

Encapsulated acetochlor in soybean

Trial ID: SOY01-09
Conducted: C-12

Study Dir.: Sprague, Powell
Investigator: Christy Sprague

Date Planted: 5/18/09
Variety: Pioneer 92M61 RR
Population: 156,000
Soil Type: Loam
Plot Size: 10 X 28 FT
Row Spacing: 30 IN
No. of Reps: 4
% OM: 3.4
pH: 7.3
Design: RANDOMIZED COMPLETE BLOCK

Tillage: Fall moldboard plow, spring soil finished twice
Fertilizer: None

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISIFOLIA L.
2.	ANGR	mainly foxtail species	SETARIA SP.
3.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
4.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
Crop	Code	Common Name	
1.	GLXMA	SOYBEAN	

Application Description

	A	B	C
Application Timing:	PRE	V2-V3	V5-V6
Date Treated:	5/18/09	6/23/09	6/25/09
Time Treated:	3:45 PM	11:30 AM	12:00 PM
% Cloud Cover:	10	20	30
Air Temp., Unit:	72 F	85 F	83 F
% Relative Humidity:	23	48	42
Wind Speed/Unit/Dir:	5 mph SW	2 mph W	2 mph W
Soil Temp., Unit:	62 F	76 F	79 F
Soil/Leaf Surface M:	5 5	4 5	5 5
Soil Moist (1=w 5=d):	3	3	4

Crop Stage at Each Application

	A	B	C
Crop Name:	GLXMA	GLXMA	GLXMA
Height (In.):	-	8	8-10
Stage (L):	-	V3	V4-V5

Weed Stage at Each Application

	A	B	C
Weed 1 Name:	AMBEL	AMBEL	AMBEL
Height (In.):	-	4	5
Stage (L):	-	6	8
Weed 2 Name:	ANGR	ANGR	ANGR
Height (In.):	-	5	6
Stage (L):	-	4	2-6
Weed 3 Name:	ABUTH	ABUTH	ABUTH
Height (In.):	-	3	3
Stage (L):	-	4	4-5
Weed 4 Name:	CHEAL	CHEAL	CHEAL
Height (In.):	-	3	4
Stage (L):	-	6	8

Weed Density (plants/sq. ft.)

	1	2	3	4
Weed Name:	ANGR	AMBEL	ABUTH	CHEAL
Density:	8	16	<1	<1

Application Equipment

Appl	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
A	Cub	3.8	AirMix	11003	23"	20"	100"	19	Water	28
B	Cub	3.8	AirMix	11003	27"	20"	100"	19	Water	28
C	Cub	3.8	AirMix	11003	27"	20"	100"	19	Water	28

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Weed Code								ANGR	AMBEL	GLXMA	ANGR	CHEAL	AMBEL
Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	GLXMA injury percent	GLXMA injury percent	GLXMA injury percent	control percent	control percent	injury percent	control percent	control percent	control percent
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	23 DA-A	6 DA-B	21 DA-B	21 DA-B	21 DA-B	34 DA-B
1	Valor	51	WG	1	oz/a	PRE	A	19	3	14	99	98	2
1	MON 63410	3	L	3	pt/a	V2-V3	B						99
1	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B						99
1	AMS		WG	17	lb/100 gal	V2-V3	B						94
2	Valor	51	WG	2	oz/a	PRE	A	20	1	3	99	99	0
2	MON 63410	3	L	3	pt/a	V2-V3	B						99
2	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B						99
2	AMS		WG	17	lb/100 gal	V2-V3	B						99
3	Valor	51	WG	1	oz/a	PRE	A	16	2	3	99	97	1
3	MON 63410	3	L	3	pt/a	V5-V6	C						96
3	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C						95
3	AMS		WG	17	lb/100 gal	V5-V6	C						93
4	Valor	51	WG	2	oz/a	PRE	A	20	3	5	98	97	3
4	MON 63410	3	L	3	pt/a	V5-V6	C						94
4	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C						99
4	AMS		WG	17	lb/100 gal	V5-V6	C						96
5	Untreated							0	0	0	0	0	0
6	Valor	51	WG	1	oz/a	PRE	A	15	10	18	99	99	3
6	MON 63410	3	L	3	pt/a	V2-V3	B						99
6	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B						99
6	AMS		WG	17	lb/100 gal	V2-V3	B						96
6	MON 63410	3	L	3	pt/a	V5-V6	C						99
6	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C						99
6	AMS		WG	17	lb/100 gal	V5-V6	C						96
7	Valor	51	WG	2	oz/a	PRE	A	20	3	9	99	99	3
7	MON 63410	3	L	3	pt/a	V2-V3	B						99
7	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B						99
7	AMS		WG	17	lb/100 gal	V2-V3	B						98
7	MON 63410	3	L	3	pt/a	V5-V6	C						99
7	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C						99
7	AMS		WG	17	lb/100 gal	V5-V6	C						98
8	Valor	51	WG	1	oz/a	PRE	A	18	6	5	99	98	3
8	MON 63410	3	L	4	pt/a	V2-V3	B						98
8	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B						99
8	AMS		WG	17	lb/100 gal	V2-V3	B						93
9	Valor	51	WG	2	oz/a	PRE	A	20	3	3	99	99	0
9	MON 63410	3	L	4	pt/a	V5-V6	C						97
9	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C						99
9	AMS		WG	17	lb/100 gal	V5-V6	C						99
10	Valor	51	WG	1	oz/a	PRE	A	18	9	5	99	98	3
10	Dual II Magnum	7.64	L	1.33	pt/a	V2-V3	B						98
10	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B						99
10	AMS		WG	17	lb/100 gal	V2-V3	B						92
11	Valor	51	WG	2	oz/a	PRE	A	18	9	3	99	98	1
11	Dual II Magnum	7.64	L	1.33	pt/a	V2-V3	B						99
11	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B						99
11	AMS		WG	17	lb/100 gal	V2-V3	B						95
12	Valor	51	WG	2	oz/a	PRE	A	18	30	16	11	99	6
12	Cobra	2	L	12.5	fl oz/a	V5-V6	C						0
12	Herbimax		L	0.25	% v/v	V5-V6	C						99
13	Valor	51	WG	2	oz/a	PRE	A	20	29	19	9	99	6
13	MON 63410	3	L	3	pt/a	V5-V6	C						31
13	Cobra	2	L	12.5	fl oz/a	V5-V6	C						98
13	Herbimax		L	0.25	% v/v	V5-V6	C						99

