

Prefix Programs for Glyphosate-Resistant Marestalk.

Project Code: 07-YRC-Prefix Location: Murphysboro, IL
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Murphysboro IL 62966 USA
Trial Status: Final Updated: 1-24-08**Objective:**

Evaluate crop safety and weed control spectrum of Prefix programs in no-till soybean with an emphasis on glyphosate-resistant marestalk.

Weed Code	Common Name	Scientific Name
1.	ERICA horseweed	Conyza canadensis (L.) Crong.
2.	HORPU barley, little	Hordeum pusillum Nutt.
3.	STEME chickweed, common	Stellaria media (L.) Vill.
4.	AMATA waterhemp, common	Amaranthus rudis Sauer

Crop 1:	GLXMA soybean	Variety:	FS4646 RR
Planting Method:	Seeded	Planting Date:	5-12-07
Rate:	180000 S/A	Depth:	1.25 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	30 FT	Reps:	3
Tillage Type:	No-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	ZEAMX, 2006				
Field Prep./Maintenance:	N 0 LB/A, P205 0 LB/A, K20 0 LB/A				

Soil Name:	Alvin	% OM:	1.6	pH:	5.2	CEC:	6.7
Texture:	Very fine sandy loam	Fert. Level:	P1: 56 LB/A, K: 143 LB/A				

APPLICATION DESCRIPTION

	A	B	C
Application Date:	5-1-07	6-18-07	7-2-07
Time of Day:	7:00	9:30	9:30
Application Method:	Spray	Spray	Spray
Application Timing:	15EPP	4-6WAP	2-4WA"B"
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	70 F	86 F	73 F
% Relative Humidity:	43	58	50
Wind Velocity, Unit:	0 MPH	2-8 MPH	0-5 MPH
Dew Presence (Y/N):	N	N	Y
Soil Temp., Unit:	63 F	77 F	74 F
Soil Moisture:	NORMAL	NORMAL	ABONOR
% Cloud Cover:	75	0	0

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GLXMA NA	GLXMA V3-V4	GLXMA R1
Height, Unit:	NA NA	13 IN	19-27 IN

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code:	ERICA	ERICA	ERICA
Stage(leaves):	8-40	10-120+	10-200+
Height(inches):	2-5	2-21	1-44
Density:	Medium	Low	Low
Weed 2 Code:	HORPU		
Stage(leaves):	3-4		
Height(inches):	4-8		
Density:	Medium		
Weed 3 Code:	STEME		
Stage(leaves):	30-70		
Height(inches):	3-5		
Density:	Medium		
Weed 4 Code:		AMATA	AMATA
Stage(leaves):		6-150	16-20
Height(inches):		5-25	20-42
Density:		Low	Low

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

NOTES:

Prefix Programs for Glyphosate-Resistant Maretail.

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Weed Code
 Crop Code
 Rating Data Type
 Rating Unit
 Rating Date
 Trt-Eval Interval

