

Ohio State University  
Horticulture and Crop Science

## PRE WEED MANAGEMENT STRATEGIES FOR ROUNDUP READY SOYBEANS

Trial ID: 08MONGRWPREMARKEY      Study Dir.: Anthony F. Dobbels  
Location: MARKEY                      Investigator: Dr. Mark M. Loux**GENERAL TRIAL INFORMATION**Study Director: Anthony F. Dobbels  
Investigator: Dr. Mark M. Loux

Conducted Under GLP (Y/N): N                      Conducted Under GEP (Y/N): N

Crop 1: GLXMA      SOYBEAN                      Variety: SEED CONSULTANTS SC9336  
Planting Date: May/07/2008                      Planting Method: JOHN DEERE 7000  
Rate: 188000 SEED/A                      Depth: 0.75 IN  
Row Spacing: 30 IN                      Seed Bed: NO-TILL**SITE AND DESIGN**Plot Width, Unit: 10 FT                      Plot Length, Unit: 30 FT                      Reps: 3  
Tillage Type: NO-TILL                      Study Design: RANDOMIZED COMPLETE BLOCK**SOIL DESCRIPTION**% Sand: 24.4      % OM: 2.0                      Texture: SILT LOAM  
% Silt: 62.5      pH: 7.3                      Soil Name: WESTBORO-SCHAFFER  
% Clay: 13.1      CEC: 10.5                      Fert. Level: GOOD**APPLICATION DESCRIPTION**

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Application Date: May/07/2008  
Time of Day: 10:00 A.M.  
Application Method: SPRAY  
Application Timing: PRE  
Applic. Placement: BROADCAST  
Air Temp., Unit: 69 F  
% Relative Humidity: 50  
Wind Velocity, Unit: 9 S  
Soil Temp., Unit: 58 F  
Soil Moisture: DRY/MOIST  
% Cloud Cover: 10**CROP STAGE AT EACH APPLICATION**

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Crop 1 Code, Stage: GLXMA

**APPLICATION EQUIPMENT**

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Appl. Equipment: BACKPACK  
Operating Pressure: 53  
Nozzle Type: DG  
Nozzle Size: 11002  
Nozzle Spacing, Unit: 18 IN  
Ground Speed, Unit: 3 MPH  
Carrier: WATER  
Spray Volume, Unit: 20 GPA  
Propellant: CO2

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Trial ID: 08MONGRWPREMARKEY Study Dir.: Anthony F. Dobbels  
Location: MARKEY Investigator: Dr. Mark M. Loux

Weed Code						AMBEL		AMBEL	
Crop Code						GLXMA	CONTROL	GLXMA	CONTROL
Rating Data Type						PHYTO	PERCENT	PHYTO	PERCENT
Rating Unit						PERCENT	PERCENT	PERCENT	PERCENT
Rating Date						Jun/11/2008	Jun/11/2008	Jun/24/2008	Jun/24/2008
Trt-Eval Interval						35 DA-A	35 DA-A	48 DA-A	48 DA-A
# Subsamples, Dec.						0	0	0	0
Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	1	2	3	4
1	ROUNDUP POWERMAX	21.3 oz/a		PRE	A	2 c	23 a	0 b	33 a
1	2,4-D	16 oz/a		PRE					
1	AMS	4 qt/a		PRE					
2	GRAMOXONE INTEON	48 oz/a		PRE	A	7 c	13 a	0 b	18 a
2	2,4-D	16 oz/a		PRE					
2	AMS	4 qt/a		PRE					
3	FIRSTRATE	0.305 oz/a		PRE	A	2 c	18 a	0 b	23 a
3	ROUNDUP POWERMAX	21.3 oz/a		PRE	A				
3	2,4-D	16 oz/a		PRE					
3	AMS	4 qt/a		PRE					
4	VALOR SX	2 oz/a		PRE	A	13 c	58 a	3 b	53 a
4	ROUNDUP POWERMAX	21.3 oz/a		PRE	A				
4	2,4-D	16 oz/a		PRE					
4	AMS	4 qt/a		PRE					
5	VALOR SX	3 oz/a		PRE	A	27 c	72 a	20 b	67 a
5	ROUNDUP POWERMAX	21.3 oz/a		PRE	A				
5	2,4-D	16 oz/a		PRE					
5	AMS	4 qt/a		PRE					
6	EXTREME	48.4 oz/a		PRE	A	2 c	23 a	0 b	25 a
6	2,4-D	16 oz/a		PRE					
6	NIS	3.2 oz/a		PRE					
6	AMS	4 qt/a		PRE					
7	INTRRO	64 oz/a		PRE	A	5 c	38 a	0 b	27 a
7	ROUNDUP POWERMAX	21.3 oz/a		PRE	A				
7	2,4-D	16 oz/a		PRE					
7	AMS	4 qt/a		PRE					
8	INTRRO	48 oz/a		PRE	A	22 c	67 a	8 b	53 a
8	VALOR SX	2 oz/a		PRE					
8	ROUNDUP POWERMAX	21.3 oz/a		PRE	A				
8	2,4-D	16 oz/a		PRE					
8	AMS	4 qt/a		PRE					
9	PROWL H20	2 pt/a		PRE	A	2 c	17 a	0 b	23 a
9	ROUNDUP POWERMAX	21.3 oz/a		PRE	A				
9	2,4-D	16 oz/a		PRE					
9	AMS	4 qt/a		PRE					
10	CANOPY EX 1.1 OZ	1.1 oz/a		PRE	A	5 c	27 a	3 b	40 a
10	CLASSIC	1 oz/a		PRE					
10	EXPRESS	0.1 oz/a		PRE					
10	ROUNDUP POWERMAX	21.3 oz/a		PRE	A				
10	2,4-D	16 oz/a		PRE					
10	AMS	4 qt/a		PRE					
11	SYNCHRONY XP	1 oz/a		PRE	A	5 c	37 a	3 b	27 a
11	CLASSIC	0.853 oz/a		PRE					
11	HARMONY GT	0.092 oz/a		PRE					
11	ROUNDUP POWERMAX	21.3 oz/a		PRE	A				
11	2,4-D	16 oz/a		PRE					
11	AMS	4 qt/a		PRE					
12	AUTHORITY FIRST	3.22 oz/a		PRE	A	35 c	34 a	30 b	43 a
12	ROUNDUP POWERMAX	21.3 oz/a		PRE	A				
12	2,4-D	16 oz/a		PRE					
12	AMS	4 qt/a		PRE					

