

MSU Weed Science Research Program

Best management practices for Warrant in Roundup Ready sugarbeet

Trial ID: SB02-13  
 Conducted: SVREC

Study Dir.: Sprague, Powell  
 Investigator: Christy Sprague

**Date Planted:** May/02/2013  
**Variety:** HM-173RR  
**Population:** 4 3/8" spacing  
**Soil Type:** Clay loam  
**Plot Size:** 10 X 30 FT  
**Row Spacing:** 30 IN  
**No. of Reps:** 4  
**% OM:** 3.2  
**pH:** 8.0  
**Design:** RANDOMIZED COMPLETE BLOCK

**Tillage:** Previous crop wheat. Fall moldboard plow, spring field cultivate and soil finish

**Crop and Weed Description**

Weed	Code	Common Name	Scientific Name
1.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
2.	AMARE	PIGWEEED, REDROOT	AMARANTHUS RETROFLEXUS L.
Crop	Code	Common Name	
1.	BETVU	BEET, SUGAR	

**Application Description**

	A	B	C
<b>Application Timing:</b>	PRE	2-leaf	6-leaf
<b>Date Treated:</b>	May/02/2013	Jun/03/2013	Jun/26/2013
<b>Time Treated:</b>	6:00 PM	11:00 AM	11:00 AM
<b>% Cloud Cover:</b>	20	10	50
<b>Air Temp., Unit:</b>	80 F	55 F	78 F
<b>% Relative Humidity:</b>	45	20	41
<b>Wind Speed/Unit/Dir:</b>	7 mph SE	4 mph NW	2 mph SW
<b>Soil Temp., Unit:</b>	66 F	61 F	80 F
<b>Soil/Leaf Surface M:</b>	3 -	4 4	3 4
<b>Soil Moist (1=w 5=d):</b>	3	4	3

**Crop Stage at Each Application**

	A	B	C
<b>Crop Name:</b>	BETVU	BETVU	BETVU
<b>Height (In.):</b>	-	1.5"	6-8"
<b>Stage (L):</b>	-	2	6-10

**Weed Stage at Each Application**

	A	B	C
<b>Weed 1 Name:</b>	CHEAL	CHEAL	CHEAL
<b>Height (In.):</b>	-	2"	2-4"
<b>Stage (L):</b>	-	8	10-many
<b>Weed 2 Name:</b>	AMARE	AMARE	AMARE
<b>Height (In.):</b>	-	1"	-
<b>Stage (L):</b>	-	4	-

**Weed Density (plants/sq. ft.)**

	1	2
<b>Weed Name:</b>	CHEAL	AMARE
<b>Density:</b>	4	<1

**Application Equipment**

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Nozzle	Boom	GPA	Carrier	PSI
A	Type	MPH	Type	Size	Height	Spacing	Width			
A	Cub	3.8	AirMix	11003	22"	20"	100"	19	water	28
B	Cub	3.8	AirMix	11003	24"	20"	100"	19	water	28
C	Cub	3.8	AirMix	11003	24"	20"	100"	19	water	28

**Comments:** Application 'D' was an as needed treatment and was not applied due to good weed control from the initial herbicide applications.

