

Burndown and Residual Weed Control from Early Preplant Soybean Herbicides.

00-WF-NEN-60

OBJECTIVE: Assess weed control spectrum and speed of burndown from various early preplant herbicides.

SUMMARY: Canopy XL plus either Express or Lorox, provided 99% control of mouseear chickweed and henbit. The addition of Express or Lorox increased control of mouseear chickweed by 9 to 14%, compared with Canopy XL alone. Lorox, at 0.5 lb ai/A, controlled mouseear chickweed and henbit 90 to 99%. Authority plus Lorox controlled mouseear chickweed, 90%. Wild garlic control with Canopy XL plus Express and Weedone 638 ranged from 82 to 83%. Wild garlic control with Canopy XL plus Lorox and Weedone 638 ranged from 70 to 80%. Python plus Sencor and Weedone 638 controlled mouseear chickweed and henbit, 99%.

HERBICIDES

AUTHORITY 75 WG
CANOPY XL 56.3 WG
EXPRESS 75 WG
LOROX 50 WG
PYTHON 80 WG
ROUNDUP ULTRA 3 SL
SENCOR 75 WG
WEEDONE 638 2.8 EC

WEEDS

CHICKWEED, MOUSEEAR
GARLIC, WILD
HENBIT

CROP

SOYBEAN

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PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

Burndown and Residual Weed Control from Early Preplant Soybean Herbicides.

Project Code: 00-WF-NEN-60 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

Weed Code	Common Name	Scientific Name
1. LAMAM	HENBIT	LAMIUM AMPLEXICAULE L.
2. CERVU	CHICKWEED, MOUSEEAR	CERASTIUM VULGATUM L.
3. ALLVI	GARLIC, WILD	ALLIUM VINEALE L.

Crop 1:	GLXMA SOYBEAN	Variety:	B-T 369CR
Planting Method:	SEEDED	Depth:	1.0 IN
Rate:	75 LB/A		
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	25 FT	Reps:	3
Tillage Type:	NO-TILL	Study Design:	RCB		
Previous Crop, Year:	ZEAMX, 1999	Fertilizer applied:	N 0 LB/A,	P ₂ O ₅ 50 LB/A,	K ₂ O 150 LB/A

Texture:	SILT LOAM	% OM: 1.9	pH: 6.2	CEC: 11
		P _i : 58 LB/A,	K: 254 LB/A	

APPLICATION DESCRIPTION

	A
Application Date:	Apr-7-00
Time of Day:	7:00
Application Method:	SPRAY
Application Timing:	EPP
Applic. Placement:	BROFOL
Air Temp., Unit:	56 F
% Relative Humidity:	98
Wind Velocity, Unit:	0 MPH
Soil Moisture:	DRY
% Cloud Cover:	75

CROP STAGE AT EACH APPLICATION

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

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code:	LAMAM
Stage(leaves):	10+
Height(inches):	4-5
Density:	MEDIUM

Weed 2 Code:	CERVU
Stage(leaves):	10+
Height(inches):	2-4
Density:	HIGH

Weed 3 Code:	ALLVI
Stage(leaves):	3-4
Height(inches):	6-12
Density:	MEDIUM

APPLICATION EQUIPMENT

	A
Appl. Equipment:	CO, SPRAY
Operating Pressure:	40 PSI
Nozzle Type:	FLAT FAN
Nozzle Size:	8003
Boom Length, Unit:	7.33 FT
Spray Volume, Unit:	20 GPA

NOTES:

Not harvested.

TABLE. BURNDOWN AND RESIDUAL WEED CONTROL FROM EARLY PREPLANT SOYBEAN HERBICIDES.

PROJECT CODE:00-WF-NEN-60

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	CONTROL, DAYS AFTER EPP								
							CERVU			LAMAM			ALLVI		
							7	14	28	7	14	28	7	14	28
1 CANOPY XL	56.3 WG			2.5 OZ/A	EPP	A	50	80	99	50	80	99	33	68	82
1 ->CLASSIC	25 WG	0.01464	LB A/A		EPP	A									
1 ->AUTHORITY	75 WG	0.0732	LB A/A		EPP	A									
1 EXPRESS	75 WG	0.00469	LB A/A	0.1 OZ/A	EPP	A									
1 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
1 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
2 CANOPY XL	56.3 WG			4.5 OZ/A	EPP	A	50	80	99	50	80	99	50	67	83
2 ->CLASSIC	25 WG	0.0264	LB A/A		EPP	A									
2 ->AUTHORITY	75 WG	0.132	LB A/A		EPP	A									
2 EXPRESS	75 WG	0.00469	LB A/A	0.1 OZ/A	EPP	A									
2 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
2 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
3 CANOPY XL	56.3 WG			2.5 OZ/A	EPP	A	50	82	99	50	83	99	42	52	70
3 ->CLASSIC	25 WG	0.01464	LB A/A		EPP	A									
3 ->AUTHORITY	75 WG	0.0732	LB A/A		EPP	A									
3 LOROX	50 WG	0.25	LB A/A	8.0 OZ/A	EPP	A									
3 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
3 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
4 CANOPY XL	56.3 WG			2.5 OZ/A	EPP	A	50	80	99	50	80	99	33	50	77
4 ->CLASSIC	25 WG	0.01464	LB A/A		EPP	A									
4 ->AUTHORITY	75 WG	0.0732	LB A/A		EPP	A									
4 LOROX	50 WG	0.5	LB A/A	16.0 OZ/A	EPP	A									
4 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
4 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
5 CANOPY XL	56.3 WG			4.5 OZ/A	EPP	A	50	78	94	50	80	99	50	50	80
5 ->CLASSIC	25 WG	0.0264	LB A/A		EPP	A									
5 ->AUTHORITY	75 WG	0.132	LB A/A		EPP	A									
5 LOROX	50 WG	0.25	LB A/A	8.0 OZ/A	EPP	A									
5 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
5 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
6 CANOPY XL	56.3 WG			4.5 OZ/A	EPP	A	50	77	85	50	80	96	33	50	75
6 ->CLASSIC	25 WG	0.0264	LB A/A		EPP	A									
6 ->AUTHORITY	75 WG	0.132	LB A/A		EPP	A									
6 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
6 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
7 AUTHORITY	75 WG	0.1875	LB A/A	4.0 OZ/A	EPP	A	50	80	90	50	78	99	50	80	78
7 LOROX	50 WG	0.5	LB A/A	16.0 OZ/A	EPP	A									
7 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
7 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
8 LOROX	50 WG	0.25	LB A/A	8.0 OZ/A	EPP	A	50	75	80	50	77	99	50	77	77
8 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
8 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
9 LOROX	50 WG	0.5	LB A/A	16.0 OZ/A	EPP	A	50	77	90	50	80	99	50	77	78
9 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
9 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
10 PYTHON	80 WG	0.05	LB A/A	1.0 OZ/A	EPP	A	50	80	99	50	80	99	33	52	77
10 SENCOR	75 WG	0.1875	LB A/A	4.0 OZ/A	EPP	A									
10 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
10 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP	A									
11 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	EPP	A	50	77	99	42	75	93	0	33	50
11 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP	A									
11 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	EPP	A									
12 NONTREATED							0	0	0	0	0	0	0	0	0
LSD							0	4	5	7	4	3	13	26	9
P							1.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

1. PROTOCOL: DUPONT USA-00-141.

2. RATING DATES:

7 DAT, 14 DAT, AND 28 DAT ON APR-14-00, APR-21-00, AND MAY-5-00, RESPECTIVELY.