

MSU Weed Science Research Program

Benefits of Residual Herbicides for Weed Control in No-Till Soybean I

Trial ID: NTS03-06
 Conducted: C-28S

Study Dir.: Sprague, Powell, Armstrong
 Investigator: Christy Sprague

Date Planted: 5/9/2006
Variety: Asgrow 2107
Population: 205,000 seeds/acre
Soil Type: Loam
Plot Size: 10 X 32 FT
Row Spacing: 7.5 IN
No. of Reps: 4
% OM: 2.2
pH: 6.8
Design: RANDOMIZED COMPLETE BLOCK

Tillage: No-Till into corn stubble
Fertilizer: None

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	TAROF	DANDELION, COMMON	TARAXACUM OFFICINALE WEBER IN WIGGERS
2.	DAUCA	CARROT, WILD	DAUCUS CAROTA L.
3.	THLAR	PENNYCRESS, FIELD	THLASPI ARVENSE L.
4.	VERPG	SPEEDWELL, PURSLANE	VERONICA PEREGRINA L.
5.	SONOL	SOWTHISTLE, ANNUAL	SONCHUS OLERACEUS L.
6.	DESPI	TANSYMUSTARD	DESCURAINIA PINNATA (WALT.) BRITT.
7.	BRAKA/SINAR	MUSTARD, WILD	BRASSICA KABER
8.	CAPBP	SHEPHERDSPURSE	CAPSELLA BURSA-PASTORIS (L.) MEDIK.
9.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
10.	ANGR	Annual grass	mainly foxtail, panicum
11.	AMBEL	RAGWEED, COMMON	AMBROSIA ELATIOR L.
12.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
Crop	Code	Common Name	
1.	GLXMA	SOYBEAN	

Application Description

	A	B	C	D
Application Timing:	7D EPP	MPOST	POST	LPOST
Date Treated:	5/3/2006	6/16/2006	6/23/2006	7/6/2006
Time Treated:	4:30 pm	12:30 pm	4:30 pm	12:30 pm
% Cloud Cover:	95	50	20	10
Air Temp., Unit:	74 F	81 F	76 F	73 F
% Relative Humidity:	43	40	35	41
Wind Speed/Unit/Dir:	5 mph W	7 mph SW	2 mph NE	5 mph N
Soil Temp., Unit:	67 F	78 F	81 F	72 F
Soil/Leaf Surface M:	5 -	5 5	3 5	5 5
Soil Moist (1=w 5=d):	5	5	4	5

Crop Stage at Each Application

	A	B	C	D
Crop Name:	GLXMA	GLXMA	GLXMA	GLXMA
Height (In.):	-	4-5"	6-8"	12-14"
Stage (L):	-	1-2 tri	2-4 tri	R 1

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Weed Stage at Each Application

	A	B	C	D
Weed 1 Name:	TAROF	TAROF	TAROF	TAROF
Height (In.):	4"-10"dia	1-12"dia	.5-10 dia	.25-14 di
Stage (L):	flowering	flowering	many	2-many
Weed 2 Name:	DAUCA	DAUCA	DAUCA	DAUCA
Height (In.):	7"-11"	4-12"	2-16"	2-10"
Stage (L):	rosette	bolting	many	many
Weed 3 Name:	THLAR	THLAR	THLAR	THLAR
Height (In.):	7"-14"	-	-	-
Stage (L):	flowering	-	-	-
Weed 4 Name:	VERPG	VERPG	VERPG	VERPG
Height (In.):	2"-5"	-	-	-
Stage (L):	many	-	-	-
Weed 5 Name:	SONOL	SONOL	SONOL	SONOL
Height (In.):	11-13 dia	-	-	-
Stage (L):	many	-	-	-
Weed 6 Name:	DESPI	DESPI	DESPI	DESPI
Height (In.):	4"-12"	-	-	-
Stage (L):	flowering	-	-	-
Weed 7 Name:	BRAKA/SINAR	BRAKA/SINAR	BRAKA/SINAR	BRAKA/SINAR
Height (In.):	1/2"	-	-	-
Stage (L):	2-4	-	-	-
Weed 8 Name:	CAPBP	CAPBP	CAPBP	CAPBP
Height (In.):	9"-11"	-	-	-
Stage (L):	flowering	-	-	-
Weed 9 Name:	ABUTH	ABUTH	ABUTH	ABUTH
Height (In.):	-	coty-4"	1-4"	.5-4"
Stage (L):	-	0.5-2lf	2-8lf	2-8
Weed10 Name:	ANGR	ANGR	ANGR	ANGR
Height (In.):	-	2-4"	-	-
Stage (L):	-	0.5-2lf	-	-
Weed11 Name:	AMBEL	AMBEL	AMBEL	AMBEL
Height (In.):	-	1-4"	4-8"	6-18"
Stage (L):	-	4-8lf	many	many
Weed12 Name:	CHEAL	CHEAL	CHEAL	CHEAL
Height (In.):	-	-	1-8"	1-17"
Stage (L):	-	-	2-many	many

Application Equipment

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Nozzle	Boom			
	Type	MPH	Type	Size	Height	Spacing	Width	GPA	Carrier	PSI
A	CUB	3.8	AirMix	11003	24"	20"	100"	19	water	27
B	CUB	3.8	AirMix	11003	24"	20"	100"	19	water	27
C	CUB	3.8	AirMix	11003	26"	20"	100"	19	water	27
D	CUB	3.8	AirMix	11003	33"	20"	100"	19	water	27

Comments: Previous Crop: Corn. Previous Herbicide: Roundup.