GLXMA GLXMA GLXMA GLXMA GLXMA GLXMA GLXMA
 Moisture Test wt. Yield Injury Injury Injury Injury
 Percent lb/bu bu/A Percent Percent Percent Percent
 10-29-07 10-29-07 10-29-07 5-29-07 6-5-07 6-19-07 7-30-07
 7 DAE 14 DAE 28 DAE 28 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA Moisture Percent	GLXMA Test wt. lb/bu	GLXMA Yield bu/A	GLXMA Injury Percent	GLXMA Injury Percent	GLXMA Injury Percent	GLXMA Injury Percent
1	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A	14.5 a	50.7 a	31 f	0 a	0 a	0 a	0 a
1	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A							
1	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A							
2	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	15EPP	A	13.7 bc	50.8 a	39 a-e	0 a	0 a	0 a	0 a
2	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A							
2	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	15EPP	A							
2	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	15EPP	A							
2	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B							
2	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B							
3	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	15EPP	A	13.7 bc	50.7 a	38 a-e	0 a	0 a	0 a	0 a
3	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A							
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A							
3	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A							
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B							
3	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B							
4	PREFIX	5.28	EW	1.58	lb ai/a	2.4	pt/a	15EPP	A	13.6 bc	50.7 a	35 def	0 a	0 a	0 a	0 a
4	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A							
4	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A							
4	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A							
4	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B							
4	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B							
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	15EPP	A	14.1 abc	51.6 a	36 c-f	0 a	0 a	0 a	0 a
5	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A							
5	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A							
5	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A							
5	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B							
5	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B							
6	CANOPY	75	WG	0.187	lb ai/a	4.0	oz/a	15EPP	A	13.8 abc	51.4 a	36 b-f	0 a	0 a	0 a	0 a
6	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A							
6	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A							
6	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A							
6	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B							
6	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B							
7	VALOR SX	51	WG	0.064	lb ai/a	2.0	oz/a	15EPP	A	13.6 bc	50.8 a	33 ef	0 a	0 a	0 a	0 a
7	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A							
7	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A							
7	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A							
7	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B							
7	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B							
8	VALOR XLT	40.3	WG			4.0	oz/a	15EPP	A	14.1 abc	51.3 a	40 a-d	0 a	0 a	0 a	0 a
8	->VALOR SX	51	WG	0.075	lb ai/a			15EPP	A							
8	->CLASSIC	25	WG	0.0258	lb ai/a			15EPP	A							
8	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A							
8	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A							
8	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A							
8	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B							
8	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B							
9	GANGSTER (MULTI-PACK)							15EPP	A	13.9 abc	51.6 a	43 ab	0 a	0 a	0 a	0 a
9	->GANGSTER V	51	WG	0.08	lb ai/a	2.5	oz/a	15EPP	A							
9	->GANGSTER FR	84	WG	0.0262	lb ai/a	0.5	oz/a	15EPP	A							
9	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A							
9	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A							
9	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A							
9	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B							
9	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B							
10	SONIC	70	WG	0.306	lb ai/a	7.0	oz/a	15EPP	A	13.8 abc	51.0 a	37 a-f	0 a	0 a	0 a	0 a
10	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A							
10	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A							
10	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A							
10	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B							
10	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B							

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GLXMA Moisture Percent 10-29-07	GLXMA Test wt. lb/bu 10-29-07	GLXMA Yield bu/A 10-29-07	GLXMA Injury Percent 5-29-07 7 DAE	GLXMA Injury Percent 6-5-07 14 DAE	GLXMA Injury Percent 6-19-07 28 DAE	GLXMA Injury Percent 7-30-07 28 DA-C
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Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code												
11	INTRRO	4	L	2	lb ai/a	4.0	pt/a	15EPP	A	13.8	abc	51.1	a	40	a-e	0 a	0 a	0 a	0 a		
11	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A												
11	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A												
11	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A												
11	ROUNDUP W-MAX	4.5	SL	0.78	lb ae/a	22.3	fl oz/a	4-6WAP	B												
11	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B												
12	PARRLAY	8	EC	1.33	lb ai/a	1.33	pt/a	15EPP	A	13.4	c	51.2	a	40	a-e	0 a	0 a	0 a	0 a		
12	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A												
12	ROUNDUP W-MAX	4.5	SL	0.78	lb ae/a	22.3	fl oz/a	15EPP	A												
12	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A												
12	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B												
12	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B												
13	SENCOR	75	WG	0.28	lb ai/a	6.0	oz/a	15EPP	A	14.0	abc	51.3	a	37	a-f	0 a	0 a	0 a	0 a		
13	REFLEX	2	EC	0.25	lb ai/a	1.0	pt/a	15EPP	A												
13	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A												
13	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A												
13	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A												
13	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B												
13	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B												
14	SENCOR	75	WG	0.187	lb ai/a	4.0	oz/a	15EPP	A	13.8	abc	51.7	a	37	a-f	0 a	0 a	0 a	0 a		
14	REFLEX	2	EC	0.25	lb ai/a	1.0	pt/a	15EPP	A												
14	DUAL MAGNUM	7.62	EC	0.95	lb ai/a	1.0	pt/a	15EPP	A												
14	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A												
14	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A												
14	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A												
14	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B												
14	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B												
15	SENCOR	75	WG	0.28	lb ai/a	6.0	oz/a	15EPP	A	13.9	abc	52.0	a	38	a-e	0 a	0 a	0 a	0 a		
15	REFLEX	2	EC	0.25	lb ai/a	1.0	pt/a	15EPP	A												
15	DUAL MAGNUM	7.62	EC	0.95	lb ai/a	1.0	pt/a	15EPP	A												
15	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A												
15	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A												
15	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A												
15	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B												
15	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B												
16	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A	14.3	ab	51.6	a	44	a	0 a	0 a	0 a	0 a		
16	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A												
16	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A												
16	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B												
16	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B												
17	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A	13.7	bc	51.3	a	43	abc	0 a	0 a	0 a	0 a		
17	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A												
17	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A												
17	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B												
17	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B												
17	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	2-4WA"B"	C												
17	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	2-4WA"B"	C												
18	NONTREATED															0 a	0 a	0 a	0 a		
LSD (P=.05)										0.78		1.30		6.9		0.0		0.0		0.0	
Replicate F										1.052		0.198		1.724		0.000		0.000		0.000	
Replicate Prob(F)										0.3609		0.8217		0.1946		1.0000		1.0000		1.0000	
Treatment F										1.069		0.788		1.985		0.000		0.000		0.000	
Treatment Prob(F)										0.4202		0.6868		0.0483		1.0000		1.0000		1.0000	