## MSU Weed Science Research Program

## Best management practices for Warrant in Roundup Ready sugarbeet

Trial ID: SB02-13  
 Conducted: SVREC

Study Dir.: Sprague, Powell  
 Investigator: Christy Sprague

Weed Code	CHEAL	AMARE	BETVU	CHEAL
Crop Code				
Rating Data Type	control	control	injury	control
Rating Unit	percent	percent	percent	percent
Rating Date	Jun/03/2013	Jun/03/2013	Jun/13/2013	Jun/13/2013
Trt-Eval Interval	0 DA-B	0 DA-B	10 DA-B	10 DA-B
# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code		
1	Roundup PowerMax AMS	4.5	SL	32	fl oz/a	2-leaf	B		
			WG	17	lb/100 gal	2-leaf	B	0	99
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C		
			WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D		
			WG	17	lb/100 gal	canopy	D		
2	Roundup PowerMax Warrant	4.5	SL	32	fl oz/a	2-leaf	B	2	99
		3	CS	3	pt/a	2-leaf	B		
	AMS		WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C		
			WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D		
			WG	17	lb/100 gal	canopy	D		
3	Roundup PowerMax Outlook	4.5	SL	32	fl oz/a	2-leaf	B	3	99
		6	L	16	fl oz/a	2-leaf	B		
	AMS		WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C		
			WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D		
			WG	17	lb/100 gal	canopy	D		
4	Roundup PowerMax Dual II Magnum	4.5	SL	32	fl oz/a	2-leaf	B	1	99
		7.64	L	1.33	pt/a	2-leaf	B		
	AMS		WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C		
			WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D		
			WG	17	lb/100 gal	canopy	D		
5	Roundup PowerMax AMS	4.5	SL	32	fl oz/a	2-leaf	B	0	99
			WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax Warrant	4.5	SL	22	fl oz/a	6-leaf	C		
		3	CS	3	pt/a	6-leaf	C		
	AMS		WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D		
			WG	17	lb/100 gal	canopy	D		
6	Roundup PowerMax AMS	4.5	SL	32	fl oz/a	2-leaf	B	2	99
			WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax Outlook	4.5	SL	22	fl oz/a	6-leaf	C		
		6	L	16	fl oz/a	6-leaf	C		
	AMS		WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D		
			WG	17	lb/100 gal	canopy	D		
7	Roundup PowerMax AMS	4.5	SL	32	fl oz/a	2-leaf	B	0	99
			WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax Dual II Magnum	4.5	SL	22	fl oz/a	6-leaf	C		
		7.64	L	1.33	pt/a	6-leaf	C		
	AMS		WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D		
			WG	17	lb/100 gal	canopy	D		

## MSU Weed Science Research Program

Weed Code	CHEAL	AMARE	BETVU	CHEAL
Crop Code				
Rating Data Type	control	control	injury	control
Rating Unit	percent	percent	percent	percent
Rating Date	Jun/03/2013	Jun/03/2013	Jun/13/2013	Jun/13/2013
Trt-Eval Interval	0 DA-B	0 DA-B	10 DA-B	10 DA-B
# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code				
8	Nortron	4	L	3	pt/a	PRE	A	50	99	14	99
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
9	Nortron	4	L	3	pt/a	PRE	A	53	99	3	99
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
10	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B			11	99
	UpBeet	50	WG	0.5	oz/a	2-leaf	B				
	Stinger	3	L	4	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
11	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B			3	99
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	UpBeet	50	WG	0.5	oz/a	6-leaf	C				
	Stinger	3	L	4	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
12	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B			15	99
	Betamix	1.3	L	2	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
LSD (P=.05)								32.8	0.0	7.3	0.6
CV								28.44	0.0	116.64	0.39

Means followed by same letter do not significantly differ (P=.05, LSD)

