

Burndown and Residual in Liberty Link Soybean - FMC.

Trial ID: 10-DSO-LLsoyFMC Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: De Soto IL 62924 USA
 Trial Status: FINAL Initiation Date: 04-13-10

Objectives: Evaluate efficacy of early preplant and preemergence burndown programs using Authority Assist, Authority MTZ and Authority First followed by Ignite or Ignite plus Cadet.

Crop 1: GLXMA Soybean Variety: Enos Description: LL
 Planting Method: SEEDED Planting Date: 05-08-10
 Rate, Unit: 75 LB/A Depth, Unit: 1.0 IN
 Row Spacing, Unit: 30 IN

Pest 1 Type: W Code: ERICA Conyza canadensis (L.) Crong. horseweed
 Pest 2 Type: W Code: CERVU Cerastium vulgatum L. chickweed, mouseear
 Pest 3 Type: W Code: ALLVI Allium vineale L. garlic, wild
 Pest 4 Type: W Code: AMATA Amaranthus rudis Sauer waterhemp, common
 Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 30 FT Tillage Type: NO-TILL
 Replications: 4 Study Design: Randomized Complete Block

Prior Crops, Year
 1. GLXMA 2009

Field Prep./Maintenance: N 13 LB/A, P205 34 LB/A, K20 92 LB/A

% OM: 2.5 Texture: SILT LOAM
 pH: 6.8 Soil Name: OKAW
 CEC: 12 Fert. Level: P1 88 LB/A, K 207 LB/A

Application Description

	A	B	C	D
Application Date:	04-13-10	04-28-10	05-08-10	06-02-10
Time of Day:	12:00	14:00	19:30	11:45
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	30DBP	14DBP	PRE	V3
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	NVH	DKP	NVH	NVH
Air Temperature, Unit:	82 F	83 F	57 F	95 F
% Relative Humidity:	22	30	50	47
Wind Velocity, Unit:	1 MPH	1 MPH	4 MPH	4 MPH
Wind Direction:	E	SW	NW	S
Dew Presence (Y/N):	N	N	N	N
Soil Temperature, Unit:	76 F	64 F	68 F	82 F
Soil Moisture:	NORMAL	ABONOR	NORMAL	ABONOR
% Cloud Cover:	0	60	30	35

	04-13-10	04-28-10	05-08-10	06-02-10
Crop stage at application:	NA	NA	NA	V3
Height Min, Max (inch):				6 7

Pest Stage At Each Application

	04-13-10	04-28-10	05-08-10	06-02-10
Application Date:	04-13-10	04-28-10	05-08-10	06-02-10
Weed Code:	ERICA	ERICA	ERICA	ERICA
Stage Majority (leaves):	12	14	30	22
Stage Min, Max:	6 16	4 22	15 40	4 35
Height Majority:	4 IN	5 IN	6 IN	6 IN
Height Min, Max:	2 6	0.5 8	4 12	1 12
Density, Unit:	0.5 FT2	2 FT2	2 FT2	1 FT2
Weed Code:	CERVU	CERVU	CERVU	CERVU
Stage Majority (leaves):	60	80	NA	NA
Stage Min, Max:	40 120	20 120		
Height Majority:	6 IN	10 IN		
Height Min, Max:	4 10	6 12		
Density, Unit:	0.4 FT2	5 FT2		
Weed Code:	ALLVI	ALLVI	ALLVI	ALLVI
Stage Majority (leaves):	3	5	5	5
Stage Min, Max:	2 4	2 6	2 6	2 6
Height Majority:	20 IN	20 IN	20 IN	20 IN
Height Min, Max:	12 32	8 26	12 26	12 26
Density, Unit:	1 FT2	2 FT2	2 FT2	2 FT2
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	COTY	COTY	12
Stage Min, Max:		COTY 1	COTY 1	2 24
Height Majority:		0.25 IN	0.5 IN	6 IN
Height Min, Max:		0.25 0.5	0.5 1	8
Density, Unit:		1 FT2	6 FT2	30 FT2

Application Equipment

	04-13-10	04-28-10	05-08-10	06-02-10
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Burndown and Residual in Liberty Link Soybean - FMC.

