

Gramoxone Adjuvant Study-2.

00-2C-E60

OBJECTIVE: Evaluate the impact of enhancing deposition with various adjuvants on weed control with Gramoxone.

SUMMARY: Initial control of little barley at 3 days after treatment (DAT) was lowest when PX332 at 10 oz or Penetrate II alone was combined with Gramoxone Extra. By 14 DAT little barley control was 96 to 99% from all Gramoxone treatments.

HERBICIDE/ADJUVANTS

GRAMOXONE EXTRA 2.5 SL
30% POLYACRYLAMIDE 100 LIQ
PENETRATE II 100 LIQ
PX330 100 DRY
PX332 100 DRY

WEEDS

BARLEY, LITTLE

CROP

CORN, FIELD

Bryan Young

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

Gramoxone Adjuvant Study-2.

Project Code: 00-2C-E60 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

Weed Code 1. HORPU	Common Name BARLEY, LITTLE	Scientific Name HORDEUM PUSILLUM		
Crop 1: Planting Method: Rate: Row Spacing:	ZEAMX CORN, FIELD SEEDED 28000 S/A 30 IN	Variety: Planting Date: Depth:	P33G28 LL May-11-005-18-00 1.5 IN	
Plot Width, Unit: Tillage Type: Previous Crop, Year:	10 FT REDUCED-TILL GLXMA, 1999	Plot Length, Unit: Study Design: Fertilizer applied:	28 FT RCB N 150 LB/A,	Reps: 3 P ₂ O ₅ 50 LB/A, K ₂ O 150 LB/A
Soil Name: Texture:	WEIR SILT LOAM	% OM: 1.6 P _i : 72 LB/A,	pH: 6.9 K: 384 LB/A	CEC: 8

APPLICATION DESCRIPTION

A
 Application Date: May-18-00
 Time of Day: 18:30
 Application Method: SPRAY
 Application Timing: BURNDOWN
 Applic. Placement: BROFOL
 Air Temp., Unit: 77 F
 % Relative Humidity: 96
 Wind Velocity, Unit: 5-7 MPH

CROP STAGE AT EACH APPLICATION

A
 Crop 1 Code, Stage: NA
 Height, Unit: NA

WEED STAGE AT EACH APPLICATION

A
 Weed 1 Code: HORPU
 Stage(leaves): 3-4
 Height(inches): 12-15
 Density: HIGH

APPLICATION EQUIPMENT

A
 Appl. Equipment: CO, SPRAY
 Operating Pressure: 40 PSI
 Nozzle Type: FLAT FAN
 Nozzle Size: DG110015 VS
 Boom Length, Unit: 7.33 FT
 Spray Volume, Unit: 10 GPA

NOTES:

Not harvested.

TABLE. GRAMOXONE ADJUVANT STUDY-2. PROJECT CODE:00-2C-E60

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	HORPU CONTROL DAYS AFTER BURNDOWN		
							3	7	14
							%	%	%
1 GRAMOXONE EXTRA	2.5 SL	0.625	LB A/A	2.0 PT/A	BURNDOWN	A	98	98	98
1 PX332	100 DRY	0.045	% W/W	6.0 OZ/100 GAL	BURNDOWN	A			
1 PENETRATE II	100 LIQ	0.25	% V/V	32.0 OZ/100 GAL	BURNDOWN	A			
2 GRAMOXONE EXTRA	2.5 SL	0.625	LB A/A	2.0 PT/A	BURNDOWN	A	96	99	99
2 PX332	100 DRY	0.0524	% W/W	7.0 OZ/100 GAL	BURNDOWN	A			
2 PENETRATE II	100 LIQ	0.25	% V/V	32.0 OZ/100 GAL	BURNDOWN	A			
3 GRAMOXONE EXTRA	2.5 SL	0.625	LB A/A	2.0 PT/A	BURNDOWN	A	98	98	96
3 PX332	100 DRY	0.06	% W/W	8.0 OZ/100 GAL	BURNDOWN	A			
3 PENETRATE II	100 LIQ	0.25	% V/V	32.0 OZ/100 GAL	BURNDOWN	A			
4 GRAMOXONE EXTRA	2.5 SL	0.625	LB A/A	2.0 PT/A	BURNDOWN	A	99	99	99
4 PX332	100 DRY	0.0674	% W/W	9.0 OZ/100 GAL	BURNDOWN	A			
4 PENETRATE II	100 LIQ	0.25	% V/V	32.0 OZ/100 GAL	BURNDOWN	A			
5 GRAMOXONE EXTRA	2.5 SL	0.625	LB A/A	2.0 PT/A	BURNDOWN	A	94	96	99
5 PX332	100 DRY	0.075	% W/W	10.0 OZ/100 GAL	BURNDOWN	A			
5 PENETRATE II	100 LIQ	0.25	% V/V	32.0 OZ/100 GAL	BURNDOWN	A			
6 GRAMOXONE EXTRA	2.5 SL	0.625	LB A/A	2.0 PT/A	BURNDOWN	A	95	98	99
6 30% POLYACRYLAMIDE	100 LIQ	0.0312	% V/V	4.0 OZ/100 GAL	BURNDOWN	A			
6 PENETRATE II	100 LIQ	0.25	% V/V	32.0 OZ/100 GAL	BURNDOWN	A			
7 GRAMOXONE EXTRA	2.5 SL	0.625	LB A/A	2.0 PT/A	BURNDOWN	A	94	96	98
7 PENETRATE II	100 LIQ	0.25	% V/V	32.0 OZ/100 GAL	BURNDOWN	A			
8 GRAMOXONE EXTRA	2.5 SL	0.625	LB A/A	2.0 PT/A	BURNDOWN	A	92	94	96
8 PX332	100 DRY	0.075	% W/W	10.0 OZ/100 GAL	BURNDOWN	A			
9 GRAMOXONE EXTRA	2.5 SL	0.625	LB A/A	2.0 PT/A	BURNDOWN	A	98	99	99
9 PX330	100 DRY	0.3	% W/W	2.5 LB/100 GAL	BURNDOWN	A			
10 NONTREATED							0	0	0
LSD							6	5	4
P							0.01	0.01	0.01

1. PROTOCOL: PRECISION LABS.

2. TREATMENT 6 WAS VERY THICK. THE PATTERN WAS APPROXIMATELY 80 DEGREES WHEN SPRAYING.

3. RATING DATES:

3 DA BURNDOWN, 7 DA BURNDOWN, AND 14 DA BURNDOWN ON MAY-22-00, MAY-26-00, AND JUN-2-00, RESPECTIVELY.