

PSII and HPPD Herbicide POST Tank Mixes Janesville, WI 2024

Trial Information

Trial Sponsor: Wisconsin Cropping Systems Weed Science,
Wisconsin Corn Growers Association

Objective: Evaluate the efficacy of atrazine alternative PSII-
and HPPD-inhibitor herbicide tank mixes for
control of giant ragweed

Crop: Corn

Hybrid: 202-24STX RIB

Weed species (pressure): giant ragweed (high-very high)

Herbicide Application(s): PRE – 5/6
POST – 6/6 (V5 corn)

For the full report see trial #24-ROK-CN12 in the [2024 Wisconsin Weed Science Research Report](#)
Also, check out this [article](#) by Daniel Zhu discussing his project in more detail!



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

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Trt #	Herbicide (rate acre ⁻¹)	Corn Injury ^c (%)			G. Ragweed (%)			Yield ^b bu acre ⁻¹
		6 DAT	15 DAT	27 DAT	15 DAT	27 DAT	EOS ^e	
1	Check (PRE Only)	0	0	0	0	0	0	7 g
2	Weed Free Check Roundup PowerMAX 3 (30 oz) + Liberty (32 oz) + AMS (2.5%) <i>fb</i> hand weeding (as necessary)	0	0	0	100	100	100	228 a
Two-Pass – PRE^d (5/10) <i>fb</i> POST (6/6)								
PSII Only	3 Moxy 2E (1 pt) + COC (1%) + AMS (2.5%)	19.8	8.3	0.1	81	69	60	187 bc
	4 Basagran 5L (1.2 pt) + COC (1%) + AMS (2.5%)	1.1	1.4	1.0	67	42	31	131 de
	5 Metricor DF (4 oz) + COC (1%) + AMS (2.5%)	50.0	29.9	9.0	42	19	21	45 f
HPPD Only	6 Callisto (3 oz) + COC (1%) + AMS (2.5%)	1.1	3.3	2.7	53	30	27	100 e
	7 Armezon (0.75 oz) + COC (1%) + AMS (2.5%)	1.7	1.8	1.3	83	74	61	193 bc
PSII + HPPD	8 Callisto (3 oz) + Moxy 2E (1 pt) + COC (1%) + AMS (2.5%)	25.1	13.9	1.5	97	93	95	216 ab
	9 Callisto (3 oz) + Basagran 5L (1.2 pt) + COC (1%) + AMS (2.5%)	6.1	4.3	1.0	94	87	90	205 ab
	10 Callisto (3 oz) + Metricor DF (4 oz) + COC (1%) + (2.5%)	50.1	33.3	15.0	86	79	84	189 bc
	11 Armezon (0.75 oz) + Moxy 2E (1 pt) + COC (1%) + AMS (2.5%)	22.5	18.7	2.0	94	88	82	212 ab
	12 Armezon (0.75 oz)+Basagran 5L (1.2 pt)+COC (1%) +AMS (2.5%)	8.6	2.7	1.3	95	88	93	213 ab
	13 Armezon (0.75 oz) + Metricor DF (4 oz) +COC (1%) +AMS (2.5%)	50.0	38.6	15.0	78	59	50	162 cd
LSD ($\alpha=0.05$)		1.7	2.3	1.6	4	6	6	13
p value		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

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

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

^cCorn injury = leaf necrosis (burn)

^dVerdict (10 fl oz/a) was applied PRE over the entire trial area including the checks (treatments #1 and #2)

^eEOS = end-of-season weed control rating

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Plot pictures taken on 6/12
33 days after the PRE application
6 days after the POST application

The number in the upper right-hand corner is the average % corn injury (leaf necrosis) of 4 replications

33 days after PRE (6/12)
PRE: 10 oz Verdict (Check)

0%



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

POST: 30 oz Roundup PM3 + 32 oz Liberty + AMS

0%



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

POST: 1 pt Moxy 2E + COC + AMS

20%



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

POST: 1.2 pt Basagran 5L + COC + AMS

1%



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

POST: 4 oz Metricor DF + COC + AMS

50%



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

POST: 3 oz Callisto + COC + AMS

1%



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

POST: 0.75 oz Armezon + COC + AMS

2%



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

25%

POST: 3 oz Callisto + 1 pt Moxy 2E + COC + AMS



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

POST: 3 oz Callisto + 1.2 pt Basagran 5L + COC + AMS

6%



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

50%

POST: 3 oz Callisto + 4 oz Metricor DF + COC + AMS



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

23%

POST: 0.75 oz Armezon + 1 pt Moxy 2E + COC + AMS



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

9%

POST: 0.75 oz Armezon + 1.2 pt Basagran 5L + COC + AMS



6 days after POST (6/12)

PRE: 10 oz Verdict *fb*

50%

POST: 0.75 oz Armezon + 4 oz Metricor DF + COC + AMS



PSII and HPPD Herbicide POST Tank Mixes Janesville, WI 2024

Plot pictures taken on 6/21
42 days after the PRE application
15 days after the POST application

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

42 days after PRE (6/21)
PRE: 10 oz Verdict (Check)

0%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 30 oz Roundup PM3 + 32 oz Liberty + AMS

100%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 1 pt Moxy 2E + COC + AMS

81%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 1.2 pt Basagran 5L + COC + AMS

67%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 4 oz Metricor DF + COC + AMS

42%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 3 oz Callisto + COC + AMS

53%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 0.75 oz Armezon + COC + AMS

83%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 3 oz Callisto + 1 pt Moxy 2E + COC + AMS

97%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 3 oz Callisto + 1.2 pt Basagran 5L + COC + AMS

94%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

86%

POST: 3 oz Callisto + 4 oz Metricor DF + COC + AMS



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 0.75 oz Armezon + 1 pt Moxy 2E + COC + AMS

94%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

95%

POST: 0.75 oz Armezon + 1.2 pt Basagran 5L + COC + AMS



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

78%

POST: 0.75 oz Armezon + 4 oz Metricor DF + COC + AMS