Trial ID: 10-DSO-LLsoyFMC Location: De Soto, IL

Pest Code Crop Code Rating Date Rating Data Type Rating Unit Rating Timing Trt-Eval Interval										GLXMA 09-25-10 Yield bu/A	GLXMA 05-15-10 Injury Percent 17 DA-B 7 DA-C	GLXMA 05-22-10 Injury Percent 24 DA-B 14 DA-C	GLXMA 06-02-10 Injury Percent 0 DA-D	GLXMA 06-09-10 Injury Percent 7 DA-D	GLXMA 06-16-10 Injury Percent 14 DA-D	GLXMA 07-02-10 Injury Percent 30 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
1	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B	37 a	0 a	0 a	0 a	0 b	0 b	0 a
1	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B							
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	14DBP	B							
1	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	14DBP	B							
1	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B							
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
1	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
2	AUTHORITY MTZ	45	WG	0.28	lb ai/a	10	oz/a	14DBP	B	37 a	0 a	0 a	0 a	0 b	0 b	0 a
2	GRAMOXONE INTEON	2	SL	0.75	lb ae/a	3	pt/a	14DBP	B							
2	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B							
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	14DBP	B							
2	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B							
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
2	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
3	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B	39 a	0 a	0 a	0 a	0 b	0 b	0 a
3	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B							
3	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	14DBP	B							
3	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B							
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C							
3	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C							
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
3	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
4	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	30DBP	A	34 a	0 a	0 a	0 a	0 b	0 b	0 a
4	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	30DBP	A							
4	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	30DBP	A							
4	AMS	100	SG	2	% w/w	2.5	lb/a	30DBP	A							
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C							
4	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C							
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
4	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
5	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B	38 a	0 a	0 a	0 a	12 a	3 a	0 a
5	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.45	oz/a	14DBP	B							
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C							
5	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C							
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	fl oz/a	V3	D							
5	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
6	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B	38 a	0 a	0 a	0 a	0 b	0 b	0 a
6	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B							
6	VALOR XLT	40.3	WG			3	oz/a	14DBP	B							
6	VALOR SX	51	WG	0.056	lb ai/a			14DBP	B							
6	CLASSIC	25	WG	0.0194	lb ai/a			14DBP	B							
6	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B							
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
6	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
LSD (P=.05)										5.1	0.0	0.0	0.0	0.9	0.0	0.0
Replicate F										0.031	0.000	0.000	0.000	1.000	0.000	0.000
Replicate Prob(F)										0.9923	1.0000	1.0000	1.0000	0.4199	1.0000	1.0000
Treatment F										1.108	0.000	0.000	0.000	266.778	0.000	0.000
Treatment Prob(F)										0.3972	1.0000	1.0000	1.0000	0.0001	1.0000	1.0000

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

Burndown and Residual in Liberty Link Soybean - FMC.

