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

BAYER

XtendFlex Soybean Herbicide Programs Brooklyn, WI 2020

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 *fb* 32 oz Liberty	86	97	96	37
	32 oz Roundup + 48 oz Warrant Ultra *fb* 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 *fb* 32 oz Liberty	87	97	98	39
	22 oz XtendiMax + 48 oz Warrant *fb* 32 oz Roundup	80	85	90	39
	22 oz XtendiMax + 48 oz Warrant *fb* 32 oz Liberty + 32 oz Roundup	81	93	96	37
	22 oz XtendiMax + 48 oz Warrant *fb* 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

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Plot pictures taken on 6/12

21 days after the PRE application

21 days after PRE (6/12)
Untreated Check

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

85%

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<u>Plot pictures taken on 7/8</u>

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

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

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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%

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15 days after POST (7/8)
PRE: 48 fl oz Warrant + 8 fl oz Mauler *fb*
POST: 22 fl oz XtendiMax + 48 fl oz Warrant

81%

15 days after POST (7/8)
PRE: 22 fl oz XtendiMax + 48 fl oz Warrant Ultra *fb*
POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant

89%

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

<u>Plot pictures taken on 7/22</u>

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

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

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29 days after POST (7/22)
PRE: 48 fl oz Warrant + 8 fl oz Mauler *fb*
POST: 22 fl oz XtendiMax + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant
80%

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29 days after POST (7/22)
PRE: 48 fl oz Warrant + 8 fl oz Mauler *fb*   **68%**
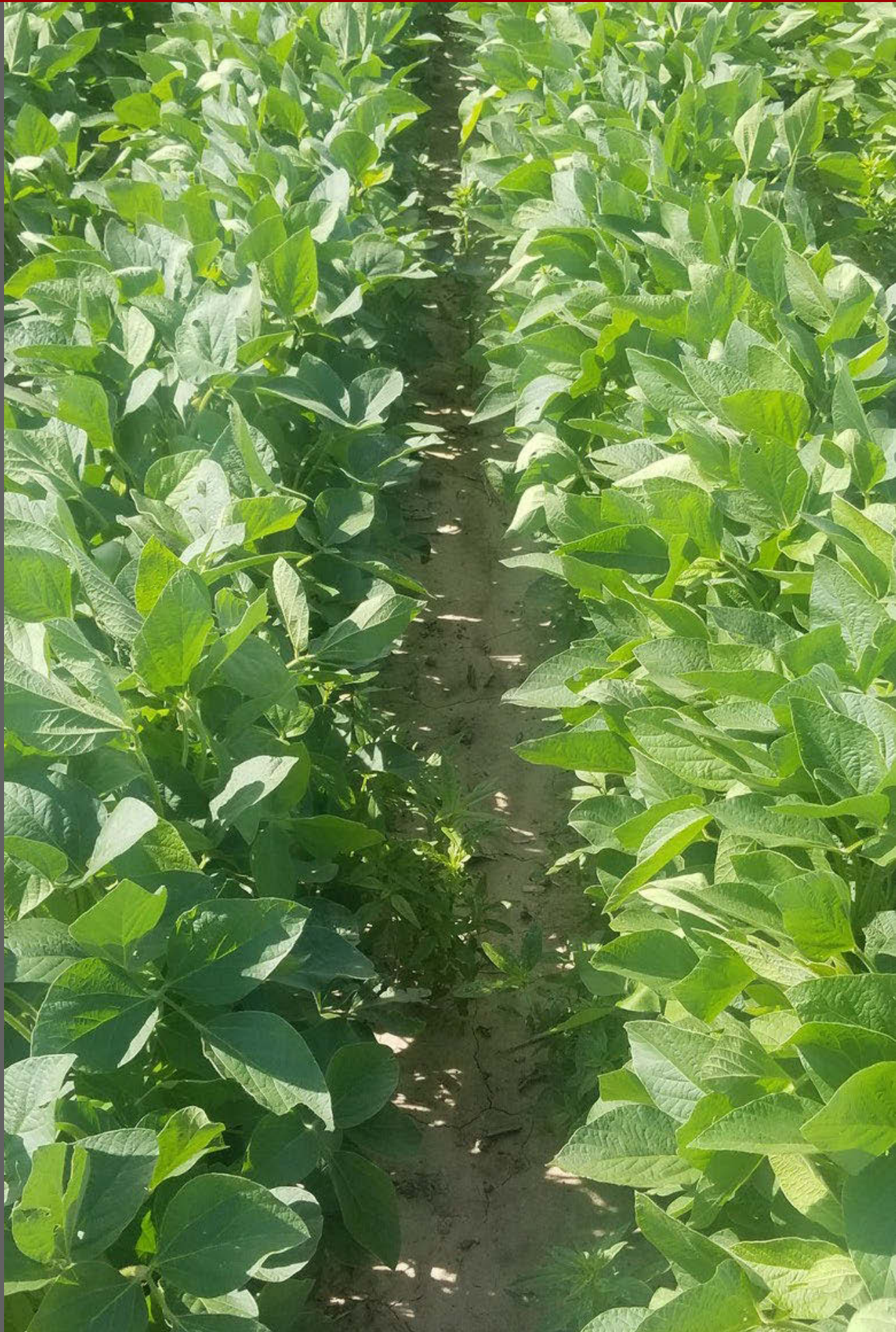**POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant**

