University of Wisconsin-Madison
Weed Science Program

Impact programs for performance and crop safety
(AMVAC)

Trial ID: 15-ROK-CN06
Location: Janesville, WI

Site and Design:

A. Treated plot width: 10 FT
B. Treated plot length: 30 FT
C. Tillage type: conventional till
D. Study design: Randomized Complete Block

Application Description:

	A	B	C
Application Date:	5/13/2015	6/2/2015	6/10/2015
Air Temperature, Unit:	67 F	70 F	84 F
% Relative Humidity:	42	53	59
Wind Velocity, Unit:	6 MPH	4 MPH	3.5 MPH
Wind Direction:	SE	S	W
Soil Temperature, Unit:	60 F	62 F	70 F
% Cloud Cover:	5	0	5

Application Equipment:

	A	B	C
Appl. Equipment:	CO2 Backpack	CO2 Backpack	CO2 Backpack
Operating Pressure, Unit:	25 PSI	25 PSI	25 PSI
Nozzle Type:	Flat Fan	Flat Fan	Flat Fan
Nozzle Size:	11002	11002	11002
Nozzle Spacing, Unit:	15 IN	15 IN	15 IN
Nozzles/Row:	8	8	8
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	15 IN	15 IN	15 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	1.89 L	1.89 L	1.89 L

HOW DATA WERE SUMMARIZED: Weed control, crop injury and yield were averaged among the 4 replications and values are provided in the tables. As variability in performance/safety can occur among replications we have provided standard deviations for each average. The standard deviation should be considered when comparing means among treatments as this provides users with an idea of how variable the response was observed in the field.

						Giant ragweed	RR pigweed	Lambsquarters	velvetleaf	Giant ragweed	Lambsquarters	velvetleaf	Woolly cupgrass	RR pigweed
Rating Date						5/28	5/28	5/28	5/28	6/2	6/2	6/2	6/2	6/2
Rating Type						%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl
Days After First/Last Applic.						15 15	15 15	15 15	15 15	20 20	20 20	20 20	20 20	20 20
Trt No.	Treatment Name	Rate	Rate Unit	Appl. Code										
1	Untreated Check				avg	0	0	0	0	0	0	0	0	0
					stdev									
2	Harness	1.53	lb ai/a	A	avg	74	100	96	96	95	95	93	99	93
	Impact	0.02	lb ai/a	C	stdev	***29***	***0***	***3***	***3***	***5***	***4***	***2***	***3***	***14***
	Aatrex 4L	0.50	lb ai/a	C										
	MSO	1.00	% v/v	C										
	N-Pak AMS Liquid	2.50	% v/v	C										
3	Harness	1.53	lb ai/a	A	avg	87	100	91	95	95	96	93	100	100
	Impact	0.02	lb ai/a	C	stdev	***8***	***0***	***4***	***7***	***3***	***3***	***4***	***0***	***0***
	Roundup PowerMax	1.13	lb ae/a	C										
	Aatrex 4L	0.50	lb ai/a	C										
	MSO	0.50	% v/v	C										
	N-Pak AMS Liquid	2.50	% v/v	C										
4	Harness	1.53	lb ai/a	A	avg	65	100	98	93	75	95	94	100	100
	Impact	0.02	lb ai/a	C	stdev	***44***	***0***	***3***	***5***	***43***	***2***	***4***	***0***	***0***
	Status	0.11	lb ai/a	C										
	Aatrex 4L	0.50	lb ai/a	C										
	MSO	1.00	% v/v	C										
	N-Pak AMS Liquid	2.50	% v/v	C										
5	Harness	1.53	lb ai/a	B	avg	0	0	0	0	0	0	0	0	0
	Aatrex 4L	0.50	lb ai/a	B	stdev	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
	Impact	0.02	lb ai/a	B										
	MSO	0.50	% v/v	B										
	N-Pak AMS Liquid	2.50	% v/v	B										
6	Halex GT	1.97	lb ai/a	B	avg	0	0	0	0	0	0	0	0	0
	Aatrex 4L	0.50	lb ai/a	B	stdev	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
	NIS	0.25	% v/v	B										
	N-Pak AMS Liquid	2.50	% v/v	B										

