

# Evaluation of No-Till Soy Herbicide Programs Arlington, WI 2023

## Trial Information

Trial Sponsor(s): FMC, Helm Agro, Syngenta, Valent

Objective: Evaluate multiple 2-pass herbicide programs in a no-till Enlist soybean system

Crop: Soybean

Hybrid: P10A66E

Weed species (pressure): dandelion (moderate-high)

Herbicide Application(s): Pre-Plant – 5/10  
POST – 6/19 (V2 soybean)

For the full report see trial #23-ARL-SB04 in the [2023 Wisconsin Weed Science Research Report](#)



# Evaluation of No-Till Soybean Herbicide Programs

## Arlington, WI 2023

| Trt #                                             | Herbicide (rate acre <sup>-1</sup> )                                                                                                                                                         | Dandelion (%) |       |       |       |       | Yield <sup>b</sup><br>bu acre <sup>-1</sup> |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------|-------|-------|-------|---------------------------------------------|
|                                                   |                                                                                                                                                                                              | 5/19          | 6/1   | 6/19  | 7/6   | 10/16 |                                             |
| 1                                                 | Untreated Check                                                                                                                                                                              | 0             | 0     | 0     | 0     | 0     | 14 b                                        |
| <b>Two-Pass – Pre-Plant (5/10) fb POST (6/19)</b> |                                                                                                                                                                                              | <b>POST</b>   |       |       |       |       |                                             |
| 2                                                 | Fierce EZ (6 oz) + Roundup PM3 (24 oz) + 2,4-D LV4 (1 pt) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Roundup PM3 (30 oz) + Perpetuo (6 oz) + AMS <sup>c</sup>                       | 91            | 92    | 88    | 94    | 98    | 66 a                                        |
| 3                                                 | Fierce MTZ (1 pt) + Roundup PM3 (24 oz) + 2,4-D LV4 (1 pt) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Roundup PM3 (30 oz) + Perpetuo (6 oz) + AMS <sup>c</sup>                      | 88            | 87    | 76    | 89    | 96    | 68 a                                        |
| 4                                                 | Fierce XLT (3.75 oz) + Roundup PM3 (24 oz) + 2,4-D LV4 (1 pt) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Roundup PM3 (30 oz) + Perpetuo (6 oz) + AMS <sup>c</sup>                   | 86            | 87    | 83    | 94    | 98    | 66 a                                        |
| 5                                                 | Authority Supreme (6.5 oz) + Roundup PM3 (24 oz) + 2,4-D LV4 (1 pt) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Liberty (32 oz) + Anthem Maxx (2.5 oz) + AMS (3 lb)                  | 80            | 81    | 76    | 99    | 77    | 64 a                                        |
| 6                                                 | Authority Edge (7 oz) + Roundup PM3 (24 oz) + 2,4-D LV4 (1 pt) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Liberty (32 oz) + Anthem Maxx (3 oz) + AMS (3 lb)                         | 75            | 78    | 64    | 99    | 78    | 63 a                                        |
| 7                                                 | Reviton (1 oz) + Roundup PM3 (20 oz) + Helmet MTZ (2.1 pt) + Destiny HC (1% v/v) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Liberty (32 oz) + AMS (3 lb)                            | 99            | 71    | 43    | 97    | 73    | 59 a                                        |
| 8                                                 | Reviton (1 oz) + Roundup PM3 (20 oz) + Zone Elite (32 oz) + Destiny HC (1% v/v) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Liberty (32 oz) + AMS (3 lb)                             | 100           | 84    | 60    | 98    | 83    | 64 a                                        |
| 9                                                 | Reviton (1 oz) + Roundup PM3 (20 oz) + Helmet MTZ (2.1 pt) + 2,4-D LV4 (1 pt) + Destiny HC (1% v/v) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Liberty (32 oz) + AMS (3 lb)         | 99            | 65    | 31    | 99    | 75    | 62 a                                        |
| 10                                                | Tendovo (2.1 qt) + Roundup PM3 (24 oz) + 2,4-D LV4 (1 pt) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Roundup PM3 (26 oz) + Dual II Magnum (1.25 pt) + AMS <sup>c</sup>              | 63            | 53    | 80    | 95    | 98    | 59 a                                        |
| 11                                                | Prefix (2 pt) + Pursuit (3 oz) + Roundup PM3 (24 oz) + 2,4-D LV4 (1 pt) + AMS <sup>c</sup> <b>fb</b><br>Enlist One (2 pt) + Roundup PM3 (26 oz) + Dual II Magnum (1.5 pt) + AMS <sup>c</sup> | 89            | 89    | 79    | 92    | 94    | 61 a                                        |
| LSD ( $\alpha=0.10$ )                             |                                                                                                                                                                                              | 4             | 6     | 20    | 4     | 6     | 8                                           |
| p value                                           |                                                                                                                                                                                              | <.001         | <.001 | <.001 | <.001 | <.001 | <0.001                                      |