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Weed Code						DAUCA	TAROF	AMBEL	CHEAL	ABUTH	DAUCA	TAROF
Crop Code												
Rating Data Type						control	control	control	control	control	control	control
Rating Unit						percent	percent	percent	percent	percent	percent	percent
Rating Date						6/16/2006	6/16/2006	6/16/2006	6/16/2006	6/16/2006	6/23/2006	6/23/2006
Trt-Eval Interval						44 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A	51 DA-A	51 DA-A
Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code						
1	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A	95	97	0	0	88	92
1	2,4-D Ester	4	1	pt/a	7 EPP	A						
1	AMS		17	lb/100 gal	7 EPP	A						
2	Canopy	75	3	oz/a	7 EPP	A	99	99	99	99	98	99
2	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A						
2	2,4-D Ester	4	1	pt/a	7 EPP	A						
2	AMS		17	lb/100 gal	7 EPP	A						
3	Boundary	6.5	1.75	pt/a	7 EPP	A	99	92	95	87	95	93
3	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A						
3	2,4-D Ester	4	1	pt/a	7 EPP	A						
3	AMS		17	lb/100 gal	7 EPP	A						
4	Untreated						0	0	0	0	0	0
5	Valor	51	2.5	oz/a	7 EPP	A	99	98	97	99	98	94
5	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A						
5	2,4-D Ester	4	1	pt/a	7 EPP	A						
5	AMS		17	lb/100 gal	7 EPP	A						
6	Extreme	2.17	3	pt/a	7 EPP	A	99	99	97	97	99	95
6	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A						
6	2,4-D Ester	4	1	pt/a	7 EPP	A						
6	Activator 90 NIS		0.25	% v/v	7 EPP	A						
6	AMS		17	lb/100 gal	7 EPP	A						
7	Prowl H2O	3.8	2	pt/a	7 EPP	A	96	95	93	93	97	93
7	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A						
7	2,4-D Ester	4	1	pt/a	7 EPP	A						
7	AMS		17	lb/100 gal	7 EPP	A						
8	Linex	4	1	pt/a	7 EPP	A	98	98	89	86	94	93
8	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A						
8	2,4-D Ester	4	1	pt/a	7 EPP	A						
8	AMS		17	lb/100 gal	7 EPP	A						
9	2,4-D Ester	4	1	pt/a	7 EPP	A	55	66	0	0	45	15
10	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A						
10	2,4-D Ester	4	1	pt/a	7 EPP	A						
10	AMS		17	lb/100 gal	7 EPP	A						
10	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B						
10	AMS		17	lb/100 gal	MPOS	B						
11	Canopy	75	3	oz/a	7 EPP	A						
11	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A						
11	2,4-D Ester	4	1	pt/a	7 EPP	A						
11	AMS		17	lb/100 gal	7 EPP	A						
11	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B						
11	AMS		17	lb/100 gal	MPOS	B						
12	Boundary	6.5	1.75	pt/a	7 EPP	A						
12	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A						
12	2,4-D Ester	4	1	pt/a	7 EPP	A						
12	AMS		17	lb/100 gal	7 EPP	A						
12	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B						
12	AMS		17	lb/100 gal	MPOS	B						
13	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B						
13	AMS		17	lb/100 gal	MPOS	B						

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Weed Code	DAUCA	TAROF	AMBEL	CHEAL	ABUTH	DAUCA	TAROF
Crop Code							
Rating Data Type	control	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Rating Date	6/16/2006	6/16/2006	6/16/2006	6/16/2006	6/16/2006	6/23/2006	6/23/2006
Trt-Eval Interval	44 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A	51 DA-A	51 DA-A

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code
14	Valor	51	2.5	oz/a	7 EPP	A
14	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
14	2,4-D Ester	4	1	pt/a	7 EPP	A
14	AMS	17		lb/100 gal	7 EPP	A
14	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B
14	AMS	17		lb/100 gal	MPOS	B
15	Extreme	2.17	3	pt/a	7 EPP	A
15	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A
15	2,4-D Ester	4	1	pt/a	7 EPP	A
15	Activator 90 NIS		0.25	% v/v	7 EPP	A
15	AMS	17		lb/100 gal	7 EPP	A
15	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B
15	AMS	17		lb/100 gal	MPOS	B
16	Prowl H2O	3.8	2	pt/a	7 EPP	A
16	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
16	2,4-D Ester	4	1	pt/a	7 EPP	A
16	AMS	17		lb/100 gal	7 EPP	A
16	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B
16	AMS	17		lb/100 gal	MPOS	B
17	Linex	4	1	pt/a	7 EPP	A
17	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
17	2,4-D Ester	4	1	pt/a	7 EPP	A
17	AMS	17		lb/100 gal	7 EPP	A
17	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B
17	AMS	17		lb/100 gal	MPOS	B
18	2,4-D Ester	4	1	pt/a	7 EPP	A
18	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B
18	AMS	17		lb/100 gal	MPOS	B
19	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
19	2,4-D Ester	4	1	pt/a	7 EPP	A
19	AMS	17		lb/100 gal	7 EPP	A
19	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
19	AMS	17		lb/100 gal	POST	C
20	Canopy	75	3	oz/a	7 EPP	A
20	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
20	2,4-D Ester	4	1	pt/a	7 EPP	A
20	AMS	17		lb/100 gal	7 EPP	A
20	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
20	AMS	17		lb/100 gal	POST	C
21	Boundary	6.5	1.75	pt/a	7 EPP	A
21	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
21	2,4-D Ester	4	1	pt/a	7 EPP	A
21	AMS	17		lb/100 gal	7 EPP	A
21	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
21	AMS	17		lb/100 gal	POST	C
22	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
22	AMS	17		lb/100 gal	POST	C
23	Valor	51	2.5	oz/a	7 EPP	A
23	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
23	2,4-D Ester	4	1	pt/a	7 EPP	A
23	AMS	17		lb/100 gal	7 EPP	A
23	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
23	AMS	17		lb/100 gal	POST	C