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

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 Investigator: Bryan Young

Weed Code	ERICA	ERICA	ERICA	ERICA	HORPU	STEME
Crop Code	Control	Control	Control	Control	Control	Control
Rating Data Type	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	5-12-07	6-5-07	6-19-07	7-30-07	5-12-07	5-12-07
Rating Date	0 DAP	14 DAE	28 DAE	28 DA-C	0 DAP	0 DAP
Trt-Eval Interval						

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code						
1	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A	75	e-h	92	a-d	95	abc
1	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
1	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
2	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	15EPP	A	98	a	98	ab	98	ab
2	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
2	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	15EPP	A						
2	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	15EPP	A						
2	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
2	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
3	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	15EPP	A	75	e-h	85	c-f	87	cde
3	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
3	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
3	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
4	PREFIX	5.28	EW	1.58	lb ai/a	2.4	pt/a	15EPP	A	72	fgh	92	a-d	93	a-e
4	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
4	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
4	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
4	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
4	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	15EPP	A	93	ab	88	b-e	90	a-e
5	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
5	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
5	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
5	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
5	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
6	CANOPY	75	WG	0.187	lb ai/a	4.0	oz/a	15EPP	A	78	c-g	93	abc	96	abc
6	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
6	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
6	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
6	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
6	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
7	VALOR SX	51	WG	0.064	lb ai/a	2.0	oz/a	15EPP	A	83	b-e	75	fg	73	f
7	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
7	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
7	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
7	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
7	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
8	VALOR XLT	40.3	WG			4.0	oz/a	15EPP	A	83	b-e	82	def	82	ef
8	->VALOR SX	51	WG	0.075	lb ai/a			15EPP	A						
8	->CLASSIC	25	WG	0.0258	lb ai/a			15EPP	A						
8	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
8	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
8	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
8	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
8	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
9	GANGSTER (MULTI-PACK)							15EPP	A	87	a-d	98	ab	98	ab
9	->GANGSTER V	51	WG	0.08	lb ai/a	2.5	oz/a	15EPP	A						
9	->GANGSTER FR	84	WG	0.0262	lb ai/a	0.5	oz/a	15EPP	A						
9	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
9	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
9	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
9	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
9	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
10	SONIC	70	WG	0.306	lb ai/a	7.0	oz/a	15EPP	A	89	abc	99	a	99	a
10	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
10	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
10	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
10	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
10	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						

Prefix Programs for Glyphosate-Resistant Maretail.

