

Postemergence HPPD Inhibitor Adjuvant Study.

Project Code: 07-21N-M100 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: 1-23-08

Objective:

The study utilizes a 1/3X rate of the POST herbicides to discern differences in adjuvants for weed control.

Weed Code	Common Name	Scientific Name
1. SETFA	foxtail, giant	Setaria faberi Herrm.
2. AMBTR	ragweed, giant	Ambrosia trifida L.
3. ABUTH	velvetleaf	Abutilon theophrasti Medicus
4. XANST	cocklebur, common	Xanthium strumarium L.

Crop 1:	ZEAMX corn, field	Variety:	33K44
Planting Method:	Seeded	Planting Date:	6-1-07
Rate:	28000 S/A	Depth:	1.5 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	30 FT	Reps:	3
Tillage Type:	Reduced-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	GLXMA, 2006				
Field Prep./Maintenance:	N 150 LB/A, P205 0 LB/A, K2O 100 LB/A				

Soil Name:	Ebbert	% OM:	2.7	pH:	6.4	CEC:	14
Texture:	Silt loam	Fert. Level:	P1: 80 LB/A, K: 342 LB/A				

APPLICATION DESCRIPTION

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Application Date:	6-27-07
Time of Day:	7:30
Application Method:	Spray
Application Timing:	6-8"W
Applic. Placement:	BROFOL
Air Temp., Unit:	78 F
% Relative Humidity:	92
Wind Velocity, Unit:	0 MPH
Dew Presence (Y/N):	Y
Soil Moisture:	ABONOR
% Cloud Cover:	25

CROP STAGE AT EACH APPLICATION

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Crop 1 Code, Stage:	ZEAMX V5-V6
Height, Unit:	24 IN

WEED STAGE AT EACH APPLICATION

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Weed 1 Code:	SETFA
Stage(leaves):	3-6
Height(inches):	2-9
Density:	High
Weed 2 Code:	AMBTR
Stage(leaves):	4-10
Height(inches):	5-10
Density:	Medium
Weed 3 Code:	ABUTH
Stage(leaves):	3-10
Height(inches):	2-11
Density:	Medium
Weed 4 Code:	XANST
Stage(leaves):	4-10
Height(inches):	3-9
Density:	Medium

APPLICATION EQUIPMENT

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

NOTES:

Southern Illinois University

Weed Code	ZEAMX		SETFA	SETFA	AMBTR	AMBTR	ABUTH	ABUTH	XANST	XANST
Crop Code	ZEAMX									
Rating Data Type	Injury	Injury	Control	Control	Control	Control	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Date	7-11-07	7-25-07	7-11-07	7-25-07	7-11-07	7-25-07	7-11-07	7-25-07	7-11-07	7-25-07
Trt-Eval Interval	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A

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

Trial Comments

1. Protocol: NDSU, UNL, SIU.
2. Ratings: CI/WC 14 + 28 DAT.
3. DA-A = Days after 6-8"W application.