						Giant ragweed	Lambsquarters	Woolly cupgrass	RR pigweed	velvetleaf	velvetleaf	Lambsquarters	Woolly cupgrass	Giant ragweed
Rating Date						6/10	6/10	6/10	6/10	6/10	6/16	6/16	6/16	6/16
Rating Type						%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl
Days After First/Last Applic.						28 8	28 8	28 8	28 8	28 8	34 6	34 6	34 6	34 6
Trt No.	Treatment Name	Rate	Rate Unit	Appl. Code										
1	Untreated Check				avg	0	0	0	0	0	0	0	0	0
					stdev									
2	Harness	1.53	lb ai/a	A	avg	84	88	100	100	94	100	99	100	98
	Impact	0.02	lb ai/a	C	stdev	***20***	***3***	***0***	***0***	***6***	***0***	***2***	***0***	***2***
	Aatrex 4L	0.50	lb ai/a	C										
	MSO	1.00	% v/v	C										
	N-Pak AMS Liquid	2.50	% v/v	C										
3	Harness	1.53	lb ai/a	A	avg	88	86	100	100	93	100	100	100	99
	Impact	0.02	lb ai/a	C	stdev	***3***	***4***	***0***	***0***	***6***	***0***	***1***	***0***	***2***
	Roundup PowerMax	1.13	lb ae/a	C										
	Aatrex 4L	0.50	lb ai/a	C										
	MSO	0.50	% v/v	C										
	N-Pak AMS Liquid	2.50	% v/v	C										
4	Harness	1.53	lb ai/a	A	avg	70	89	100	100	95	100	100	100	99
	Impact	0.02	lb ai/a	C	stdev	***48***	***5***	***0***	***0***	***4***	***0***	***0***	***0***	***1***
	Status	0.11	lb ai/a	C										
	Aatrex 4L	0.50	lb ai/a	C										
	MSO	1.00	% v/v	C										
	N-Pak AMS Liquid	2.50	% v/v	C										
5	Harness	1.53	lb ai/a	B	avg	100	100	100	100	100	99	99	100	100
	Aatrex 4L	0.50	lb ai/a	B	stdev	***0***	***0***	***0***	***0***	***0***	***1***	***3***	***0***	***1***
	Impact	0.02	lb ai/a	B										
	MSO	0.50	% v/v	B										
	N-Pak AMS Liquid	2.50	% v/v	B										
6	Halex GT	1.97	lb ai/a	B	avg	100	100	99	100	100	100	99	96	99
	Aatrex 4L	0.50	lb ai/a	B	stdev	***0***	***0***	***3***	***0***	***0***	***0***	***2***	***8***	***2***
	NIS	0.25	% v/v	B										
	N-Pak AMS Liquid	2.50	% v/v	B										

