

No-Till Corn Weed Control Studies

1-25-08 (07-Alstat-Syngenta)

Southern Illinois University

Gramoxone Inteon Burndown for Roundup Ready Corn
 - Glyphosate-Resistant Marestalk.
 Project Code: 07-Alstat-Syngenta 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: 1-23-08

Objective:

Evaluate full and reduced rates of Lexar or Bicep with Gramoxone Inteon combinations for management of glyphosate-resistant marestalk in Roundup Ready corn.

Weed Code	Common Name	Scientific Name
1. ERICA	horseweed	Conyza canadensis (L.) Crong.
2. GERCA	geranium, Carolina	Geranium carolinianum L.
3. ALLVI	garlic, wild	Allium vineale L.
4. HORPU	barley, little	Hordeum pusillum Nutt.
5. VERAR	speedwell, corn	Veronica arvensis L.
6. SETFA	foxtail, giant	Setaria faberi Herrm.
7. AMARE	pigweed, redroot	Amaranthus retroflexus L.

Crop 1: ZEAMX corn, field Variety: 33H27
 Planting Method: Seeded Planting Date: 5-8-07
 Rate: 28000 S/A Depth: 1.75 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: GLXMA, 2006
 Field Prep./Maintenance: N 0 LB/A, P205 0 LB/A, K20 0 LB/A

APPLICATION DESCRIPTION

	A	B
Application Date:	4-30-07	6-6-07
Time of Day:	19:00	7:00
Application Method:	Spray	Spray
Application Timing:	7EPP	6"W
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	83 F	60 F
% Relative Humidity:	30	50
Wind Velocity, Unit:	3-6 MPH	0 MPH
Dew Presence (Y/N):	N	Y
Soil Temp., Unit:	73 F	70 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	10	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	ZEAMX NA	ZEAMX V6
Height, Unit:	NA NA	20-24 IN

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code:	ERICA	ERICA
Stage(leaves):	0-26	24-50+
Height(inches):	0-6	4-12
Density:	Medium	Medium
Weed 2 Code:	GERCA	
Stage(leaves):	30-40	
Height(inches):	4-6	
Density:	Medium	
Weed 3 Code:	ALLVI	
Stage(leaves):	3-4	
Height(inches):	16-20	
Density:	Medium	
Weed 4 Code:	HORPU	
Stage(leaves):	3-4	
Height(inches):	6-8	
Density:	Medium	
Weed 5 Code:	VERAR	
Stage(leaves):	10+	
Height(inches):	3-5	
Density:	High	
Weed 6 Code:	SETFA	
Stage(leaves):	4-8	
Height(inches):	4-10	
Density:	Low	

Gramoxone Inteon Burndown for Roundup Ready Corn
- Glyphosate-Resistant Maretail.
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Weed 7 Code: AMARE
Stage (leaves): 15-25
Height (inches): 5-10
Density: Medium

APPLICATION EQUIPMENT

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

NOTES:

Gramoxone Inteon Burndown for Roundup Ready Corn
 - Glyphosate-Resistant Marestalk.
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Weed Code
 Crop Code
 Rating Data Type
 Rating Unit
 Rating Date
 Trt-Eval Interval

ZEAMX ZEAMX ZEAMX ZEAMX ZEAMX ZEAMX
 Moisture Yield Injury Injury Injury Injury
 Percent bu/A Percent Percent Percent Percent
 9-13-07 9-13-07 5-22-07 6-6-07 6-20-07 7-18-07
 14 DAP 0 DA-B 14 DA-B 42 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code						
1	NONTREATED									21.3	a	25	e	0	a
2	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	7EPP	A	20.1	abc	123	d	0	a
2	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	7EPP	A					0	a
2	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B					0	a
2	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B					0	a
3	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A	20.7	ab	175	abc	0	a
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	7EPP	A					0	a
3	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	7EPP	A					0	a
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B					0	a
3	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B					0	a
4	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	20.6	ab	173	bc	0	a
5	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	20.0	bc	183	abc	0	a
6	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	19.3	cd	173	bc	0	a
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A					0	a
6	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A					0	a
7	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	19.3	cd	181	abc	0	a
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A					0	a
7	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A					0	a
8	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	18.9	cd	185	abc	0	a
8	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A					0	a
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A					0	a
8	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A					0	a
9	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	19.6	bcd	203	a	0	a
9	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A					0	a
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A					0	a
9	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A					0	a
10	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	19.0	cd	193	ab	0	a
10	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B					0	a
10	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B					0	a
11	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	19.6	bcd	181	abc	0	a
11	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B					0	a
11	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B					0	a
12	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	19.8	bcd	199	ab	0	a
12	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A					0	a
12	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A					0	a
12	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B					0	a
12	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B					0	a
13	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	19.6	bcd	182	abc	0	a
13	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A					0	a
13	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A					0	a
13	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B					0	a
13	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B					0	a
14	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	19.8	bcd	194	ab	0	a
14	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A					0	a
14	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A					0	a
14	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A					0	a
14	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B					0	a
14	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B					0	a
15	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	19.1	cd	196	ab	0	a
15	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A					0	a
15	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A					0	a
15	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A					0	a
15	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B					0	a
15	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B					0	a
16	LEXAR	3.7	L	1.85	lb ai/a	2.0	qt/a	7EPP	A	19.9	bcd	187	abc	0	a
16	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B					0	a
16	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B					0	a

