

Evaluation of Roundup PowerMAX 3

Arlington, WI 2020

Trial Information

Trial Sponsor: Bayer

Objective: Evaluate weed control of Roundup PowerMAX 3 compared to other commercial glyphosate formulations

Crop: none

Weed species (pressure): Common lambsquarters (very high); common ragweed (high); velvetleaf (high); pigweed (moderate); foxtails (high)

Herbicide Application(s): POST – 6/19
common lambsquarters – 6-11”
common ragweed – 5-14”
velvetleaf – 4-9”
pigweed – 4-7”
foxtails – 4-11”

For the full report see trial #20-ARL-BG02 in the [2020 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON



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Weed control (%) ratings 13 days after the POST application

Herbicide Treatment*		Weed Species**				
		CHEAL	AMBEL	ABUTH	Pigweed	Foxtails
0.77 lb ae/a	33 fl oz Helosate Plus Advanced	79	97	94	100	99
	22 fl oz Credit Xtreme	84	93	94	100	99
	22 fl oz Roundup PowerMAX II	91	93	94	100	99
	22 fl oz Roundup WeatherMAX	95	97	94	100	100
	20.7 fl oz Roundup PowerMAX 3	94	97	92	100	100
1.125 lb ae/a	48.1 fl oz Helosate Plus Advanced	88	97	97	100	99
	32 fl oz Credit Xtreme	91	99	97	100	99
	32 fl oz Roundup PowerMAX II	95	99	95	100	100
	32 fl oz Roundup WeatherMAX	97	98	96	100	99
	30 fl oz Roundup PowerMAX 3	99	99	96	100	100
LSD (0.10)		6	3	ns	ns	ns
p-value		<0.01	<0.01	ns	ns	ns

*All treatments included liquid AMS at 2% v/v

**CHEAL (common lambsquarters); AMBEL (common ragweed); ABUTH (velvetleaf); Pigweed sp. (redroot, smooth pigweed) Foxtail sp. (giant, green foxtail)

Roundup PowerMAX 3 is a new formulation of glyphosate that contains a proprietary surfactant blend and a higher concentration of glyphosate acid per gallon

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Weed control (%) ratings 21 days after the POST application

Herbicide Treatment*		Weed Species**				
		CHEAL	AMBEL	ABUTH	Pigweed	Foxtails
0.77 lb ae/a	33 fl oz Helosate Plus Advanced	74	96	97	100	96
	22 fl oz Credit Xtreme	74	95	95	100	96
	22 fl oz Roundup PowerMAX II	88	93	95	100	95
	22 fl oz Roundup WeatherMAX	93	95	92	100	96
	20.7 fl oz Roundup PowerMAX 3	96	96	94	100	99
1.125 lb ae/a	48.1 fl oz Helosate Plus Advanced	76	98	99	100	95
	32 fl oz Credit Xtreme	89	99	97	100	95
	32 fl oz Roundup PowerMAX II	95	99	96	100	97
	32 fl oz Roundup WeatherMAX	97	98	97	100	97
	30 fl oz Roundup PowerMAX 3	97	99	97	100	99
LSD (0.10)		7	3	2	ns	ns
p-value		<0.01	0.02	<0.01	ns	ns

*All treatments included liquid AMS at 2% v/v

**CHEAL (common lambsquarters); AMBEL (common ragweed); ABUTH (velvetleaf); Pigweed sp. (redroot, smooth pigweed) Foxtail sp. (giant, green foxtail)

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Day of application (6/19)



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Plot pictures taken on 7/2
13 days after application

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

13 days after POST (7/2)

0%

Untreated Check



13 days after POST (7/2)

POST: 33 fl oz Helosate Advanced Plus + 2% v/v AMS

79%



13 days after POST (7/2)

POST: 22 fl oz Credit Xtreme + 2% v/v AMS

84%



13 days after POST (7/2)

POST: 22 fl oz Roundup PowerMAX II + 2% v/v AMS

91%



13 days after POST (7/2)

POST: 22 fl oz Roundup WeatherMAX + 2% v/v AMS

95%



13 days after POST (7/2)

POST: 20.7 fl oz Roundup PowerMAX 3 + 2% v/v AMS

94%



13 days after POST (7/2)

POST: 48.1 fl oz Helosate Advanced Plus + 2% v/v AMS

88%



13 days after POST (7/2)
POST: 32 fl oz Credit Xtreme + 2% v/v AMS

91%



13 days after POST (7/2)

POST: 32 fl oz Roundup PowerMAX II + 2% v/v AMS

95%



13 days after POST (7/2)

POST: 32 fl oz Roundup WeatherMAX + 2% v/v AMS

97%



13 days after POST (7/2)

POST: 30 fl oz Roundup PowerMAX 3 + 2% v/v AMS

99%



Evaluation of Roundup PowerMAX 3

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Plot pictures taken on 7/10
21 days after application

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



21 days after POST (7/10)

POST: 33 fl oz Helosate Advanced Plus + 2% v/v AMS

74%



21 days after POST (7/10)

POST: 22 fl oz Credit Xtreme + 2% v/v AMS

74%



21 days after POST (7/10)

POST: 22 fl oz Roundup PowerMAX II + 2% v/v AMS

88%



21 days after POST (7/10)

POST: 22 fl oz Roundup WeatherMAX + 2% v/v AMS

93%



21 days after POST (7/10)

POST: 20.7 fl oz Roundup PowerMAX 3 + 2% v/v AMS

96%



21 days after POST (7/10)

POST: 48.1 fl oz Helosate Advanced Plus + 2% v/v AMS

76%



21 days after POST (7/10)
POST: 32 fl oz Credit Xtreme + 2% v/v AMS

89%



21 days after POST (7/10)

POST: 32 fl oz Roundup PowerMAX II + 2% v/v AMS

95%



21 days after POST (7/10)

POST: 32 fl oz Roundup WeatherMAX + 2% v/v AMS

97%



21 days after POST (7/10)

POST: 30 fl oz Roundup PowerMAX 3 + 2% v/v AMS

97%