<sup>a</sup>Visual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

<sup>b</sup>Yield values with the same letter are not significantly different.

<sup>c</sup>AMS applied at 8.5 lb/100 gal.

# Evaluation of No-Till Soy Herbicide Programs Arlington, WI 2023

Plot pictures taken on 5/19  
9 days after the Pre-Plant application

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



9 days after Pre-Plant (5/19)

0%

Untreated Check





9 days after Pre-Plant (5/19)

Pre-Plant: 6 oz Fierce EZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS

91%





9 days after Pre-Plant (5/19)

Pre-Plant: 1 pt Fierce MTZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS

88%





**9 days after Pre-Plant (5/19)**

**Pre-Plant: 3.75 oz Fierce XLT + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS**

**86%**





9 days after Pre-Plant (5/19)

Pre-Plant: 6.5 oz Authority Supreme + 24 oz RU PM3 + 1 pt 2,4-D + AMS

80%





**9 days after Pre-Plant (5/19)**

**Pre-Plant: 7 oz Authority Edge + 24 oz RU PM3 + 1 pt 2,4-D + AMS**

**75%**





9 days after Pre-Plant (5/19)

PP: 1 oz Reviton + 20 oz RU PM3 + 2.1 pt Helmet + 1% Destiny HC + AMS

99%





9 days after Pre-Plant (5/19)

PP: 1 oz Reviton + 20 oz RU PM3 + 32 oz Zone Elite + 1% Destiny HC + AMS

100%





9 days after Pre-Plant (5/19)

PP: 1 oz Reviton + 20 oz RU PM3 + 2.1 pt Helmet MTZ + 1 pt 2,4-D + 1% Destiny HC + AMS

99%





9 days after Pre-Plant (5/19)

Pre-Plant: 2.1 qt Tendovo + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS

63%





**9 days after Pre-Plant (5/19)**

**Pre-Plant: 2 pt Prefix + 3 oz Pursuit + 24 oz RU PM3 + 1 pt 2,4-D + AMS**

**89%**





# Evaluation of No-Till Soy Herbicide Programs Arlington, WI 2023

Plot pictures taken on 6/1  
22 days after the Pre-Plant application

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







**22 days after Pre-Plant (6/1)**

**Pre-Plant: 6 oz Fierce EZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS**

**92%**





**22 days after Pre-Plant (6/1)**

**Pre-Plant: 1 pt Fierce MTZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS**

**87%**





**22 days after Pre-Plant (6/1)**

**Pre-Plant: 3.75 oz Fierce XLT + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS**

**87%**





**22 days after Pre-Plant (6/1)**

**Pre-Plant: 6.5 oz Authority Supreme + 24 oz RU PM3 + 1 pt 2,4-D + AMS**

**81%**





**22 days after Pre-Plant (6/1)**

**Pre-Plant: 7 oz Authority Edge + 24 oz RU PM3 + 1 pt 2,4-D + AMS**

**78%**





22 days after Pre-Plant (6/1)

