

XtendFlex Soybean Herbicide Programs

Brooklyn, WI 2020

Trial Information

Trial Sponsor: Bayer

Objective: Evaluate multiple herbicide programs to provide recommendations for the 2021 launch of XtendFlex soybeans

Crop: XtendFlex soybean

Variety: AG23XF0

Weed species (pressure): glyphosate-resistant waterhemp (very high)

Herbicide Application(s): PRE – 5/22

POST – 6/23 (V3/V4 soybean)

LPOST – 7/8 (V6 soybean)

For the full report see trial #20-BRO-SB02 in the [2020 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON



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Herbicide Treatment*		Waterhemp Control %			Yield bu/acre
PRE	POST	7/8	7/22	9/24	
22 oz XtendiMax + 48 oz Warrant + 8 oz Mauler	22 oz XtendiMax + 32 oz Roundup + 48 oz Warrant	85	80	87	35
	32 oz Liberty + 32 oz Roundup + 48 oz Warrant	83	77	74	35
	32 oz Liberty + 48 oz Warrant	83	72	77	35
	32 oz Liberty + 48 Warrant <i>fb</i> 32 oz Liberty	86	97	96	37
	32 oz Roundup + 48 oz Warrant Ultra <i>fb</i> 32 oz Liberty	76	88	92	38
48 oz Warrant + 8 oz Mauler	22 oz XtendiMax + 32 oz Roundup + 48 oz Warrant	85	80	86	34
	32 oz Liberty + 32 oz Roundup + 48 oz Warrant	83	68	63	36
	32 oz Liberty + 48 oz Warrant	79	68	69	35
	22 oz XtendiMax + 32 oz Roundup + 48 oz Warrant <i>fb</i> 32 oz Liberty	87	97	98	39
	22 oz XtendiMax + 48 oz Warrant <i>fb</i> 32 oz Roundup	80	85	90	39
	22 oz XtendiMax + 48 oz Warrant <i>fb</i> 32 oz Liberty + 32 oz Roundup	81	93	96	37
	22 oz XtendiMax + 48 oz Warrant <i>fb</i> 32 oz Liberty	81	96	97	40
22 oz XtendiMax + 48 oz Warrant Ultra	22 oz XtendiMax + 32 oz Roundup + 48 oz Warrant	89	80	86	35
	32 oz Liberty + 32 oz Roundup + 48 oz Warrant	84	71	66	39
Untreated Check		0	0	0	21
LSD (0.10)		5	5	9	4
p-value		<0.01	<0.01	<0.01	<0.01

*All POST treatments included appropriate adjuvants

XtendFlex Soybean Herbicide Programs Brooklyn, WI 2020

Plot pictures taken on 6/12
21 days after the PRE application

21 days after PRE (6/12)

Untreated Check



21 days after PRE (6/12)

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



21 days after PRE (6/12)
PRE: 48 fl oz Warrant + 8 fl oz Mauler



21 days after PRE (6/12)

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



XtendFlex Soybean Herbicide Programs Brooklyn, WI 2020

Plot pictures taken on 6/23
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

32 days after PRE (6/23)

0%

Untreated Check



32 days after PRE (6/23)

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

85%



32 days after PRE (6/23)
PRE: 48 fl oz Warrant + 8 fl oz Mauler

79%



32 days after PRE (6/23)

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

87%



XtendFlex Soybean Herbicide Programs Brooklyn, WI 2020

Plot pictures taken on 7/8
47 days after the PRE application
15 days after POST application
The day of the LPOST application

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

47 days after PRE (7/8)

Untreated Check

0%



15 days after POST (7/8)

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

85%

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



15 days after POST (7/8)

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

83%

POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



15 days after POST (7/8)

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

85%

POST: 32 fl oz Liberty + 48 fl oz Warrant



15 days after POST (7/8)

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

76%

POST: 32 fl oz Roundup PowerMAX + 48 fl oz Warrant Ultra



15 days after POST (7/8)

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

86%

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



15 days after POST (7/8)

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

83%

POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



15 days after POST (7/8)

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

POST: 32 fl oz Liberty + 48 fl oz Warrant

83%



15 days after POST (7/8)

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

81%

POST: 22 fl oz XtendiMax + 48 fl oz Warrant



15 days after POST (7/8)

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

89%

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



15 days after POST (7/8)

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

84%

POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



XtendFlex Soybean Herbicide Programs Brooklyn, WI 2020

Plot pictures taken on 7/22

61 days after the PRE application

29 days after the POST application

14 days after the LPOST application

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

61 days after PRE (7/22)
Untreated Check

0%



29 days after POST (7/22)

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

80%

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



29 days after POST (7/22)

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

77%

POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



29 days after POST (7/22)

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

72%

POST: 32 fl oz Liberty + 48 fl oz Warrant



14 days after LPOST (7/22)

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

POST: 32 fl oz Liberty + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Liberty

97%



14 days after LPOST (7/22)

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

POST: 32 fl oz Roundup PowerMAX + 48 fl oz Warrant Ultra *fb*

LPOST: 32 fl oz Liberty

88%



Waterhemp regrowth



29 days after POST (7/22)

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

80%

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



29 days after POST (7/22)

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

68%

POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



29 days after POST (7/22)

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

POST: 32 fl oz Liberty + 48 fl oz Warrant

68%



14 days after LPOST (7/22)

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

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PMAX + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Liberty

97%



14 days after LPOST (7/22)

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

POST: 22 fl oz XtendiMax + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Roundup PowerMAX

85%



14 days after LPOST (7/22)

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

POST: 22 fl oz XtendiMax + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX

93%



14 days after LPOST (7/22)

