
PRE: 2 pt Prefix + 0.4 oz FirstRate

90%



31 days after PRE (6/22)

PRE: 4.5 oz Sonic

80%



31 days after PRE (6/22)
PRE: 6 fl oz Zidua PRO

91%



31 days after PRE (6/22)

PRE: 1.8 pt Boundary + 0.4 oz FirstRate

90%



Syngenta Herbicide Programs in Enlist Soybean Brooklyn, WI 2020

Plot pictures taken on 7/8
30 days after the EPOST application
15 days after the POST application

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

47 days after PRE (7/8)
Untreated Check

0%



15 days after POST (7/8)

PRE: 2 pt Prefix + 6 oz Tricor DF *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

98%



15 days after POST (7/8)

PRE: 2 pt Prefix + 6 oz Tricor DF *fb*

POST: 32 fl oz Enlist + 3 pt Sequence

98%



30 days after EPOST (7/8)

EPOST: 2 pt Prefix + 0.4 oz FirstRate + 32 fl oz Enlist One + 32 fl oz Roundup

86%



15 days after POST (7/8)

PRE: 1.8 pt Boundary *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

94%



15 days after POST (7/8)

PRE: 1.8 pt Boundary *fb*

POST: 32 fl oz Enlist + 3 pt Sequence

97%



15 days after POST (7/8)

PRE: 2 pt Prefix + 0.4 oz FirstRate *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

97%



15 days after POST (7/8)

PRE: 4.5 oz Sonic *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

90%



15 days after POST (7/8)

PRE: 6 fl oz Zidua PRO *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

99%



15 days after POST (7/8)

PRE: 1.8 pt Boundary + 0.4 oz FirstRate *fb*

98%

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX



Syngenta Herbicide Programs in Enlist Soybean Brooklyn, WI 2020

Plot pictures taken on 8/4
57 days after the EPOST application
42 days after the POST application

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

74 days after PRE (8/4)
Untreated Check

0%



42 days after POST (8/4)

PRE: 2 pt Prefix + 6 oz Tricor DF *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

89%



42 days after POST (8/4)

PRE: 2 pt Prefix + 6 oz Tricor DF *fb*

POST: 32 fl oz Enlist + 3 pt Sequence

91%



57 days after EPOST (8/4)

EPOST: 2 pt Prefix + 0.4 oz FirstRate + 32 fl oz Enlist One + 32 fl oz Roundup

61%



42 days after POST (8/4)

PRE: 1.8 pt Boundary *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

83%



42 days after POST (8/4)

PRE: 1.8 pt Boundary *fb*

POST: 32 fl oz Enlist + 3 pt Sequence

88%



42 days after POST (8/4)

PRE: 2 pt Prefix + 0.4 oz FirstRate *fb*

90%

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX



42 days after POST (8/4)

PRE: 4.5 oz Sonic *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

79%



42 days after POST (8/4)

PRE: 6 fl oz Zidua PRO fb

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

88%



42 days after POST (8/4)

PRE: 1.8 pt Boundary + 0.4 oz FirstRate *fb*

85%

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX



Syngenta Herbicide Programs in Enlist Soybean Brooklyn, WI 2020

Plot pictures taken on 10/9
Day of soybean harvest

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



Soybean Harvest (10/9)

PRE: 2 pt Prefix + 6 oz Tricor DF *fb*

89%

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX



Soybean Harvest (10/9)

PRE: 2 pt Prefix + 6 oz Tricor DF *fb*

89%

POST: 32 fl oz Enlist + 3 pt Sequence





Soybean Harvest (10/9)

PRE: 1.8 pt Boundary *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

83%



Soybean Harvest (10/9)

PRE: 1.8 pt Boundary *fb*

POST: 32 fl oz Enlist + 3 pt Sequence

89%



Soybean Harvest (10/9)

PRE: 2 pt Prefix + 0.4 oz FirstRate *fb*

90%

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX



Soybean Harvest (10/9)

PRE: 4.5 oz Sonic *fb*

78%

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX



Soybean Harvest (10/9)

PRE: 6 fl oz Zidua PRO *fb*

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

85%



Soybean Harvest (10/9)

PRE: 1.8 pt Boundary + 0.4 oz FirstRate *fb*

83%

POST: 32 fl oz Enlist + 28 fl oz Roundup PowerMAX