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Crop Code							
Rating Data Type	control	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Rating Date	6/16/2006	6/16/2006	6/16/2006	6/16/2006	6/16/2006	6/23/2006	6/23/2006
Trt-Eval Interval	44 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A	51 DA-A	51 DA-A

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code
24	Extreme	2.17	3	pt/a	7 EPP	A
24	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A
24	2,4-D Ester	4	1	pt/a	7 EPP	A
24	Activator 90 NIS		0.25	% v/v	7 EPP	A
24	AMS		17	lb/100 gal	7 EPP	A
24	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
24	AMS		17	lb/100 gal	POST	C
25	Prowl H2O	3.8	2	pt/a	7 EPP	A
25	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
25	2,4-D Ester	4	1	pt/a	7 EPP	A
25	AMS		17	lb/100 gal	7 EPP	A
25	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
25	AMS		17	lb/100 gal	POST	C
26	Linex	4	1	pt/a	7 EPP	A
26	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
26	2,4-D Ester	4	1	pt/a	7 EPP	A
26	AMS		17	lb/100 gal	7 EPP	A
26	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
26	AMS		17	lb/100 gal	POST	C
27	2,4-D Ester	4	1	pt/a	7 EPP	A
27	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
27	AMS		17	lb/100 gal	POST	C
28	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
28	2,4-D Ester	4	1	pt/a	7 EPP	A
28	AMS		17	lb/100 gal	7 EPP	A
28	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
28	AMS		17	lb/100 gal	LPOS	D
29	Canopy	75	3	oz/a	7 EPP	A
29	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
29	2,4-D Ester	4	1	pt/a	7 EPP	A
29	AMS		17	lb/100 gal	7 EPP	A
29	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
29	AMS		17	lb/100 gal	LPOS	D
30	Boundary	6.5	1.75	pt/a	7 EPP	A
30	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
30	2,4-D Ester	4	1	pt/a	7 EPP	A
30	AMS		17	lb/100 gal	7 EPP	A
30	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
30	AMS		17	lb/100 gal	LPOS	D
31	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
31	AMS		17	lb/100 gal	LPOS	D
32	Valor	51	2.5	oz/a	7 EPP	A
32	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
32	2,4-D Ester	4	1	pt/a	7 EPP	A
32	AMS		17	lb/100 gal	7 EPP	A
32	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
32	AMS		17	lb/100 gal	LPOS	D

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Crop Code							
Rating Data Type	control	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Rating Date	6/16/2006	6/16/2006	6/16/2006	6/16/2006	6/16/2006	6/23/2006	6/23/2006
Trt-Eval Interval	44 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A	51 DA-A	51 DA-A

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code
33	Extreme	2.17	3	pt/a	7 EPP	A
33	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A
33	2,4-D Ester	4	1	pt/a	7 EPP	A
33	Activator 90 NIS		0.25	% v/v	7 EPP	A
33	AMS		17	lb/100 gal	7 EPP	A
33	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
33	AMS		17	lb/100 gal	LPOS	D
34	Prowl H2O	3.8	2	pt/a	7 EPP	A
34	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
34	2,4-D Ester	4	1	pt/a	7 EPP	A
34	AMS		17	lb/100 gal	7 EPP	A
34	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
34	AMS		17	lb/100 gal	LPOS	D
35	Linex	4	1	pt/a	7 EPP	A
35	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
35	2,4-D Ester	4	1	pt/a	7 EPP	A
35	AMS		17	lb/100 gal	7 EPP	A
35	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
35	AMS		17	lb/100 gal	LPOS	D
36	2,4-D Ester	4	1	pt/a	7 EPP	A
36	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
36	AMS		17	lb/100 gal	LPOS	D
37	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A
37	2,4-D Ester	4	1	pt/a	7 EPP	A
37	AMS		17	lb/100 gal	7 EPP	A
37	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B
37	AMS		17	lb/100 gal	MPOS	B
37	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
37	AMS		17	lb/100 gal	LPOS	D
38	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B
38	AMS		17	lb/100 gal	MPOS	B
38	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
38	AMS		17	lb/100 gal	LPOS	D
39	Roundup WeatherMax	4.5	22	fl oz/a	POST	C
39	AMS		17	lb/100 gal	POST	C
39	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D
39	AMS		17	lb/100 gal	LPOS	D