## MSU Weed Science Research Program

Weed Code		AMARE		CHEAL	AMARE					
Crop Code			BETVU							
Rating Data Type		control	injury	control	control					
Rating Unit		percent	percent	percent	percent					
Rating Date		Jun/13/2013	Jun/26/2013	Jun/26/2013	Jun/26/2013					
Trt-Eval Interval		10 DA-B	23 DA-B	23 DA-B	23 DA-B					
# Subsamples, Dec.		0	0	0	0					
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Grow Stg	Appl Code				
1	Roundup PowerMax AMS	4.5	SL	32 fl oz/a	2-leaf	B	99	0	99	99
	AMS		WG	17 lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22 fl oz/a	6-leaf	C				
	AMS		WG	17 lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22 fl oz/a	canopy	D				
	AMS (ASN)		WG	17 lb/100 gal	canopy	D				
2	Roundup PowerMax	4.5	SL	32 fl oz/a	2-leaf	B	99	3	99	99
	Warrant AMS	3	CS	3 pt/a	2-leaf	B				
	AMS		WG	17 lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22 fl oz/a	6-leaf	C				
	AMS		WG	17 lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22 fl oz/a	canopy	D				
	AMS (ASN)		WG	17 lb/100 gal	canopy	D				
3	Roundup PowerMax	4.5	SL	32 fl oz/a	2-leaf	B	99	1	99	99
	Outlook AMS	6	L	16 fl oz/a	2-leaf	B				
	AMS		WG	17 lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22 fl oz/a	6-leaf	C				
	AMS		WG	17 lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22 fl oz/a	canopy	D				
	AMS (ASN)		WG	17 lb/100 gal	canopy	D				
4	Roundup PowerMax	4.5	SL	32 fl oz/a	2-leaf	B	99	0	99	99
	Dual II Magnum AMS	7.64	L	1.33 pt/a	2-leaf	B				
	AMS		WG	17 lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22 fl oz/a	6-leaf	C				
	AMS		WG	17 lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22 fl oz/a	canopy	D				
	AMS (ASN)		WG	17 lb/100 gal	canopy	D				
5	Roundup PowerMax	4.5	SL	32 fl oz/a	2-leaf	B	99	2	99	99
	AMS		WG	17 lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22 fl oz/a	6-leaf	C				
	Warrant AMS	3	CS	3 pt/a	6-leaf	C				
	AMS		WG	17 lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22 fl oz/a	canopy	D				
	AMS (ASN)		WG	17 lb/100 gal	canopy	D				
6	Roundup PowerMax	4.5	SL	32 fl oz/a	2-leaf	B	99	3	99	99
	AMS		WG	17 lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22 fl oz/a	6-leaf	C				
	Outlook AMS	6	L	16 fl oz/a	6-leaf	C				
	AMS		WG	17 lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22 fl oz/a	canopy	D				
	AMS (ASN)		WG	17 lb/100 gal	canopy	D				
7	Roundup PowerMax	4.5	SL	32 fl oz/a	2-leaf	B	99	0	99	99
	AMS		WG	17 lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22 fl oz/a	6-leaf	C				
	Dual II Magnum AMS	7.64	L	1.33 pt/a	6-leaf	C				
	AMS		WG	17 lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22 fl oz/a	canopy	D				
	AMS (ASN)		WG	17 lb/100 gal	canopy	D				

## MSU Weed Science Research Program

Weed Code	AMARE	BETVU	CHEAL	AMARE
Crop Code				
Rating Data Type	control	injury	control	control
Rating Unit	percent	percent	percent	percent
Rating Date	Jun/13/2013	Jun/26/2013	Jun/26/2013	Jun/26/2013
Trt-Eval Interval	10 DA-B	23 DA-B	23 DA-B	23 DA-B
# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code	AMARE	BETVU	CHEAL	AMARE
8	Nortron	4	L	3	pt/a	PRE	A	99	14	99	99
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
9	Nortron	4	L	3	pt/a	PRE	A	99	3	99	99
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
10	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	8	99	99
	UpBeet	50	WG	0.5	oz/a	2-leaf	B				
	Stinger	3	L	4	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
11	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	4	99	99
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	UpBeet	50	WG	0.5	oz/a	6-leaf	C				
	Stinger	3	L	4	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
12	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	13	99	99
	Betamix	1.3	L	2	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
LSD (P=.05)								0.0	8.3	0.7	0.0
CV								0.0	142.75	0.5	0.0

Means followed by same letter do not significantly differ (P=.05, LSD)

## MSU Weed Science Research Program

Weed Code									CHEAL	AMARE		
Crop Code									BETVU		BETVU	
Rating Data Type									injury	control	control	injury
Rating Unit									percent	percent	percent	percent
Rating Date									Jul/03/2013	Jul/03/2013	Jul/03/2013	Jul/17/2013
Trt-Eval Interval									7 DA-C	7 DA-C	7 DA-C	21 DA-C
# Subsamples, Dec.									0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Roundup PowerMax AMS	4.5	SL	32	fl oz/a	2-leaf	B	0	99	99	0	
	AMS		WG	17	lb/100 gal	2-leaf	B					
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C					
	AMS		WG	17	lb/100 gal	6-leaf	C					
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D					
	AMS (ASN)		WG	17	lb/100 gal	canopy	D					
2	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	0	99	99	0	
	Warrant AMS	3	CS	3	pt/a	2-leaf	B					
	AMS		WG	17	lb/100 gal	2-leaf	B					
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C					
	AMS		WG	17	lb/100 gal	6-leaf	C					
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D					
	AMS (ASN)		WG	17	lb/100 gal	canopy	D					
3	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	0	99	99	0	
	Outlook AMS	6	L	16	fl oz/a	2-leaf	B					
	AMS		WG	17	lb/100 gal	2-leaf	B					
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C					
	AMS		WG	17	lb/100 gal	6-leaf	C					
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D					
	AMS (ASN)		WG	17	lb/100 gal	canopy	D					
4	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	0	99	99	0	
	Dual II Magnum AMS	7.64	L	1.33	pt/a	2-leaf	B					
	AMS		WG	17	lb/100 gal	2-leaf	B					
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C					
	AMS		WG	17	lb/100 gal	6-leaf	C					
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D					
	AMS (ASN)		WG	17	lb/100 gal	canopy	D					
5	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	1	99	99	0	
	AMS		WG	17	lb/100 gal	2-leaf	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C					
	Warrant AMS	3	CS	3	pt/a	6-leaf	C					
	AMS		WG	17	lb/100 gal	6-leaf	C					
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D					
	AMS (ASN)		WG	17	lb/100 gal	canopy	D					
6	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	1	99	99	0	
	AMS		WG	17	lb/100 gal	2-leaf	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C					
	Outlook AMS	6	L	16	fl oz/a	6-leaf	C					
	AMS		WG	17	lb/100 gal	6-leaf	C					
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D					
	AMS (ASN)		WG	17	lb/100 gal	canopy	D					
7	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	3	99	99	0	
	AMS		WG	17	lb/100 gal	2-leaf	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C					
	Dual II Magnum AMS	7.64	L	1.33	pt/a	6-leaf	C					
	AMS		WG	17	lb/100 gal	6-leaf	C					
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D					
	AMS (ASN)		WG	17	lb/100 gal	canopy	D					