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*
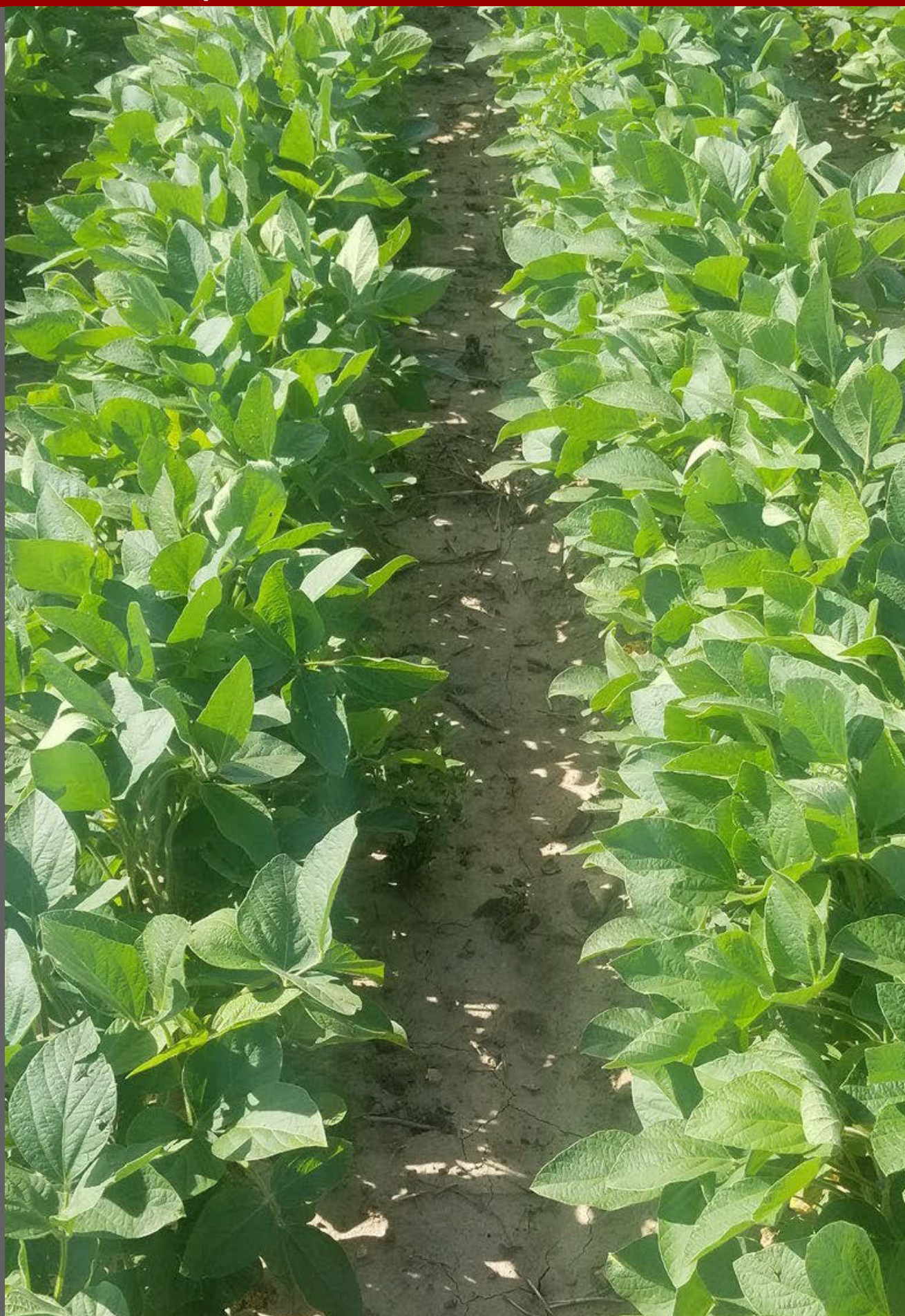**LPOST: 32 fl oz Liberty**