Project Code: 07-YRC-Prefix Location: Murphysboro, IL
 Investigator: Bryan Young

Weed Code	ERICA	ERICA	ERICA	ERICA	HORPU	STEME
Crop Code						
Rating Data Type	Control	Control	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent
Rating Date	5-12-07	6-5-07	6-19-07	7-30-07	5-12-07	5-12-07
Trt-Eval Interval	0 DAP	14 DAE	28 DAE	28 DA-C	0 DAP	0 DAP

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code						
11	INTRRO	4	L	2	lb ai/a	4.0	pt/a	15EPP	A	68	gh	93	abc	94	a-d
11	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
11	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
11	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
11	ROUNDUP W-MAX	4.5	SL	0.78	lb ae/a	22.3	fl oz/a	4-6WAP	B						
11	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
12	PARRLAY	8	EC	1.33	lb ai/a	1.33	pt/a	15EPP	A	75	e-h	86	cde	88	b-e
12	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
12	ROUNDUP W-MAX	4.5	SL	0.78	lb ae/a	22.3	fl oz/a	15EPP	A						
12	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
12	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
12	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
13	SENCOR	75	WG	0.28	lb ai/a	6.0	oz/a	15EPP	A	82	b-f	92	a-d	93	a-e
13	REFLEX	2	EC	0.25	lb ai/a	1.0	pt/a	15EPP	A						
13	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
13	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
13	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
13	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
13	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
14	SENCOR	75	WG	0.187	lb ai/a	4.0	oz/a	15EPP	A	77	d-h	72	g	74	f
14	REFLEX	2	EC	0.25	lb ai/a	1.0	pt/a	15EPP	A						
14	DUAL MAGNUM	7.62	EC	0.95	lb ai/a	1.0	pt/a	15EPP	A						
14	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
14	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
14	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
14	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
14	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
15	SENCOR	75	WG	0.28	lb ai/a	6.0	oz/a	15EPP	A	77	d-h	80	efg	83	def
15	REFLEX	2	EC	0.25	lb ai/a	1.0	pt/a	15EPP	A						
15	DUAL MAGNUM	7.62	EC	0.95	lb ai/a	1.0	pt/a	15EPP	A						
15	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
15	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
15	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
15	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
15	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
16	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A	67	h	90	a-e	92	a-e
16	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
16	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
16	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
16	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
17	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A	77	d-h	92	a-d	94	a-d
17	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
17	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
17	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
17	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
17	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	2-4WA"B"	C						
17	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	2-4WA"B"	C						
18	NONTREATED									0	i	0	h	0	g
	LSD (P=.05)									11.5		10.3		11.1	
	Replicate F									0.502		2.589		2.112	
	Replicate Prob(F)									0.6098		0.0898		0.1366	
	Treatment F									26.475		38.880		34.297	
	Treatment Prob(F)									0.0001		0.0001		0.0001	
										0.250		0.000		0.7801	
										1.0000		0.000		1.0000	
										0.000		0.000		0.000	
										0.0001		0.0001		0.0001	
										1.0000		1.0000		1.0000	

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

Prefix Programs for Glyphosate-Resistant Maretail.

Project Code: 07-YRC-Prefix Location: Murphysboro, IL
 Investigator: Bryan Young

Weed Code	AMATA	AMATA	AMATA
Crop Code			
Rating Data Type	Control	Control	Control
Rating Unit	Percent	Percent	Percent
Rating Date	6-5-07	6-19-07	7-30-07
Trt-Eval Interval	14 DAE	28 DAE	28 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code						
1	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A	50	de	43	de	23	b
1	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
1	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
2	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	15EPP	A	96	a	95	ab	99	a
2	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
2	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	15EPP	A						
2	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	15EPP	A						
2	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
2	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
3	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	15EPP	A	86	ab	89	ab	99	a
3	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
3	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
3	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
4	PREFIX	5.28	EW	1.58	lb ai/a	2.4	pt/a	15EPP	A	88	ab	93	ab	99	a
4	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
4	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
4	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
4	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
4	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	15EPP	A	53	cde	57	cd	99	a
5	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
5	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
5	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
5	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
5	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
6	CANOPY	75	WG	0.187	lb ai/a	4.0	oz/a	15EPP	A	99	a	98	a	99	a
6	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
6	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
6	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
6	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
6	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
7	VALOR SX	51	WG	0.064	lb ai/a	2.0	oz/a	15EPP	A	99	a	98	a	99	a
7	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
7	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
7	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
7	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
7	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
8	VALOR XLT	40.3	WG			4.0	oz/a	15EPP	A	99	a	99	a	99	a
8	->VALOR SX	51	WG	0.075	lb ai/a			15EPP	A						
8	->CLASSIC	25	WG	0.0258	lb ai/a			15EPP	A						
8	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
8	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
8	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
8	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
8	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
9	GANGSTER (MULTI-PACK)							15EPP	A	82	abc	85	ab	99	a
9	->GANGSTER V	51	WG	0.08	lb ai/a	2.5	oz/a	15EPP	A						
9	->GANGSTER FR	84	WG	0.0262	lb ai/a	0.5	oz/a	15EPP	A						
9	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
9	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
9	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
9	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
9	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
10	SONIC	70	WG	0.306	lb ai/a	7.0	oz/a	15EPP	A	99	a	99	a	99	a
10	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
10	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
10	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
10	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
10	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						