## MSU Weed Science Research Program

Weed Code								CHEAL	AMARE		
Crop Code								BETVU		BETVU	
Rating Data Type								injury	control	injury	
Rating Unit								percent	percent	percent	
Rating Date								Jul/03/2013	Jul/03/2013	Jul/03/2013	
Trt-Eval Interval								7 DA-C	7 DA-C	7 DA-C	
# Subsamples, Dec.								0	0	0	
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code				
8	Nortron	4	L	3	pt/a	PRE	A	5	99	99	0
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
9	Nortron	4	L	3	pt/a	PRE	A	3	99	99	0
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
10	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	4	99	99	0
	UpBeet	50	WG	0.5	oz/a	2-leaf	B				
	Stinger	3	L	4	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
11	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	0	99	99	7
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	UpBeet	50	WG	0.5	oz/a	6-leaf	C				
	Stinger	3	L	4	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
12	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	3	99	99	0
	Betamix	1.3	L	2	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
LSD (P=.05)								5.0	0.6	0.0	0.0
CV								218.05	0.42	0.0	0.0

Means followed by same letter do not significantly differ (P=.05, LSD)

## MSU Weed Science Research Program

Weed Code	CHEAL	AMARE	BETVU	CHEAL							
Crop Code											
Rating Data Type	control	control	injury	control							
Rating Unit	percent	percent	percent	percent							
Rating Date	Jul/17/2013	Jul/17/2013	Sep/21/2013	Sep/21/2013							
Trt-Eval Interval	21 DA-C	21 DA-C	87 DA-C	87 DA-C							
# Subsamples, Dec.	0	0	0	0							
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code				
1	Roundup PowerMax AMS	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
2	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	Warrant AMS	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
3	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	Outlook AMS	6	L	16	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
4	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	Dual II Magnum AMS	7.64	L	1.33	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
5	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant AMS	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
6	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Outlook AMS	6	L	16	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
7	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Dual II Magnum AMS	7.64	L	1.33	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				



## MSU Weed Science Research Program

Weed Code							CHEAL	AMARE	BETVU	CHEAL	
Crop Code							control	control	injury	control	
Rating Data Type							percent	percent	percent	percent	
Rating Unit							Jul/17/2013	Jul/17/2013	Sep/21/2013	Sep/21/2013	
Rating Date							21 DA-C	21 DA-C	87 DA-C	87 DA-C	
Trt-Eval Interval							0	0	0	0	
# Subsamples, Dec.											
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code				
8	Nortron	4	L	3	pt/a	PRE	A	99	99	0	99
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
9	Nortron	4	L	3	pt/a	PRE	A	99	99	0	99
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
10	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	UpBeet	50	WG	0.5	oz/a	2-leaf	B				
	Stinger	3	L	4	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
11	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	UpBeet	50	WG	0.5	oz/a	6-leaf	C				
	Stinger	3	L	4	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
12	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	99	0	99
	Betamix	1.3	L	2	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
LSD (P=.05)								0.0	0.0	0.0	0.4
CV								0.0	0.0	0.0	0.29