Gramoxone Inteon Burndown for Roundup Ready Corn
 - Glyphosate-Resistant Maize
 Project Code: 07-Alstat-Syngenta Location: Murphysboro, IL
 Investigator: Bryan Young

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

ZEAMX ZEAMX ZEAMX ZEAMX ZEAMX ZEAMX
 Moisture Yield Injury Injury Injury Injury
 Percent bu/A Percent Percent Percent Percent
 9-13-07 9-13-07 5-22-07 6-6-07 6-20-07 7-18-07
 14 DAP 0 DA-B 14 DA-B 42 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code											
17	BICEP II MAGNUM	5.5	L	1.92	lb ai/a	1.4	qt/a	7EPP	A	19.7	bcd	188	abc	0	a					
17	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B											
17	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B											
18	LEXAR	3.7	L	1.85	lb ai/a	2.0	qt/a	7EPP	A	18.7	d	187	abc	0	a					
18	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A											
18	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A											
18	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B											
18	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B											
19	BICEP II MAGNUM	5.5	L	1.92	lb ai/a	1.4	qt/a	7EPP	A	19.8	bcd	161	c	0	a					
19	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A											
19	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A											
19	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B											
19	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B											
20	LEXAR	3.7	L	1.85	lb ai/a	2.0	qt/a	7EPP	A	19.2	cd	193	ab	0	a					
20	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A											
20	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A											
20	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A											
20	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B											
20	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B											
21	BICEP II MAGNUM	5.5	L	1.92	lb ai/a	1.4	qt/a	7EPP	A	19.3	cd	181	abc	0	a					
21	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A											
21	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A											
21	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A											
21	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B											
21	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B											
LSD (P=.05)										1.22		28.4		0.0		0.0		0.0		
Replicate F										6.727		0.422		0.000		0.000		0.000		0.000
Replicate Prob(F)										0.0030		0.6588		1.0000		1.0000		1.0000		1.0000
Treatment F										2.211		14.639		0.000		0.000		0.000		0.000
Treatment Prob(F)										0.0162		0.0001		1.0000		1.0000		1.0000		1.0000

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

Gramoxone Inteon Burndown for Roundup Ready Corn
 - Glyphosate-Resistant Marestalk.
 Project Code: 07-Alstat-Syngenta Location: Murphysboro, IL
 Investigator: Bryan Young

Weed Code						ERICA	ERICA	ERICA	ERICA	ERICA	GERCA	GERCA	ALLVI	ALLVI				
Crop Code						Control	Control	Control	Control	Control	Control	Control	Control	Control				
Rating Data Type						Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent				
Rating Unit						5-7-07	5-22-07	6-6-07	6-20-07	7-18-07	5-7-07	5-22-07	5-7-07	5-22-07				
Rating Date						0 DAP	14 DAP	0 DA-B	14 DA-B	42 DA-B	0 DAP	14 DAP	0 DAP	14 DAP				
Trt-Eval Interval																		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code									
1	NONTREATED									0 f	0 d	0 d	0 d	0 f				
2	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	7EPP	A	25 c	52 c	37 c	20 c	12 c	20 cd	83 b	3 c	52 cd
2	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	7EPP	A									
2	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
2	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
3	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A	53 b	96 a	77 b	80 b	75 b	63 b	99 a	37 b	57 bc
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	7EPP	A									
3	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	7EPP	A									
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
3	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
4	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	22 cd	99 a	99 a	99 a	99 a	12 d	99 a	7 c	30 e
5	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	18 d	99 a	99 a	96 a	98 a	23 c	99 a	7 c	35 de
6	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	99 a	99 a	99 a	96 a	95 a	99 a	99 a	80 a	85 a
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
6	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
7	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	77 a	82 a
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
7	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
8	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	98 a	99 a	99 a	99 a	99 a	99 a	99 a	78 a	75 ab
8	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
8	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
9	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	98 a	99 a	99 a	99 a	99 a	99 a	99 a	78 a	77 a
9	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
9	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
10	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	27 c	99 a	99 a	99 a	99 a	23 c	99 a	0 c	27 e
10	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
10	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
11	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	12 e	99 a	96 a	99 a	99 a	10 de	99 a	0 c	28 e
11	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
11	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
12	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	83 a	80 a
12	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
12	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
12	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
12	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
13	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	78 a	82 a
13	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
13	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
13	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
13	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
14	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	78 a	75 ab
14	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
14	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
14	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
14	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
14	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
15	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	78 a	57 bc
15	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
15	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
15	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
15	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
15	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
16	LEXAR	3.7	L	1.85	lb ai/a	2.0	qt/a	7EPP	A	27 c	99 a	99 a	99 a	99 a	13 cd	99 a	10 c	30 e
16	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B									
16	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									