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Weed Code	ABUTH	GLXMA	GLXMA
Crop Code	control	moisture	yield
Rating Data Type	percent	percent	bu/acre
Rating Unit	7/27/09	10/13/09	10/13/09
Rating Date	34 DA-B	148 DA-A	at 13% M
Trt-Eval Interval			

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code			
1	Valor	51	WG	1	oz/a	PRE	A	98	19.6	74.3
1	MON 63410	3	L	3	pt/a	V2-V3	B			
1	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B			
1	AMS		WG	17	lb/100 gal	V2-V3	B			
2	Valor	51	WG	2	oz/a	PRE	A	99	17.4	80.4
2	MON 63410	3	L	3	pt/a	V2-V3	B			
2	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B			
2	AMS		WG	17	lb/100 gal	V2-V3	B			
3	Valor	51	WG	1	oz/a	PRE	A	98	18.8	75.1
3	MON 63410	3	L	3	pt/a	V5-V6	C			
3	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C			
3	AMS		WG	17	lb/100 gal	V5-V6	C			
4	Valor	51	WG	2	oz/a	PRE	A	98	19.6	78.4
4	MON 63410	3	L	3	pt/a	V5-V6	C			
4	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C			
4	AMS		WG	17	lb/100 gal	V5-V6	C			
5	Untreated							0	22.0	29.1
6	Valor	51	WG	1	oz/a	PRE	A	98	17.8	74.9
6	MON 63410	3	L	3	pt/a	V2-V3	B			
6	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B			
6	AMS		WG	17	lb/100 gal	V2-V3	B			
6	MON 63410	3	L	3	pt/a	V5-V6	C			
6	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C			
6	AMS		WG	17	lb/100 gal	V5-V6	C			
7	Valor	51	WG	2	oz/a	PRE	A	99	18.7	74.3
7	MON 63410	3	L	3	pt/a	V2-V3	B			
7	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B			
7	AMS		WG	17	lb/100 gal	V2-V3	B			
7	MON 63410	3	L	3	pt/a	V5-V6	C			
7	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C			
7	AMS		WG	17	lb/100 gal	V5-V6	C			
8	Valor	51	WG	1	oz/a	PRE	A	98	17.2	77.3
8	MON 63410	3	L	4	pt/a	V2-V3	B			
8	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B			
8	AMS		WG	17	lb/100 gal	V2-V3	B			
9	Valor	51	WG	2	oz/a	PRE	A	99	19.2	75.6
9	MON 63410	3	L	4	pt/a	V5-V6	C			
9	Roundup PowerMax	4.5	SL	22	fl oz/a	V5-V6	C			
9	AMS		WG	17	lb/100 gal	V5-V6	C			
10	Valor	51	WG	1	oz/a	PRE	A	96	18.3	76.8
10	Dual II Magnum	7.64	L	1.33	pt/a	V2-V3	B			
10	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B			
10	AMS		WG	17	lb/100 gal	V2-V3	B			
11	Valor	51	WG	2	oz/a	PRE	A	95	21.0	77.0
11	Dual II Magnum	7.64	L	1.33	pt/a	V2-V3	B			
11	Roundup PowerMax	4.5	SL	22	fl oz/a	V2-V3	B			
11	AMS		WG	17	lb/100 gal	V2-V3	B			
12	Valor	51	WG	2	oz/a	PRE	A	93	22.6	57.4
12	Cobra	2	L	12.5	fl oz/a	V5-V6	C			
12	Herbimax		L	0.25	% v/v	V5-V6	C			
13	Valor	51	WG	2	oz/a	PRE	A	99	25.0	57.6
13	MON 63410	3	L	3	pt/a	V5-V6	C			
13	Cobra	2	L	12.5	fl oz/a	V5-V6	C			
13	Herbimax		L	0.25	% v/v	V5-V6	C			

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Rating Data Type	control	moisture	yield
Rating Unit	percent	percent	bu/acre
Rating Date	7/27/09	10/13/09	10/13/09
Trt-Eval Interval	34 DA-B	148 DA-A	at 13% M

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code			
LSD (P=.05)								4.0	3.36	5.79
Standard Deviation								2.8	2.35	4.05
CV								3.12	11.91	5.8