Trial ID: 10-DSO-LLsoyFMC Location: De Soto, IL

										ERICA	ERICA	ERICA	ERICA	ERICA	ERICA	ERICA
Pest Code										04-27-10	05-08-10	05-15-10	05-22-10	06-02-10	06-09-10	06-16-10
Crop Code										Control	Control	Control	Control	Control	Control	Control
Rating Date										Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Data Type										-1 DA-B	0 DAP	17 DA-B	24 DA-B			
Rating Unit										14 DA-A	10 DA-B	7 DA-C	14 DA-C	0 DA-D	7 DA-D	14 DA-D
Rating Timing																
Trt-Eval Interval																
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
1	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B		81 b	84 b	88 b	88 b	96 bc	95 c
1	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B							
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	14DBP	B							
1	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	14DBP	B							
1	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B							
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
1	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
2	AUTHORITY MTZ	45	WG	0.28	lb ai/a	10	oz/a	14DBP	B		97 a	97 a	97 a	96 a	98 ab	99 ab
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	14DBP	B							
2	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B							
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	14DBP	B							
2	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B							
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
2	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
3	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B		77 b	98 a	98 a	98 a	99 a	99 a
3	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B							
3	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	14DBP	B							
3	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B							
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C							
3	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C							
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
3	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
4	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	30DBP	A	94	97 a	99 a	99 a	99 a	99 a	99 a
4	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	30DBP	A							
4	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	30DBP	A							
4	AMS	100	SG	2	% w/w	2.5	lb/a	30DBP	A							
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C							
4	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C							
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
4	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
5	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B		81 b	98 a	98 a	98 a	99 a	99 a
5	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.45	oz/a	14DBP	B							
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C							
5	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C							
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	fl oz/a	V3	D							
5	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
6	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B		83 b	86 b	88 b	86 b	93 c	97 bc
6	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B							
6	VALOR XLT	40.3	WG			3	oz/a	14DBP	B							
6	VALOR SX	51	WG	0.056	lb ai/a			14DBP	B							
6	CLASSIC	25	WG	0.0194	lb ai/a			14DBP	B							
6	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B							
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D							
6	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D							
LSD (P=.05)											7.3	3.9	3.4	4.8	3.5	1.9
Replicate F											1.254	2.653	2.102	2.575	1.229	1.816
Replicate Prob(F)											0.3256	0.0864	0.1429	0.0926	0.3338	0.1875
Treatment F											12.753	27.647	21.803	12.747	5.390	7.068
Treatment Prob(F)											0.0001	0.0001	0.0001	0.0001	0.0049	0.0014

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

Burndown and Residual in Liberty Link Soybean - FMC.

Trial ID: 10-DSO-LLsoyFMC

Location: De Soto, IL

Pest Code	ERICA	CERVU	CERVU
Crop Code			
Rating Date	07-02-10	04-27-10	05-08-10
Rating Data Type	Control	Control	Control
Rating Unit	Percent	Percent	Percent
Rating Timing		-1 DA-B	0 DAP
Trt-Eval Interval	30 DA-D	14 DA-A	10 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP B		95 c		99 a
1	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP B				
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	14DBP B				
1	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	14DBP B				
1	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP B				
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3 D				
1	AMS	100	SG	2	% w/w	2.5	lb/a	V3 D				
2	AUTHORITY MTZ	45	WG	0.28	lb ai/a	10	oz/a	14DBP B		98 ab		99 a
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	14DBP B				
2	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP B				
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	14DBP B				
2	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP B				
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3 D				
2	AMS	100	SG	2	% w/w	2.5	lb/a	V3 D				
3	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP B		99 a		99 a
3	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP B				
3	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	14DBP B				
3	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP B				
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE C				
3	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE C				
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3 D				
3	AMS	100	SG	2	% w/w	2.5	lb/a	V3 D				
4	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	30DBP A		99 a	99	99 a
4	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	30DBP A				
4	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	30DBP A				
4	AMS	100	SG	2	% w/w	2.5	lb/a	30DBP A				
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE C				
4	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE C				
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3 D				
4	AMS	100	SG	2	% w/w	2.5	lb/a	V3 D				
5	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP B		99 a		99 a
5	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.45	oz/a	14DBP B				
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE C				
5	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE C				
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3 D				
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	fl oz/a	V3 D				
5	AMS	100	SG	2	% w/w	2.5	lb/a	V3 D				
6	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP B		97 bc		99 a
6	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP B				
6	VALOR XLT	40.3	WG			3	oz/a	14DBP B				
6	VALOR SX	51	WG	0.056	lb ai/a			14DBP B				
6	CLASSIC	25	WG	0.0194	lb ai/a			14DBP B				
6	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP B				
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3 D				
6	AMS	100	SG	2	% w/w	2.5	lb/a	V3 D				
LSD (P=.05)										1.8	.	0.0
Replicate F										2.038		0.000
Replicate Prob(F)										0.1517		1.0000
Treatment F										8.585		0.000
Treatment Prob(F)										0.0005		1.0000

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

Burndown and Residual in Liberty Link Soybean - FMC.

