2021 WiscWeeds Herbicide Comparison for Residual Weed Control in Corn

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Study Objective: Evaluate the residual control of giant ragweed, waterhemp & common lambsquarters with single and multiple SOA herbicide products commonly used in corn production systems in Wisconsin.

			Lan	caster, WI		
Weed Control Ratings 2021 Study (1 year)		Giant Ragweed	Waterhemp	Common Lambsquarters		
, , ,		42 days after treatment (DAT)				
		V5 corn growth stage				
SOA	Herbicide &	Greater than 90% is considered effective				
Group	Application rate (ac ⁻¹)	Average % control (standard error)				
4	Diflexx (16 fl oz)	48 (12)	44 (16)	65 (5)		
5	Aatrex (32 fl oz)	20 (8)	49 (13)	98 (2)		
5	Princep 4FL (64 fl oz)	22 (13)	70 (15)	98 (5)		
15	Harness (32 fl oz)	39 (14)	100 (0)	77 (6)		
15	Dual II Magnum (26.7 fl oz)	14 (13)	93 (6)	74 (11)		
27	Balance Flexx (4.5 fl oz)	26 (8)	92 (3)	91 (6)		
27	Callisto (5 fl oz)	66 (10)	100 (0)	96 (4)		
15 & 27	Harness Max (64 fl oz)	56 (12)	100 (0)	100 (0)		
2 & 27	Corvus (5.6 fl oz)	58 (3)	89 (7)	93 (4)		
5 & 27	Bicep Lite II Magnum (56 fl oz)	26 (14)	95 (3)	99 (1)		
5 & 15	Harness Xtra (64 fl oz)	51 (7)	100 (0)	99 (1)		
14 & 15	Verdict (15 fl oz)	72 (5)	94 (3)	80 (4)		
2 & 4	Hornet WDG (4 oz)	53 (13)	43 (19)	74 (18)		
15 & 27	Acuron Flexi (64 fl oz)	78 (5)	98 (3)	98 (1)		
5 & 15 & 27	Acuron (80 fl oz)	78 (3)	100 (0)	100 (0)		
2 & 4 & 15	Surestart II (40 fl oz)	36 (9)	98 (2)	93 (6)		
4 & 15 & 27	Resicore (80 fl oz)	72 (8)	100 (0)	100 (0)		
4 & 15 & 27	Maverick ¹ (32 fl oz)	68 (3)	100 (0)	100 (0)		

¹ Maverick[™] is a new three-way premix of clopyralid + mesotrione + pyroxasulfone from Valent®

Always read, follow and understand the pesticide label. **The label is the law.** Information presented does not constitute a recommendation or endorsement.

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Stay tuned!

Trial will be replicated in multiple locations in 2022, and a final data report will be available in the Fall of 2022, complete with statistical analysis. Herbicide rates were based on industry recommendations; the authors support using maximum labeled rates. Herbicide choices should be based on both herbicide efficacy and price. Length of rotational restrictions should always be considered.



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Site Description							
Location*	Target Weed	Previous Crop	Soil Type	% OM	рН	Planting Date	Hybrid**
Janesville	Giant Ragweed	Soybean	Plano silt loam	3.3	7.0	4/26	NK 9653-5222EZ (Syngenta®)
Lancaster	Waterhemp	Soybean	Fayette silt loam	2.4	7.3	4/28	B97T04SXE (Brevant®)

^{*}All trials established following tillage.

^{**}Corn planted at 35,000 seeds/acre at 2.0-2.25 inch depth.

Herbicide Application Information							
Location	App. Date	Air Temp. (F)	Nozzle Tips	Pressure (psi)			
Janesville	4/27	88	TTI 110015	34			
Lancaster	4/29	66	TTI 110015	35			

Additional Resources:

- Residual Control of Waterhemp with Pre-emergence Herbicides in Soybean
- 2020 Wisconsin Weed Science Research Report
- Evaluating Efficacy of Pre-emergence Soybean Herbicides Using Field Treated Soil in Greenhouse Bioassays

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