

University of Wisconsin-Madison
Weed Science Program

Corn Herbicide Control and Crop Safety Showcase
(AMVAC, BASF, BAYER, DOW, FMC)

Trial ID: 15-ARL-CN02, **Location:** Arlington, WI

Site and Design:

- A. Treated plot width: 10 FT
- B. Treated plot length: 28 FT

- C. Tillage type: conventional till
- D. Study design: Randomized Complete Block 4 reps

Planting date: 5/1/2015

Application Description:

	A	B	C
Application Date:	5/1/2015	5/28/2015	6/9/2015
Type of Application	PRE	POST	POST
Crop Stage	-	V2	V5
Avg. Weed Height	-	0.5-1"	1-2"
Days until Precipitation	3 days	1 day	2 days
Air Temperature, Unit:	64.5 F	73 F	77.6 F
% Relative Humidity:	43	57	64
Wind Velocity, Unit:	6.5 MPH	9.5 MPH	5.6 MPH
Soil Temperature, Unit:	50 F	60 F	62 F
% Cloud Cover:	40	5	35

Application Equipment:

	A	B	C
Appl. Equipment:	CO2 Backpack	CO2 Backpack	CO2 Backpack
Operating Pressure, Unit:	24 PSI	29 PSI	29 PSI
Nozzle Type:	Flat Fan	Flat Fan	Flat Fan
Nozzle Size:	11002	11002	11002
Nozzle Spacing, Unit:	20 IN	15 IN	15 IN
Nozzles/Row:	8	8	8
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	20 IN	24 IN	18 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.

		Rating Date Rating Type Days After First/Last Applic.			Giant Foxtail	velvetleaf	Lambquarters	velvetleaf	Giant foxtail	Common ragweed	RR pigweed	Giant foxtail	Lambquarter
					5/13 % cntrl 12 12	5/13 % cntrl 12 12	6/3 % cntrl 33 6	6/3 % cntrl 33 6	6/3 % cntrl 33 6	6/3 % cntrl 33 6	6/3 % cntrl 33 6	6/23 % cntrl 53 14	6/23 % cntrl 53 14
Trt No.	Treatment Name	Rate	Rate Unit	Appl. Code									
1	SOLSTICE Roundup PMAX AMS	3 22 9	oz/a oz/a lb/100 gal	B B B	avg stdev	0 0	0 0	100 3	99 5	98 0	100 0	88 9	100 0
2	SOLSTICE Roundup PMAX COC AMS	3 22 1 9	oz/a oz/a % v/v lb/100 gal	B B B B	avg stdev	0 0	0 0	100 3	99 5	98 0	100 0	91 6	100 0
3	SOLSTICE HORNET Roundup PMAX AMS	3 2 22 9	oz/a oz/a oz/a lb/100 gal	B B B B	avg stdev	0 0	0 0	100 3	99 5	98 0	100 0	90 2	100 0
4	CADET DIFLEXX Roundup PMAX AMS	1 12 22 9	oz/a oz/a oz/a lb/100 gal	B B B B	avg stdev	0 0	0 0	100 3	99 5	98 0	100 0	93 6	97 7
5	ANTHEM MAXX SOLSTICE Roundup PMAX AMS	2 3 22 9	oz/a oz/a oz/a lb/100 gal	B B B B	avg stdev	0 0	0 0	100 0	100 0	100 0	100 0	97 2	98 3
6	LAUDIS Roundup PMAX COC AMS	3 22 1 9	oz/a oz/a % v/v lb/100 gal	B B B B	avg stdev	0 0	0 0	100 1	99 3	97 4	100 0	87 5	100 0
7	STATUS HERBICIDE Roundup PMAX COC AMS	3 22 1 9	oz/a oz/a % v/v lb/100 gal	B B B B	avg stdev	0 0	0 0	100 3	99 5	98 0	100 0	89 7	96 3
8	NONTREATED CHECK				avg stdev	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
9	SURESTART II DURANGO DMA AMS	3 1 17	pt/a qt/a lb/100 gal	A C C	avg stdev	100 0	64 44	97 4	96 8	97 2	98 5	100 0	100 0
10	SURESTART II SURESTART II DURANGO DMA AMS	2 2 1 17	pt/a pt/a qt/a lb/100 gal	A C C C	avg stdev	88 19	70 36	96 5	83 3	99 3	100 0	100 0	99 2
11	SURESTART II DURANGO DMA AMS	2 1 17	pt/a qt/a lb/100 gal	B B B	avg stdev	34 41	32 46	100 0	99 3	100 0	100 0	100 0	100 1
12	GF-3471 DURANGO DMA AMS	3 1 17	qt/a qt/a lb/100 gal	A C C	avg stdev	100 0	90 14	100 0	100 0	96 9	100 0	100 0	98 4
13	GF-3471 GF-3471 DURANGO DMA AMS	2 1 1 17	qt/a qt/a qt/a lb/100 gal	A C C C	avg stdev	85 15	63 36	100 0	99 3	95 7	95 10	100 0	100 0
14	Verdict Zidua Roundup PMAX Armezon Outlook NIS	5 2 22 1 12 0	fl oz/a oz/a fl oz/a fl oz/a fl oz/a % v/v	A A C C C C	avg stdev	75 21	83 13	86 8	99 3	94 5	95 8	100 0	100 0