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Weed Code		AMBEL				AMBEL			
Crop Code		GLXMA		GLXMA		GLXMA		GLXMA	
Rating Data Type		PHYTO		PHYTO		PHYTO		PHYTO	
Rating Unit		PERCENT		PERCENT		PERCENT		PERCENT	
Rating Date		Jun/11/2008		Jun/11/2008		Jun/24/2008		Jun/24/2008	
Trt-Eval Interval		35 DA-A		35 DA-A		48 DA-A		48 DA-A	
# Subsamples, Dec.		0		0		0		0	
Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	1	2	3	4
13	SENCOR DF	5.33	oz/a	PRE	A	8 c	40 a	0 b	33 a
13	ROUNDUP POWERMAX	21.3	oz/a	PRE	A				
13	2,4-D	16	oz/a	PRE					
13	AMS	4	qt/a	PRE					
14	AUTHORITY MTZ	11	oz/a	PRE	A	12 c	40 a	7 b	38 a
14	ROUNDUP POWERMAX	21.3	oz/a	PRE	A				
14	2,4-D	16	oz/a	PRE					
14	AMS	4	qt/a	PRE					
15	VALOR XLT	2.98	oz/a	PRE	A	30 c	53 a	43 b	42 a
15	VALOR SX	1.76	oz/a	PRE					
15	CLASSIC	1.24	oz/a	PRE					
15	ROUNDUP POWERMAX	21.3	oz/a	PRE	A				
15	2,4-D	16	oz/a	PRE					
15	AMS	4	qt/a	PRE					
16	CLARITY	16	oz/a	PRE	A	77 b	63 a	87 a	50 a
16	ROUNDUP POWERMAX	21.3	oz/a	PRE	A				
16	2,4-D	16	oz/a	PRE					
16	AMS	4	qt/a	PRE					
17	SENCOR DF	5.33	oz/a	PRE	A	3 c	37 a	0 b	35 a
17	GRAMOXONE INTEON	48	oz/a	PRE					
17	2,4-D	16	oz/a	PRE					
17	AMS	4	qt/a	PRE					
18	GANGSTER	1.62	oz/a	PRE	A	15 c	50 a	3 b	48 a
18	VALOR SX	1.35	oz/a	PRE					
18	FIRSTRATE	0.27	oz/a	PRE					
18	ROUNDUP POWERMAX	21.3	oz/a	PRE	A				
18	2,4-D	16	oz/a	PRE					
18	AMS	4	qt/a	PRE					
19	ENVIVE 3.5 OZ					22 c	67 a	20 b	58 a
19	VALOR SX	2	oz/a	PRE	A				
19	CLASSIC	1.28	oz/a	PRE					
19	HARMONY GT	0.104	oz/a	PRE					
19	ROUNDUP POWERMAX	21.3	oz/a	PRE	A				
19	2,4-D	16	oz/a	PRE					
19	AMS	4	qt/a	PRE					
20	ENLITE 2.8 OZ					20 c	63 a	10 b	57 a
20	VALOR SX	2	oz/a	PRE	A				
20	CLASSIC	0.32	oz/a	PRE					
20	HARMONY GT	0.49	oz/a	PRE					
20	ROUNDUP POWERMAX	21.3	oz/a	PRE	A				
20	2,4-D	16	oz/a	PRE					
20	AMS	4	qt/a	PRE					
21	CLARITY	8	oz/a	PRE	A	30 c	38 a	23 b	33 a
21	ROUNDUP POWERMAX	21.3	oz/a	PRE	A				
21	2,4-D	16	oz/a	PRE					
21	AMS	4	qt/a	PRE					
22	CLARITY	32	oz/a	PRE	A	100 a	66 a	97 a	50 a
22	ROUNDUP POWERMAX	21.3	oz/a	PRE	A				
22	2,4-D	16	oz/a	PRE					
22	AMS	4	qt/a	PRE					
LSD (P=.05)						21.6	37.7	30.9	31.1
Standard Deviation						13.0	22.8	18.5	18.9
CV						63.76	53.14	113.83	47.28
Bartlett's X2						34.731	21.762	25.965	13.781
P(Bartlett's X2)						0.01*	0.413	0.017*	0.879

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		AMBEL		AMBEL					
		GLXMA		GLXMA					
Weed Code		PHYTO	CONTROL	PHYTO	CONTROL				
Crop Code		PERCENT	PERCENT	PERCENT	PERCENT				
Rating Data Type		Jun/11/2008	Jun/11/2008	Jun/24/2008	Jun/24/2008				
Rating Unit		35 DA-A	35 DA-A	48 DA-A	48 DA-A				
Rating Date		0	0	0	0				
Trt-Eval Interval									
# Subsamples, Dec.									
Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	1	2	3	4
Replicate F						0.051	0.342	0.662	0.030
Replicate Prob(F)						0.9507	0.7123	0.5223	0.9707
Treatment F						10.812	1.959	6.418	1.496
Treatment Prob(F)						0.0001	0.0316	0.0001	0.1314

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.