LSD (P=.05)	4.8	6.1	5.8	4.4	2.4	13.8	8.1
Standard Deviation	3.3	4.2	4.0	3.0	1.6	9.5	5.6
CV	3.99	5.07	6.32	4.83	2.51	12.06	7.41

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Crop Code							
Rating Data Type	control	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Rating Date	6/23/2006	6/23/2006	6/23/2006	7/10/2006	7/10/2006	7/10/2006	7/20/2006
Trt-Eval Interval	51 DA-A	51 DA-A	51 DA-A	68 DA-A	68 DA-A	68 DA-A	78 DA-A

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code	AMBEL	CHEAL	ABUTH	AMBEL	CHEAL	ABUTH	AMBEL
1	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A	0	0	0	0	0	0	0
1	2,4-D Ester	4	1	pt/a	7 EPP	A							
1	AMS		17	lb/100 gal	7 EPP	A							
2	Canopy	75	3	oz/a	7 EPP	A	99	99	99	99	99	99	99
2	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A							
2	2,4-D Ester	4	1	pt/a	7 EPP	A							
2	AMS		17	lb/100 gal	7 EPP	A							
3	Boundary	6.5	1.75	pt/a	7 EPP	A	82	83	92	71	86	99	66
3	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A							
3	2,4-D Ester	4	1	pt/a	7 EPP	A							
3	AMS		17	lb/100 gal	7 EPP	A							
4	Untreated						0	0	0	0	0	0	0
5	Valor	51	2.5	oz/a	7 EPP	A	96	99	98	89	99	98	82
5	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A							
5	2,4-D Ester	4	1	pt/a	7 EPP	A							
5	AMS		17	lb/100 gal	7 EPP	A							
6	Extreme	2.17	3	pt/a	7 EPP	A	89	88	94	75	89	99	70
6	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A							
6	2,4-D Ester	4	1	pt/a	7 EPP	A							
6	Activator 90 NIS		0.25	% v/v	7 EPP	A							
6	AMS		17	lb/100 gal	7 EPP	A							
7	Prowl H2O	3.8	2	pt/a	7 EPP	A	65	89	97	48	95	97	41
7	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A							
7	2,4-D Ester	4	1	pt/a	7 EPP	A							
7	AMS		17	lb/100 gal	7 EPP	A							
8	Linex	4	1	pt/a	7 EPP	A	65	70	86	59	55	70	38
8	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A							
8	2,4-D Ester	4	1	pt/a	7 EPP	A							
8	AMS		17	lb/100 gal	7 EPP	A							
9	2,4-D Ester	4	1	pt/a	7 EPP	A	0	0	0	0	0	0	0
10	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				99	99	99	99
10	2,4-D Ester	4	1	pt/a	7 EPP	A							
10	AMS		17	lb/100 gal	7 EPP	A							
10	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B							
10	AMS		17	lb/100 gal	MPOS	B							
11	Canopy	75	3	oz/a	7 EPP	A				99	99	99	99
11	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A							
11	2,4-D Ester	4	1	pt/a	7 EPP	A							
11	AMS		17	lb/100 gal	7 EPP	A							
11	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B							
11	AMS		17	lb/100 gal	MPOS	B							
12	Boundary	6.5	1.75	pt/a	7 EPP	A				99	99	99	99
12	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A							
12	2,4-D Ester	4	1	pt/a	7 EPP	A							
12	AMS		17	lb/100 gal	7 EPP	A							
12	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B							
12	AMS		17	lb/100 gal	MPOS	B							
13	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				99	99	99	99
13	AMS		17	lb/100 gal	MPOS	B							

MSU Weed Science Research Program

Benefits of Residual Herbicides for Weed Control in No-Till Soybean I

Trial ID: NTS03-06
 Conducted: C-28S

Study Dir.: Sprague, Powell, Armstrong
 Investigator: Christy Sprague

Weed Code	AMBEL	CHEAL	ABUTH	AMBEL	CHEAL	ABUTH	AMBEL
Crop Code							
Rating Data Type	control	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Rating Date	6/23/2006	6/23/2006	6/23/2006	7/10/2006	7/10/2006	7/10/2006	7/20/2006
Trt-Eval Interval	51 DA-A	51 DA-A	51 DA-A	68 DA-A	68 DA-A	68 DA-A	78 DA-A