Trial ID: 10-DSO-LLsoyFMC

Location: De Soto, IL

Pest Code										ALLVI	ALLVI	ALLVI	ALLVI	ALLVI	ALLVI	ALLVI						
Crop Code										04-27-10	05-08-10	05-15-10	05-22-10	06-02-10	06-09-10	06-16-10						
Rating Date										Control	Control	Control	Control	Control	Control	Control						
Rating Data Type										Percent	Percent	Percent	Percent	Percent	Percent	Percent						
Rating Unit										-1 DA-B	0 DAP	17 DA-B	24 DA-B									
Rating Timing										14 DA-A	10 DA-B	7 DA-C	14 DA-C	0 DA-D	7 DA-D	14 DA-D						
Trt-Eval Interval																						
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code													
1	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B		55	ab	56	b	59	c	90	ab	93	b		
1	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B													
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	14DBP	B													
1	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	14DBP	B													
1	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B													
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D													
1	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D													
2	AUTHORITY MTZ	45	WG	0.28	lb ai/a	10	oz/a	14DBP	B		60	ab	68	a	66	ab	93	ab	93	b	93	b
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	14DBP	B													
2	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B													
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	14DBP	B													
2	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B													
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D													
2	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D													
3	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B		58	ab	66	a	68	ab	95	a	97	a	98	a
3	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B													
3	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	14DBP	B													
3	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B													
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C													
3	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C													
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D													
3	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D													
4	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	30DBP	A	64	61	a	69	a	73	a	89	b	95	ab	95	ab
4	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	30DBP	A													
4	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	30DBP	A													
4	AMS	100	SG	2	% w/w	2.5	lb/a	30DBP	A													
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C													
4	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C													
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D													
4	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D													
5	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B		58	ab	68	a	65	bc	93	ab	95	ab	95	ab
5	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.45	oz/a	14DBP	B													
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C													
5	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C													
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D													
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	fl oz/a	V3	D													
5	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D													
6	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B		54	b	60	b	61	bc	93	ab	93	ab	93	b
6	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B													
6	VALOR XLT	40.3	WG			3	oz/a	14DBP	B													
6	VALOR SX	51	WG	0.056	lb ai/a			14DBP	B													
6	CLASSIC	25	WG	0.0194	lb ai/a			14DBP	B													
6	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B													
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D													
6	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D													
LSD (P=.05)											.	7.0	5.5	7.0	6.0	3.9	3.9					
Replicate F												0.260	0.407	0.570	1.011	1.039	1.223					
Replicate Prob(F)												0.8532	0.7499	0.6433	0.4155	0.4036	0.3357					
Treatment F												1.519	7.420	4.388	1.295	1.482	2.227					
Treatment Prob(F)												0.2424	0.0011	0.0116	0.3176	0.2535	0.1054					

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

Burndown and Residual in Liberty Link Soybean - FMC.

Trial ID: 10-DSO-LLsoyFMC

Location: De Soto, IL

Pest Code										AMATA-HR	AMATA-HR	AMATA-HR	AMATA-HR	AMATA-HR	AMATA-HR
Crop Code															
Rating Date										05-08-10	05-15-10	05-22-10	06-02-10	06-09-10	06-16-10
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										0 DAP	17 DA-B	24 DA-B			
Trt-Eval Interval										10 DA-B	7 DA-C	14 DA-C	0 DA-D	7 DA-D	14 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B	92	ab	73	c	59	c
1	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B					31	c
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	14DBP	B					71	b
1	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	14DBP	B						
1	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B						
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D						
1	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D						
2	AUTHORITY MTZ	45	WG	0.28	lb ai/a	10	oz/a	14DBP	B	69	c	63	d	55	c
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	14DBP	B					24	c
2	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B					65	b
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	14DBP	B						
2	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B						
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D						
2	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D						
3	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B	98	a	95	a	95	a
3	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B					88	a
3	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	14DBP	B					97	a
3	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B						
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C						
3	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C						
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D						
3	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D						
4	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	30DBP	A	86	b	90	ab	86	a
4	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	30DBP	A					64	b
4	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	30DBP	A					89	a
4	AMS	100	SG	2	% w/w	2.5	lb/a	30DBP	A						
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C						
4	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C						
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D						
4	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D						
5	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B	98	a	97	a	97	a
5	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.45	oz/a	14DBP	B					95	a
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C					99	a
5	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C						
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D						
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	fl oz/a	V3	D						
5	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D						
6	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B	90	ab	83	b	70	b
6	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B					39	c
6	VALOR XLT	40.3	WG			3	oz/a	14DBP	B					74	b
6	VALOR SX	51	WG	0.056	lb ai/a			14DBP	B						
6	CLASSIC	25	WG	0.0194	lb ai/a			14DBP	B						
6	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B						
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D						
6	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D						
LSD (P=.05)										9.7	8.6	10.8	18.0	13.4	9.3
Replicate F										2.756	2.822	2.686	1.296	0.549	2.643
Replicate Prob(F)										0.0789	0.0744	0.0839	0.3122	0.6566	0.0871
Treatment F										11.317	22.208	25.573	25.601	10.249	5.110
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0002	0.0062

