

MON 301688 Residual Weed Control and Crop Safety (Arlington, WI 2021)

Trial Information

Trial Sponsor(s): Bayer

Objective: Evaluate weed control and crop safety of MON301668* vs key competitor herbicides

Crop: XtendFlex Soybean

Variety: AG20XF1

Weed species (pressure): Common ragweed (high-very high)
Common lambsquarters(moderate)
Giant foxtail (high)

Herbicide Application(s): PRE – 5/17

MON301668 is an experimental formulation of encapsulated acetochlor similar to Warrant herbicide

For the full report see trial #21-ARL-SB03 in the [2021 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON



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Trt # Herbicide (rate acre ⁻¹)	AMBEL (%)		CHEAL (%)		SETFA (%)	
	23 DAT	36 DAT	23 DAT	36 DAT	23 DAT	36 DAT
1 Untreated Check	0	0	0	0	0	0
One-Pass – PRE (5/12)						
2 Warrant (48 fl oz) + XtendiMax (22 fl oz)*	98	96	93	93	99	100
7 Warrant (48 fl oz) + Mauler (8 fl oz)	89	80	92	92	94	91
12 Warrant (48 fl oz) + Mauler (8 fl oz) + XtendiMax (22 fl oz)*	98	96	95	92	100	98
3 MON 301668 (30 fl oz) + XtendiMax (22 fl oz)*	100	96	98	97	100	98
8 MON 301668 (30 fl oz) + Mauler (8 fl oz)	88	81	97	93	99	95
13 MON 301668 (30 fl oz) + Mauler (8 fl oz) + XtendiMax (22 fl oz)*	100	99	97	94	100	98
4 Zidua (2 oz) + XtendiMax (22 fl oz)*	100	99	95	96	100	99
9 Zidua (2 oz) + Mauler (8 fl oz)	84	65	94	93	96	93
14 Zidua (2 oz) + Mauler (8 fl oz) + XtendiMax (22 fl oz)*	100	97	96	94	100	99
5 Outlook (14 fl oz) + XtendiMax (22 fl oz)*	99	98	97	97	100	98
10 Outlook (14 fl oz) + Mauler (8 fl oz)	86	72	97	90	96	93
15 Outlook (14 fl oz) + Mauler (8 fl oz) + XtendiMax (22 fl oz)*	99	98	97	95	99	98
6 Dual II Magnum (1 pt) + XtendiMax (22 fl oz)*	99	98	93	93	99	99
11 Dual II Magnum (1 pt) + Mauler (8 fl oz)	84	59	93	89	96	93
16 Dual II Magnum (1 pt) + Mauler (8 fl oz) + XtendiMax (22 fl oz)*	99	98	98	95	100	97
LSD ($\alpha=0.10$)	4	18	2	3	ns	ns
p value	<0.001	<0.001	<0.001	<0.001	0.175	0.128

^aVisual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

^bAMBEL, common ragweed; CHEAL, common lambsquarters; SETFA, giant foxtail.

*All treatments with XtendiMax included 20 fl oz/a VaporGrip Xtra, a volatility reducing agent.

MON 301688 Residual Weed Control and Crop Safety (Arlington, WI 2021)

Plot pictures taken on 6/9
23 days after the PRE application

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

23 days after PRE (6/9)
Untreated Check

0%



23 days after PRE (6/9)

PRE: 48 fl oz Warrant + 22 fl oz XtendiMax

98%



23 days after PRE (6/9)

PRE: 48 fl oz Warrant + 8 fl oz Mauler

89%



23 days after PRE (6/9)

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

98%



23 days after PRE (6/9)

PRE: 30 fl oz MON 301668 + 22 fl oz XtendiMax

100%



23 days after PRE (6/9)
PRE: 30 fl oz MON 301668 + 8 fl oz Mauler

88%



23 days after PRE (6/9)

PRE: 30 fl oz MON 301668 + 8 fl oz Mauler + 22 fl oz XtendiMax

100%



23 days after PRE (6/9)

PRE: 2 oz Zidua + 22 fl oz XtendiMax

100%



23 days after PRE (6/9)
PRE: 2 oz Zidua + 8 fl oz Mauler

84%



23 days after PRE (6/9)

PRE: 2 oz Zidua + 8 fl oz Mauler + 22 fl oz XtendiMax

100%



23 days after PRE (6/9)
PRE: 14 fl oz Outlook + 22 fl oz XtendiMax

99%



23 days after PRE (6/9)

PRE: 14 fl oz Outlook + 8 fl oz Mauler

86%



23 days after PRE (6/9)

PRE: 14 fl oz Outlook + 8 fl oz Mauler + 22 fl oz XtendiMax

99%



23 days after PRE (6/9)

PRE: 1 pt Dual II Magnum + 22 fl oz XtendiMax

99%



23 days after PRE (6/9)
PRE: 1 pt Dual II Magnum + 8 fl oz Mauler

84%



23 days after PRE (6/9)

PRE: 1 pt Dual II Magnum + 8 fl oz Mauler + 22 fl oz XtendiMax

99%



MON 301688 Residual Weed Control and Crop Safety (Arlington, WI 2021)

Plot pictures taken on 6/22
36 days after the PRE application

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

36 days after PRE (6/22)
Untreated Check

0%



36 days after PRE (6/22)

PRE: 48 fl oz Warrant + 22 fl oz XtendiMax

96%



36 days after PRE (6/22)

PRE: 48 fl oz Warrant + 8 fl oz Mauler

80%



36 days after PRE (6/22)

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

96%



36 days after PRE (6/22)

PRE: 30 fl oz MON 301668 + 22 fl oz XtendiMax

96%



36 days after PRE (6/22)

PRE: 30 fl oz MON 301668 + 8 fl oz Mauler

81%



36 days after PRE (6/22)

PRE: 30 fl oz MON 301668 + 8 fl oz Mauler + 22 fl oz XtendiMax

99%



36 days after PRE (6/22)
PRE: 2 oz Zidua + 22 fl oz XtendiMax

99%



36 days after PRE (6/22)
PRE: 2 oz Zidua + 8 fl oz Mauler

65%



36 days after PRE (6/22)

PRE: 2 oz Zidua + 8 fl oz Mauler + 22 fl oz XtendiMax

97%



36 days after PRE (6/22)
PRE: 14 fl oz Outlook + 22 fl oz XtendiMax

98%



36 days after PRE (6/22)
PRE: 14 fl oz Outlook + 8 fl oz Mauler

72%



36 days after PRE (6/22)

PRE: 14 fl oz Outlook + 8 fl oz Mauler + 22 fl oz XtendiMax

98%



36 days after PRE (6/22)

PRE: 1 pt Dual II Magnum + 22 fl oz XtendiMax

98%



36 days after PRE (6/22)
PRE: 1 pt Dual II Magnum + 8 fl oz Mauler

59%



36 days after PRE (6/22)

PRE: 1 pt Dual II Magnum + 8 fl oz Mauler + 22 fl oz XtendiMax

98%

