

Flexstar GT Adjuvant Study.

Trial ID: 09-DeSoto-FlexGT-Adj Location: De Soto, IL

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 City State Zip Country: De Soto IL 62924 USA
 Trial Status: FINAL Initiation Date: 05-23-09

Objectives: Determine the influence of adjuvant on the efficacy of Flexstar GT
 on glyphosate-resistant waterhemp.

Crop 1: GLXMA Soybean	Variety: AG 3905	Description: RR
Planting Method: SEED	Planting Date: 05-23-09	
Rate, Unit: 180000 S/A	Depth, Unit: 1.25 IN	
Row Spacing, Unit: 30 IN		
Soil Moisture: ABOVE NORMAL		

Pest 1 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: 3	Study Design: Randomized Complete Block

Prior Crops, Year
 1. GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P205 0 LB/A, K20 0 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

Application Date:	06-17-09
Time of Day:	9:00
Application Method:	Spray
Application Timing:	6-8"WH
Application Placement:	BROFOL
Applied By:	DKT
Air Temperature, Unit:	82 F
% Relative Humidity:	85
Wind Velocity, Unit:	2 MPH
Wind Direction:	SW
Dew Presence (Y/N):	N
Soil Temperature, Unit:	78 F
Soil Moisture:	ABONOR
% Cloud Cover:	30

	06-17-09
Crop stage at application:	V2-3
Height Min, Max (inch):	7 9

Pest Stage At Each Application

Application Date:	06-17-09
Weed Code:	AMATA
Stage Majority (leaves):	12
Stage Min, Max:	4 20
Height Majority:	6 IN
Height Min, Max:	2 10
Density, Unit:	35 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	6.67 FT
Spray Volume, Unit:	15 GPA

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										AMATA-HR		
Pest Code										GLXMA	GLXMA	GLXMA
Crop Code										06-24-09	07-01-09	07-15-09
Rating Date										Injury	Injury	Injury
Rating Data Type										Percent	Percent	Percent
Rating Unit										Control	Control	Control
Rating Timing										Percent	Percent	Percent
Trt-Eval Interval										7 DA-A	14 DA-A	28 DA-A
Trt	Treatment	Form	Form	Rate	Rate	Other	Other	Growth	Appl			
No.	Name	Conc	Type		Unit	Rate	Rate	Stage	Code			
1	NONTREATED									0 h	0 g	0 a
2	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		4 g	0 g	0 a
3	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		8 f	0 g	0 a
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	6-8"WH A		73 bcd	37 de	37 ab
4	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		12 cde	4 d	0 a
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	6-8"WH A		76 abc	37 de	27 bc
5	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		15 c	3 de	0 a
5	HSOC (DESTINY HC)	100	SL	0.5	% v/v	0.5	% v/v	6-8"WH A		68 d	45 bcd	32 abc
6	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		12 de	2 ef	0 a
6	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH A		73 cd	53 abc	43 a
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH A		4 g	0 g	0 a
7	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		67 d	43 cd	30 abc
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH A		10 ef	1 fg	0 a
8	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		72 cd	33 de	28 bc
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	6-8"WH A				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH A		13 cd	4 cd	0 a
9	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		79 abc	58 ab	40 ab
9	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	6-8"WH A				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH A		12 cde	3 de	0 a
10	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		68 d	40 cd	35 ab
10	HSOC (DESTINY HC)	100	SL	0.5	% v/v	0.5	% v/v	6-8"WH A				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH A		14 cd	4 d	0 a
11	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH A		80 ab	60 a	37 ab
11	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH A				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH A		19 b	6 c	0 a
12	FLEXSTAR	1.88	EC	0.25	lb ai/a	1.06	pt/a	6-8"WH A		83 a	43 cd	30 abc
12	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	6-8"WH A				
12	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH A				
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH A		24 a	10 a	0 a
13	COBRA	2	EC	0.156	lb ai/a	10	fl oz/a	6-8"WH A		68 d	23 e	20 c
13	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	6-8"WH A				
13	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH A				
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH A		24 a	8 b	0 a
14	ULTRA BLAZER	2	EC	0.25	lb ai/a	1	pt/a	6-8"WH A		81 a	62 a	40 ab
14	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	6-8"WH A				
14	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH A				
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH A		4 g	0 g	0 a
15	RESOURCE	0.86	EC	0.0202	lb ai/a	3	fl oz/a	6-8"WH A		37 e	25 e	20 c
15	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	6-8"WH A				
15	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH A				
LSD (P=.05)										2.9	1.6	0.0
Replicate F										5.143	1.712	0.000
Replicate Prob(F)										0.0125	0.1989	1.0000
Treatment F										52.000	33.803	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000
										0.0001	0.0001	0.0001

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

Trial Comments

1. Protocol: Syngenta (FM051A4).
2. Ratings: CI at 7, 14 + 28 da A; WC at 14, 28 + 42 da A.
3. Yield not necessary.
4. Blanket burndown application of Touchdown Total (36 fl oz/A) + 2,4-D LV4 (1 pt/A) + AMS (1% w/w) was applied on 4-26-09.
5. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
6. Not harvested.