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

<u>Plot pictures taken on 10/8</u>
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*
POST: 32 fl oz Liberty + 48 fl oz Warrant
77%

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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*
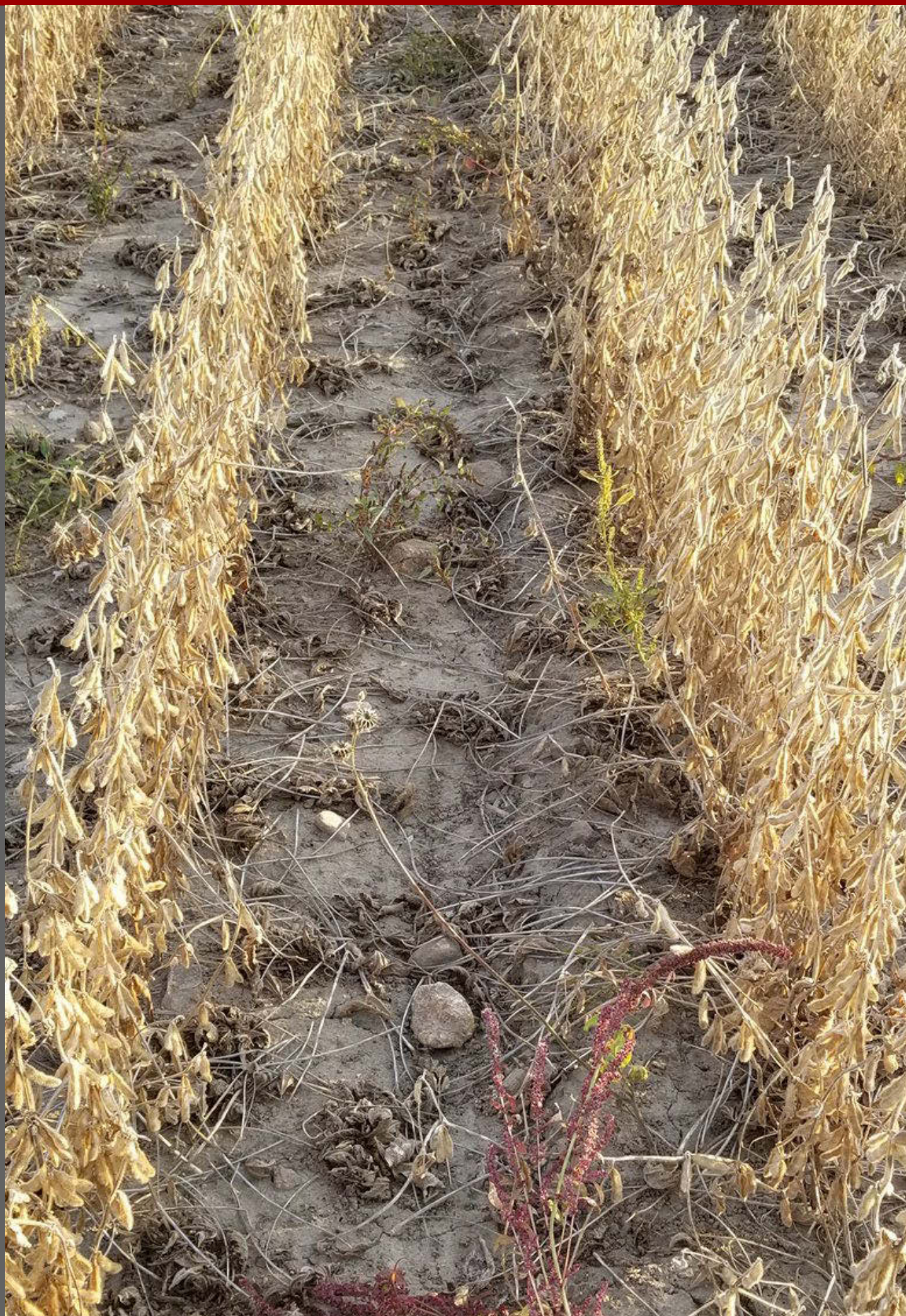**LPOST: 32 fl oz Liberty**

