

Enversa Layered Residual Comparison

Brooklyn, WI 2024

Trial Information

Trial Sponsor: Corteva

Objective: Compare the crop safety profile and waterhemp control of ***Enversa** to other group 15 herbicides on the market.

Crop: Soybean

Hybrid: O'SOY 2024EL-3

Weed species (pressure): glyphosate-resistant waterhemp

Herbicide Application(s): PRE – 5/24
POST – 6/20 (V2 soybean)

***Enversa** is a new herbicide offering from Corteva containing encapsulated acetochlor.

For the full report see trial #24-BRO-SB02 in the [2024 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

Enversa Layered Residual Comparison (Brooklyn, WI 2024)

Trt #	Herbicide (rate acre ⁻¹)	Necrosis (%)		Waterhemp (%)			Yield ^b bu acre ⁻¹
		6 DAT	13 DAT	13 DAT	27 DAT	9/18	
1	Treated Check ^c	0	0	0	0	0	66 a
Two-Pass – PRE ^c (5/24) <i>fb</i> POST (6/20)							
2	Enlist One (2 pt) + Roundup PM3 (30 oz) + AMS ^d	3.0	1.3	93	88	96	70 a
3	Enlist One (2 pt) + Roundup PM3 (30 oz) + Enversa (3 pt) + AMS ^d	2.3	1.8	92	85	92	69 a
4	Enlist One (2 pt) + Roundup PM3 (30 oz) + Warrant (3 pt) + AMS ^d	2.3	2.3	93	88	96	68 a
5	Enlist One (2 pt) + Roundup PM3 (30 oz) + Dual II Magnum (1.25 pt) + AMS ^d	5.3	1.8	90	85	95	68 a
6	Enlist One (2 pt) + Roundup PM3 (30 oz) + Zidua SC (2.5 fl oz) + AMS ^d	4.3	1.8	94	91	97	67 a
7	Enlist One (2 pt) + Liberty (32 oz) + AMS ^d	9.8	1.5	97	88	96	69 a
8	Enlist One (2 pt) + Liberty (32 oz) + Enversa (3 pt) + AMS ^d	8.8	1.5	98	87	96	69 a
9	Enlist One (2 pt) + Liberty (32 oz) + Warrant (3 pt) + AMS ^d	11.8	2.5	98	91	95	70 a
10	Enlist One (2 pt) + Liberty (32 oz) + Dual II Magnum (1.25 pt) + AMS ^d	11.8	2.0	97	89	96	70 a
11	Enlist One (2 pt) + Liberty (32 oz) + Zidua SC (2.5 fl oz) + AMS ^d	11.3	1.8	98	95	98	69 a
LSD ($\alpha=0.10$)		1.5	ns	3	4	ns	ns
p value		<.001	0.677	<.001	0.016	0.670	0.257

^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.

^cA lower rate of Sonic (2.5 oz/a) was applied PRE over the entire trial area including the treated check (treatment #1)

^dAll POST applications included AMSOL (liquid AMS) applied at 2.5% v/v.

Weed Size Day of the POST Application



Weed Size Day of the POST Application



Enversa Layered Residual Comparison Brooklyn, WI 2024

Plot pictures taken on 6/26
6 days after the POST application

The number in the upper right-hand corner is the average %
soybean injury of 4 replications

6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

3%

POST: 2 pt Enlist One + 30 oz Roundup PowerMAX3 + AMS



6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

2%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 3 pt Enversa + AMS



6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

2%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 3 pt Warrant + AMS



6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

5%

POST: 2 pt Enlist One + 30 oz RU PM3 + 1.25 pt Dual II Magnum + AMS



6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

4%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 2.5 oz Zidua SC + AMS



6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

10%

POST: 2 pt Enlist One + 32 oz Liberty + AMS



6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

9%

POST: 2 pt Enlist One + 32 oz Liberty + 3 pt Enversa + AMS



6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

12%

POST: 2 pt Enlist One + 32 oz Liberty + 3 pt Warrant + AMS



6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

12%

POST: 2 pt Enlist One + 32 oz Liberty + 1.25 pt Dual II Magnum + AMS



6 days after POST (6/26)

