

# 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



# Syngenta Herbicide Programs in Enlist Soybean Brooklyn, WI 2020

Herbicide Treatment*	APP Timing	Gly-R Waterhemp Control %			
		6/12	6/22	7/8	10/9
2 pt Prefix + 6 oz Tricor <b>fb</b> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	98	92	98	89
2 pt Prefix + 6 oz Tricor <b>fb</b> 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 <b>fb</b> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	94	79	94	83
1.8 pt Boundary <b>fb</b> 32 fl oz Enlist One + 3 pt Sequence	PRE POST	96	84	97	89
2 pt Prefix + 0.4 oz FirstRate <b>fb</b> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	98	90	97	90
4.5 oz Sonic <b>fb</b> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	93	80	90	78
6 fl oz Zidua PRO <b>fb</b> 32 fl oz Enlist One + 28 fl oz Roundup PMAX	PRE POST	99	91	99	85
1.8 pt Boundary + 0.4 oz FirstRate <b>fb</b> 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)



# Syngenta Herbicide Programs in Enlist Soybean Brooklyn, WI 2020

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)**

**0%**

**Untreated Check**



**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)**

**98%**

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



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)**

**0%**

**Untreated Check**



**31 days after PRE (6/22)**  
**PRE: 2 pt Prefix + 6 oz Tricor DF**

**92%**



**14 days after EPOST (6/22)**

**97%**

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



31 days after PRE (6/22)

PRE: 1.8 pt Boundary

81%



**31 days after PRE (6/22)**

**90%**

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



**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***

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

**98%**



# 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)**

**61%**

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



**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**

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

**90%**



**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***

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

**85%**



# 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)

0%

## Untreated Check



# Soybean Harvest (10/9)

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

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

89%



# Soybean Harvest (10/9)

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

POST: 32 fl oz Enlist + 3 pt Sequence

89%



# Soybean Harvest (10/9)

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

51%



**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***

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

**90%**



# Soybean Harvest (10/9)

PRE: 4.5 oz Sonic *fb*

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

78%



**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*

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

83%

