

Spray Early w/Confidence Program in Xtend Soy Brooklyn, WI 2019

Trial Information

Trial Sponsor: Bayer

Objective: Evaluate a systems approach of controlling weeds within the 45-day application window of dicamba

Crop: Soybean

Variety: Asgrow AG24X7

Weed species (pressure): Glyphosate-resistant waterhemp (very high)

Herbicide Application(s): PRE – 6/4

POST – 6/27 (V1 soybean)

LPOST – 7/9 (V4/V5 soybean)

For the full report see the [2019 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON



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Herbicide Treatment*	APP Timing	Waterhemp Control %			
		6/27	7/11	7/24	8/7
48 fl oz Warrant + 8 fl oz Mauler 22 fl oz XtendiMax + 32 fl oz Roundup PM + 50 fl oz Warrant Ultra	PRE EPOST	93	100	98	86
48 fl oz Warrant + 8 fl oz Mauler 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant	PRE EPOST	93	90	76	29
3 oz Fierce + 8 fl oz Mauler 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant	PRE EPOST	97	99	96	75
2 oz Valor SX 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant	PRE EPOST	78	90	78	41
2 oz Valor SX + 22 fl oz XtendiMax 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant	PRE EPOST	97	96	81	49
50 fl oz Warrant Ultra 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant	PRE EPOST	93	96	88	63
48 fl oz Warrant 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant	PRE EPOST	53	64	58	10
48 fl oz Warrant + 22 fl oz XtendiMax 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant	PRE EPOST	95	92	84	48
48 fl oz Warrant + 8 fl oz Mauler 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant + 8 fl oz Select Max	PRE EPOST	94	97	90	61
48 fl oz Warrant + 8 fl oz Mauler 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant + 10 fl oz Cobra	PRE EPOST	91	100	97	73
5 fl oz Verdict 12.8 fl oz Engenia + 32 fl oz Roundup PM + 16 fl oz Outlook	PRE EPOST	86	94	83	41
6 fl oz Zidua PRO 12.8 fl oz Engenia + 32 fl oz Roundup PM + 16 fl oz Outlook	PRE EPOST	97	98	94	74
22 fl oz XtendiMax + 32 fl oz Roundup PM 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant	EPOST LPOST	0	96	91	73

*All POST treatments included the appropriate adjuvants

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Soybean emergence was very poor due to heavy rains after planting. Slow canopy closure created an ideal environment for waterhemp emergence and growth. Waterhemp density was also very high ($50-150/\text{ft}^2$). This can partially explain why very few of the herbicide programs evaluated provided adequate season long waterhemp control. It would be reasonable to expect higher levels of waterhemp control with these herbicide programs under more ideal field conditions.

POST Dicamba Control Failure

Picture taken on 8/7 – 29 days after LPOST application



Spray Early w/Confidence Program in Xtend Soy Brooklyn, WI 2019

Plot pictures taken on 6/27
23 days after the PRE application

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

23 days after PRE (6/27)

Untreated Check

0%



23 days after PRE (6/27)

PRE: 48 fl oz Warrant + 8 fl oz Mauler

93%



23 days after PRE (6/27)
PRE: 3 oz Fierce + 8 fl oz Mauler

97%



23 days after PRE (6/27)

PRE: 2 oz Valor SX

78%



23 days after PRE (6/27)

PRE: 2 oz Valor SX + 22 fl oz XtendiMax

97%



23 days after PRE (6/27)
PRE: 50 fl oz Warrant Ultra

93%



23 days after PRE (6/27)

PRE: 48 fl oz Warrant

53%



23 days after PRE (6/27)

PRE: 48 fl oz Warrant + 22 fl oz XtendiMax

95%



23 days after PRE (6/27)

PRE: 5 fl oz Verdict

86%



23 days after PRE (6/27)

PRE: 6 fl oz Zidua PRO

97%



Spray Early w/Confidence Program in Xtend Soy Brooklyn, WI 2019

Plot pictures taken on 7/24

27 days after the EPOST application
15 days after the LPOST application

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

27 days after EPOST (7/24)

Untreated Check

0%



27 days after EPOST (7/24)

PRE: 48 fl oz Warrant + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 50 fl oz Warrant Ultra

98%



27 days after EPOST (7/24)

PRE: 48 fl oz Warrant + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

76%



27 days after EPOST (7/24)

PRE: 3 oz Fierce + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

96%



27 days after EPOST (7/24)

PRE: 2 oz Valor SX fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

78%



27 days after EPOST (7/24)

PRE: 2 oz Valor SX + 22 fl oz XtendiMax *fb*

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

81%



27 days after EPOST (7/24)

PRE: 50 fl oz Warrant Ultra *fb*

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

88%



27 days after EPOST (7/24)

PRE: 48 fl oz Warrant *fb*

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

58%



27 days after EPOST (7/24)

PRE: 48 fl oz Warrant + 22 fl oz XtendiMax *fb*

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

84%



27 days after EPOST (7/24)

PRE: 48 fl oz Warrant + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax+32 fl oz Roundup PM+48 fl oz Warrant+8 fl oz Select Max

90%



27 days after EPOST (7/24)

PRE: 48 fl oz Warrant + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant + 10 fl oz Cobra

97%



27 days after EPOST (7/24)

PRE: 5 fl oz Verdict *fb*

EPOST: 12.8 fl oz Engenia + 32 fl oz Roundup PM + 16 fl oz Outlook

83%



27 days after EPOST (7/24)

PRE: 6 fl oz Zidua PRO fb

EPOST: 12.8 fl oz Engenia + 32 fl oz Roundup PM + 16 fl oz Outlook

94%



27 days after EPOST (7/24)

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM

91%

LPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant



Spray Early w/Confidence Program in Xtend Soy Brooklyn, WI 2019

Plot pictures taken on 8/7

41 days after the EPOST application
29 days after the LPOST application

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

41 days after EPOST (8/7)

Untreated Check

0%



41 days after EPOST (8/7)

PRE: 48 fl oz Warrant + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 50 fl oz Warrant Ultra

86%



41 days after EPOST (8/7)

PRE: 48 fl oz Warrant + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

29%



41 days after EPOST (8/7)

PRE: 3 oz Fierce + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

75%



41 days after EPOST (8/7)

PRE: 2 oz Valor SX fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

41%



41 days after EPOST (8/7)

PRE: 2 oz Valor SX + 22 fl oz XtendiMax fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

49%



41 days after EPOST (8/7)

PRE: 50 fl oz Warrant Ultra *fb*

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

63%



41 days after EPOST (8/7)

PRE: 48 fl oz Warrant *fb*

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

10%



41 days after EPOST (8/7)

PRE: 48 fl oz Warrant + 22 fl oz XtendiMax *fb*

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

48%



41 days after EPOST (8/7)

PRE: 48 fl oz Warrant + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax+32 fl oz Roundup PM+48 fl oz Warrant+8 fl oz Select Max

61%



41 days after EPOST (8/7)

PRE: 48 fl oz Warrant + 8 fl oz Mauler fb

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant + 10 fl oz Cobra

73%



41 days after EPOST (8/7)

PRE: 5 fl oz Verdict fb

EPOST: 12.8 fl oz Engenia + 32 fl oz Roundup PM + 16 fl oz Outlook

41%



41 days after EPOST (8/7)

PRE: 6 fl oz Zidua PRO fb

EPOST: 12.8 fl oz Engenia + 32 fl oz Roundup PM + 16 fl oz Outlook

74%



41 days after EPOST (8/7)

EPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM

LPOST: 22 fl oz XtendiMax + 32 fl oz Roundup PM + 48 fl oz Warrant

73%

