

Impact of AMS Rate with Liberty ULTRA Arlington, WI 2025

Trial Information

Trial Sponsor(s): BASF

Objective: Demonstrate the importance of AMS when applying with Liberty ULTRA

Crop: Soybean

Variety: Xitavo XO2206E

Weed species (pressure): common lambsquarters (high-very high)
common ragweed (high-very high)

Herbicide Application(s): POST – 6/26 (V4 soybean)

For the full report see trial #25-ARL-SB06 in the [2025 Wisconsin Weed Science Research Report](#)

***Liberty ULTRA** is a new formulation of glufosinate (Liberty 280 SL) powered by Glu-L™ Technology offered by BASF. Technical grade glufosinate with no surfactant package (BAS 100002H) was included in the trial for comparison.



BASF
We create chemistry

Impact of AMS Rate with Liberty ULTRA Arlington, WI 2025

Trt #	Herbicide (rate acre ⁻¹)	Lambsquarters (%)		
		6 DAT	15 DAT	28 DAT
1	Untreated Check	0	0	0
One-Pass – POST (6/26)				
2	Liberty ULTRA (19 fl oz) ^b	78 d	66 c	59 c
3	Liberty ULTRA (19 fl oz) + AMS (0.75 lb)	88 c	79 b	70 b
4	Liberty ULTRA (19 fl oz) + AMS (1.5 lb)	92 b	87 a	76 ab
5	Liberty ULTRA (19 fl oz) + AMS (3 lb)	95 a	91 a	81 a
6	Liberty ULTRA (19 fl oz) + Request (0.5% v/v)	80 d	72 bc	60 c
7	Liberty ULTRA (19 fl oz) + Verimax AMS (0.5% v/v)	80 d	74 b	63 c
LSD ($\alpha=0.10$)		4	6	7
p value		<0.001	<0.001	<0.001

^aVisual control from 70-100% is illustrated on a color scale with green representing greater weed control values. Weed control values with the same letter are not significantly different at $\alpha = 0.10$.

^bA slightly reduced rate of Liberty ULTRA was used in order to achieve better treatment separation.

Impact of AMS Rate with Liberty ULTRA Arlington, WI 2025

Plot pictures taken on 7/2
6 days after the POST application

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

6 days after POST (7/2)
Untreated Check

0%



6 days after POST (7/2)
POST: 19 fl oz Liberty ULTRA

78%



6 days after POST (7/2)
POST: 19 fl oz Liberty ULTRA + 0.75 lb AMS

88%



6 days after POST (7/2)
POST: 19 fl oz Liberty ULTRA + 1.5 lb AMS

92%



6 days after POST (7/2)
POST: 19 fl oz Liberty ULTRA + 3 lb AMS

95%



6 days after POST (7/2)
POST: 19 fl oz Liberty ULTRA + 0.5% v/v Request

80%



6 days after POST (7/2)

POST: 19 fl oz Liberty ULTRA + 0.5% v/v Verimax AMS

80%



Impact of AMS Rate with Liberty ULTRA

Common Lambsquarters control 6 days after application

78%

80%

88%

95%

Liberty ULTRA @ 19 oz

Liberty ULTRA @ 19 oz
Verimax AMS @ 0.5% v/v

Liberty ULTRA @ 19 oz
AMS @ 0.75 lb

Liberty ULTRA @ 19 oz
AMS @ 3 lb



Impact of AMS Rate with Liberty ULTRA Arlington, WI 2025

Plot pictures taken on 7/11
15 days after the POST application

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

15 days after POST (7/11)
Untreated Check

0%



15 days after POST (7/11)
POST: 19 fl oz Liberty ULTRA

66%



15 days after POST (7/11)
POST: 19 fl oz Liberty ULTRA + 0.75 lb AMS

79%



15 days after POST (7/11)
POST: 19 fl oz Liberty ULTRA + 1.5 lb AMS

87%



15 days after POST (7/11)
POST: 19 fl oz Liberty ULTRA + 3 lb AMS

91%



15 days after POST (7/11)
POST: 19 fl oz Liberty ULTRA + 0.5% v/v Request

72%



15 days after POST (7/11)

POST: 19 fl oz Liberty ULTRA + 0.5% v/v Verimax AMS

74%



Impact of AMS Rate with Liberty ULTRA

Common Lambsquarters control 15 days after application



Liberty ULTRA @ 19 oz



Liberty ULTRA @ 19 oz
Verimax AMS @ 0.5% v/v



Liberty ULTRA @ 19 oz
AMS @ 0.75 lb



Liberty ULTRA @ 19 oz
AMS @ 3 lb

Impact of AMS Rate with Liberty ULTRA Arlington, WI 2025

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

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

22 days after POST (7/17)

0%

Untreated Check



22 days after POST (7/17)
POST: 19 fl oz Liberty ULTRA

59%



22 days after POST (7/17)
POST: 19 fl oz Liberty ULTRA + 0.75 lb AMS

70%



22 days after POST (7/17)
POST: 19 fl oz Liberty ULTRA + 1.5 lb AMS

76%



22 days after POST (7/17)
POST: 19 fl oz Liberty ULTRA + 3 lb AMS

81%



22 days after POST (7/17)
POST: 19 fl oz Liberty ULTRA + 0.5% v/v Request

60%



22 days after POST (7/17)

POST: 19 fl oz Liberty ULTRA + 0.5% v/v Verimax AMS

63%

