

# 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)

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	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	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	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	100	94	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	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	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	100	85	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	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	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	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	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	100	100	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	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	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	100	100	58 a-d	
<b>LSD (<math>\alpha=0.10</math>)</b>		<b>11</b>	<b>3</b>	<b>9</b>	<b>8</b>	<b>&lt;1</b>	<b>6</b>	<b>ns</b>	<b>ns</b>	<b>13</b>	<b>ns</b>	<b>ns</b>	<b>ns</b>	<b>6</b>
<b>p value</b>		<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>0.075</b>	<b>&lt;0.001</b>	<b>0.463</b>	<b>1.000</b>	<b>0.007</b>	<b>0.200</b>	<b>0.470</b>	<b>0.560</b>	<b>&lt;0.001</b>

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





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)  
PRE: 1 pt Kyber

81%





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%





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

98%





32 days after PRE (6/15)  
PRE: 7 fl oz Authority Edge + 5 oz Tricor DF

94%





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*

99%

POST: 32 fl oz Liberty + 3 lb AMS





15 days after POST (6/30)

PRE: 6.5 fl oz Authority Supreme *fb*

98%

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





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*

97%

POST: 32 fl oz Liberty + 3 lb AMS





15 days after POST (6/30)

PRE: 7 fl oz Authority Edge *fb*

98%

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





15 days after POST (6/30)

PRE: 6.4 oz Authority First DF *fb*

POST: 32 fl oz Liberty + 3 lb AMS

97%





# 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)

PRE: 8 fl oz Authority Supreme *fb*

82%

POST: 32 fl oz Liberty + 3 lb AMS





**Soybean harvest (9/28)**

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

**95%**

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





**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***

**89%**

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





**Soybean harvest (9/28)**

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

**94%**

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





**Soybean harvest (9/28)**

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

**93%**

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





**Soybean harvest (9/28)**

**PRE: 6.4 oz Authority First DF *fb***

**92%**

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

