

## Winter Annual Grass Control with Fall Applied Herbicides - Study 1.

01-2C-ME80

**OBJECTIVE:** Evaluate fall application of herbicides for control of little barley prior to spring planting.

**SUMMARY:** Gramoxone Extra was the only herbicide that controlled little barley in the fall. However, when evaluated at planting, little barley control was greatest from treatments that included Gramoxone Extra or Roundup Ultra Max plus a residual herbicide like Princep or Basis.

**HERBICIDES**

BASIS 75 WG  
GRAMOXONE EXTRA 2.5 SL  
PRINCEP 90 WG  
ROUNDUP ULTRA MAX 3.7 SL

**WEEDS**

barley, little

**CROP**

non-crop

Bryan Young

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

## Winter Annual Grass Control with Fall Applied Herbicides - Study 1.

Project Code: 01-2C-ME80      Location: BELLEVILLE RESEARCH CENTER

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

City State Zip Country:            Belleville      IL 62221 USA  
Trial Status: Final                    Initiation Date: 11-17-00**Objective:**

Evaluate fall application of herbicides for control of little barley prior to spring planting.

Weed Code	Common Name	Scientific Name
1.	HORPU barley, little	Hordeum pusillum Nutt.
2.	BROTE brome, downy	Bromus tectorum L.

Crop 1:                    NONE      non-crop

Plot Width, Unit: 10	FT	Plot Length, Unit: 28	FT	Reps: 4
Tillage Type: No-Till		Study Design: Randomized complete block		
Previous Crop, Year: ZEAMX, 2000				
Field Prep./Maintenance: N 0 LB/A, P205 0 LB/A, K20 150 LB/A				

Soil Name: Weir	% OM: 1.5	pH: 6.5	CEC: 8
Texture: Silt loam	Fert. Level: P1: 88 LB/A, K: 265 LB/A		

**APPLICATION DESCRIPTION****A**

Application Date:	11-23-00
Time of Day:	10:00
Application Method:	SPRAY
Application Timing:	FALL
Applic. Placement:	BROFOL
Wind Velocity, Unit:	5 MPH
Soil Moisture:	NORMAL

**CROP STAGE AT EACH APPLICATION****A**

Crop 1 Code, Stage:	NONE
Height, Unit:	NA

**WEED STAGE AT EACH APPLICATION****A**

Weed 1 Code:	HORPU
Stage(leaves):	3-4
Height(inches):	1-4
Density:	Medium
Weed 2 Code:	BROTE
Stage(leaves):	3-5
Height(inches):	1-5
Density:	Medium

**APPLICATION EQUIPMENT****A**

Appl. Equipment:	CO2 sprayer
Operating Pressure:	40 PSI
Nozzle Type:	Flat fan
Nozzle Size:	8003
Boom Length, Unit:	7.33 FT
Incorporation Equip.:	NA
Spray Volume, Unit:	20 GPA

NOTES: NOT HARVESTED.

Winter Annual Grass Control with Fall Applied Herbicides - Study 1.

Project Code: 01-2C-ME80 Location: BELLEVILLE RESEARCH CENTER

Weed Code		HORPU	HORPU	HORPU	HORPU
Rating Data Type		Control	Control	Control	Control
Rating Unit		Percent	Percent	Percent	Percent
Rating Date		12-7-00	12-21-00	4-2-01	5-9-01
Trt-Eval Interval		14 DA-A	28 DA-A	130 DA-A	0 DAP

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
2	ROUNDUP ULTRA MAX	3.7	SL	0.375	LB AE/A	0.8	PT/A	FALL	A	0	0	96	88
2	AMS	100	DRY	2.0	% W/W	2	% W/W	FALL	A				
3	GRAMOXONE EXTRA	2.5	SL	0.313	LB A/A	1	PT/A	FALL	A	90	90	99	88
3	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	FALL	A				
4	PRINCEP	90	WG	1.0	LB A/A	1.1	LB/A	FALL	A	0	0	88	83
5	ROUNDUP ULTRA MAX	3.7	SL	0.375	LB AE/A	0.8	PT/A	FALL	A	0	0	99	99
5	PRINCEP	90	WG	1.0	LB A/A	1.1	LB/A	FALL	A				
5	AMS	100	DRY	2.0	% W/W	2	% W/W	FALL	A				
6	BASIS	75	WG	0.0234	LB A/A	0.5	OZ/A	FALL	A	0	0	99	82
6	PRIME OIL COC	100	LIQ	1.0	% V/V	1	% V/V	FALL	A				
7	ROUNDUP ULTRA MAX	3.7	SL	0.375	LB AE/A	0.8	PT/A	FALL	A	0	0	98	97
7	BASIS	75	WG	0.0234	LB A/A	0.5	OZ/A	FALL	A				
7	AMS	100	DRY	2.0	% W/W	2	% W/W	FALL	A				
8	BASIS	75	WG	0.0469	LB A/A	1	OZ/A	FALL	A	0	0	99	97
8	PRIME OIL COC	100	LIQ	1.0	% V/V	1	% V/V	FALL	A				
9	ROUNDUP ULTRA MAX	3.7	SL	0.375	LB AE/A	0.8	PT/A	FALL	A	0	0	99	98
9	BASIS	75	WG	0.0469	LB A/A	1	OZ/A	FALL	A				
9	AMS	100	DRY	2.0	% W/W	2	% W/W	FALL	A				
10	PRINCEP	90	WG	1.0	LB A/A	1.1	LB/A	FALL	A	0	0	99	98
10	BASIS	75	WG	0.0234	LB A/A	0.5	OZ/A	FALL	A				
10	PRIME OIL COC	100	LIQ	1.0	% V/V	1	% V/V	FALL	A				
11	ROUNDUP ULTRA MAX	3.7	SL	0.375	LB AE/A	0.8	PT/A	FALL	A	0	0	99	99
11	PRINCEP	90	WG	1.0	LB A/A	1.1	LB/A	FALL	A				
11	BASIS	75	WG	0.0234	LB A/A	0.5	OZ/A	FALL	A				
11	AMS	100	DRY	2.0	% W/W	2	% W/W	FALL	A				
12	GRAMOXONE EXTRA	2.5	SL	0.313	LB A/A	1	PT/A	FALL	A	90	90	99	99
12	PRINCEP	90	WG	1.0	LB A/A	1.1	LB/A	FALL	A				
12	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	FALL	A				
LSD (P=.05)										0.0	0.0	3.0	11.6
Replicate F										0.000	0.000	1.380	0.808
Replicate Prob(F)										1.0000	1.0000	0.2661	0.4984
Treatment F										0.000	0.000	759.713	47.390
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001

Winter Annual Grass Control with Fall Applied Herbicides - Study 1.

Project Code: 01-2C-ME80      Location: BELLEVILLE RESEARCH CENTER

Trial Comments

1. Protocol; SIU(BGY).
2. DA-A = days after FALL application; Ratings on 4-2-01 were early spring evaluations; 0 DAP = at planting.