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

POST: 22 fl oz XtendiMax + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Liberty

96%



29 days after POST (7/22)

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

80%

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



29 days after POST (7/22)

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

71%

POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



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Plot pictures taken on 10/8
Day of soybean harvest

The number in the upper right-hand corner is the
average % waterhemp control of 4 replications on 9/24



Soybean Harvest (10/8)

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

87%

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



Soybean Harvest (10/8)

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

74%

POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



Soybean Harvest (10/8)

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

77%

POST: 32 fl oz Liberty + 48 fl oz Warrant



Soybean Harvest (10/8)

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

POST: 32 fl oz Liberty + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Liberty

96%



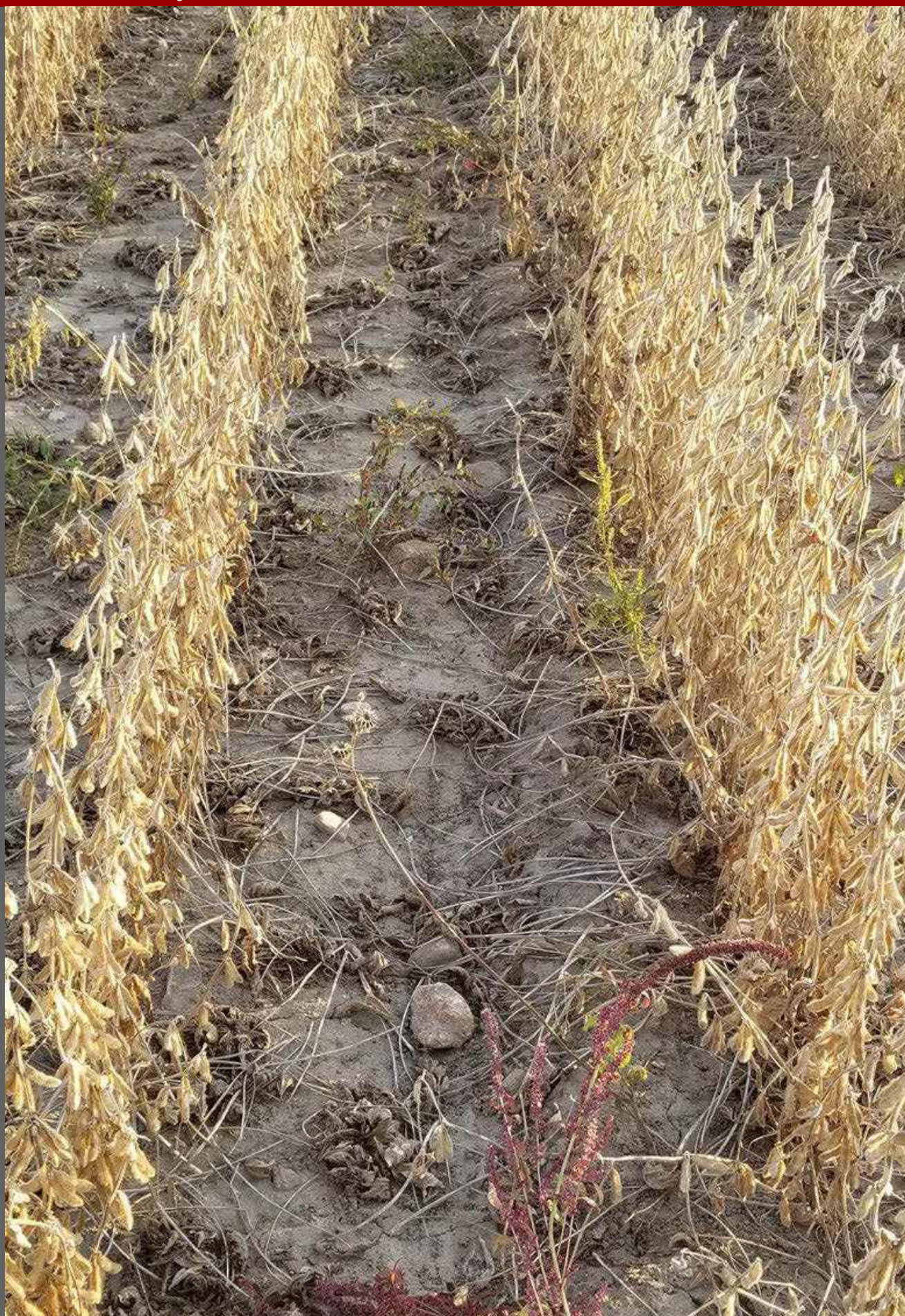
Soybean Harvest (10/8)

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

POST: 32 fl oz Roundup PowerMAX + 48 fl oz Warrant Ultra *fb*

LPOST: 32 fl oz Liberty

92%



Soybean Harvest (10/8)

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

86%

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



Soybean Harvest (10/8)

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

63%

POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



Soybean Harvest (10/8)

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

69%

POST: 32 fl oz Liberty + 48 fl oz Warrant



Soybean Harvest (10/8)

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

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PMAX + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Liberty

98%



Soybean Harvest (10/8)

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

POST: 22 fl oz XtendiMax + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Roundup PowerMAX

90%



Soybean Harvest (10/8)

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

POST: 22 fl oz XtendiMax + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX

96%



Soybean Harvest (10/8)

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

POST: 22 fl oz XtendiMax + 48 fl oz Warrant *fb*

LPOST: 32 fl oz Liberty

97%



Soybean Harvest (10/8)

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

86%

POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant



Soybean Harvest (10/8)

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

66%

POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant

