

Evaluation of Marestalk Burndown with Liberty Tank-Mixes and Liberty Rates.

Trial ID: 16-DSO-BAYER-WGJ Location: De Soto, IL Trial Year: 2016  
Investigator: Karla L. Gage, Ph.D.

<b>Trial Status:</b> F one-year/final <b>Initiation Date:</b> 4-14-16 <b>Completion Date:</b> 5-23-16	<b>Trial Location</b>
<b>City:</b> De Soto <b>Country:</b> USA <b>State/Prov.:</b> Illinois IL <b>Postal Code:</b> 62924	

<b>Objectives:</b> Evaluate the new increased Liberty rates for 2017 as a burndown on non LL corn.
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<b>Study Director:</b> Karla Gage, Ph.D. <b>Title:</b> Assistant Professor of Weed Science <b>Organization:</b> Southern Illinois University Carbondale <b>Address:</b> 1205 Lincoln Drive MC 4415 <b>Phone No.:</b> 618-453-7679 <b>City+State/Prov:</b> Carbondale, IL <b>Postal Code:</b> 62901 <b>E-mail:</b> kgage@siu.edu <b>Country:</b> USA	<b>Contacts</b>
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<b>Crop 1:</b> NONE - Non-crop _ <b>Variety:</b> NON-CROP <b>Planting Method:</b> NA	<b>Crop Description</b>
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<b>Pest 1 Type:</b> W <b>Code:</b> ERICA <i>Conyza canadensis</i> (L.) Crong. <b>Common Name:</b> horseweed <b>Description:</b> glyphosate-resistant marestalk  <b>Pest 2 Type:</b> W <b>Code:</b> AMATA <i>Amaranthus rudis</i> Sauer <b>Common Name:</b> waterhemp, common <b>Description:</b> glyphosate-resistant waterhemp	<b>Pest Description</b>
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<b>Treated Plot Width:</b> 6.67 FT <b>Total Plot Width:</b> 10 FT <b>Treated Plot Length:</b> 30 FT <b>Total Plot Length:</b> 30 FT <b>Replications:</b> 3 <b>Untreated Arrangement:</b> INCLUDED single control randomized in each block	<b>Site and Design</b> <b>Site Type:</b> FIELD <b>Experimental Unit:</b> 1 PLOT <b>Tillage Type:</b> NOTILL no-till <b>Study Design:</b> RACOB� Randomized Complete Block (RCB)						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">No.</th> <th style="width: 45%;">Previous Crop</th> <th style="width: 50%;">Year</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>GLXMA</td> <td style="text-align: center;">2015</td> </tr> </tbody> </table>		No.	Previous Crop	Year	1.	GLXMA	2015
No.	Previous Crop	Year					
1.	GLXMA	2015					

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">No.</th> <th style="width: 95%;">Maintenance Product Name</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A</td> </tr> </tbody> </table>	No.	Maintenance Product Name	1.	N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A	<b>Maintenance</b>
No.	Maintenance Product Name				
1.	N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A				

<b>Description Name:</b> DSO_west_2016 <b>% Sand:</b> 15.4 <b>% OM:</b> 1.96 <b>Texture:</b> SIL silt loam <b>% Silt:</b> 64.7 <b>pH:</b> 7.1 <b>Soil Name:</b> Okaw <b>% Clay:</b> 19.9 <b>CEC:</b> 7.91	<b>Soil Description</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Element</th> <th style="width: 35%;">Quantity</th> <th style="width: 50%;">Unit</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td style="text-align: center;">52</td> <td>lb/A</td> </tr> <tr> <td>K</td> <td style="text-align: center;">278</td> <td>lb/A</td> </tr> </tbody> </table>		Element	Quantity	Unit	P1	52	lb/A	K	278	lb/A
Element	Quantity	Unit								
P1	52	lb/A								
K	278	lb/A								

<b>Overall Moisture Conditions:</b> NORMAL <b>Closest Weather Station:</b> SOUTHERN IL AIRPORT (93810)	<b>Moisture and Weather Conditions</b>
	<b>Distance, Unit:</b> 1.5 MI

