

Metribuzin in Early Planted Soybean Brooklyn, WI 2024

Trial Information

Trial Sponsor(s): United Soybean Board

Objective: Evaluate different metribuzin rates in comprehensive herbicide programs to maximize PRE waterhemp control and minimize crop injury in early- and late-planted soybeans

Crop: Enlist Soybean

Variety: NK22-C4E3

Weed species (pressure): glyphosate-R waterhemp (high)

Herbicide Application(s):	Early Planting Date	Late Planting Date
	PRE – 4/24	PRE – 5/23
	POST – 6/20 (V6/R1)	POST #1 – 6/27 (V3)
		POST #2 – 7/10 (R1/R2)

For the full report see trial #24-BRO-USB01 in the [2024 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

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Plant Date	POST App Date	Trt # Herbicide (rate acre ⁻¹)	Waterhemp Density ^a (plants m ⁻²)			Yield ^b bu acre ⁻¹
			14 DAE	28 DAE	@POST	
Early	-	8 Untreated Check	53.0	69.0	76.5	47 d
Late	-	16 Untreated Check	29.0	35.5	48.0	37 e
Two-Pass – PRE (5/23) fb POST^c						
Early	6/20	1 Fierce EZ (6 fl oz)	0.0	4.0	10.5	74 ab
		2 Fierce EZ (6 fl oz) + Metricor DF (4 oz)	0.5	3.0	8.0	76 a
		3 Fierce EZ (6 fl oz) + Metricor DF (8 oz)	2.0	8.5	9.0	77 a
		4 Fierce EZ (6 fl oz) + Metricor DF (12 oz)	0.5	6.0	7.0	77 a
		5 Fierce EZ (6 fl oz) + Metricor DF (16 oz)	1.0	2.5	10.0	75 a
		6 Spartan (10 fl oz)	0.5	18.0	26.0	75 a
		7 Preview 2.1SC (23 fl oz)	3.0	24.0	44.0	76 a
	Average (trts 2-7)			1.1	9.4	16.4
Late	7/10	9 Fierce EZ (6 fl oz)	0.0	0.5	2.5	63 c
		10 Fierce EZ (6 fl oz) + Metricor DF (4 oz)	0.0	0.5	2.0	66 bc
		11 Fierce EZ (6 fl oz) + Metricor DF (8 oz)	0.0	1.5	3.5	62 c
		12 Fierce EZ (6 fl oz) + Metricor DF (12 oz)	0.0	2.0	5.5	66 bc
		13 Fierce EZ (6 fl oz) + Metricor DF (16 oz)	0.0	0.0	4.5	65 bc
	6/27	14 Spartan (10 fl oz)	4.5	-	17.0	67 bc
	7/10	15 Preview 2.1SC (23 fl oz)	4.0	19.5	24.5	66 bc
	Average (trts 9-15)			1.2	3.4	8.5
LSD ($\alpha=0.10$)			9.7	15.7	22.2	5
p value			<.001	<.001	<.001	<.001

^aWaterhemp density collected from two 0.25 m² quadrats 14 and 28 days after emergence (DAE) of each respective planting date and at the time of the POST herbicide application.

^bYield values with the same letter are not significantly different.

^cPOST application of Liberty (32 oz) + Enlist One (2 pt) + Dual II Magnum (1.5 pt) + AMS (3 lb) was made when average waterhemp height reached 4 inches.

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Plot pictures taken on 6/20

57 days after the PRE application (early plant date)

28 days after the PRE application (late plant date)

The day of the POST application (trts 1-7)

