

North Carolina State University

Postemergence Control of Spotted Spurge

Trial ID: 02-T29

Study Dir.: Jason Hinton

Location: Plymouth C.C.

Investigator: Fred Yelverton

GENERAL TRIAL INFORMATION

Study Director: Jason Hinton **Title:** Research Technician
Affiliation: North Carolina State University
Postal Code: 27695
Investigator: Fred Yelverton **Title:** Professor
Affiliation: North Carolina State University
Postal Code: 27695

TRIAL LOCATION

City: Plymouth **Trial Status:** Complete
State/Prov.: NC
Postal Code: 27962 **Initiation Date:** 07-02-02
Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	EPHMA	Spotted Spurge	Euphorbia maculata

Crop 1: CYNDA Bermudagrass

Variety: Common

SITE AND DESIGN

Plot Width, Unit: 5 FT

Plot Length, Unit: 10 FT

Reps: 4

Study Design: RANDOMIZED COMPLETE BLOCK

APPLICATION DESCRIPTION

	A
Application Date:	07-02-02
Time of Day:	1:30-2 PM
Application Method:	Spray
Application Timing:	Post
Applic. Placement:	Foliar
Air Temp., Unit:	91.6 F
% Relative Humidity:	45
Wind Velocity, Unit:	1.6 MPH
Dew Presence (Y/N):	N
Water Hardness:	N/A
Soil Temp., Unit:	89 F
Soil Moisture:	Poor
% Cloud Cover:	75

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	CYNDA Mowed
Height, Unit:	0.75 Inch

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WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	EPHMA Flowering
Stage Scale:	2-8" dia.
Density, Unit:	5 Ft ²

APPLICATION EQUIPMENT

	A
Appl. Equipment:	CO2 Spray
Operating Pressure:	36 PSI
Nozzle Type:	Flat Fan
Nozzle Size:	8002 XR
Nozzle Spacing, Unit:	10 Inch
Boom Height, Unit:	10 Inch
Ground Speed, Unit:	3 MPH
Carrier:	Water
Spray Volume, Unit:	32.5 GPA
Propellant:	Compr.CO2

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Weed Code								EPHMA	EPHMA
Rating Data Type								CONTROL	CONTROL
Rating Unit								%	%
Rating Date								07-11-02	07-18-02
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code
1	EH 1349		L	4.0	PT/A			POST	A
								71.3	bcd
								75.0	a-e
2	EH 1349		L	6.0	PT/A			POST	A
								77.5	abc
								68.8	b-e
3	NB 30165		L	8.0	PT/A			POST	A
								78.8	abc
								81.0	a-d
4	MILLENNIUM ULTRA	3.75	L	2.0	PT/A			POST	A
								66.3	cde
								68.8	b-e
5	POWER ZONE	2.91	EC	3.5	PT/A			POST	A
								91.3	a
								92.5	ab
6	SPEED ZONE	2.2	EC	3.0	PT/A			POST	A
								77.5	abc
								86.3	abc
7	SPEED ZONE	2.2	EC	5.0	PT/A			POST	A
								82.5	ab
								97.0	a
8	SPEED ZONE - ST. AUG.	0.81	EC	4.0	PT/A			POST	A
								68.8	b-e
								76.3	a-e
9	SPEED ZONE - ST. AUG.	0.81	EC	6.0	PT/A			POST	A
								77.5	abc
								88.8	abc
10	TRIMEC CLASSIC	3.32	L	4.0	PT/A			POST	A
								81.3	ab
								91.3	abc
11	TRIMEC SOUTHERN	4.58	L	2.0	PT/A			POST	A
								73.8	bcd
								71.3	b-e
12	TRIMEC BENTGRASS	2.1	EC	4.0	PT/A			POST	A
								71.3	bcd
								55.0	e
13	FLAZASULFURON X-77	25	DG L	1.5	OZ/A			POST	A
				0.25	% V/V			POST	A
								56.3	e
								57.5	de
14	FLAZASULFURON X-77	25	DG L	2.25	OZ/A			POST	A
				0.25	% V/V			POST	A
								61.3	de
								67.5	cde
15	FLAZASULFURON X-77	25	DG L	3.0	OZ/A			POST	A
				0.25	% V/V			POST	A
								56.3	e
								76.3	a-e
16	NONTREATED								
								0.0	f
								0.0	f
LSD (P=.05)								13.90	24.51
Standard Deviation								9.73	17.15
CV								14.26	23.8
Bartlett's X2								10.842	35.086
P(Bartlett's X2)								0.698	0.001*
Replicate F								5.101	2.819
Replicate Prob(F)								0.0040	0.0496
Treatment F								17.798	7.027
Treatment Prob(F)								0.0001	0.0001

