

XtendFlex Soybean Herbicide Recommendations for ESA Counties (Brooklyn, WI 2021)

Trial Information

Trial Sponsor(s): Bayer

Objective: Evaluate herbicide programs to provide recommendations for XtendFlex soybean weed management in counties under restrictions of the endangered species act (ESA)

Crop: XtendFlex Soybean

Variety: AG20XF1

Weed species (pressure): glyphosate-R waterhemp(moderate-high)
velvetleaf (moderate)
common lambsquarters (low-moderate)

Herbicide Application(s): PRE – 5/26
POST – 6/22 (V3 soybean)

For the full report see trial #21-BRO-SB13 in the [2021 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON



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Trt # Herbicide (rate acre ⁻¹)	Injury ^c (%)		Waterhemp (%)				Overall ^d (%)				Yield ^b bu acre ⁻¹
	6/30	7/7	6/16	6/22	7/7	9/21	6/16	6/22	7/7	9/21	
1 Untreated Check	0	0	0	0	0	0	0	0	0	0	50 d
Two-Pass – PRE (5/26) fb POST (6/22)											
2 Fierce EZ (6 fl oz) fb Liberty (32 fl oz) + MON 301668 (30 fl oz) + AMS**	12.5	10.0	95	91	100	99	90	85	98	99	66 abc
3 Fierce EZ (6 fl oz) + XtendiMax (22 fl oz)* fb Liberty (32 fl oz) + MON 301668 (30 fl oz) + AMS**	12.5	10.5	98	96	100	100	97	95	100	100	66 abc
4 Fierce EZ (6 fl oz) fb Liberty (32 fl oz) + Roundup PM3 (30 fl oz) + MON 301668 (30 fl oz) + AMS**	12.0	9.3	96	92	100	99	88	81	99	99	68 ab
5 Fierce EZ (6 fl oz) + XtendiMax (22 fl oz)* fb Liberty (32 fl oz) + Roundup PM3 (30 fl oz) + MON 301668 (30 fl oz) + AMS**	12.0	10.8	98	96	100	100	97	96	100	100	69 a
6 Fierce EZ (6 fl oz) fb Warrant Ultra (48 fl oz) + Liberty (32 fl oz) + AMS**	21.8	16.3	94	90	99	100	87	83	98	99	63 c
7 Fierce EZ (6 fl oz) + XtendiMax (22 fl oz)* fb Warrant Ultra (48 fl oz) + Liberty (32 fl oz) + AMS**	21.3	15.0	100	97	100	100	98	96	100	100	63 c
8 Fierce EZ (6 fl oz) fb Warrant Ultra (48 fl oz) + Liberty (32 fl oz) + Roundup PM3 (30 fl oz) + AMS**	23.3	16.5	94	88	100	100	90	85	97	98	66 abc
9 Fierce EZ (6 fl oz) + XtendiMax (22 fl oz)* fb Warrant Ultra (48 fl oz) + Liberty (32 fl oz) + Roundup PM3 (30 fl oz) + AMS**	23.5	16.3	99	97	100	100	96	95	100	100	64 bc
LSD ($\alpha=0.10$)	3.0	1.9	3	4	ns	0.5	3	4	ns	ns	4
p value	<.001	<.001	0.006	0.002	0.168	0.080	<.001	<.001	0.398	0.704	<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.

^cCrop injury symptoms included leaf necrosis (burn) and leaf crinkling.

^dOverall weed control included all species in the trial area: waterhemp, velvetleaf, and common lambsquarters.

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

**Liquid AMS was applied at 2.5% v/v

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Plot pictures taken on 6/22
27 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

27 days after PRE (6/22)

0%

Untreated Check



27 days after PRE (6/22)
PRE: 6 fl oz Fierce EZ

90%



27 days after PRE (6/22)

PRE: 6 fl oz Fierce EZ

90%



27 days after PRE (6/22)
PRE: 6 fl oz Fierce EZ + 22 fl oz XtendiMax

97%



27 days after PRE (6/22)
PRE: 6 fl oz Fierce EZ + 22 fl oz XtendiMax

97%



XtendFlex Soybean Herbicide Recommendations for ESA Counties (Brooklyn, WI 2021)

Plot pictures taken on 7/20
55 days after the PRE application
28 days after the POST application

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

55 days after PRE (7/20)

0%

Untreated Check



28 days after POST (7/20)

PRE: 6 fl oz Fierce EZ *fb*

100%

POST: 32 fl oz Liberty + 30 fl oz MON 301668 + AMS



28 days after POST (7/20)

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

100%

POST: 32 fl oz Liberty + 30 fl oz MON 301668 + AMS



28 days after POST (7/20)

PRE: 6 fl oz Fierce EZ *fb*

100%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 30 fl oz MON 301668 + AMS



28 days after POST (7/20)

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

100%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 30 fl oz MON 301668 + AMS



28 days after POST (7/20)

PRE: 6 fl oz Fierce EZ *fb*

100%

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



28 days after POST (7/20)

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

100%

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



28 days after POST (7/20)

PRE: 6 fl oz Fierce EZ *fb*

100%

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



28 days after POST (7/20)

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

100%

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



XtendFlex Soybean Herbicide Recommendations for ESA Counties (Brooklyn, WI 2021)

Plot pictures taken on 9/29
The day of soybean harvest

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

Soybean harvest (9/29)

0%

Untreated Check



Soybean harvest (9/29)

PRE: 6 fl oz Fierce EZ *fb*

99%

POST: 32 fl oz Liberty + 30 fl oz MON 301668 + AMS



Soybean harvest (9/29)

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

100%

POST: 32 fl oz Liberty + 30 fl oz MON 301668 + AMS



Soybean harvest (9/29)

PRE: 6 fl oz Fierce EZ *fb*

99%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 30 fl oz MON 301668 + AMS



Soybean harvest (9/29)

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

100%

POST: 32 fl oz Liberty + 30 fl oz Roundup PM3 + 30 fl oz MON 301668 + AMS



Soybean harvest (9/29)

PRE: 6 fl oz Fierce EZ *fb*

100%

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



Soybean harvest (9/29)

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

100%

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



Soybean harvest (9/29)

PRE: 6 fl oz Fierce EZ *fb*

100%

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



Soybean harvest (9/29)

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

100%

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

