

Nonionic Surfactant Study with Touchdown HiTech - Agriliance.

Project Code: 06-2B-EE65      Location: Belleville Research Center  
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country:      Belleville      IL 62221 USA  
Trial Status: Final      Updated:      8-4-06**Objective:**Evaluate experimental surfactant based adjuvants for use  
with unloaded glyphosate formulations.

Weed Code	Common Name	Scientific Name
1.	PANDI panicum, fall	Panicum dichotomiflorum Michx.
2.	AMATA waterhemp, common	Amaranthus rudis Sauer
3.	ABUTH velvetleaf	Abutilon theophrasti Medicus

Crop 1:	GLXMA soybean	Variety:	Asgrow 4403 RR
Tillage Method:	Seeded	Planting Date:	5-22-06
Rate:	75 lb/A	Depth:	1.0 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	28 FT	Reps:	3
Tillage Type:	No-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	ZEAMX, 2005				
Field Prep./Maintenance:	N 0 LB/A, P205 0 LB/A, K2O 100 LB/A				

Soil Name:	Weir	% OM:	1.6	pH:	6.1	CEC:	8
Texture:	Silt loam	Fert. Level:	P1: 91 LB/A, K: 410 LB/A				

**APPLICATION DESCRIPTION**

APPLICATION DESCRIPTION		A
Application Date:	6-22-06	
Time of Day:	7:00	
Application Method:	Spray	
Application Timing:	6-8"W	
Applic. Placement:	BROFOL	
Air Temp., Unit:	84 F	
% Relative Humidity:	90	
Wind Velocity, Unit:	1-2 MPH	
Dew Presence (Y/N):	Y	
Soil Moisture:	ADEQUATE	
% Cloud Cover:	15	

**CROP STAGE AT EACH APPLICATION**

CROP STAGE AT EACH APPLICATION		A
Crop 1 Code, Stage:	GLXMA V3	
Height, Unit:	7-9 IN	

**WEED STAGE AT EACH APPLICATION**

WEED STAGE AT EACH APPLICATION		A
Weed 1 Code:	PANDI	
Stage(leaves):	2-6	
Height(inches):	5-8	
Density:	High	
Weed 2 Code:	AMATA	
Stage(leaves):	2-9	
Height(inches):	0-6	
Density:	Medium	
Weed 3 Code:	ABUTH	
Stage(leaves):	2-6	
Height(inches):	0-6	
Density:	Low	

**APPLICATION EQUIPMENT**

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

NOTES:

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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	GLXMA Injury Percent 7-6-06 14 DAT	GLXMA Injury Percent 7-20-06 28 DAT	PANDI Control Percent 7-6-06 14 DAT	PANDI Control Percent 7-20-06 28 DAT	AMATA Control Percent 7-6-06 14 DAT	AMATA Control Percent 7-20-06 28 DAT	ABUTH Control Percent 7-6-06 14 DAT	ABUTH Control Percent 7-20-06 28 DAT
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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code								
1	NONTREATED									0	0	0	0	0	0	0	0
2	TOUCHDOWN HI-TECH	5	SC	0.188	lb ae/a	4.8	fl oz/a	6-8"W	A	0	0	88	72	45	27	35	8
3	TOUCHDOWN HI-TECH	5	SC	0.188	lb ae/a	4.8	fl oz/a	6-8"W	A	0	0	91	80	57	33	42	23
3	PREFERENCE	100	LIQ	0.25	% v/v	0.25	% v/v	6-8"W	A								
4	TOUCHDOWN HI-TECH	5	SC	0.188	lb ae/a	4.8	fl oz/a	6-8"W	A	2	0	95	87	60	28	52	27
4	AG 03019	100	LIQ	0.25	% v/v	0.25	% v/v	6-8"W	A								
5	TOUCHDOWN HI-TECH	5	SC	0.188	lb ae/a	4.8	fl oz/a	6-8"W	A	0	0	88	77	57	28	53	37
5	AG 03037	100	LIQ	0.25	% v/v	0.25	% v/v	6-8"W	A								
6	TOUCHDOWN HI-TECH	5	SC	0.188	lb ae/a	4.8	fl oz/a	6-8"W	A	0	0	90	70	55	35	42	22
6	AG 04021	100	LIQ	5.0	fl oz/a	5	fl oz/a	6-8"W	A								
7	TOUCHDOWN HI-TECH	5	SC	0.188	lb ae/a	4.8	fl oz/a	6-8"W	A	0	0	88	82	50	27	42	22
7	AG 06001	100	LIQ	0.25	% v/v	0.25	% v/v	6-8"W	A								
8	TOUCHDOWN HI-TECH	5	SC	0.188	lb ae/a	4.8	fl oz/a	6-8"W	A	2	0	90	84	50	27	35	25
8	AG 06011	100	LIQ	5.0	fl oz/a	5	fl oz/a	6-8"W	A								
9	TOUCHDOWN HI-TECH	5	SC	0.188	lb ae/a	4.8	fl oz/a	6-8"W	A	0	0	93	83	57	23	57	23
9	AG 06013	100	LIQ	0.25	% v/v	0.25	% v/v	6-8"W	A								
10	TOUCHDOWN HI-TECH	5	SC	0.188	lb ae/a	4.8	fl oz/a	6-8"W	A	0	0	88	70	52	23	42	17
10	AG 06015	100	LIQ	5.0	fl oz/a	5	fl oz/a	6-8"W	A								
LSD (P=.05)										2.1	0.0	6.3	12.7	12.5	14.4	10.3	7.6
Replicate F										2.250	0.000	2.253	1.180	2.466	7.514	2.221	0.673
Replicate Prob(F)										0.1342	1.0000	0.1339	0.3299	0.1131	0.0042	0.1373	0.5226
Treatment F										1.000	0.000	183.810	35.687	17.293	3.917	20.634	15.495
Treatment Prob(F)										0.4742	1.0000	0.0001	0.0001	0.0001	0.0066	0.0001	0.0001

Trial Comments

1. Protocol: Agrilience.
2. Ratings: CI/WC 14 + 28 DAT.
3. DA-A = Days after 6-8"W application.
4. Not harvested.