

# Authority Supreme Supreme/Edge and Anthem Maxx Herbicide Programs (Brooklyn, WI 2021)

## Trial Information

Trial Sponsor(s): FMC

Objective: Evaluate the efficacy and crop safety of Authority brand herbicides and competitor PRE herbicides in Enlist soybeans

Crop: Enlist Soybean

Variety: P20T64E

Weed species (pressure): glyphosate-R waterhemp (high-very high)  
velvetleaf (moderate-high)  
common lambsquarters (moderate)  
wild-proso millet (moderate)

Herbicide Application(s): PRE – 5/14  
POST – 6/15 (V3 soybean)

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For the full report see trial #21-BRO-SB07 in the [2021 Wisconsin Weed Science Research Report](#)



**Cropping Systems Weed Science**  
UNIVERSITY OF WISCONSIN-MADISON



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Trt#	Herbicide (rate acre <sup>-1</sup> )	Waterhemp (%)			Velvetleaf (%)			Lambsquarters (%)			Annual Grasses <sup>b</sup> (%)			Yield bu acre <sup>-1</sup>
		6/15	6/30	9/28	6/15	6/30	9/28	6/15	6/30	9/28	6/15	6/30	9/28	
1	Untreated Check	0	0	0	0	0	0	0	0	0	0	0	0	21 f
<b>Two-Pass – PRE (5/14) fb POST (6/15)</b>														
2	Authority Supreme (8 fl oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	91	97	82	96	100	100	100	100	100	99	100	100	61 ab
3	Authority Supreme (7 fl oz) + Tricor DF (5 oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	95	99	95	95	100	100	100	100	100	93	100	99	58 a-d
4	Authority Supreme (6.5 fl oz) <b>fb</b> Liberty (32 fl oz) + Anthem Maxx (2.5 fl oz) + AMS (3 lb)	88	98	89	98	100	100	100	100	100	94	100	100	58 a-d
5	Boundary (29 fl oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	87	97	90	96	99	96	100	100	98	97	100	100	61 abc
6	Zidua PRO (6 fl oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	89	97	84	100	100	100	100	100	100	97	100	100	60 abc
7	Kyber (1 pt) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	81	95	84	90	100	94	98	100	100	85	100	100	63 a
8	Anthem Maxx (4 fl oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	75	93	77	90	100	99	100	100	100	95	100	100	59 abc
9	Warrant (48 fl oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	52	82	41	50	100	87	100	100	78	85	100	100	52 e
10	Outlook (14 fl oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	69	83	49	68	99	85	99	100	75	93	100	100	53 de
11	Dual II Magnum (1.3 pt) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	51	84	47	46	100	90	100	100	88	95	100	100	56 b-e
12	Authority Edge (8 fl oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	98	98	89	98	100	100	100	100	100	96	99	99	55 cde
13	Authority Edge (7 fl oz) + Tricor DF (5 oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	94	97	94	97	100	100	100	100	100	93	100	100	59 a-d
14	Authority Edge (7 fl oz) <b>fb</b> Liberty (32 fl oz) + Anthem Maxx (2.5 fl oz) + AMS (3 lb)	92	98	93	99	100	100	100	100	100	96	100	100	60 abc
15	Authority First DF (6.4 oz) <b>fb</b> Liberty (32 fl oz) + AMS (3 lb)	94	97	92	100	100	100	100	100	100	98	100	100	58 a-d
LSD ( $\alpha=0.10$ )		11	3	9	8	<1	6	ns	ns	13	ns	ns	ns	6
p value		<0.001	<0.001	<0.001	<0.001	0.075	<0.001	0.463	1.000	0.007	0.200	0.470	0.560	<0.001

<sup>b</sup>Annual grass species in the trial area consisted of wild-proso millet and woolly cupgrass. Wild-proso millet was the predominant species.

# Authority Supreme Supreme/Edge and Anthem Maxx Herbicide Programs (Brooklyn, WI 2021)

Plot pictures taken on 6/15

32 days after the PRE application  
The day of the POST application

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

**32 days after PRE (6/15)**

**Untreated Check**

**0%**



**32 days after PRE (6/15)  
PRE: 8 fl oz Authority Supreme**

**91%**



**1**

32 days after PRE (6/15)

PRE: 7 fl oz Authority Supreme + 5 oz Tricor DF

95%



**32 days after PRE (6/15)  
PRE: 6.5 fl oz Authority Supreme**

**88%**



**32 days after PRE (6/15)**

**PRE: 29 fl oz Boundary**

**87%**



32 days after PRE (6/15)

PRE: 6 fl oz Zidua PRO

89%



32 days after PRE (6/15)

81%

PRE: 1 pt Kyber



**32 days after PRE (6/15)  
PRE: 4 fl oz Anthem Maxx**

**75%**



**32 days after PRE (6/15)**

**PRE: 48 fl oz Warrant**

**52%**



**32 days after PRE (6/15)**

**PRE: 14 fl oz Outlook**

**69%**



**32 days after PRE (6/15)  
PRE: 1.3 pt Dual II Magnum**

**51%**



**1**

**32 days after PRE (6/15)  
PRE: 8 fl oz Authority Edge**

**98%**



32 days after PRE (6/15)