		Rating Date Rating Type Days After First/Last Applic.			Common ragweed	velvetleaf	RR pigweed	Common dandelion	Lambsquartars	velvetleaf	Giant foxtail	Common ragweed	wild buckwheat	
					6/23 % cntrl 53 14	6/23 % cntrl 53 14	6/23 % cntrl 53 14	6/23 % cntrl 53 14	7/6 % cntrl 66 27	7/6 % cntrl 66 27	7/6 % cntrl 66 27	7/6 % cntrl 66 27	7/6 % cntrl 66 27	
Trt No.	Treatment Name	Rate	Rate Unit	Appl. Code										
1	SOLSTICE Roundup PMAX AMS	3 22 9	oz/a oz/a lb/100 gal	B B B	avg stdev	100 0	100 0	100 0	91 14	100 0	100 0	70 8	100 0	100 0
2	SOLSTICE Roundup PMAX COC AMS	3 22 1 9	oz/a oz/a % v/v lb/100 gal	B B B B	avg stdev	100 0	100 0	100 0	95 10	100 0	100 0	79 5	100 0	100 0
3	SOLSTICE HORNET Roundup PMAX AMS	3 2 22 9	oz/a oz/a oz/a lb/100 gal	B B B B	avg stdev	100 0	100 0	100 0	100 0	100 0	100 0	83 3	100 0	100 0
4	CADET DIFLEXX Roundup PMAX AMS	1 12 22 9	oz/a oz/a oz/a lb/100 gal	B B B B	avg stdev	98 4	98 4	100 0	94 8	89 4	93 6	76 17	99 3	100 0
5	ANTHEM MAXX SOLSTICE Roundup PMAX AMS	2 3 22 9	oz/a oz/a oz/a lb/100 gal	B B B B	avg stdev	97 6	100 0	100 0	100 0	97 4	100 0	91 3	97 4	100 0
6	LAUDIS Roundup PMAX COC AMS	3 22 1 9	oz/a oz/a % v/v lb/100 gal	B B B B	avg stdev	100 0	98 5	96 8	96 5	100 1	99 2	80 9	100 0	100 0
7	STATUS HERBICIDE Roundup PMAX COC AMS	3 22 1 9	oz/a oz/a % v/v lb/100 gal	B B B B	avg stdev	100 0	93 5	98 5	96 5	90 8	94 7	81 7	100 0	100 0
8	NONTREATED CHECK				avg stdev	0	0	0	0	0	0	0	0	0
9	SURESTART II DURANGO DMA AMS	3 1 17	pt/a qt/a lb/100 gal	A C C	avg stdev	100 0	100 1	100 0	100 0	100 0	100 1	98 2	100 0	100 0
10	SURESTART II SURESTART II DURANGO DMA AMS	2 2 1 17	pt/a pt/a qt/a lb/100 gal	A C C C	avg stdev	98 4	100 0	100 0	100 0	100 0	100 0	98 3	99 3	96 8
11	SURESTART II DURANGO DMA AMS	2 1 17	pt/a qt/a lb/100 gal	B B B	avg stdev	100 0	96 9	100 0	100 0	100 1	91 11	97 6	100 0	100 0
12	GF-3471 DURANGO DMA AMS	3 1 17	qt/a qt/a lb/100 gal	A C C	avg stdev	100 0	100 0	100 0	100 0	100 0	100 0	99 3	100 0	100 0
13	GF-3471 GF-3471 DURANGO DMA AMS	2 1 1 17	qt/a qt/a qt/a lb/100 gal	A C C C	avg stdev	100 0	100 0	100 0	100 0	100 0	100 0	99 3	100 0	99 3
14	Verdict Zidua Roundup PMAX Armezon Outlook NIS	5 2 22 1 12 0	fl oz/a oz/a fl oz/a fl oz/a fl oz/a % v/v	A A C C C C	avg stdev	100 0	100 0	100 0	100 0	100 0	99 2	100 1	100 0	100 0

