

XtendFlex Soybean Herbicide Programs

Brooklyn, WI 2022

Trial Information

Trial Sponsor(s): Bayer

Objective: Evaluate multiple herbicide programs to provide recommendations for XtendFlex soybean weed management

Crop: XtendFlex Soybean

Variety: AG20XF1

Weed species (pressure): glyphosate-R waterhemp (moderate-very high)
velvetleaf (moderate)
fall panicum (low-moderate)

Herbicide Application(s): PRE – 5/24
POST – 6/29 (V4 soybean)

For the full report see trial #22-BRO-SB07 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 (%)				Velvetleaf (%)				Fall Panicum (%)			Yield ^b bu acre ⁻¹		
		7/13	6/29	7/13	7/26	9/29	6/29	7/13	7/26	9/29	7/13	7/26	9/29	7/13	7/26		
1	Untreated Check	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.7 c	
Two-Pass – PRE (5/24) fb POST (6/29)			POST				POST										
2	XtendiMax (22 oz) + Fierce EZ (6 oz)* fb	3.3	88	94	89	92	92	100	100	100	100	100	98	95	100	64.5 b	
	XtendiMax (22 oz) + Roundup PM3 (30 oz) + Warrant (48 oz)**		86	95	87	86	90	100	100	100	100	100	100	98	100	67.8 ab	
3	XtendiMax (22 oz) + Fierce EZ (6 oz)* fb	0.8	63	83	80	87	96	100	100	100	100	100	90	83	100	62.7 b	
	Liberty (32 oz) + Roundup PM3 (30 oz) + Warrant (48 oz) + AMS (2.5% v/v)		64	87	73	69	94	100	100	100	100	100	96	93	100	67.2 ab	
4	XtendiMax (22 oz) + Authority MTZ (14 oz)* fb	1.0	74	86	83	86	84	100	100	100	100	100	95	96	100	61.7 b	
	XtendiMax (22 oz) + Roundup PM3 (30 oz) + Warrant (48 oz)**		78	94	86	88	84	100	100	100	100	100	99	98	100	68.4 ab	
5	XtendiMax (22 oz) + Authority MTZ (14 oz)* fb	0.3	53	81	80	86	49	100	100	100	100	100	92	92	100	70.7 ab	
	Liberty (32 oz) + Roundup PM3 (30 oz) + Warrant (48 oz) + AMS (2.5% v/v)		54	87	75	75	60	100	100	100	100	100	97	97	100	65.9 ab	
6	XtendiMax (22 oz) + Valor EZ (2 oz)* fb	2.0	61	88	76	73	49	100	98	95	100	96	91	91	100	63.4 b	
	XtendiMax (22 oz) + Roundup PM3 (30 oz) + Warrant (48 oz)**		59	69	55	51	54	100	100	100	100	100	100	100	100	63.0 b	
7	XtendiMax (22 oz) + Valor EZ (2 oz)* fb	0.0	83	90	88	94	57	100	100	100	100	100	99	99	100	76.8 a	
	Liberty (32 oz) + Roundup PM3 (30 oz) + Warrant (48 oz) + AMS (2.5% v/v)		86	98	90	91	71	100	99	99	100	100	97	95	100	71.7 a	
8	XtendiMax (22 oz) + Mauler (8 oz) + Warrant (48 oz)* fb	2.5	8	5	7	10	15	ns	ns	2	ns	5	5	11			
	XtendiMax (22 oz) + Roundup PM3 (30 oz) + Warrant (48 oz)**		<.001	<.001	<.001	<.001	<.001	0.467	0.399	0.018	1.00	0.065	0.001	<0.001			
9	XtendiMax (22 oz) + Mauler (8 oz) + Warrant (48 oz)* fb	0.0															
	Liberty (32 oz) + Roundup PM3 (30 oz) + Warrant (48 oz) + AMS (2.5% v/v)																
10	XtendiMax (22 oz) + Mauler (8 oz) + Warrant (48 oz)* fb	0.8															
	Liberty (32 oz) + Warrant (48 oz) + AMS (2.5% v/v)																
11	XtendiMax (22 oz) + Mauler (8 oz) + Warrant (48 oz)* fb	2.8															
	Roundup PM3 (30 oz) + Warrant Ultra (48 oz) + AMS (2.5% v/v)																
12	XtendiMax (22 oz) + Warrant Ultra (48 oz)* fb	2.8															
	XtendiMax (22 oz) + Roundup PM3 (30 oz) + Warrant (48 oz)**																
13	XtendiMax (22 oz) + Warrant Ultra (48 oz)* fb	0.0															
	Liberty (32 oz) + Roundup PM3 (30 oz) + Warrant (48 oz) + AMS (2.5% v/v)																
		LSD ($\alpha=0.10$)	0.9														
		p value	<0.001														

^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.