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No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	3-1-16	0.49	IN	RAIN	rain	3	DAY			
2.	3-4-16					7	DAY	27	70	F
3.	3-7-16	1.62	IN	RAIN	rain	6	DAY			
4.	3-11-16					7	DAY	41	77	F
5.	3-18-16					7	DAY	31	68	F
6.	3-18-16	0.37	IN	RAIN	rain	3	DAY			
7.	3-24-16	0.59	IN	RAIN	rain	1	DAY			
8.	3-25-16					7	DAY	33	74	F
9.	3-27-16	0.06	IN	RAIN	rain	1	DAY			
10.	3-30-16	1.01	IN	RAIN	rain	4	DAY			
11.	4-1-16					7	DAY	31	67	F
12.	4-6-16	0.27	IN	RAIN	rain	2	DAY			
13.	4-8-16					7	DAY	30	73	F
14.	4-10-16	0.99	IN	RAIN	rain	2	DAY			
15.	4-15-16					7	DAY	47	80	F
16.	4-20-16	1.76	IN	RAIN	rain	2	DAY			
17.	4-22-16					7	DAY	47	81	F
18.	4-26-16	1.59	IN	RAIN	rain	6	DAY			
19.	4-29-16					7	DAY	45	78	F
20.	5-4-16	0.03	IN	RAIN	rain	1	DAY			
21.	5-6-16					7	DAY	44	86	F
22.	5-9-16	2.92	IN	RAIN	rain	4	DAY			
23.	5-13-16					7	DAY	39	74	F
24.	5-16-16	1.27	IN	RAIN	rain	2	DAY			
25.	5-20-16					7	DAY	49	82	F
26.	5-20-16	0.1	IN	RAIN	rain	1	DAY			
27.	5-25-16	2.12	IN	RAIN	rain	3	DAY			
28.	5-27-16					7	DAY	61	86	F

**Comment:**  
 Rainfall and air temperature were recorded at SOUTHERN ILLINOIS AIRPORT (93810) 1.5 miles SSE and provided by NOAA's National Centers for Environmental Information. Air temperatures given are summarized as weekly high and low, detailed weather data is available on request.

**Application Description**

	A	B
<b>Application Date:</b>	4-14-16	4-25-16
<b>Appl. Start Time:</b>	9:15	8:00
<b>Appl. Stop Time:</b>	10:00	8:30
<b>Application Method:</b>	Spray	Spray
<b>Application Timing:</b>	3-4"MT	6-8"MT
<b>Application Placement:</b>	BROFOL	BROFOL
<b>Applied By:</b>	MCG	MCG
<b>Air Temperature, Unit:</b>	62 F	71 F
<b>% Relative Humidity:</b>	53	66
<b>Wind Velocity, Unit:</b>	3 MPH	4 MPH
<b>Wind Direction:</b>	NE	S
<b>Dew Presence (Y/N):</b>	N	N
<b>Soil Temperature, Unit:</b>	60 F	60 F
<b>Soil Moisture:</b>	NORMAL	NORMAL
<b>% Cloud Cover:</b>	0	0
<b>Next Moisture Occurred On:</b>	4-20-16	4-26-16
<b>Time to Next Moisture, Unit:</b>	5 DAY	32 HR

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**Crop Stage At Each Application**

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	NONE	NONE
<b>Stage Scale Used:</b>	DESC	DESC
<b>Stage Majority, Percent:</b>	NA	NA

**Pest Stage At Each Application**

	A	B
<b>Pest 1 Code, Type, Scale:</b>	ERICA W	ERICA W
<b>Stage Majority, Percent:</b>	15	20
<b>Stage Minimum, Percent:</b>	5	15
<b>Stage Maximum, Percent:</b>	25	30
<b>Height, Unit:</b>	3 IN	5 IN
<b>Height Minimum, Maximum:</b>	2.25 4	3 7
<b>Density, Unit:</b>	2 FT2	2 FT2
<b>Pest 2 Code, Type, Scale:</b>	AMATA W	AMATA W
<b>Stage Majority, Percent:</b>	COTY	2
<b>Stage Minimum, Percent:</b>	COTY	COTY
<b>Stage Maximum, Percent:</b>	1	5
<b>Height, Unit:</b>	0.25 IN	0.5 IN
<b>Height Minimum, Maximum:</b>	0.125 0.25	0.25 0.5
<b>Density, Unit:</b>	50 FT2	50 FT2

