

North Carolina State University

CLUMPY RYEGRASS CONTROL WITH SULFONYLUREA HERBICIDES IN A GOLF COURSE ROUGH

Trial ID: 04-D42
Location: WALNUT WOODS GC

Study Director: TRAVIS GANNON
Investigator: Fred Yelverton

General Trial Information

Study Director: TRAVIS GANNON **Title:** RESEARCH ASSOCIATE
Affiliation: NORTH CAROLINA STATE UNIVERSITY
Postal Code: 27695 **E-mail:** TRAVIS_GANNON@NCSSU.EDU
Investigator: FRED YELVERTON **Title:** PROFESSOR
Affiliation: NORTH CAROLINA STATE UNIVERSITY
Postal Code: 27695 **E-mail:** FRED_YELVERTON@NCSSU.EDU

Trial Location

City: JULIAN **Trial Status:** COMPLETED
State/Prov.: NC
Postal Code: 27283 **Initiation Date:** 7-13-04
Country: USA
Directions:

Objectives:

Conclusions:

Cooperator/Landowner

Cooperator: MITCH CLENDENIN **Country:** USA
Organization: WALNUT WOODS GOLF COURSE
Address 1: 3172 ALAMANCE CH RD
City: JULIAN
State/Prov: NC
Postal Code: 27283

Crop Description

Crop 1: CYNDA Cynodon dactylon Bermuda grass
Variety: COMMON
BBCH Scale: BGRM

Pest Description

Pest 1 Type: W **Code:** LOLPE Lolium perenne
Common Name: Ryegrass, perennial

Site and Design

Plot Width, Unit: 4 FT **Site Type:** GOLF COURSE ROUGH
Plot Length, Unit: 8 FT
Replications: 4 **Study Design:** Randomized Complete Block

Trial Initiation Comments:

Field Prep./Maintenance:

Soil Description

% OM: 0.56 **Texture:** MINERAL
pH: 5.9
CEC: 6.8 **Fert. Level:** GOOD

Moisture Conditions

Overall Moisture Conditions: IRRIGATED AS NEEDED

North Carolina State University

CLUMPY RYEGRASS CONTROL WITH SULFONYLUREA HERBICIDES IN A GOLF COURSE ROUGH

Trial ID: 04-D42
 Location: WALNUT WOODS GC

Study Director: TRAVIS GANNON
 Investigator: Fred Yelverton

Application Description

A	
Application Date:	7-13-04
Time of Day:	1-2 PM
Application Method:	SPRAY
Application Timing:	JULY 13
Application Placement:	FOLIAR
Applied By:	T GANNON
Air Temperature, Unit:	91.8 F
% Relative Humidity:	73
Wind Velocity, Unit:	0.9 MPH
Dew Presence (Y/N):	N
Soil Temperature, Unit:	87 F
Soil Moisture:	GOOD
% Cloud Cover:	35

Crop Stage At Each Application

A	
Crop 1 Code, BBCH Scale:	CYNDA BGRM
Stage Scale Used:	MOWED
Diameter, Unit:	0.5 IN
Height, Unit:	1 IN
Height Minimum, Maximum:	1 1

Pest Stage At Each Application

A	
Pest 1 Code, Disc., Scale:	LOLPE W
Height, Unit:	1 IN
Height Minimum, Maximum:	0.5 1.5
Density, Unit:	3 FT2
Coverage, Unit:	35 %

Application Equipment

A	
Appl. Equipment:	CO2 SPRAY
Operating Pressure:	25
Pressure Unit:	PSI
Nozzle Type:	FLAT FAN
Nozzle Size:	VS8002XR
Nozzle Spacing, Unit:	10 INCH
Nozzles/Row:	4
Boom Length, Unit:	40 INCH
Boom Height, Unit:	10 INCH
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume:	32.5
Volume Unit:	GPA
Propellant:	COMP CO2

North Carolina State University

CLUMPY RYEGRASS CONTROL WITH SULFONYLUREA HERBICIDES IN A GOLF COURSE ROUGH

Trial ID: 04-D42
Location: WALNUT WOODS GC

Study Director: TRAVIS GANNON
Investigator: Fred Yelverton

Pest Code					LOLPE	LOLPE	LOLPE	LOLPE
Rating Date					7-28-04	8-9-04	9-8-04	10-1-04
Rating Data Type					CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit					%	%	%	%
Days After Last Applic.					15	27	57	80
Trt-Eval Interval					15 DA-A	27 DA-A	57 DA-A	80 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate	Growth Unit	Appl Code
1	REVOLVER	0.19	SC	0.2 fl oz/1000 ft2			JULY 13 A	
					92.5 a	96.3 a	95.0 a	96.3 a
2	REVOLVER	0.19	SC	0.4 fl oz/1000 ft2			JULY 13 A	
					91.3 a	100.0 a	100.0 a	100.0 a
3	REVOLVER	0.19	SC	0.6 fl oz/1000 ft2			JULY 13 A	
					95.0 a	100.0 a	100.0 a	100.0 a
4	REVOLVER	0.19	SC	0.2 fl oz/1000 ft2			JULY 13 A	
	TADS	10	WG	0.016 oz wt/1000 ft2	91.3 a	100.0 a	100.0 a	100.0 a
5	REVOLVER	0.19	SC	0.4 fl oz/1000 ft2			JULY 13 A	
	TADS	10	WG	0.016 oz wt/1000 ft2	93.8 a	97.5 a	96.3 a	95.0 a
6	REVOLVER	0.19	SC	0.6 fl oz/1000 ft2			JULY 13 A	
	TADS	10	WG	0.016 oz wt/1000 ft2	95.0 a	100.0 a	100.0 a	100.0 a
7	TADS	10	WG	0.016 oz wt/1000 ft2			JULY 13 A	
					92.5 a	100.0 a	100.0 a	100.0 a
8	MANOR X-77	60	WG	1 oz/a			JULY 13 A	
		L		0.25 % v/v	92.5 a	100.0 a	100.0 a	100.0 a
9	NONTREATED				0.0 b	0.0 b	0.0 b	0.0 b
LSD (P=.05)					6.33	4.47	6.20	6.20
Standard Deviation					4.34	3.06	4.25	4.25
CV					5.25	3.47	4.83	4.83
Grand Mean					82.64	88.19	87.92	87.92
Bartlett's X2					6.617	0.472	0.24	0.24
P(Bartlett's X2)					0.251	0.492	0.624	0.624
Friedman's X2					11.567	10.4	10.4	10.4
P(Friedman's X2)					0.172	0.238	0.238	0.238
Replicate F					0.529	0.667	0.654	0.654
Replicate Prob(F)					0.6665	0.5807	0.5884	0.5884
Treatment F					204.655	467.519	241.615	241.615
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Trial Comments