Means followed by same letter do not significantly differ (P=.05, LSD)

MSU Weed Science Research Program

Weed Code	AMARE			
Crop Code		BETVU	BETVU	BETVU
Rating Data Type	control	stand count	% sugar	yield
Rating Unit	percent	100' row		ton/acre
Rating Date	Sep/21/2013	Sep/24/2013	Sep/25/2013	Sep/25/2013
Trt-Eval Interval	87 DA-C	145 DA-A	146 DA-A	146 DA-A
# Subsamples, Dec.	0	0	1	1

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
1	Roundup PowerMax AMS	4.5	SL	32	fl oz/a	2-leaf	B	99	186	19.3	20.5
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
2	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	202	19.6	21.0
	Warrant AMS	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
3	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	217	19.7	21.4
	Outlook AMS	6	L	16	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
4	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	216	19.8	20.5
	Dual II Magnum AMS	7.64	L	1.33	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
5	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	194	19.9	21.3
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant AMS	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
6	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	193	20.2	19.9
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Outlook AMS	6	L	16	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
7	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	209	20.4	20.9
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Dual II Magnum AMS	7.64	L	1.33	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				

MSU Weed Science Research Program

Weed Code							AMARE	BETVU	BETVU	BETVU	
Crop Code							control	stand count	% sugar	yield	
Rating Data Type							percent	100' row		ton/acre	
Rating Unit							Sep/21/2013	Sep/24/2013	Sep/25/2013	Sep/25/2013	
Rating Date							87 DA-C	145 DA-A	146 DA-A	146 DA-A	
Trt-Eval Interval							0	0	1	1	
# Subsamples, Dec.											
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code				
8	Nortron	4	L	3	pt/a	PRE	A	99	196	19.9	20.8
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
9	Nortron	4	L	3	pt/a	PRE	A	99	200	19.8	20.6
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
10	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	190	20.1	18.6
	UpBeet	50	WG	0.5	oz/a	2-leaf	B				
	Stinger	3	L	4	fl oz/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	Warrant	3	CS	3	pt/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
11	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	191	19.9	20.0
	Warrant	3	CS	3	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	UpBeet	50	WG	0.5	oz/a	6-leaf	C				
	Stinger	3	L	4	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
12	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	99	191	19.9	20.2
	Betamix	1.3	L	2	pt/a	2-leaf	B				
	AMS		WG	17	lb/100 gal	2-leaf	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C				
	AMS		WG	17	lb/100 gal	6-leaf	C				
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D				
	AMS (ASN)		WG	17	lb/100 gal	canopy	D				
LSD (P=.05)							0.0	20.4	0.91	2.73	
CV							0.0	7.11	3.18	9.23	

Means followed by same letter do not significantly differ (P=.05, LSD)