**Application Equipment**

	A	B
<b>Appl. Equipment:</b>	CO2 sprayer	CO2 sprayer
<b>Equipment Type:</b>	BACSPR	BACSPR
<b>Operation Pressure, Unit:</b>	30 PSI	30 PSI
<b>Nozzle Type:</b>	XR	XR
<b>Nozzle Size:</b>	8002	8002
<b>Boom Length, Unit:</b>	6.67 FT	6.67 FT
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA

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Pest Code							ERICA	ERICA	ERICA	ERICA	ERICA	ERICA	
Crop Code							4-21-16	4-28-16	5-2-16	5-9-16	5-12-16	5-23-16	
Rating Date							Burndown	Burndown	Burndown	Burndown	Burndown	Burndown	
Rating Type							Percent	Percent	Percent	Percent	Percent	Percent	
Rating Unit							7 DA-A	14 DA-A	7 DA-B	14 DA-B	28 DA-A	28 DA-B	
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	NONTREATED									0	0	0	
2	LIBERTY 280 2,4-D AMINE 4 N-PAK AMS	2.34 3.8 100	EC SL SL	0.53 lb ai/a 0.71 lb ae/a 2.5 % v/v		29 fl oz/a 1.5 pt/a 2.5 % v/v		3-4"MT A 3-4"MT A 3-4"MT A		90 c	97 a	96 a	
3	LIBERTY 280 2,4-D AMINE 4 N-PAK AMS	2.34 3.8 100	EC SL SL	0.66 lb ai/a 0.71 lb ae/a 2.5 % v/v		36 fl oz/a 1.5 pt/a 2.5 % v/v		3-4"MT A 3-4"MT A 3-4"MT A		93 b	96 a	97 a	
4	LIBERTY 280 2,4-D AMINE 4 N-PAK AMS	2.34 3.8 100	EC SL SL	0.79 lb ai/a 0.71 lb ae/a 2.5 % v/v		43 fl oz/a 1.5 pt/a 2.5 % v/v		3-4"MT A 3-4"MT A 3-4"MT A		93 b	97 a	98 a	
5	LIBERTY 280 SHARPEN MSO (MSO ULTRA) N-PAK AMS	2.34 2.85 100 100	EC SC SL SL	0.53 lb ai/a 0.0445 lb ai/a 1 % v/v 2.5 % v/v		29 fl oz/a 2 fl oz/a 1 % v/v 2.5 % v/v		3-4"MT A 3-4"MT A 3-4"MT A 3-4"MT A		99 a	96 a	96 a	
6	LIBERTY 280 SHARPEN MSO (MSO ULTRA) N-PAK AMS	2.34 2.85 100 100	EC SC SL SL	0.66 lb ai/a 0.0445 lb ai/a 1 % v/v 2.5 % v/v		36 fl oz/a 2 fl oz/a 1 % v/v 2.5 % v/v		3-4"MT A 3-4"MT A 3-4"MT A 3-4"MT A		98 a	96 a	96 a	
7	LIBERTY 280 SHARPEN MSO (MSO ULTRA) N-PAK AMS	2.34 2.85 100 100	EC SC SL SL	0.79 lb ai/a 0.0445 lb ai/a 1 % v/v 2.5 % v/v		43 fl oz/a 2 fl oz/a 1 % v/v 2.5 % v/v		3-4"MT A 3-4"MT A 3-4"MT A 3-4"MT A		99 a	98 a	98 a	
8	LIBERTY 280 2,4-D AMINE 4 N-PAK AMS	2.34 3.8 100	EC SL SL	0.53 lb ai/a 0.71 lb ae/a 2.5 % v/v		29 fl oz/a 1.5 pt/a 2.5 % v/v		6-8"MT B 6-8"MT B 6-8"MT B			73 c	91 a	93 a
9	LIBERTY 280 2,4-D AMINE 4 N-PAK AMS	2.34 3.8 100	EC SL SL	0.66 lb ai/a 0.71 lb ae/a 2.5 % v/v		36 fl oz/a 1.5 pt/a 2.5 % v/v		6-8"MT B 6-8"MT B 6-8"MT B			85 b	94 a	96 a
10	LIBERTY 280 2,4-D AMINE 4 N-PAK AMS	2.34 3.8 100	EC SL SL	0.79 lb ai/a 0.71 lb ae/a 2.5 % v/v		43 fl oz/a 1.5 pt/a 2.5 % v/v		6-8"MT B 6-8"MT B 6-8"MT B			87 b	92 a	91 a
11	LIBERTY 280 SHARPEN MSO (MSO ULTRA) N-PAK AMS	2.34 2.85 100 100	EC SC SL SL	0.53 lb ai/a 0.0445 lb ai/a 1 % v/v 2.5 % v/v		29 fl oz/a 2 fl oz/a 1 % v/v 2.5 % v/v		6-8"MT B 6-8"MT B 6-8"MT B 6-8"MT B			98 a	98 a	98 a
12	LIBERTY 280 SHARPEN MSO (MSO ULTRA) N-PAK AMS	2.34 2.85 100 100	EC SC SL SL	0.66 lb ai/a 0.0445 lb ai/a 1 % v/v 2.5 % v/v		36 fl oz/a 2 fl oz/a 1 % v/v 2.5 % v/v		6-8"MT B 6-8"MT B 6-8"MT B 6-8"MT B			98 a	97 a	97 a
13	LIBERTY 280 SHARPEN MSO (MSO ULTRA) N-PAK AMS	2.34 2.85 100 100	EC SC SL SL	0.79 lb ai/a 0.0445 lb ai/a 1 % v/v 2.5 % v/v		43 fl oz/a 2 fl oz/a 1 % v/v 2.5 % v/v		6-8"MT B 6-8"MT B 6-8"MT B 6-8"MT B			98 a	98 a	98 a