						Common dandelion	Giant ragweed	Lambsquarters	RR pigweed	Woolly cupgrass	velvetleaf	Giant ragweed	Lambsquarters	velvetleaf
Rating Date						6/16	6/24	6/24	6/24	6/24	6/24	7/8	7/8	7/8
Rating Type						%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl
Days After First/Last Applic.						34 6	42 14	42 14	42 14	42 14	42 14	56 28	56 28	56 28
Trt No.	Treatment Name	Rate	Rate Unit	Appl. Code										
1	Untreated Check				avg	0	0	0	0	0	0	0	0	0
					stdev									
2	Harness	1.53	lb ai/a	A	avg	93	100	100	100	100	100	97	99	100
	Impact	0.02	lb ai/a	C	stdev	***15***	***0***	***0***	***0***	***0***	***0***	***4***	***3***	***0***
	Aatrex 4L	0.50	lb ai/a	C										
	MSO	1.00	% v/v	C										
	N-Pak AMS Liquid	2.50	% v/v	C										
3	Harness	1.53	lb ai/a	A	avg	100	100	100	100	100	100	99	99	99
	Impact	0.02	lb ai/a	C	stdev	***0***	***0***	***1***	***1***	***0***	***1***	***3***	***3***	***2***
	Roundup PowerMax	1.13	lb ae/a	C										
	Aatrex 4L	0.50	lb ai/a	C										
	MSO	0.50	% v/v	C										
	N-Pak AMS Liquid	2.50	% v/v	C										
4	Harness	1.53	lb ai/a	A	avg	100	99	100	100	100	100	96	99	99
	Impact	0.02	lb ai/a	C	stdev	***0***	***3***	***0***	***0***	***0***	***0***	***5***	***3***	***3***
	Status	0.11	lb ai/a	C										
	Aatrex 4L	0.50	lb ai/a	C										
	MSO	1.00	% v/v	C										
	N-Pak AMS Liquid	2.50	% v/v	C										
5	Harness	1.53	lb ai/a	B	avg	100	99	100	100	99	100	96	100	100
	Aatrex 4L	0.50	lb ai/a	B	stdev	***0***	***3***	***0***	***0***	***2***	***0***	***5***	***0***	***0***
	Impact	0.02	lb ai/a	B										
	MSO	0.50	% v/v	B										
	N-Pak AMS Liquid	2.50	% v/v	B										
6	Halex GT	1.97	lb ai/a	B	avg	95	99	100	100	91	100	99	100	100
	Aatrex 4L	0.50	lb ai/a	B	stdev	***10***	***3***	***0***	***0***	***18***	***0***	***3***	***0***	***0***
	NIS	0.25	% v/v	B										
	N-Pak AMS Liquid	2.50	% v/v	B										

						Woolly cupgrass	RR pigweed	Giant ragweed	Lambsquarters	velvetleaf	Fall panicum	
Rating Date						7/8	7/8	10/13	10/13	10/13	10/13	10/26
Rating Type						%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	%cntrl	YIELD Bu/A
Days After First/Last Applic.						56 28	56 28	153 125	153 125	153 125	153 125	166 138
Trt No.	Treatment Name	Rate	Rate Unit	Appl. Code								
1	Untreated Check				avg	0	0	0	0	0	0	36
					stdev							***39***
2	Harness	1.53	lb ai/a	A	avg	97	99	94	100	100	96	166
	Impact	0.02	lb ai/a	C	stdev	***4***	***3***	***7***	***1***	***0***	***6***	***8***
	Aatrex 4L	0.50	lb ai/a	C								
	MSO	1.00	% v/v	C								
	N-Pak AMS Liquid	2.50	% v/v	C								
3	Harness	1.53	lb ai/a	A	avg	99	99	96	100	100	96	163
	Impact	0.02	lb ai/a	C	stdev	***3***	***3***	***4***	***0***	***0***	***8***	***7***
	Roundup PowerMax	1.13	lb ae/a	C								
	Aatrex 4L	0.50	lb ai/a	C								
	MSO	0.50	% v/v	C								
	N-Pak AMS Liquid	2.50	% v/v	C								
4	Harness	1.53	lb ai/a	A	avg	99	99	85	100	100	96	159
	Impact	0.02	lb ai/a	C	stdev	***3***	***3***	***24***	***0***	***0***	***8***	***16***
	Status	0.11	lb ai/a	C								
	Aatrex 4L	0.50	lb ai/a	C								
	MSO	1.00	% v/v	C								
	N-Pak AMS Liquid	2.50	% v/v	C								
5	Harness	1.53	lb ai/a	B	avg	100	100	100	100	100	99	162
	Aatrex 4L	0.50	lb ai/a	B	stdev	***1***	***0***	***1***	***0***	***1***	***3***	***9***
	Impact	0.02	lb ai/a	B								
	MSO	0.50	% v/v	B								
	N-Pak AMS Liquid	2.50	% v/v	B								
6	Halex GT	1.97	lb ai/a	B	avg	97	100	93	100	100	95	174
	Aatrex 4L	0.50	lb ai/a	B	stdev	***6***	***0***	***9***	***0***	***0***	***10***	***16***
	NIS	0.25	% v/v	B								
	N-Pak AMS Liquid	2.50	% v/v	B								