*All PRE applications of XtendiMax included 20 fl oz/a VaporGrip Xtra, a volatility reducing agent.

**All POST applications of XtendiMax included VaporGrip Xtra at 20 fl oz, Class Act Ridion 1% v/v, and Intact 0.5% v/v.

XtendFlex Soybean Herbicide Programs

Brooklyn, WI 2022

Plot pictures taken on 6/28

35 days after the PRE application
The day before the POST application

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

35 days after PRE (6/28)

Untreated Check

0%



35 days after PRE (6/28)

PRE: 22 fl oz XtendiMax + 6 fl oz Fierce EZ

87%



35 days after PRE (6/28)

PRE: 22 fl oz XtendiMax + 14 oz Authority MTZ

64%



35 days after PRE (6/28)

PRE: 22 fl oz XtendiMax + 2 fl oz Valor EZ

76%



35 days after PRE (6/28)

57%

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant



35 days after PRE (6/28)

PRE: 22 fl oz XtendiMax + 48 fl oz Warrant Ultra

85%



XtendFlex Soybean Herbicide Programs

Brooklyn, WI 2022

Plot pictures taken on 7/13

50 days after the PRE application
14 days after the POST application

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

50 days after PRE (7/13)

Untreated Check

0%



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 6 fl oz Fierce EZ *fb*

94%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 6 fl oz Fierce EZ *fb*

95%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 14 oz Authority MTZ *fb*

83%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 14 oz Authority MTZ fb

87%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 2 fl oz Valor EZ fb

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant

86%



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 2 fl oz Valor EZ fb

94%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant *fb*

81%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant *fb*

87%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant *fb*

88%

POST: 32 fl oz Liberty + 48 fl oz Warrant + AMS



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant *fb*

69%

POST: 30 fl oz Roundup PM3 + 48 fl oz Warrant Ultra + AMS



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 48 fl oz Warrant Ultra *fb*

90%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



14 days after POST (7/13)

PRE: 22 fl oz XtendiMax + 48 fl oz Warrant Ultra *fb*

98%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



XtendFlex Soybean Herbicide Programs

Brooklyn, WI 2022

Plot pictures taken on 7/26

63 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

63 days after PRE (7/26)

Untreated Check

0%



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 6 fl oz Fierce EZ *fb*

89%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 6 fl oz Fierce EZ *fb*

87%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 14 oz Authority MTZ *fb*

80%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 14 oz Authority MTZ fb

73%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 2 fl oz Valor EZ fb

83%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 2 fl oz Valor EZ fb

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS

86%



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant *fb*

80%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant *fb*

75%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant *fb*

POST: 32 fl oz Liberty + 48 fl oz Warrant + AMS

76%



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant *fb*

55%

POST: 30 fl oz Roundup PM3 + 48 fl oz Warrant Ultra + AMS



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 48 fl oz Warrant Ultra *fb*

88%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



27 days after POST (7/26)

PRE: 22 fl oz XtendiMax + 48 fl oz Warrant Ultra *fb*

90%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



XtendFlex Soybean Herbicide Programs

Brooklyn, WI 2022

Plot pictures taken on 9/29

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

End of Season (9/29)

Untreated Check

0%



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 6 fl oz Fierce EZ *fb*

92%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 6 fl oz Fierce EZ fb

86%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 14 oz Authority MTZ *fb*

87%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 14 oz Authority MTZ fb

69%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 2 fl oz Valor EZ fb

86%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 2 fl oz Valor EZ fb

88%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



End of Season (9/29)

8 fl oz Mauler + 48 fl oz Warrant *fb*

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant

86%



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant *fb*

75%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant fb

73%

POST: 32 fl oz Liberty + 48 fl oz Warrant + AMS



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 8 fl oz Mauler + 48 fl oz Warrant fb

51%

POST: 30 fl oz Roundup PM3 + 48 fl oz Warrant Ultra + AMS



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 48 fl oz Warrant Ultra fb

94%

POST: 22 fl oz XtendiMax + 30 fl oz Roundup PM3 + 48 fl oz Warrant



End of Season (9/29)

PRE: 22 fl oz XtendiMax + 48 fl oz Warrant Ultra *fb*

91%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 48 fl oz Warrant + AMS