Gramoxone Inteon Burndown for Roundup Ready Corn
 - Glyphosate-Resistant Marestalk.
 Project Code: 07-Alstat-Syngenta Location: Murphysboro, IL
 Investigator: Bryan Young

Weed Code										ERICA	ERICA	ERICA	ERICA	ERICA	GERCA	GERCA	ALLVI	ALLVI
Crop Code										Control	Control	Control	Control	Control	Control	Control	Control	Control
Rating Data Type										Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit										5-7-07	5-22-07	6-6-07	6-20-07	7-18-07	5-7-07	5-22-07	5-7-07	5-22-07
Rating Date										0 DAP	14 DAP	0 DA-B	14 DA-B	42 DA-B	0 DAP	14 DAP	0 DAP	14 DAP
Trt-Eval Interval																		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code									
17	BICEP II MAGNUM	5.5	L	1.92	lb ai/a	1.4	qt/a	7EPP	A	10 e	89 b	95 a	99 a	99 a	10 de	99 a	0 c	25 e
17	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B									
17	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
18	LEXAR	3.7	L	1.85	lb ai/a	2.0	qt/a	7EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	83 a	77 a
18	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
18	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
18	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B									
18	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
19	BICEP II MAGNUM	5.5	L	1.92	lb ai/a	1.4	qt/a	7EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	80 a	68 abc
19	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
19	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
19	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B									
19	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
20	LEXAR	3.7	L	1.85	lb ai/a	2.0	qt/a	7EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	80 a	77 a
20	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
20	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
20	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
20	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B									
20	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
21	BICEP II MAGNUM	5.5	L	1.92	lb ai/a	1.4	qt/a	7EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	75 a	68 abc
21	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
21	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
21	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
21	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B									
21	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
LSD (P=.05)										6.0	5.2	5.9	7.6	5.1	11.2	10.2	11.7	19.0
Replicate F										1.298	1.305	2.240	1.360	1.467	0.999	1.000	4.307	0.280
Replicate Prob(F)										0.2842	0.2825	0.1197	0.2683	0.2427	0.3785	0.3769	0.0202	0.7574
Treatment F										368.544	162.335	148.191	102.038	243.479	116.218	37.132	83.098	14.299
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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

Gramoxone Inteon Burndown for Roundup Ready Corn
 - Glyphosate-Resistant Marestalk.
 Project Code: 07-Alstat-Syngenta Location: Murphysboro, IL
 Investigator: Bryan Young