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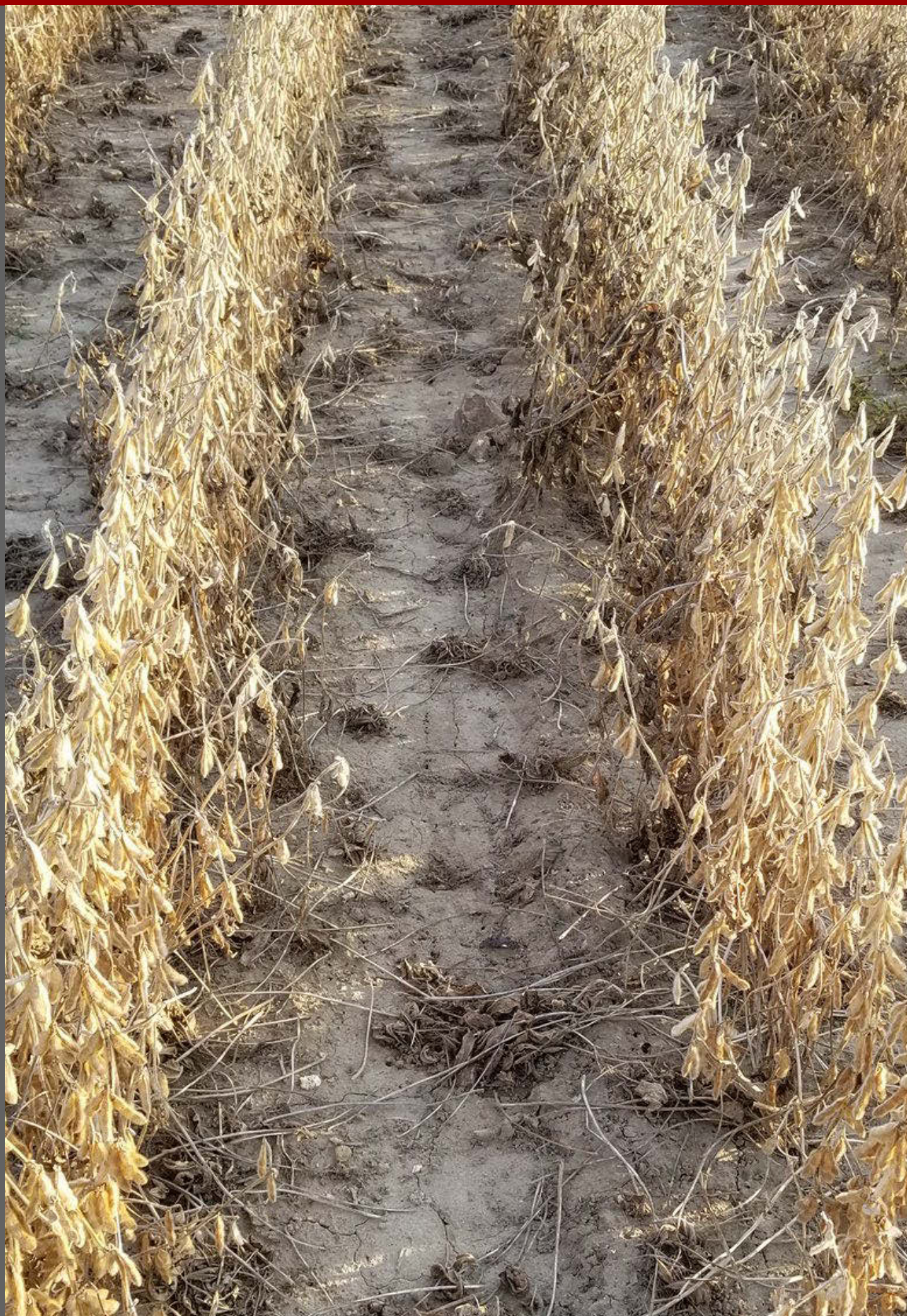POST: 32 fl oz Liberty + 32 fl oz Roundup PowerMAX + 48 fl oz Warrant