PP: 1 oz Reviton + 20 oz RU PM3 + 2.1 pt Helmet + 1% Destiny HC + AMS

71%





22 days after Pre-Plant (6/1)

PP: 1 oz Reviton + 20 oz RU PM3 + 32 oz Zone Elite + 1% Destiny HC + AMS

84%





22 days after Pre-Plant (6/1)

PP: 1 oz Reviton + 20 oz RU PM3 + 2.1 pt Helmet MTZ + 1 pt 2,4-D + 1% Destiny HC + AMS

65%





22 days after Pre-Plant (6/1)

Pre-Plant: 2.1 qt Tendovo + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS

53%





**22 days after Pre-Plant (6/1)**

**Pre-Plant: 2 pt Prefix + 3 oz Pursuit + 24 oz RU PM3 + 1 pt 2,4-D + AMS**

**89%**





# Evaluation of No-Till Soy Herbicide Programs Arlington, WI 2023

Plot pictures taken on 6/19  
40 days after the Pre-Plant application  
The day of the POST application

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



40 days after Pre-Plant (6/19)  
Untreated Check

0%





40 days after Pre-Plant (6/19)

Pre-Plant: 6 oz Fierce EZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS

88%





40 days after Pre-Plant (6/19)

Pre-Plant: 1 pt Fierce MTZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS

76%





40 days after Pre-Plant (6/19)

Pre-Plant: 3.75 oz Fierce XLT + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS

83%





40 days after Pre-Plant (6/19)

Pre-Plant: 6.5 oz Authority Supreme + 24 oz RU PM3 + 1 pt 2,4-D + AMS

76%





**40 days after Pre-Plant (6/19)**

**Pre-Plant: 7 oz Authority Edge + 24 oz RU PM3 + 1 pt 2,4-D + AMS**

**64%**





40 days after Pre-Plant (6/19)

PP: 1 oz Reviton + 20 oz RU PM3 + 2.1 pt Helmet + 1% Destiny HC + AMS

43%





40 days after Pre-Plant (6/19)

PP: 1 oz Reviton + 20 oz RU PM3 + 32 oz Zone Elite + 1% Destiny HC + AMS

60%









40 days after Pre-Plant (6/19)

Pre-Plant: 2.1 qt Tendovo + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS

80%





40 days after Pre-Plant (6/19)