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code				
14	Valor	51	2.5	oz/a	7 EPP	A				
14	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A		99	99	99
14	2,4-D Ester	4	1	pt/a	7 EPP	A				
14	AMS	17	17	lb/100 gal	7 EPP	A				
14	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
14	AMS	17	17	lb/100 gal	MPOS	B				
15	Extreme	2.17	3	pt/a	7 EPP	A		99	99	99
15	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A				
15	2,4-D Ester	4	1	pt/a	7 EPP	A				
15	Activator 90 NIS		0.25	% v/v	7 EPP	A				
15	AMS	17	17	lb/100 gal	7 EPP	A				
15	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
15	AMS	17	17	lb/100 gal	MPOS	B				
16	Prowl H2O	3.8	2	pt/a	7 EPP	A		99	99	99
16	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
16	2,4-D Ester	4	1	pt/a	7 EPP	A				
16	AMS	17	17	lb/100 gal	7 EPP	A				
16	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
16	AMS	17	17	lb/100 gal	MPOS	B				
17	Linex	4	1	pt/a	7 EPP	A		99	99	99
17	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
17	2,4-D Ester	4	1	pt/a	7 EPP	A				
17	AMS	17	17	lb/100 gal	7 EPP	A				
17	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
17	AMS	17	17	lb/100 gal	MPOS	B				
18	2,4-D Ester	4	1	pt/a	7 EPP	A		99	99	99
18	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
18	AMS	17	17	lb/100 gal	MPOS	B				
19	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A		99	99	99
19	2,4-D Ester	4	1	pt/a	7 EPP	A				
19	AMS	17	17	lb/100 gal	7 EPP	A				
19	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
19	AMS	17	17	lb/100 gal	POST	C				
20	Canopy	75	3	oz/a	7 EPP	A		99	99	99
20	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
20	2,4-D Ester	4	1	pt/a	7 EPP	A				
20	AMS	17	17	lb/100 gal	7 EPP	A				
20	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
20	AMS	17	17	lb/100 gal	POST	C				
21	Boundary	6.5	1.75	pt/a	7 EPP	A		99	99	99
21	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
21	2,4-D Ester	4	1	pt/a	7 EPP	A				
21	AMS	17	17	lb/100 gal	7 EPP	A				
21	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
21	AMS	17	17	lb/100 gal	POST	C				
22	Roundup WeatherMax	4.5	22	fl oz/a	POST	C		99	99	99
22	AMS	17	17	lb/100 gal	POST	C				
23	Valor	51	2.5	oz/a	7 EPP	A		99	99	99
23	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
23	2,4-D Ester	4	1	pt/a	7 EPP	A				
23	AMS	17	17	lb/100 gal	7 EPP	A				
23	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
23	AMS	17	17	lb/100 gal	POST	C				

MSU Weed Science Research Program

Benefits of Residual Herbicides for Weed Control in No-Till Soybean I

Trial ID: NTS03-06
 Conducted: C-28S

Study Dir.: Sprague, Powell, Armstrong
 Investigator: Christy Sprague

Weed Code	AMBEL	CHEAL	ABUTH	AMBEL	CHEAL	ABUTH	AMBEL
Crop Code							
Rating Data Type	control	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Rating Date	6/23/2006	6/23/2006	6/23/2006	7/10/2006	7/10/2006	7/10/2006	7/20/2006
Trt-Eval Interval	51 DA-A	51 DA-A	51 DA-A	68 DA-A	68 DA-A	68 DA-A	78 DA-A

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code				
24	Extreme	2.17	3	pt/a	7 EPP	A				
24	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A		99	99	99
24	2,4-D Ester	4	1	pt/a	7 EPP	A				
24	Activator 90 NIS		0.25	% v/v	7 EPP	A				
24	AMS		17	lb/100 gal	7 EPP	A				
24	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
24	AMS		17	lb/100 gal	POST	C				
25	Prowl H2O	3.8	2	pt/a	7 EPP	A		99	99	99
25	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
25	2,4-D Ester	4	1	pt/a	7 EPP	A				
25	AMS		17	lb/100 gal	7 EPP	A				
25	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
25	AMS		17	lb/100 gal	POST	C				
26	Linex	4	1	pt/a	7 EPP	A		99	99	99
26	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
26	2,4-D Ester	4	1	pt/a	7 EPP	A				
26	AMS		17	lb/100 gal	7 EPP	A				
26	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
26	AMS		17	lb/100 gal	POST	C				
27	2,4-D Ester	4	1	pt/a	7 EPP	A		99	99	99
27	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
27	AMS		17	lb/100 gal	POST	C				
28	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				97
28	2,4-D Ester	4	1	pt/a	7 EPP	A				
28	AMS		17	lb/100 gal	7 EPP	A				
28	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
28	AMS		17	lb/100 gal	LPOS	D				
29	Canopy	75	3	oz/a	7 EPP	A				99
29	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
29	2,4-D Ester	4	1	pt/a	7 EPP	A				
29	AMS		17	lb/100 gal	7 EPP	A				
29	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
29	AMS		17	lb/100 gal	LPOS	D				
30	Boundary	6.5	1.75	pt/a	7 EPP	A				99
30	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
30	2,4-D Ester	4	1	pt/a	7 EPP	A				
30	AMS		17	lb/100 gal	7 EPP	A				
30	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
30	AMS		17	lb/100 gal	LPOS	D				
31	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				99
31	AMS		17	lb/100 gal	LPOS	D				
32	Valor	51	2.5	oz/a	7 EPP	A				99
32	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
32	2,4-D Ester	4	1	pt/a	7 EPP	A				
32	AMS		17	lb/100 gal	7 EPP	A				
32	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
32	AMS		17	lb/100 gal	LPOS	D				

MSU Weed Science Research Program

Benefits of Residual Herbicides for Weed Control in No-Till Soybean I

Trial ID: NTS03-06
 Conducted: C-28S

Study Dir.: Sprague, Powell, Armstrong
 Investigator: Christy Sprague

Weed Code	AMBEL	CHEAL	ABUTH	AMBEL	CHEAL	ABUTH	AMBEL
Crop Code							
Rating Data Type	control	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Rating Date	6/23/2006	6/23/2006	6/23/2006	7/10/2006	7/10/2006	7/10/2006	7/20/2006
Trt-Eval Interval	51 DA-A	51 DA-A	51 DA-A	68 DA-A	68 DA-A	68 DA-A	78 DA-A