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Pest Code						ERICA	ERICA	ERICA	ERICA	ERICA	ERICA
Crop Code						4-21-16	4-28-16	5-2-16	5-9-16	5-12-16	5-23-16
Rating Date						Burndown	Burndown	Burndown	Burndown	Burndown	Burndown
Rating Type						Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit						7 DA-A	14 DA-A	7 DA-B	14 DA-B	28 DA-A	28 DA-B
Rating Timing											
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code	
14	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		3-4"MT A			80 d
	2,4-D AMINE 4	3.8 SL		0.71 lb ae/a		1.5 pt/a		3-4"MT A			94 a
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		3-4"MT A			99 a
15	GRAMOXONE INTEON	2 SL		0.75 lb ai/a		3 pt/a		3-4"MT A			92 bc
	2,4-D AMINE 4	3.8 SL		0.71 lb ae/a		1.5 pt/a		3-4"MT A			94 a
	MSO (MSO ULTRA)	100 SL		1 % v/v		1 % v/v		3-4"MT A			91 a
16	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		6-8"MT B			47 e
	2,4-D AMINE 4	3.8 SL		0.71 lb ae/a		1.5 pt/a		6-8"MT B			77 b
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		6-8"MT B			87 a
17	GRAMOXONE INTEON	2 SL		0.75 lb ai/a		3 pt/a		6-8"MT B			58 d
	2,4-D AMINE 4	3.8 SL		0.71 lb ae/a		1.5 pt/a		6-8"MT B			63 c
	MSO (MSO ULTRA)	100 SL		1 % v/v		1 % v/v		6-8"MT B			70 b
LSD P=.05						3.3	5.8	7.9	8.7	6.7	12.7
Standard Deviation						1.9	3.3	4.5	5.0	3.8	7.3
CV						2.0	3.47	5.63	5.59	3.98	7.97
Replicate F						0.518	0.657	0.495	0.142	1.081	0.391
Replicate Prob(F)						0.6067	0.5338	0.6199	0.8691	0.3659	0.6838
Treatment F						32.957	0.641	55.087	18.468	1.354	5.071
Treatment Prob(F)						0.0001	0.7158	0.0001	0.0001	0.2974	0.0048

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
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Investigator: Karla L. Gage, Ph.D.