PRE: 2.5 oz Sonic *fb*

11%

POST: 2 pt Enlist One + 32 oz Liberty + 2.5 oz Zidua SC + AMS



Enversa Layered Residual Comparison Brooklyn, WI 2024

Plot pictures taken on 7/3
13 days after the POST application

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

13 days after POST (7/3)
PRE: 2.5 oz Sonic fb

0%



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

93%

POST: 2 pt Enlist One + 30 oz Roundup PowerMAX3 + AMS



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

92%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 3 pt Enversa + AMS



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

93%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 3 pt Warrant + AMS



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

90%

POST: 2 pt Enlist One + 30 oz RU PM3 + 1.25 pt Dual II Magnum + AMS



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

94%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 2.5 oz Zidua SC + AMS



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

97%

POST: 2 pt Enlist One + 32 oz Liberty + AMS



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

98%

POST: 2 pt Enlist One + 32 oz Liberty + 3 pt Enversa + AMS



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

98%

POST: 2 pt Enlist One + 32 oz Liberty + 3 pt Warrant + AMS



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

97%

POST: 2 pt Enlist One + 32 oz Liberty + 1.25 pt Dual II Magnum + AMS



13 days after POST (7/3)

PRE: 2.5 oz Sonic *fb*

98%

POST: 2 pt Enlist One + 32 oz Liberty + 2.5 oz Zidua SC + AMS



Enversa Layered Residual Comparison Brooklyn, WI 2024

Plot pictures taken on 7/17
27 days after the POST application

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

27 days after POST (7/17)
PRE: 2.5 oz Sonic *fb*

0%



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

88%

POST: 2 pt Enlist One + 30 oz Roundup PowerMAX3 + AMS



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

85%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 3 pt Enversa + AMS



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

88%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 3 pt Warrant + AMS



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

85%

POST: 2 pt Enlist One + 30 oz RU PM3 + 1.25 pt Dual II Magnum + AMS



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

91%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 2.5 oz Zidua SC + AMS



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

88%

POST: 2 pt Enlist One + 32 oz Liberty + AMS



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

87%

POST: 2 pt Enlist One + 32 oz Liberty + 3 pt Enversa + AMS



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

91%

POST: 2 pt Enlist One + 32 oz Liberty + 3 pt Warrant + AMS



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

89%

POST: 2 pt Enlist One + 32 oz Liberty + 1.25 pt Dual II Magnum + AMS



27 days after POST (7/17)

PRE: 2.5 oz Sonic *fb*

95%

POST: 2 pt Enlist One + 32 oz Liberty + 2.5 oz Zidua SC + AMS



Enversa Layered Residual Comparison Brooklyn, WI 2024

Plot pictures taken on 10/1
The day of soybean harvest

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



Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

96%

POST: 2 pt Enlist One + 30 oz Roundup PowerMAX3 + AMS



Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

92%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 3 pt Enversa + AMS



Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

96%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 3 pt Warrant + AMS



Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

95%

POST: 2 pt Enlist One + 30 oz RU PM3 + 1.25 pt Dual II Magnum + AMS

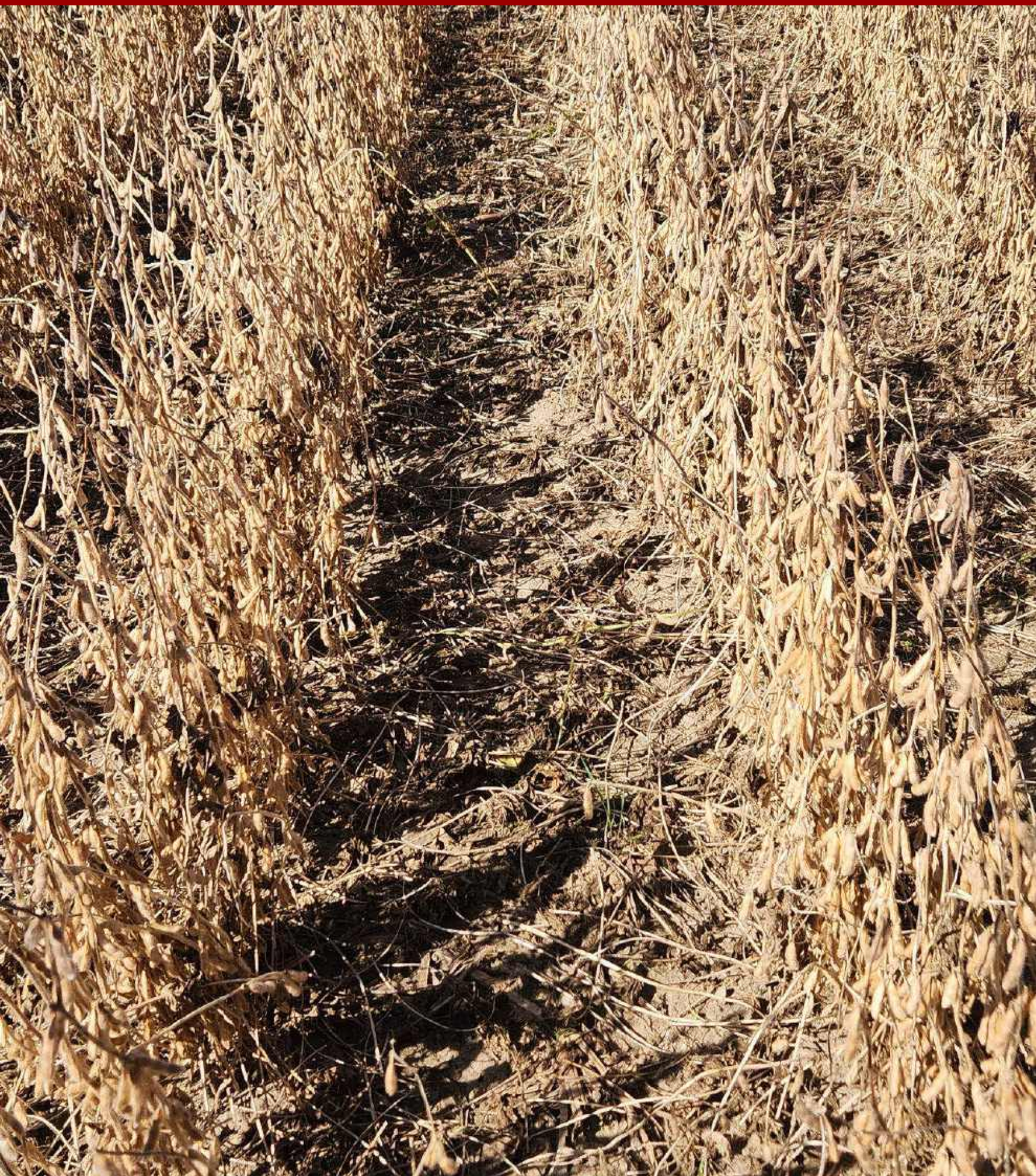


Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

97%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 2.5 oz Zidua SC + AMS



Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

96%

POST: 2 pt Enlist One + 32 oz Liberty + AMS



Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

96%

POST: 2 pt Enlist One + 32 oz Liberty + 3 pt Enversa + AMS



Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

95%

POST: 2 pt Enlist One + 32 oz Liberty + 3 pt Warrant + AMS

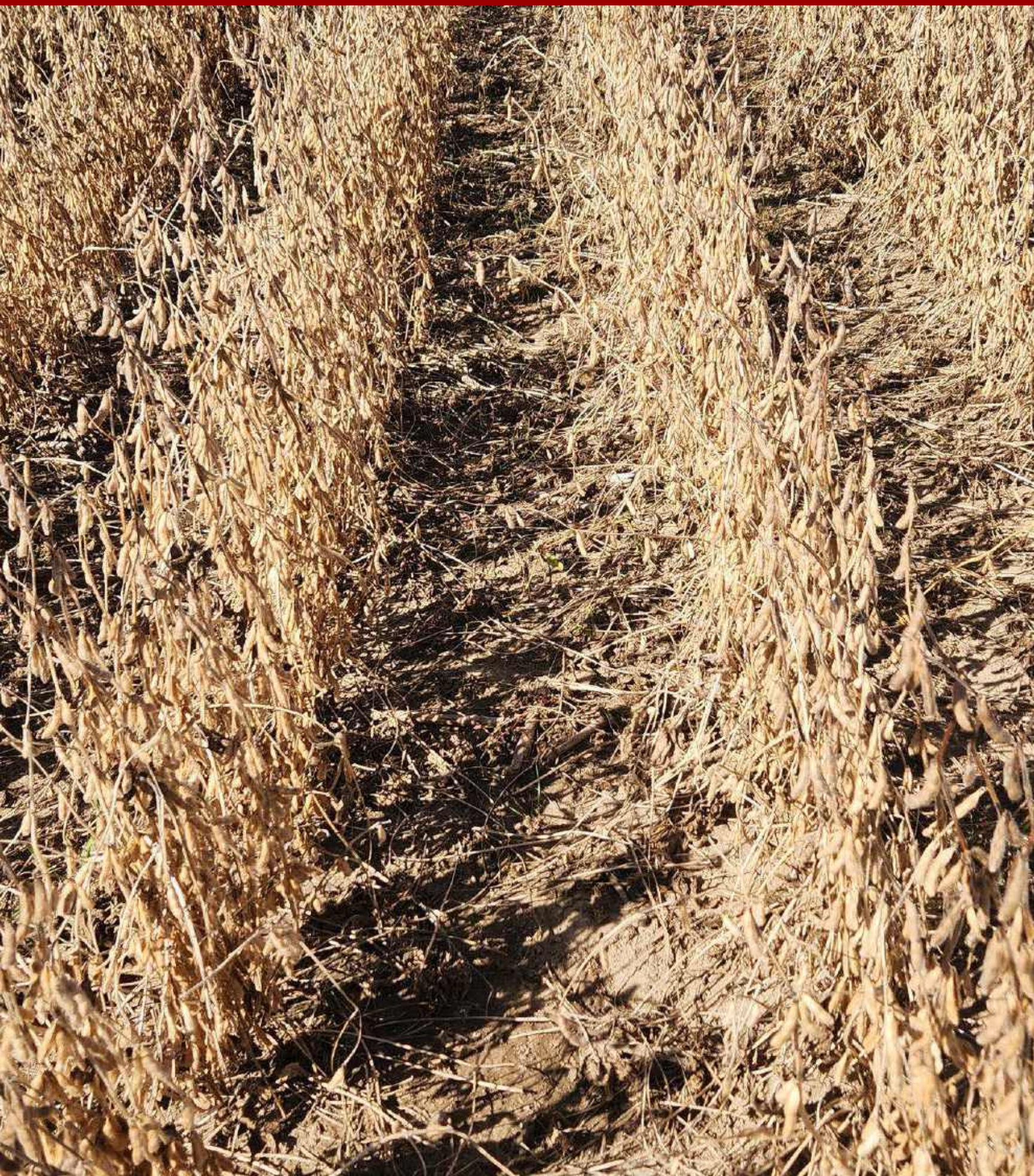


Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

96%

POST: 2 pt Enlist One + 32 oz Liberty + 1.25 pt Dual II Magnum + AMS



Soybean Harvest (10/1)

PRE: 2.5 oz Sonic *fb*

98%

POST: 2 pt Enlist One + 32 oz Liberty + 2.5 oz Zidua SC + AMS