## MSU Weed Science Research Program

Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	# Subsamples, Dec.	BETVU RWST # / ton Sep/25/2013 146 DA-A 0	BETVU RWSA # / acre Sep/25/2013 91 DA-C 0
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Grow Stg	Appl Code	
1	Roundup PowerMax AMS	4.5	SL WG	32 17	fl oz/a lb/100 gal	2-leaf 2-leaf	B B	288
	Roundup PowerMax AMS	4.5	SL WG	22 17	fl oz/a lb/100 gal	6-leaf 6-leaf	C C	
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL WG	22 17	fl oz/a lb/100 gal	canopy canopy	D D	
2	Roundup PowerMax Warrant AMS	4.5 3	SL CS WG	32 3 17	fl oz/a pt/a lb/100 gal	2-leaf 2-leaf 2-leaf	B B B	294
	Roundup PowerMax AMS	4.5	SL WG	22 17	fl oz/a lb/100 gal	6-leaf 6-leaf	C C	
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL WG	22 17	fl oz/a lb/100 gal	canopy canopy	D D	
3	Roundup PowerMax Outlook AMS	4.5 6	SL L WG	32 16 17	fl oz/a fl oz/a lb/100 gal	2-leaf 2-leaf 2-leaf	B B B	296
	Roundup PowerMax AMS	4.5	SL WG	22 17	fl oz/a lb/100 gal	6-leaf 6-leaf	C C	
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL WG	22 17	fl oz/a lb/100 gal	canopy canopy	D D	
4	Roundup PowerMax Dual II Magnum AMS	4.5 7.64	SL L WG	32 1.33 17	fl oz/a pt/a lb/100 gal	2-leaf 2-leaf 2-leaf	B B B	298
	Roundup PowerMax AMS	4.5	SL WG	22 17	fl oz/a lb/100 gal	6-leaf 6-leaf	C C	
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL WG	22 17	fl oz/a lb/100 gal	canopy canopy	D D	
5	Roundup PowerMax AMS	4.5	SL WG	32 17	fl oz/a lb/100 gal	2-leaf 2-leaf	B B	302
	Roundup PowerMax Warrant AMS	4.5 3	SL CS WG	22 3 17	fl oz/a pt/a lb/100 gal	6-leaf 6-leaf 6-leaf	C C C	
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL WG	22 17	fl oz/a lb/100 gal	canopy canopy	D D	
6	Roundup PowerMax AMS	4.5	SL WG	32 17	fl oz/a lb/100 gal	2-leaf 2-leaf	B B	303
	Roundup PowerMax Outlook AMS	4.5 6	SL L WG	22 16 17	fl oz/a fl oz/a lb/100 gal	6-leaf 6-leaf 6-leaf	C C C	
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL WG	22 17	fl oz/a lb/100 gal	canopy canopy	D D	
7	Roundup PowerMax AMS	4.5	SL WG	32 17	fl oz/a lb/100 gal	2-leaf 2-leaf	B B	308
	Roundup PowerMax Dual II Magnum AMS	4.5 7.64	SL L WG	22 1.33 17	fl oz/a pt/a lb/100 gal	6-leaf 6-leaf 6-leaf	C C C	
	Roundup PowerMax (ASN) AMS (ASN)	4.5	SL WG	22 17	fl oz/a lb/100 gal	canopy canopy	D D	

## MSU Weed Science Research Program

Weed Code							BETVU	BETVU	
Crop Code							RWST	RWSA	
Rating Data Type							# / ton	# / acre	
Rating Unit							Sep/25/2013	Sep/25/2013	
Rating Date							146 DA-A	91 DA-C	
Trt-Eval Interval							0	0	
# Subsamples, Dec.							0	0	
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code		
8	Nortron	4	L	3	pt/a	PRE	A	300	6238
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B		
	Warrant	3	CS	3	pt/a	2-leaf	B		
	AMS		WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C		
	AMS		WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D		
	AMS (ASN)		WG	17	lb/100 gal	canopy	D		
9	Nortron	4	L	3	pt/a	PRE	A	296	6097
	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B		
	AMS		WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C		
	Warrant	3	CS	3	pt/a	6-leaf	C		
	AMS		WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D		
	AMS (ASN)		WG	17	lb/100 gal	canopy	D		
10	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	301	5629
	UpBeet	50	WG	0.5	oz/a	2-leaf	B		
	Stinger	3	L	4	fl oz/a	2-leaf	B		
	AMS		WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C		
	Warrant	3	CS	3	pt/a	6-leaf	C		
	AMS		WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D		
	AMS (ASN)		WG	17	lb/100 gal	canopy	D		
11	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	298	5934
	Warrant	3	CS	3	pt/a	2-leaf	B		
	AMS		WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C		
	UpBeet	50	WG	0.5	oz/a	6-leaf	C		
	Stinger	3	L	4	fl oz/a	6-leaf	C		
	AMS		WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D		
	AMS (ASN)		WG	17	lb/100 gal	canopy	D		
12	Roundup PowerMax	4.5	SL	32	fl oz/a	2-leaf	B	297	5999
	Betamix	1.3	L	2	pt/a	2-leaf	B		
	AMS		WG	17	lb/100 gal	2-leaf	B		
	Roundup PowerMax	4.5	SL	22	fl oz/a	6-leaf	C		
	AMS		WG	17	lb/100 gal	6-leaf	C		
	Roundup PowerMax (ASN)	4.5	SL	22	fl oz/a	canopy	D		
	AMS (ASN)		WG	17	lb/100 gal	canopy	D		
LSD (P=.05)							14.8	831.4	
CV							3.42	9.43	

Means followed by same letter do not significantly differ (P=.05, LSD)