Pest Code							AMATA	AMATA	AMATA	AMATA
Crop Code							4-28-16	5-9-16	5-12-16	5-23-16
Rating Date							Residual	Residual	Residual	Residual
Rating Type							Percent	Percent	Percent	Percent
Rating Unit										
Rating Timing										
Trt-Eval Interval							14 DA-A	14 DA-B	28 DA-A	28 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Growth Stage	Appl Code		
1	NONTREATED								0	0
2	LIBERTY 280	2.34	EC	0.53 lb ai/a	29 fl oz/a		3-4"MT A		53 a	22 a
	2,4-D AMINE 4	3.8	SL	0.71 lb ae/a	1.5 pt/a		3-4"MT A			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		3-4"MT A			
3	LIBERTY 280	2.34	EC	0.66 lb ai/a	36 fl oz/a		3-4"MT A		20 a	0 a
	2,4-D AMINE 4	3.8	SL	0.71 lb ae/a	1.5 pt/a		3-4"MT A			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		3-4"MT A			
4	LIBERTY 280	2.34	EC	0.79 lb ai/a	43 fl oz/a		3-4"MT A		50 a	7 a
	2,4-D AMINE 4	3.8	SL	0.71 lb ae/a	1.5 pt/a		3-4"MT A			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		3-4"MT A			
5	LIBERTY 280	2.34	EC	0.53 lb ai/a	29 fl oz/a		3-4"MT A		23 a	0 a
	SHARPEN	2.85	SC	0.0445 lb ai/a	2 fl oz/a		3-4"MT A			
	MSO (MSO ULTRA)	100	SL	1 % v/v	1 % v/v		3-4"MT A			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		3-4"MT A			
6	LIBERTY 280	2.34	EC	0.66 lb ai/a	36 fl oz/a		3-4"MT A		40 a	10 a
	SHARPEN	2.85	SC	0.0445 lb ai/a	2 fl oz/a		3-4"MT A			
	MSO (MSO ULTRA)	100	SL	1 % v/v	1 % v/v		3-4"MT A			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		3-4"MT A			
7	LIBERTY 280	2.34	EC	0.79 lb ai/a	43 fl oz/a		3-4"MT A		23 a	20 a
	SHARPEN	2.85	SC	0.0445 lb ai/a	2 fl oz/a		3-4"MT A			
	MSO (MSO ULTRA)	100	SL	1 % v/v	1 % v/v		3-4"MT A			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		3-4"MT A			
8	LIBERTY 280	2.34	EC	0.53 lb ai/a	29 fl oz/a		6-8"MT B			0 a
	2,4-D AMINE 4	3.8	SL	0.71 lb ae/a	1.5 pt/a		6-8"MT B		27 a	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		6-8"MT B			
9	LIBERTY 280	2.34	EC	0.66 lb ai/a	36 fl oz/a		6-8"MT B			17 a
	2,4-D AMINE 4	3.8	SL	0.71 lb ae/a	1.5 pt/a		6-8"MT B		65 a	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		6-8"MT B			
10	LIBERTY 280	2.34	EC	0.79 lb ai/a	43 fl oz/a		6-8"MT B			0 a
	2,4-D AMINE 4	3.8	SL	0.71 lb ae/a	1.5 pt/a		6-8"MT B		27 a	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		6-8"MT B			
11	LIBERTY 280	2.34	EC	0.53 lb ai/a	29 fl oz/a		6-8"MT B			27 a
	SHARPEN	2.85	SC	0.0445 lb ai/a	2 fl oz/a		6-8"MT B		73 a	
	MSO (MSO ULTRA)	100	SL	1 % v/v	1 % v/v		6-8"MT B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		6-8"MT B			
12	LIBERTY 280	2.34	EC	0.66 lb ai/a	36 fl oz/a		6-8"MT B			10 a
	SHARPEN	2.85	SC	0.0445 lb ai/a	2 fl oz/a		6-8"MT B		55 a	
	MSO (MSO ULTRA)	100	SL	1 % v/v	1 % v/v		6-8"MT B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		6-8"MT B			
13	LIBERTY 280	2.34	EC	0.79 lb ai/a	43 fl oz/a		6-8"MT B			7 a
	SHARPEN	2.85	SC	0.0445 lb ai/a	2 fl oz/a		6-8"MT B		58 a	
	MSO (MSO ULTRA)	100	SL	1 % v/v	1 % v/v		6-8"MT B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		6-8"MT B			