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code								
33	Extreme	2.17	3	pt/a	7 EPP	A						99		
33	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A								
33	2,4-D Ester	4	1	pt/a	7 EPP	A								
33	Activator 90 NIS		0.25	% v/v	7 EPP	A								
33	AMS		17	lb/100 gal	7 EPP	A								
33	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D								
33	AMS		17	lb/100 gal	LPOS	D								
34	Prowl H2O	3.8	2	pt/a	7 EPP	A						94		
34	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A								
34	2,4-D Ester	4	1	pt/a	7 EPP	A								
34	AMS		17	lb/100 gal	7 EPP	A								
34	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D								
34	AMS		17	lb/100 gal	LPOS	D								
35	Linex	4	1	pt/a	7 EPP	A						99		
35	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A								
35	2,4-D Ester	4	1	pt/a	7 EPP	A								
35	AMS		17	lb/100 gal	7 EPP	A								
35	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D								
35	AMS		17	lb/100 gal	LPOS	D								
36	2,4-D Ester	4	1	pt/a	7 EPP	A						99		
36	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D								
36	AMS		17	lb/100 gal	LPOS	D								
37	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A		99	99	99		99		
37	2,4-D Ester	4	1	pt/a	7 EPP	A								
37	AMS		17	lb/100 gal	7 EPP	A								
37	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B								
37	AMS		17	lb/100 gal	MPOS	B								
37	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D								
37	AMS		17	lb/100 gal	LPOS	D								
38	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B		99	99	99		99		
38	AMS		17	lb/100 gal	MPOS	B								
38	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D								
38	AMS		17	lb/100 gal	LPOS	D								
39	Roundup WeatherMax	4.5	22	fl oz/a	POST	C		99	99	99		99		
39	AMS		17	lb/100 gal	POST	C								
39	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D								
39	AMS		17	lb/100 gal	LPOS	D								
LSD (P=.05)								10.9	5.0	6.9	7.9	4.5	3.8	9.5
Standard Deviation								7.5	3.4	4.7	5.6	3.2	2.7	6.8
CV								13.59	5.84	7.49	6.62	3.7	3.09	7.86

MSU Weed Science Research Program

Benefits of Residual Herbicides for Weed Control in No-Till Soybean I

Trial ID: NTS03-06
 Conducted: C-28S

Study Dir.: Sprague, Powell, Armstrong
 Investigator: Christy Sprague

Weed Code						CHEAL	ABUTH	GLXMA	GLXMA	
Crop Code						control	control	moisture	yield	
Rating Data Type						percent	percent	percent	bu/acre	
Rating Unit						7/20/2006	7/20/2006	10/25/2006	10/25/2006	
Rating Date						78 DA-A	78 DA-A	175 DA-A	at 13% M	
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code				
1	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP A	A	0	0	15.6	49.3
1	2,4-D Ester	4	1	pt/a	7 EPP A	A				
1	AMS		17	lb/100 gal	7 EPP A	A				
2	Canopy	75	3	oz/a	7 EPP A	A	99	99	14.8	58.7
2	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP A	A				
2	2,4-D Ester	4	1	pt/a	7 EPP A	A				
2	AMS		17	lb/100 gal	7 EPP A	A				
3	Boundary	6.5	1.75	pt/a	7 EPP A	A	69	91	15.0	60.6
3	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP A	A				
3	2,4-D Ester	4	1	pt/a	7 EPP A	A				
3	AMS		17	lb/100 gal	7 EPP A	A				
4	Untreated						0	0	15.8	36.8
5	Valor	51	2.5	oz/a	7 EPP A	A	97	99	15.1	58.5
5	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP A	A				
5	2,4-D Ester	4	1	pt/a	7 EPP A	A				
5	AMS		17	lb/100 gal	7 EPP A	A				
6	Extreme	2.17	3	pt/a	7 EPP A	A	84	99	15.2	59.9
6	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP A	A				
6	2,4-D Ester	4	1	pt/a	7 EPP A	A				
6	Activator 90 NIS		0.25	% v/v	7 EPP A	A				
6	AMS		17	lb/100 gal	7 EPP A	A				
7	Prowl H2O	3.8	2	pt/a	7 EPP A	A	91	97	15.5	50.5
7	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP A	A				
7	2,4-D Ester	4	1	pt/a	7 EPP A	A				
7	AMS		17	lb/100 gal	7 EPP A	A				
8	Linex	4	1	pt/a	7 EPP A	A	45	70	15.1	53.3
8	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP A	A				
8	2,4-D Ester	4	1	pt/a	7 EPP A	A				
8	AMS		17	lb/100 gal	7 EPP A	A				
9	2,4-D Ester	4	1	pt/a	7 EPP A	A	0	0	15.1	55.7
10	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP A	A	99	99	15.3	56.1
10	2,4-D Ester	4	1	pt/a	7 EPP A	A				
10	AMS		17	lb/100 gal	7 EPP A	A				
10	Roundup WeatherMax	4.5	22	fl oz/a	MPOS B	B				
10	AMS		17	lb/100 gal	MPOS B	B				
11	Canopy	75	3	oz/a	7 EPP A	A	99	99	15.2	57.9
11	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP A	A				
11	2,4-D Ester	4	1	pt/a	7 EPP A	A				
11	AMS		17	lb/100 gal	7 EPP A	A				
11	Roundup WeatherMax	4.5	22	fl oz/a	MPOS B	B				
11	AMS		17	lb/100 gal	MPOS B	B				
12	Boundary	6.5	1.75	pt/a	7 EPP A	A	99	99	15.1	60.5
12	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP A	A				
12	2,4-D Ester	4	1	pt/a	7 EPP A	A				
12	AMS		17	lb/100 gal	7 EPP A	A				
12	Roundup WeatherMax	4.5	22	fl oz/a	MPOS B	B				
12	AMS		17	lb/100 gal	MPOS B	B				
13	Roundup WeatherMax	4.5	22	fl oz/a	MPOS B	B	98	99	15.6	50.4
13	AMS		17	lb/100 gal	MPOS B	B				