Pre-Plant: 2 pt Prefix + 3 oz Pursuit + 24 oz RU PM3 + 1 pt 2,4-D + AMS

79%





# Evaluation of No-Till Soy Herbicide Programs Arlington, WI 2023

Plot pictures taken on 7/6

57 days after the Pre-Plant application

17 days after the POST application

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



57 days after Pre-Plant (7/6)  
Untreated Check

0%





**17 days after POST (7/6)**

**Pre-Plant: 6 oz Fierce EZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS *fb***

**94%**

**POST: 2 pt Enlist One + 30 oz Roundup PM3 + 6 oz Perpetuo + AMS**





**17 days after POST (7/6)**

**Pre-Plant: 1 pt Fierce MTZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS *fb***

**89%**

**POST: 2 pt Enlist One + 30 oz Roundup PM3 + 6 oz Perpetuo + AMS**





**17 days after POST (7/6)**

**Pre-Plant: 3.75 oz Fierce XLT + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS *fb***

**94%**

**POST: 2 pt Enlist One + 30 oz Roundup PM3 + 6 oz Perpetuo + AMS**





**17 days after POST (7/6)**

**Pre-Plant: 6.5 oz Authority Supreme + 24 oz RU PM3 + 1 pt 2,4-D + AMS *fb* 99%**

**POST: 2 pt Enlist One + 32 oz Liberty + 2.5 oz Anthem Maxx + AMS**





**17 days after POST (7/6)**

**Pre-Plant: 7 oz Authority Edge + 24 oz RU PM3 + 1 pt 2,4-D + AMS *fb***

**99%**

**POST: 2 pt Enlist One + 32 oz Liberty + 3 oz Anthem Maxx + AMS**





**17 days after POST (7/6)**

**PP: 1 oz Reviton + 20 oz RU PM3 + 2.1 pt Helmet + 1% Destiny HC + AMS *fb* 97%**

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





**17 days after POST (7/6)**

**PP: 1 oz Reviton + 20 oz RU PM3 + 32 oz Zone Elite + 1% Destiny HC + AMS 98%**

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





**17 days after POST (7/6)**

**PP: 1 oz Reviton + 20 oz RU PM3 + 2.1 pt Helmet MTZ + 1 pt 2,4-D + 1% Destiny HC + AMS 99%**

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





**17 days after POST (7/6)**

**Pre-Plant: 2.1 qt Tendovo + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS fb**

**95%**

**POST: 2 pt Enlist One + 26 oz RU PM3 + 1.25 pt Dual II Magnum + AMS**





**17 days after POST (7/6)**

**Pre-Plant: 2 pt Prefix + 3 oz Pursuit + 24 oz RU PM3 + 1 pt 2,4-D + AMS *fb* 92%**

**POST: 2 pt Enlist One + 26 oz RU PM3 + 1.5 pt Dual II Magnum + AMS**





# Evaluation of No-Till Soy Herbicide Programs Arlington, WI 2023

Plot pictures taken on 10/16  
1 week before soybean harvest

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







## Soybean Harvest (10/16)

Pre-Plant: 6 oz Fierce EZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS *fb*

98%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 6 oz Perpetuo + AMS





**Soybean Harvest (10/16)**

**Pre-Plant: 1 pt Fierce MTZ + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS *fb***

**96%**

**POST: 2 pt Enlist One + 30 oz Roundup PM3 + 6 oz Perpetuo + AMS**





## Soybean Harvest (10/16)

Pre-Plant: 3.75 oz Fierce XLT + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS *fb*

98%

POST: 2 pt Enlist One + 30 oz Roundup PM3 + 6 oz Perpetuo + AMS





## Soybean Harvest (10/16)

Pre-Plant: 6.5 oz Authority Supreme + 24 oz RU PM3 + 1 pt 2,4-D + AMS *fb* 77%

POST: 2 pt Enlist One + 32 oz Liberty + 2.5 oz Anthem Maxx + AMS





**Soybean Harvest (10/16)**

**Pre-Plant: 7 oz Authority Edge + 24 oz RU PM3 + 1 pt 2,4-D + AMS *fb***

**78%**

**POST: 2 pt Enlist One + 32 oz Liberty + 3 oz Anthem Maxx + AMS**





## Soybean Harvest (10/16)

PP: 1 oz Reviton + 20 oz RU PM3 + 2.1 pt Helmet + 1% Destiny HC + AMS *fb* 73%

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





## Soybean Harvest (10/16)

PP: 1 oz Reviton + 20 oz RU PM3 + 32 oz Zone Elite + 1% Destiny HC + AMS 83%

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





## Soybean Harvest (10/16)

PP: 1 oz Reviton + 20 oz RU PM3 + 2.1 pt Helmet MTZ + 1 pt 2,4-D + 1% Destiny HC + AMS 75%

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





**Soybean Harvest (10/16)**

**Pre-Plant: 2.1 qt Tendovo + 24 oz Roundup PM3 + 1 pt 2,4-D + AMS *fb***

**98%**

**POST: 2 pt Enlist One + 26 oz RU PM3 + 1.25 pt Dual II Magnum + AMS**





## Soybean Harvest (10/16)

Pre-Plant: 2 pt Prefix + 3 oz Pursuit + 24 oz RU PM3 + 1 pt 2,4-D + AMS *fb* 94%

POST: 2 pt Enlist One + 26 oz RU PM3 + 1.5 pt Dual II Magnum + AMS