Trt No.	Treatment Name	Rate	Rate Unit	Appl. Code		
	Rating Date Rating Type Days After First/Last Applic.					Corn Yield 11/9 YIELD Bu/A 192 153
1	SOLSTICE Roundup PMAX AMS	3 22 9	oz/a oz/a lb/100 gal	B B B	avg stdev	196 17
2	SOLSTICE Roundup PMAX COC AMS	3 22 1 9	oz/a oz/a % v/v lb/100 gal	B B B B	avg stdev	182 29
3	SOLSTICE HORNET Roundup PMAX AMS	3 2 22 9	oz/a oz/a oz/a lb/100 gal	B B B B	avg stdev	173 13
4	CADET DIFLEXX Roundup PMAX AMS	1 12 22 9	oz/a oz/a oz/a lb/100 gal	B B B B	avg stdev	171 6
5	ANTHEM MAXX SOLSTICE Roundup PMAX AMS	2 3 22 9	oz/a oz/a oz/a lb/100 gal	B B B B	avg stdev	177 8
6	LAUDIS Roundup PMAX COC AMS	3 22 1 9	oz/a oz/a % v/v lb/100 gal	B B B B	avg stdev	184 11
7	STATUS HERBICIDE Roundup PMAX COC AMS	3 22 1 9	oz/a oz/a % v/v lb/100 gal	B B B B	avg stdev	171 24
8	NONTREATED CHECK				avg stdev	128 45
9	SURESTART II DURANGO DMA AMS	3 1 17	pt/a qt/a lb/100 gal	A C C	avg stdev	188 31
10	SURESTART II SURESTART II DURANGO DMA AMS	2 2 1 17	pt/a pt/a qt/a lb/100 gal	A C C C	avg stdev	187 28
11	SURESTART II DURANGO DMA AMS	2 1 17	pt/a qt/a lb/100 gal	B B B	avg stdev	185 15
12	GF-3471 DURANGO DMA AMS	3 1 17	qt/a qt/a lb/100 gal	A C C	avg stdev	173 17
13	GF-3471 GF-3471 DURANGO DMA AMS	2 1 1 17	qt/a qt/a qt/a lb/100 gal	A C C C	avg stdev	176 10
14	Verdict Zidua Roundup PMAX Armezon Outlook NIS	5 2 22 1 12 0	fl oz/a oz/a fl oz/a fl oz/a fl oz/a % v/v	A A C C C C	avg stdev	187 21