MSU Weed Science Research Program

Benefits of Residual Herbicides for Weed Control in No-Till Soybean I

Trial ID: NTS03-06
 Conducted: C-28S

Study Dir.: Sprague, Powell, Armstrong
 Investigator: Christy Sprague

Weed Code						CHEAL	ABUTH	GLXMA	GLXMA	
Crop Code						control	control	moisture	yield	
Rating Data Type						percent	percent	percent	bu/acre	
Rating Unit						7/20/2006	7/20/2006	10/25/2006	10/25/2006	
Rating Date						78 DA-A	78 DA-A	175 DA-A	at 13% M	
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code				
14	Valor	51	2.5	oz/a	7 EPP	A	99	99	14.9	61.0
14	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
14	2,4-D Ester	4	1	pt/a	7 EPP	A				
14	AMS	17		lb/100 gal	7 EPP	A				
14	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
14	AMS	17		lb/100 gal	MPOS	B				
15	Extreme	2.17	3	pt/a	7 EPP	A	99	99	14.8	57.0
15	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A				
15	2,4-D Ester	4	1	pt/a	7 EPP	A				
15	Activator 90 NIS		0.25	% v/v	7 EPP	A				
15	AMS	17		lb/100 gal	7 EPP	A				
15	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
15	AMS	17		lb/100 gal	MPOS	B				
16	Prowl H2O	3.8	2	pt/a	7 EPP	A	99	99	15.2	57.7
16	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
16	2,4-D Ester	4	1	pt/a	7 EPP	A				
16	AMS	17		lb/100 gal	7 EPP	A				
16	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
16	AMS	17		lb/100 gal	MPOS	B				
17	Linex	4	1	pt/a	7 EPP	A	99	99	15.1	58.4
17	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
17	2,4-D Ester	4	1	pt/a	7 EPP	A				
17	AMS	17		lb/100 gal	7 EPP	A				
17	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
17	AMS	17		lb/100 gal	MPOS	B				
18	2,4-D Ester	4	1	pt/a	7 EPP	A	99	99	14.9	62.7
18	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
18	AMS	17		lb/100 gal	MPOS	B				
19	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A	99	99	15.0	57.2
19	2,4-D Ester	4	1	pt/a	7 EPP	A				
19	AMS	17		lb/100 gal	7 EPP	A				
19	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
19	AMS	17		lb/100 gal	POST	C				
20	Canopy	75	3	oz/a	7 EPP	A	99	99	14.9	60.2
20	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
20	2,4-D Ester	4	1	pt/a	7 EPP	A				
20	AMS	17		lb/100 gal	7 EPP	A				
20	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
20	AMS	17		lb/100 gal	POST	C				
21	Boundary	6.5	1.75	pt/a	7 EPP	A	99	99	14.9	65.9
21	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
21	2,4-D Ester	4	1	pt/a	7 EPP	A				
21	AMS	17		lb/100 gal	7 EPP	A				
21	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
21	AMS	17		lb/100 gal	POST	C				
22	Roundup WeatherMax	4.5	22	fl oz/a	POST	C	99	99	14.8	49.5
22	AMS	17		lb/100 gal	POST	C				
23	Valor	51	2.5	oz/a	7 EPP	A	99	99	14.7	66.5
23	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
23	2,4-D Ester	4	1	pt/a	7 EPP	A				
23	AMS	17		lb/100 gal	7 EPP	A				
23	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
23	AMS	17		lb/100 gal	POST	C				

MSU Weed Science Research Program

Benefits of Residual Herbicides for Weed Control in No-Till Soybean I

Trial ID: NTS03-06
 Conducted: C-28S

Study Dir.: Sprague, Powell, Armstrong
 Investigator: Christy Sprague

Weed Code	CHEAL	ABUTH	GLXMA	GLXMA
Crop Code			moisture	yield
Rating Data Type	control	control	percent	bu/acre
Rating Unit	percent	percent	percent	bu/acre
Rating Date	7/20/2006	7/20/2006	10/25/2006	10/25/2006
Trt-Eval Interval	78 DA-A	78 DA-A	175 DA-A	at 13% M