Soybean Harvest (10/8)
PRE: 48 fl oz Warrant + 8 fl oz Mauler *fb*
POST: 32 fl oz Liberty + 48 fl oz Warrant
69%

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*
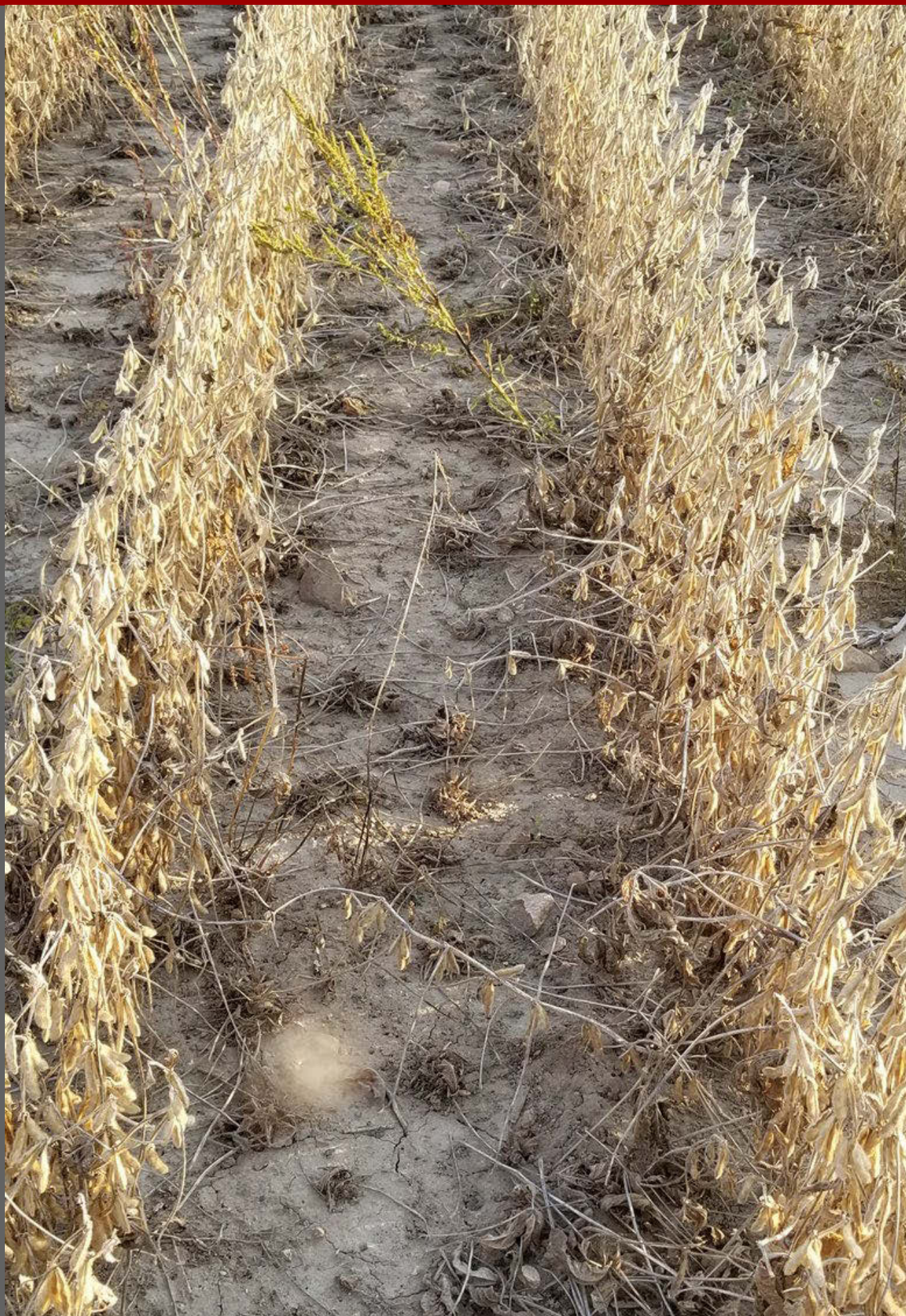**LPOST: 32 fl oz Liberty**

98%

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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

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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