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

Burndown and Residual in Liberty Link Soybean - FMC.

Trial ID: 10-DSO-LLsoyFMC

Location: De Soto, IL

Pest Code	AMATA-HR
Crop Code	
Rating Date	07-02-10
Rating Data Type	Control
Rating Unit	Percent
Rating Timing	
Trt-Eval Interval	30 DA-D

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B	81 b
1	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B	
1	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	14DBP	B	
1	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	14DBP	B	
1	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B	
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D	
1	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D	
2	AUTHORITY MTZ	45	WG	0.28	lb ai/a	10	oz/a	14DBP	B	82 b
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	14DBP	B	
2	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B	
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	14DBP	B	
2	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B	
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D	
2	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D	
3	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	14DBP	B	98 a
3	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B	
3	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	14DBP	B	
3	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B	
3	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C	
3	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C	
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D	
3	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D	
4	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	30DBP	A	96 a
4	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	30DBP	A	
4	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	30DBP	A	
4	AMS	100	SG	2	% w/w	2.5	lb/a	30DBP	A	
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C	
4	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C	
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D	
4	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D	
5	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B	99 a
5	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.45	oz/a	14DBP	B	
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	C	
5	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	PRE	C	
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D	
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	fl oz/a	V3	D	
5	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D	
6	RAGE D-TECH	4.06	EC	0.38	lb ai/a	0.75	pt/a	14DBP	B	90 ab
6	GLY STAR PLUS	3	SL	0.75	lb ae/a	2	pt/a	14DBP	B	
6	VALOR XLT	40.3	WG			3	oz/a	14DBP	B	
6	VALOR SX	51	WG	0.056	lb ai/a			14DBP	B	
6	CLASSIC	25	WG	0.0194	lb ai/a			14DBP	B	
6	AMS	100	SG	2	% w/w	2.5	lb/a	14DBP	B	
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3	D	
6	AMS	100	SG	2	% w/w	2.5	lb/a	V3	D	
LSD (P=.05)										10.4
Replicate F										2.796
Replicate Prob(F)										0.0761
Treatment F										5.098
Treatment Prob(F)										0.0063

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

Trial Comments

1. Protocol: FMC (SULF SOY 10 JPR02c).
2. Ratings: WC 14+30 DA-A, and 14 DA-B (30 DA-A and 14 DA-B should be at planting).
CI+WC 7+14 DA-C and at POST.
CI+WC 7, 14+30 DA-D.
3. Yield.

Burndown and Residual in Liberty Link Soybean - FMC.

Trial ID: 10-DSO-LLsoyFMC Location: De Soto, IL

4. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
DAP = Days after planting.
5. The planned 5-13-10 planting date was advanced to 5-8-10 as conditions were good for planting and a rainy period was predicted for the planned planting date.
6. By 5-15-10 CERVU was senscng naturally and could no longer be evaluated.
By 7-2-10 ALLVI was senscng naturally and could no longer be evaluated.
7. Harvested 9-25-10, (2) 30 inch rows by 26.5 ft.