57 days after PRE (6/20)
Untreated Check

Trt 8
Early Planting



57 days after PRE (6/20)
PRE: 6 oz Fierce EZ

Trt 1
Early Planting



57 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 4 oz Metricor DF

Trt 2

Early Planting



57 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 8 oz Metricor DF

Trt 3

Early Planting



57 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 12 oz Metricor DF

Trt 4

Early Planting



57 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 16 oz Metricor DF

Trt 5

Early Planting



57 days after PRE (6/20)
PRE: 10 oz Spartan

Trt 6
Early Planting



57 days after PRE (6/20)
PRE: 23 oz Preview 2.1SC

Trt 7
Early Planting



28 days after PRE (6/20)
Untreated Check

Trt 16
Late Planting



28 days after PRE (6/20)
PRE: 6 oz Fierce EZ

Trt 9
Late Planting



28 days after PRE (6/20)
PRE: 6 oz Fierce EZ + 4 oz Metricor DF

Trt 10
Late Planting



28 days after PRE (6/20)
PRE: 6 oz Fierce EZ + 8 oz Metricor DF

Trt 11
Late Planting



28 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 12 oz Metricor DF

Trt 12

Late Planting



28 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 16 oz Metricor DF

Trt 13

Late Planting



28 days after PRE (6/20)
PRE: 10 oz Spartan

Trt 14
Late Planting



28 days after PRE (6/20)
PRE: 23 oz Preview 2.1SC

Trt 15
Late Planting



Metribuzin in Early Planted Soybean Brooklyn, WI 2024

Plot pictures taken on 7/10

77 days after the PRE application (early plant date)

48 days after the PRE application (late plant date)

20 days after the POST application (trts 1-7)

13 days after the POST application (trts 14)

The day of the POST application (trts 9-13, 15)

77 days after PRE (7/10)
Untreated Check

Trt 8
Early Planting



20 days after POST (7/10)

PRE: 6 oz Fierce EZ *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS

Trt 1

Early Planting



20 days after POST (7/10)

PRE: 6 oz Fierce EZ + 4 oz Metricor DF *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS

Trt 2

Early Planting



20 days after POST (7/10)

PRE: 6 oz Fierce EZ + 8 oz Metricor DF *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS

Trt 3

Early Planting



20 days after POST (7/10)

PRE: 6 oz Fierce EZ + 12 oz Metricor DF *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS

Trt 4

Early Planting



20 days after POST (7/10)

PRE: 6 oz Fierce EZ + 16 oz Metricor DF *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS

Trt 5

Early Planting



20 days after POST (7/10)

PRE: 10 oz Spartan *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS

Trt 6

Early Planting



20 days after POST (7/10)

PRE: 23 oz Preview 2.1SC *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS

Trt 7

Early Planting



48 days after PRE (7/10)
Untreated Check

Trt 16
Late Planting



48 days after PRE (7/10)
PRE: 6 oz Fierce EZ

Trt 9
Late Planting



48 days after PRE (7/10)
PRE: 6 oz Fierce EZ + 4 oz Metricor DF

Trt 10
Late Planting



48 days after PRE (7/10)
PRE: 6 oz Fierce EZ + 8 oz Metricor DF

Trt 11
Late Planting



48 days after PRE (7/10)

PRE: 6 oz Fierce EZ + 12 oz Metricor DF

Trt 12

Late Planting



48 days after PRE (7/10)

PRE: 6 oz Fierce EZ + 16 oz Metricor DF

Trt 13

Late Planting



13 days after POST (7/10)

PRE: 10 oz Spartan *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS

Trt 14

Late Planting



48 days after PRE (7/10)
PRE: 23 oz Preview 2.1SC

Trt 15
Late Planting



Metribuzin in Early Planted Soybean Brooklyn, WI 2024

Plot pictures taken on 10/2
The day of soybean harvest



Soybean Harvest (10/2)

Trt 1

PRE: 6 oz Fierce EZ *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 2

PRE: 6 oz Fierce EZ + 4 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 3

PRE: 6 oz Fierce EZ + 8 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 4

PRE: 6 oz Fierce EZ + 12 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 5

PRE: 6 oz Fierce EZ + 16 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 6

PRE: 10 oz Spartan *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 7

PRE: 23 oz Preview 2.1SC *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS





Soybean Harvest (10/2)

Trt 9

PRE: 6 oz Fierce EZ *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 10

PRE: 6 oz Fierce EZ + 4 oz Metricor DF *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 11

PRE: 6 oz Fierce EZ + 8 oz Metricor DF *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 12

PRE: 6 oz Fierce EZ + 12 oz Metricor DF *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 13

PRE: 6 oz Fierce EZ + 16 oz Metricor DF *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 14

PRE: 10 oz Spartan *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 15

PRE: 23 oz Preview 2.1SC *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS