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

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								EPHMA CONTROL %	EPHMA CONTROL %
								07-25-02	08-08-02
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Product Rate	Product Unit	Grow Stg	Appl Code
1	EH 1349		L	4.0	PT/A			POST	A
2	EH 1349		L	6.0	PT/A			POST	A
3	NB 30165		L	8.0	PT/A			POST	A
4	MILLENNIUM ULTRA	3.75	L	2.0	PT/A			POST	A
5	POWER ZONE	2.91	EC	3.5	PT/A			POST	A
6	SPEED ZONE	2.2	EC	3.0	PT/A			POST	A
7	SPEED ZONE	2.2	EC	5.0	PT/A			POST	A
8	SPEED ZONE - ST. AUG.	0.81	EC	4.0	PT/A			POST	A
9	SPEED ZONE - ST. AUG.	0.81	EC	6.0	PT/A			POST	A
10	TRIMEC CLASSIC	3.32	L	4.0	PT/A			POST	A
11	TRIMEC SOUTHERN	4.58	L	2.0	PT/A			POST	A
12	TRIMEC BENTGRASS	2.1	EC	4.0	PT/A			POST	A
13	FLAZASULFURON X-77	25	DG L	1.5 0.25	OZ/A % V/V			POST POST	A A
14	FLAZASULFURON X-77	25	DG L	2.25 0.25	OZ/A % V/V			POST POST	A A
15	FLAZASULFURON X-77	25	DG L	3.0 0.25	OZ/A % V/V			POST POST	A A
16	NONTREATED								
LSD (P=.05)								36.06	42.84
Standard Deviation								25.23	29.98
CV								41.0	53.68
Bartlett's X2								28.619	23.628
P(Bartlett's X2)								0.012*	0.051
Replicate F								2.369	0.434
Replicate Prob(F)								0.0832	0.7299
Treatment F								3.904	2.796
Treatment Prob(F)								0.0002	0.0039

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Weed Code							EPHMA			
Rating Data Type							CONTROL			
Rating Unit							%			
Rating Date							08-29-02			
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	
1	EH 1349		L	4.0	PT/A			POST	A	12.5 cd
2	EH 1349		L	6.0	PT/A			POST	A	18.8 bcd
3	NB 30165		L	8.0	PT/A			POST	A	33.8 bcd
4	MILLENNIUM ULTRA	3.75	L	2.0	PT/A			POST	A	18.8 bcd
5	POWER ZONE	2.91	EC	3.5	PT/A			POST	A	50.0 abc
6	SPEED ZONE	2.2	EC	3.0	PT/A			POST	A	48.8 abc
7	SPEED ZONE	2.2	EC	5.0	PT/A			POST	A	87.5 a
8	SPEED ZONE - ST. AUG.	0.81	EC	4.0	PT/A			POST	A	18.8 bcd
9	SPEED ZONE - ST. AUG.	0.81	EC	6.0	PT/A			POST	A	38.8 bcd
10	TRIMEC CLASSIC	3.32	L	4.0	PT/A			POST	A	57.5 ab
11	TRIMEC SOUTHERN	4.58	L	2.0	PT/A			POST	A	0.0 d
12	TRIMEC BENTGRASS	2.1	EC	4.0	PT/A			POST	A	6.3 d
13	FLAZASULFURON X-77	25	DG L	1.5	OZ/A			POST	A	18.8 bcd
				0.25	% V/V			POST	A	
14	FLAZASULFURON X-77	25	DG L	2.25	OZ/A			POST	A	30.0 bcd
				0.25	% V/V			POST	A	
15	FLAZASULFURON X-77	25	DG L	3.0	OZ/A			POST	A	17.5 bcd
				0.25	% V/V			POST	A	
16	NONTREATED									0.0 d
LSD (P=.05)										41.47
Standard Deviation										29.02
CV										101.48
Bartlett's X2										9.589
P(Bartlett's X2)										0.727
Replicate F										0.481
Replicate Prob(F)										0.6974
Treatment F										2.599
Treatment Prob(F)										0.0068

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Trial Comments