94%

PRE: 7 fl oz Authority Edge + 5 oz Tricor DF



**32 days after PRE (6/15)  
PRE: 7 fl oz Authority Edge**

**92%**



**32 days after PRE (6/15)  
PRE: 6.4 oz Authority First DF**

**94%**



# Authority Supreme Supreme/Edge and Anthem Maxx Herbicide Programs (Brooklyn, WI 2021)

Plot pictures taken on 6/30

47 days after the PRE application  
15 days after the POST application

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

**47 days after PRE (6/30)**  
**Untreated Check**

**0%**



**15 days after POST (6/30)**

**PRE: 8 fl oz Authority Supreme *fb***

**POST: 32 fl oz Liberty + 3 lb AMS**

**97%**



**15 days after POST (6/30)**

**PRE: 7 fl oz Authority Supreme + 5 oz Tricor DF *fb***

**POST: 32 fl oz Liberty + 3 lb AMS**

**99%**



**15 days after POST (6/30)**

**PRE: 6.5 fl oz Authority Supreme *fb***

**POST: 32 fl oz Liberty + 2.5 fl oz Anthem Maxx + 3 lb AMS**

**98%**



**15 days after POST (6/30)**  
**PRE: 29 fl oz Boundary *fb***  
**POST: 32 fl oz Liberty + 3 lb AMS**

**97%**



**15 days after POST (6/30)**  
**PRE: 6 fl oz Zidua PRO fb**  
**POST: 32 fl oz Liberty + 3 lb AMS**

**97%**



**15 days after POST (6/30)**

**PRE: 1 pt Kyber fb**

**POST: 32 fl oz Liberty + 3 lb AMS**

**95%**



**15 days after POST (6/30)**  
**PRE: 4 fl oz Anthem Maxx *fb***  
**POST: 32 fl oz Liberty + 3 lb AMS**

**93%**



**15 days after POST (6/30)**

**PRE: 48 fl oz Warrant *fb***

**POST: 32 fl oz Liberty + 3 lb AMS**

**82%**



**15 days after POST (6/30)**

**PRE: 14 fl oz Outlook fb**

**POST: 32 fl oz Liberty + 3 lb AMS**

**83%**



**15 days after POST (6/30)**  
**PRE: 1.3 pt Dual II Magnum *fb***  
**POST: 32 fl oz Liberty + 3 lb AMS**

**84%**



**15 days after POST (6/30)**  
**PRE: 8 fl oz Authority Edge *fb***  
**POST: 32 fl oz Liberty + 3 lb AMS**

**98%**



**15 days after POST (6/30)**

**PRE: 7 fl oz Authority Edge + 5 oz Tricor DF fb**

**POST: 32 fl oz Liberty + 3 lb AMS**

**97%**



**15 days after POST (6/30)**

**PRE: 7 fl oz Authority Edge *fb***

**POST: 32 fl oz Liberty + 2.5 fl oz Anthem Maxx + 3 lb AMS**

**98%**



**15 days after POST (6/30)**  
**PRE: 6.4 oz Authority First DF *fb***  
**POST: 32 fl oz Liberty + 3 lb AMS**

**97%**



**4**

# Authority Supreme Supreme/Edge and Anthem Maxx Herbicide Programs (Brooklyn, WI 2021)

Plot pictures taken on 9/28  
Day of soybean harvest

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

# Soybean harvest (9/28)

## Untreated Check

0%



Soybean harvest (9/28)

PRE: 8 fl oz Authority Supreme *fb*

POST: 32 fl oz Liberty + 3 lb AMS

82%



Soybean harvest (9/28)

PRE: 7 fl oz Authority Supreme + 5 oz Tricor DF *fb*

POST: 32 fl oz Liberty + 3 lb AMS

95%



Soybean harvest (9/28)

PRE: 6.5 fl oz Authority Supreme *fb*

89%

POST: 32 fl oz Liberty + 2.5 fl oz Anthem Maxx + 3 lb AMS



Soybean harvest (9/28)

PRE: 29 fl oz Boundary *fb*

POST: 32 fl oz Liberty + 3 lb AMS

90%



**Soybean harvest (9/28)**  
**PRE: 6 fl oz Zidua PRO fb**  
**POST: 32 fl oz Liberty + 3 lb AMS**

**84%**



Soybean harvest (9/28)

PRE: 1 pt Kyber fb

POST: 32 fl oz Liberty + 3 lb AMS

84%



**Soybean harvest (9/28)**  
**PRE: 4 fl oz Anthem Maxx fb**  
**POST: 32 fl oz Liberty + 3 lb AMS**

**77%**



**Soybean harvest (9/28)**  
**PRE: 48 fl oz Warrant fb**  
**POST: 32 fl oz Liberty + 3 lb AMS**

**41%**



**Soybean harvest (9/28)**

**PRE: 14 fl oz Outlook fb**

**POST: 32 fl oz Liberty + 3 lb AMS**

**49%**



Soybean harvest (9/28)

PRE: 1.3 pt Dual II Magnum *fb*

POST: 32 fl oz Liberty + 3 lb AMS

47%



Soybean harvest (9/28)

PRE: 8 fl oz Authority Edge *fb*

POST: 32 fl oz Liberty + 3 lb AMS

89%



Soybean harvest (9/28)

PRE: 7 fl oz Authority Edge + 5 oz Tricor DF *fb*

POST: 32 fl oz Liberty + 3 lb AMS

94%



Soybean harvest (9/28)

PRE: 7 fl oz Authority Edge *fb*

POST: 32 fl oz Liberty + 2.5 fl oz Anthem Maxx + 3 lb AMS

93%



Soybean harvest (9/28)

PRE: 6.4 oz Authority First DF *fb*

POST: 32 fl oz Liberty + 3 lb AMS

92%