Weed Code								HORPU		VERAR	SETFA	SETFA	SETFA	SETFA	AMARE	AMARE	AMARE	
Crop Code								Control		Control	Control	Control	Control	Control	Control	Control	Control	
Rating Data Type								Percent		Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
Rating Unit								5-7-07		5-7-07	5-22-07	6-6-07	6-20-07	7-18-07	6-6-07	6-20-07	7-18-07	
Rating Date								0 DAP		0 DAP	14 DAP	0 DA-B	14 DA-B	42 DA-B	0 DA-B	14 DA-B	42 DA-B	
Trt-Eval Interval																		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code									
1	NONTREATED									0 f	0 e	0 c	0 c	0 d	0 c	0 d	0 c	0 b
2	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	7EPP	A	50 e	30 d	99 a	85 a	99 a	99 a	75 b	99 a	99 a
2	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	7EPP	A									
2	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
2	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
3	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A	53 e	48 c	97 b	40 b	99 a	99 a	45 c	99 a	99 a
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	7EPP	A									
3	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	7EPP	A									
3	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
3	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
4	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	0 f	78 b	99 a	98 a	99 a	99 a	99 a	99 a	99 a
5	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	0 f	73 b	99 a	98 a	99 a	99 a	99 a	99 a	99 a
6	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	80 cd	99 a	99 a	99 a	92 c	96 b	99 a	99 a	99 a
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
6	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
7	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	87 abc	99 a	99 a	99 a	96 ab	96 b	99 a	99 a	99 a
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
7	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
8	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	92 a	99 a	99 a	99 a	95 bc	96 b	99 a	99 a	99 a
8	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
8	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
9	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	91 a	99 a	99 a	99 a	96 ab	99 a	99 a	99 a	99 a
9	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
9	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
10	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	0 f	77 b	99 a	99 a	99 a	99 a	99 a	99 a	99 a
10	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
10	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
11	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	0 f	73 b	99 a	99 a	99 a	99 a	99 a	99 a	99 a
11	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
11	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
12	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	88 ab	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a
12	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
12	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
12	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
12	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
13	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	90 a	99 a	99 a	99 a	99 a	99 a	99 a	96 b	99 a
13	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
13	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
13	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
13	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
14	LEXAR	3.7	L	2.78	lb ai/a	3.0	qt/a	7EPP	A	82 bcd	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a
14	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
14	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
14	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
14	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
14	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
15	BICEP II MAGNUM	5.5	L	2.9	lb ai/a	2.1	qt/a	7EPP	A	90 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a
15	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A									
15	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A									
15	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A									
15	TOUCHDOWN TOTAL	4.17	SC	0.78	lb ae/a	24	fl oz/a	6"W	B									
15	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									
16	LEXAR	3.7	L	1.85	lb ai/a	2.0	qt/a	7EPP	A	0 f	80 b	99 a	99 a	99 a	99 a	99 a	99 a	99 a
16	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B									
16	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B									

Gramoxone Inteon Burndown for Roundup Ready Corn
 - Glyphosate-Resistant Maize
 Project Code: 07-Alstat-Syngenta Location: Murphysboro, IL
 Investigator: Bryan Young

Weed Code	HORPU	VERAR	SETFA	SETFA	SETFA	SETFA	AMARE	AMARE	AMARE
Crop Code	Control	Control	Control	Control	Control	Control	Control	Control	Control
Rating Data Type	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	5-7-07	5-7-07	5-22-07	6-6-07	6-20-07	7-18-07	6-6-07	6-20-07	7-18-07
Rating Date	0 DAP	0 DAP	14 DAP	0 DA-B	14 DA-B	42 DA-B	0 DA-B	14 DA-B	42 DA-B
Trt-Eval Interval									

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code								
17	BICEP II MAGNUM	5.5	L	1.92	lb ai/a	1.4	qt/a	7EPP	A	0 f	50 c	99 a	99 a	99 a	99 a	99 a	99 a
17	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B								
17	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B								
18	LEXAR	3.7	L	1.85	lb ai/a	2.0	qt/a	7EPP	A	90 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a
18	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A								
18	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A								
18	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B								
18	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B								
19	BICEP II MAGNUM	5.5	L	1.92	lb ai/a	1.4	qt/a	7EPP	A	90 a	99 a	98 a	99 a	99 a	99 a	99 a	99 a
19	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A								
19	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A								
19	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B								
19	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B								
20	LEXAR	3.7	L	1.85	lb ai/a	2.0	qt/a	7EPP	A	77 d	99 a	99 a	99 a	99 a	99 a	99 a	99 a
20	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A								
20	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A								
20	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A								
20	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B								
20	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B								
21	BICEP II MAGNUM	5.5	L	1.92	lb ai/a	1.4	qt/a	7EPP	A	85 abc	99 a	99 a	99 a	99 a	99 a	99 a	99 a
21	2,4-D LV4	3.8	EC	0.475	lb ai/a	1.0	pt/a	7EPP	A								
21	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	7EPP	A								
21	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	7EPP	A								
21	SEQUENCE	5.25	EW	1.64	lb ai/a	2.5	pt/a	6"W	B								
21	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	6"W	B								

LSD (P=.05)	8.3	11.3	0.9	14.9	3.4	2.2	17.4	1.9	0.0
Replicate F	2.408	0.714	1.111	0.971	0.004	0.528	1.254	1.000	0.000
Replicate Prob(F)	0.1032	0.4957	0.3391	0.3878	0.9962	0.5940	0.2970	0.3769	1.0000
Treatment F	200.527	48.928	4654.508	22.030	335.511	758.259	15.935	1086.700	0.000
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

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

Trial Comments

1. Protocol: Syngenta.
2. Ratings: WC at planting; CI/WC 14 DAP, just prior to POST, 14 and 42 DA"B".
3. Application "B" should be to corn that is 30 inch or less.
4. Photos are requested.
5. DAP = Days after planting. DA-B = Days after 6"W application.
6. Harvested 9-13-07, (2) 30 inch rows by 27 ft.