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	AMATA	AMATA	AMATA	AMATA
							4-28-16	5-9-16	5-12-16	5-23-16
							Residual	Residual	Residual	Residual
							Percent	Percent	Percent	Percent
							14 DA-A	14 DA-B	28 DA-A	28 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code	
14	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	3-4"	MT A	70 a
	2,4-D AMINE 4	3.8	SL	0.71	lb ae/a	1.5	pt/a	3-4"	MT A	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"	MT A	8 a
15	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	3-4"	MT A	68 a
	2,4-D AMINE 4	3.8	SL	0.71	lb ae/a	1.5	pt/a	3-4"	MT A	
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	3-4"	MT A	40 a
16	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	6-8"	MT B	
	2,4-D AMINE 4	3.8	SL	0.71	lb ae/a	1.5	pt/a	6-8"	MT B	38 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"	MT B	0 a
17	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	6-8"	MT B	
	2,4-D AMINE 4	3.8	SL	0.71	lb ae/a	1.5	pt/a	6-8"	MT B	33 a
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	6-8"	MT B	0 a
LSD P=.05							44.8	53.8	36.9	22.4
Standard Deviation							25.6	30.7	21.1	12.8
CV							58.74	65.27	157.96	170.9
Replicate F							0.083	0.147	1.454	0.913
Replicate Prob(F)							0.9210	0.8649	0.2669	0.4239
Treatment F							1.858	1.043	1.218	1.783
Treatment Prob(F)							0.1534	0.4457	0.3553	0.1692

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Evaluation of Marestalk Burndown with Liberty Tank-Mixes and Liberty Rates.

Trial ID: 16-DSO-BAYER-WGJ      Location: De Soto, IL      Trial Year: 2016  
 Investigator: Karla L. Gage, Ph.D.

Trial Comments

1. Protocol: Bayer (WGJ).
2. Ratings:  
 WC 7, 14, and 28 DA-A;  
 WC 7, 14, and 28 DA-B;
3. No yield, non-crop.
4. Blanket possible after the last rating, last photo, last tour.
5. Target glyphosate-resistant marestalk and rate other weeds.  
 Rate burndown and residue control separately, especially at the last rating.  
 Record percent cover for each weed in each nontreated plot at each rating.
6. Spray early season when cool, do not conduct the trial if you missed the burndown timing.  
 Spray before 5pm, no dew, avoid overcast sky.
7. Photos: 2 sets; NT+A at 28 DA-A, NT+B at 28 DA-B,  
 but showing burndown, before too much new emergence.
8. Cloud cover at the 3-4"MT application A was clear at least 2 hours prior to and during the application, and remained clear for about 2 hours following the application.  
 Cloud cover at the 6-8"MT application B was clear at least 2 hours prior to and during the application, and remained clear for about 4 hours following the application.
9. Rainfall following the 3-4"MT application A was 1.76 inch over 2 days beginning 5 days later.  
 Rainfall following the 6-8"MT application B was 1.59 inch over 6 days beginning 32 hours later.
10. Blanket POST application of Roundup Powermax (32 floz/A) + Firstrate (0.6 oz/A) was applied to treated areas of the plots on 6-1-16 after the last ratings.
11. Percent cover for each weed in each nontreated plot at each rating is as follows:

Date	DAT	Plot	ERICA	AMATA
4-21-16	7 DA-A	101	5	0
		211	5	0
		309	5	0
4-28-16	14 DA-A	101	10	5
		211	10	5
		309	10	5
5-2-16	7 DA-B	101	15	10
		211	15	10
		309	15	10
5-9-16	14 DA-B	101	15	15
		211	15	15
		309	15	15
5-12-16	28 DA-A	101	20	30
		211	20	30
		309	20	30
5-23-16	28 DA-B	101	20	50
		211	20	50
		309	20	50

12. Not harvested.