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code				
24	Extreme	2.17	3	pt/a	7 EPP	A	99	99	14.8	66.7
24	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A				
24	2,4-D Ester	4	1	pt/a	7 EPP	A				
24	Activator 90 NIS		0.25	% v/v	7 EPP	A				
24	AMS		17	lb/100 gal	7 EPP	A				
24	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
24	AMS		17	lb/100 gal	POST	C				
25	Prowl H2O	3.8	2	pt/a	7 EPP	A	99	99	14.7	59.8
25	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
25	2,4-D Ester	4	1	pt/a	7 EPP	A				
25	AMS		17	lb/100 gal	7 EPP	A				
25	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
25	AMS		17	lb/100 gal	POST	C				
26	Linex	4	1	pt/a	7 EPP	A	99	99	14.6	63.4
26	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
26	2,4-D Ester	4	1	pt/a	7 EPP	A				
26	AMS		17	lb/100 gal	7 EPP	A				
26	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
26	AMS		17	lb/100 gal	POST	C				
27	2,4-D Ester	4	1	pt/a	7 EPP	A	99	99	14.6	62.6
27	Roundup WeatherMax	4.5	22	fl oz/a	POST	C				
27	AMS		17	lb/100 gal	POST	C				
28	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A	99	99	14.9	60.4
28	2,4-D Ester	4	1	pt/a	7 EPP	A				
28	AMS		17	lb/100 gal	7 EPP	A				
28	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
28	AMS		17	lb/100 gal	LPOS	D				
29	Canopy	75	3	oz/a	7 EPP	A	99	99	14.8	61.3
29	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
29	2,4-D Ester	4	1	pt/a	7 EPP	A				
29	AMS		17	lb/100 gal	7 EPP	A				
29	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
29	AMS		17	lb/100 gal	LPOS	D				
30	Boundary	6.5	1.75	pt/a	7 EPP	A	99	99	14.7	65.7
30	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
30	2,4-D Ester	4	1	pt/a	7 EPP	A				
30	AMS		17	lb/100 gal	7 EPP	A				
30	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
30	AMS		17	lb/100 gal	LPOS	D				
31	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D	97	99	15.6	45.8
31	AMS		17	lb/100 gal	LPOS	D				
32	Valor	51	2.5	oz/a	7 EPP	A	99	99	15.0	63.4
32	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
32	2,4-D Ester	4	1	pt/a	7 EPP	A				
32	AMS		17	lb/100 gal	7 EPP	A				
32	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
32	AMS		17	lb/100 gal	LPOS	D				

MSU Weed Science Research Program

Benefits of Residual Herbicides for Weed Control in No-Till Soybean I

Trial ID: NTS03-06
 Conducted: C-28S

Study Dir.: Sprague, Powell, Armstrong
 Investigator: Christy Sprague

Weed Code	CHEAL	ABUTH	GLXMA	GLXMA
Crop Code				
Rating Data Type	control	control	moisture	yield
Rating Unit	percent	percent	percent	bu/acre
Rating Date	7/20/2006	7/20/2006	10/25/2006	10/25/2006
Trt-Eval Interval	78 DA-A	78 DA-A	175 DA-A	at 13% M

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code				
33	Extreme	2.17	3	pt/a	7 EPP	A	99	99	14.8	66.0
33	Roundup WeatherMax	4.5	5.5	fl oz/a	7 EPP	A				
33	2,4-D Ester	4	1	pt/a	7 EPP	A				
33	Activator 90 NIS		0.25	% v/v	7 EPP	A				
33	AMS		17	lb/100 gal	7 EPP	A				
33	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
33	AMS		17	lb/100 gal	LPOS	D				
34	Prowl H2O	3.8	2	pt/a	7 EPP	A	99	99	15.1	56.4
34	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
34	2,4-D Ester	4	1	pt/a	7 EPP	A				
34	AMS		17	lb/100 gal	7 EPP	A				
34	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
34	AMS		17	lb/100 gal	LPOS	D				
35	Linex	4	1	pt/a	7 EPP	A	99	99	14.9	59.6
35	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A				
35	2,4-D Ester	4	1	pt/a	7 EPP	A				
35	AMS		17	lb/100 gal	7 EPP	A				
35	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
35	AMS		17	lb/100 gal	LPOS	D				
36	2,4-D Ester	4	1	pt/a	7 EPP	A	99	99	14.9	62.7
36	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
36	AMS		17	lb/100 gal	LPOS	D				
37	Roundup WeatherMax	4.5	22	fl oz/a	7 EPP	A	99	99	15.1	57.4
37	2,4-D Ester	4	1	pt/a	7 EPP	A				
37	AMS		17	lb/100 gal	7 EPP	A				
37	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B				
37	AMS		17	lb/100 gal	MPOS	B				
37	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
37	AMS		17	lb/100 gal	LPOS	D				
38	Roundup WeatherMax	4.5	22	fl oz/a	MPOS	B	99	99	15.1	56.8
38	AMS		17	lb/100 gal	MPOS	B				
38	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
38	AMS		17	lb/100 gal	LPOS	D				
39	Roundup WeatherMax	4.5	22	fl oz/a	POST	C	99	99	14.9	55.7
39	AMS		17	lb/100 gal	POST	C				
39	Roundup WeatherMax	4.5	22	fl oz/a	LPOS	D				
39	AMS		17	lb/100 gal	LPOS	D				

LSD (P=.05)	5.3	1.9	0.58	10.63
Standard Deviation	3.8	1.3	0.41	7.59
CV	4.3	1.49	2.74	13.06