

Liberty Adjuvant Study in Corn - Agrilience.

Project Code: 06-50W-N30 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 the efficacy of Liberty applied with alternative adjuvants compared with traditional ammonium sulfate.

Weed Code	Common Name	Scientific Name
1. SETFA	foxtail, giant	Setaria faberi Herrm.
2. PANDI	panicum, fall	Panicum dichotomiflorum Michx.
3. AMATA	waterhemp, common	Amaranthus rudis Sauer
4. ABUTH	velvetleaf	Abutilon theophrasti Medicus

Crop 1: ZEAMX corn, field **Variety:** 33K44RR
Planting Method: Seeded **Planting Date:** 5-23-06
Rate: 28000 S/A **Depth:** 1.5 IN
Row Spacing: 30 IN

Plot Width, Unit: 10 FT **Plot Length, Unit:** 27 FT **Reps:** 3
Tillage Type: Reduced-Till **Study Design:** Randomized complete block
Previous Crop, Year: GLXMA, 2005
Field Prep./Maintenance: N 150 LB/A, P205 50 LB/A, K20 100 LB/A

Soil Name: Weir **% OM:** 2.2 **pH:** 6.3 **CEC:** 11
Texture: Silt loam **Fert. Level:** P1: 67 LB/A, K: 376 LB/A

APPLICATION DESCRIPTION

A
Application Date: 6-13-06
Time of Day: 16:30
Application Method: Spray
Application Timing: 4-6"W
Applic. Placement: BROFOL
Air Temp., Unit: 80 F
% Relative Humidity: 48
Wind Velocity, Unit: 5-6 MPH
Soil Moisture: NORMAL

CROP STAGE AT EACH APPLICATION

A
Crop 1 Code, Stage: ZEAMX V4
Height, Unit: 12 IN

WEED STAGE AT EACH APPLICATION

A
Weed 1 Code: SETFA
Stage (leaves): 4-5
Height (inches): 4-6
Density: Medium
Weed 2 Code: PANDI
Stage (leaves): 4-5
Height (inches): 4-6
Density: Medium
Weed 3 Code: AMATA
Stage (leaves): 6-8
Height (inches): 4-6
Density: Medium
Weed 4 Code: ABUTH
Stage (leaves): 4-6
Height (inches): 4-6
Density: Medium

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: 20 GPA

NOTES:

12-12-06 (06-50W-N30)

Southern Illinois University

Liberty Adjuvant Study in Corn - Agrilience.

Project Code: 06-50W-N30 Location: Belleville Research Center
 Investigator: Bryan Young

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	ZEAMX Injury Percent	ZEAMX Injury Percent	SETFA Control Percent	SETFA Control Percent	PANDI Control Percent	PANDI Control Percent	AMATA Control Percent	AMATA Control Percent
1	NONTREATED									0	0	0	0	0	0	0	0
2	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	0	0	85	93	48	63	72	67
3	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	0	0	96	95	80	78	85	81
3	N-PAK AMS	100	LIQ	3.5	qt/a	3.5	qt/a	4-6"	W A								
4	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	0	0	95	95	70	78	82	80
4	CLASS ACT NG	100	LIQ	2.5	% v/v	2.5	% v/v	4-6"	W A								
5	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	0	0	94	95	75	82	87	84
5	CLASS ACT NG	100	LIQ	2.5	% v/v	2.5	% v/v	4-6"	W A								
5	AG 02013	100	LIQ	2.0	fl oz/a	2	fl oz/a	4-6"	W A								
6	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	0	0	95	95	78	78	86	83
6	CLASS ACT NG	100	LIQ	2.5	% v/v	2.5	% v/v	4-6"	W A								
6	AG 02013	100	LIQ	4.0	fl oz/a	4	fl oz/a	4-6"	W A								
LSD (P=.05)										0.0	0.0	6.8	2.1	15.0	6.0	13.7	19.8
Replicate F										0.000	0.000	1.029	1.000	4.429	3.462	2.639	2.656
Replicate Prob(F)										1.0000	1.0000	0.3923	0.4019	0.0419	0.0720	0.1201	0.1188
Treatment F										0.000	0.000	316.965	3227.200	42.192	278.154	61.179	27.188
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

12-12-06 (06-50W-N30)

Southern Illinois University

Liberty Adjuvant Study in Corn - Agrilience.

Project Code: 06-50W-N30 Location: Belleville Research Center
 Investigator: Bryan Young

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	ABUTH Control Percent	ABUTH Control Percent
1	NONTREATED									0	0
2	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	43	43
3	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	94	92
3	N-PAK AMS	100	LIQ	3.5	qt/a	3.5	qt/a	4-6"	W A		
4	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	93	94
4	CLASS ACT NG	100	LIQ	2.5	% v/v	2.5	% v/v	4-6"	W A		
5	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	87	85
5	CLASS ACT NG	100	LIQ	2.5	% v/v	2.5	% v/v	4-6"	W A		
5	AG 02013	100	LIQ	2.0	fl oz/a	2	fl oz/a	4-6"	W A		
6	LIBERTY	1.67	EC	0.287	lb ai/a	22	fl oz/a	4-6"	W A	94	95
6	CLASS ACT NG	100	LIQ	2.5	% v/v	2.5	% v/v	4-6"	W A		
6	AG 02013	100	LIQ	4.0	fl oz/a	4	fl oz/a	4-6"	W A		
LSD (P=.05)										12.7	22.7
Replicate F										1.170	0.395
Replicate Prob(F)										0.3495	0.6840
Treatment F										92.512	28.961
Treatment Prob(F)										0.0001	0.0001

Trial Comments

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