		Rating Date Rating Type Days After First/Last Applic.			RR pigweed 7/6 % cntrl 66 27	Common dandelion 7/6 % cntrl 66 27	Common ragweed 10/14 % cntrl 166 127	Giant foxtail 10/14 % cntrl 166 127	Lambsquarters 10/14 % cntrl 166 127	RR pigweed 10/14 % cntrl 166 127	Common dandelion 10/14 % cntrl 166 127
Trt No.	Treatment Name	Rate	Rate Unit	Appl. Code							
	AMS	17	lb/100 gal	C							
15	Verdict	13	fl oz/a	A	avg	100	97	99	99	98	100
	Roundup PMAX	22	fl oz/a	C	stdev	0	6	3	1	3	0
	Armezon	1	fl oz/a	C							
	Outlook	12	fl oz/a	C							
	NIS	0	% v/v	C							
	AMS	17	lb/100 gal	C							
16	Zidua	3	oz/a	A	avg	100	95	100	100	100	83
	Sharpen	3	fl oz/a	A	stdev	0	10	0	0	0	25
	Roundup PMAX	22	fl oz/a	C							
	Status	4	oz/a	C							
	AMS	17	lb/100 gal	C							
17	Armezon	1	fl oz/a	B	avg	97	86	97	82	93	69
	Outlook	16	fl oz/a	B	stdev	6	24	3	28	1	46
	Roundup PMAX	22	fl oz/a	B							
	NIS	0	% v/v	B							
	AMS	17	lb/100 gal	B							
18	NONTREATED CHECK				avg	0	0	0	0	0	0
					stdev						
19	Harness	2	pt/a	A	avg	100	100	99	91	98	93
	IMPACT	1	fl oz/a	C	stdev	0	1	2	11	3	3
	Roundup PMAX	32	fl oz/a	C							
	MSO	1	% v/v	C							
	N-PaK AMS	3	% v/v	C							
20	ZIDUA WG	3	oz/a	A	avg	100	100	100	99	100	98
	SHARPEN	3	fl oz/a	A	stdev	0	0	0	3	0	1
	Liberty 280 SL	22	fl oz/a	C							
	AMS	3	lb/a	C							
21	Zemax	2	qt/a	A	avg	99	100	100	95	100	99
	Liberty 280 SL	22	fl oz/a	C	stdev	2	0	0	10	0	1
	AMS	3	lb/a	C							
22	ZIDUA WG	3	oz/a	A	avg	100	95	100	100	100	82
	CAPRENO	3	fl oz/a	C	stdev	0	10	0	0	0	31
	AMS	9	lb/100 gal	C							
	COC	1	% v/v	C							

Trt No.	Treatment Name	Rate	Rate Unit	Appl. Code		
	Rating Date Rating Type Days After First/Last Applic.					Corn Yield 11/9 YIELD Bu/A 192 153
	AMS	17	lb/100 gal	C		
15	Verdict	13	fl oz/a	A	avg	177
	Roundup PMAX	22	fl oz/a	C	stdev	16
	Armezon	1	fl oz/a	C		
	Outlook	12	fl oz/a	C		
	NIS	0	% v/v	C		
	AMS	17	lb/100 gal	C		
16	Zidua	3	oz/a	A	avg	182
	Sharpen	3	fl oz/a	A	stdev	14
	Roundup PMAX	22	fl oz/a	C		
	Status	4	oz/a	C		
	AMS	17	lb/100 gal	C		
17	Armezon	1	fl oz/a	B	avg	175
	Outlook	16	fl oz/a	B	stdev	9
	Roundup PMAX	22	fl oz/a	B		
	NIS	0	% v/v	B		
	AMS	17	lb/100 gal	B		
18	NONTREATED CHECK				avg	133
					stdev	41
19	Harness	2	pt/a	A	avg	185
	IMPACT	1	fl oz/a	C	stdev	24
	Roundup PMAX	32	fl oz/a	C		
	MSO	1	% v/v	C		
	N-PaK AMS	3	% v/v	C		
20	ZIDUA WG	3	oz/a	A	avg	167
	SHARPEN	3	fl oz/a	A	stdev	1
	Liberty 280 SL	22	fl oz/a	C		
	AMS	3	lb/a	C		
21	Zemax	2	qt/a	A	avg	188
	Liberty 280 SL	22	fl oz/a	C	stdev	7
	AMS	3	lb/a	C		
22	ZIDUA WG	3	oz/a	A	avg	196
	CAPRENO	3	fl oz/a	C	stdev	18
	AMS	9	lb/100 gal	C		
	COC	1	% v/v	C		