Prefix Programs for Glyphosate-Resistant Maize

Project Code: 07-YRC-Prefix Location: Murphysboro, IL
 Investigator: Bryan Young

Weed Code	AMATA	AMATA	AMATA
Crop Code			
Rating Data Type	Control	Control	Control
Rating Unit	Percent	Percent	Percent
Rating Date	6-5-07	6-19-07	7-30-07
Trt-Eval Interval	14 DAE	28 DAE	28 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code						
11	INTRRO	4	L	2	lb ai/a	4.0	pt/a	15EPP	A	25	ef	20	ef	99	a
11	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
11	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
11	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
11	ROUNDUP W-MAX	4.5	SL	0.78	lb ae/a	22.3	fl oz/a	4-6WAP	B						
11	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
12	PARRLAY	8	EC	1.33	lb ai/a	1.33	pt/a	15EPP	A	53	cde	53	cd	99	a
12	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
12	ROUNDUP W-MAX	4.5	SL	0.78	lb ae/a	22.3	fl oz/a	15EPP	A						
12	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
12	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
12	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
13	SENCOR	75	WG	0.28	lb ai/a	6.0	oz/a	15EPP	A	71	a-d	70	bcd	99	a
13	REFLEX	2	EC	0.25	lb ai/a	1.0	pt/a	15EPP	A						
13	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
13	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
13	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
13	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
13	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
14	SENCOR	75	WG	0.187	lb ai/a	4.0	oz/a	15EPP	A	93	ab	88	ab	99	a
14	REFLEX	2	EC	0.25	lb ai/a	1.0	pt/a	15EPP	A						
14	DUAL MAGNUM	7.62	EC	0.95	lb ai/a	1.0	pt/a	15EPP	A						
14	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
14	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
14	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
14	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
14	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
15	SENCOR	75	WG	0.28	lb ai/a	6.0	oz/a	15EPP	A	65	bcd	75	abc	99	a
15	REFLEX	2	EC	0.25	lb ai/a	1.0	pt/a	15EPP	A						
15	DUAL MAGNUM	7.62	EC	0.95	lb ai/a	1.0	pt/a	15EPP	A						
15	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A						
15	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
15	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
15	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
15	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
16	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A	0	f	0	f	99	a
16	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
16	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
16	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
16	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
17	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	15EPP	A	0	f	0	f	99	a
17	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	15EPP	A						
17	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	15EPP	A						
17	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	4-6WAP	B						
17	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	4-6WAP	B						
17	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	2-4WA"B"	C						
17	N-PAK AMS	100	LIQ	2.5	% v/v	2.5	% v/v	2-4WA"B"	C						
18	NONTREATED									0	f	0	f	0	c
LSD (P=.05)										28.8		27.3		2.3	
Replicate F										2.857		1.552		1.105	
Replicate Prob(F)										0.0737		0.2289		0.3427	
Treatment F										13.256		15.307		1312.055	
Treatment Prob(F)										0.0001		0.0001		0.0001	

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

Trial Comments

1. Protocol: Syngenta (FM053A).
2. Ratings: CI 7, 14 + 28 DAE; WC prior to planting and at 14 + 28 DAE (before "B") and 28 DA"C".
3. Yield.
4. DAP = Days after planting. DAE = Days after emergence. DA-C = Days after 2-4WA"B" application.
5. Ratings at 28 DAE are prior to any postemergence application.
6. Harvested 10-29-07, (2) 30 inch rows by 27 feet.