

North Carolina State University

TOLERANCE OF FAIRWAY HEIGHT BENTGRASS USING SULFENTRAZONE-CONTAINING PRODUCTS VS. INDUSTRY BROADLEAF STANDARDS

Trial ID: 02-PBI1

Study Dir.: F.H. YELVERTON

Location: ELK RIVER CC

Investigator: Crop Science Department

GENERAL TRIAL INFORMATION

Study Director: F.H. YELVERTON

Title: PROFESSOR

Affiliation: NORTH CAROLINA STATE UNIVERSITY

Postal Code: 27695

Investigator: L.S. WARREN JR.

Title: RESEARCH ASSOCIATE

Affiliation: NORTH CAROLINA STATE UNIVERSITY

Postal Code: 27695

TRIAL LOCATION

City: BANNER ELK

Trial Status: COMPLETED

State/Prov.: NC

Initiation Date: 06-12-02

Country: USA

Angle y-axis to North °: 0.00

COOPERATOR/LANDOWNER

Cooperator: MONTE MELTON AND JOSH SMITH

Country: USA

Org: ELK RIVER COUNTRY CLUB

Phone No: 828/898-9779

Address 1: P.O. BOX 1238

City: BANNER ELK

State/Prov: NC

Postal Code: 28604

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Objective: TO EVALUATE SULFENTRAZONE-CONTAINING HERBICIDES VS. INDUSTRY BROADLEAF STANDARDS FOR FAIRWAY HEIGHT CUT BENTGRASS TOLERANCE

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	NONE		

Crop 1: AGSSS BENTGRASS, AGROSTIS SP.

Variety: SEASIDE CREEPING BENT

SITE AND DESIGN

Plot Width, Unit: 5 FT **Plot Length, Unit:** 10 FT **Reps:** 4

Site Type: TURF - GOLF COURSE FAIRWAY

Tillage Type: NA

Study Design: RANDOMIZED COMPLETE BLOCK

Overall Moisture Conditions: IRRIGATED ONCE PER DAY

Unit: MI

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APPLICATION DESCRIPTION

	A
Application Date:	06-12-02
Time of Day:	3:30 PM
Application Method:	SPRAY
Application Timing:	POST
Applic. Placement:	BROFOL
Air Temp., Unit:	72 F
% Relative Humidity:	73
Wind Velocity, Unit:	2.7 MPH
Dew Presence (Y/N):	N
Soil Temp., Unit:	73 F
Soil Moisture:	MOIST
% Cloud Cover:	60

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	AGSSS MOWED
Stage Scale:	NONE
Height, Unit:	0.44 IN

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	NONE

APPLICATION EQUIPMENT

	A
Appl. Equipment:	BACSPR
Operating Pressure:	40 PSI
Nozzle Type:	FLAT FAN
Nozzle Size:	XR 8002VS
Nozzle Spacing, Unit:	10 IN
Band Width, Unit:	40 IN
Boom Length, Unit:	40 IN
Boom Height, Unit:	10 IN
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume, Unit:	40 GPA
Propellant:	COMCO2
Tank Mix (Y/N):	N

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Crop Code							AGSSS	AGSSS	
Rating Data Type							C-PHYTO	C-PHYTO	
Rating Unit							PERCENT	PERCENT	
Rating Date							06-26-02	07-10-02	
Trt-Eval Interval							14 DA-A	28 DA-A	
ARM Action Codes							P	P	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Product Rate	Product Unit	Grow Stg	Appl Code	
1	EH 1349	L		4.0	PT/A		JUN 12 A	5.0 ab	0.0 a
2	EH 1349	L		6.0	PT/A		JUN 12 A	3.8 ab	0.0 a
3	NB 30165	L		8.0	PT/A		JUN 12 A	2.5 b	0.0 a
4	MILLENNIUM ULTRA	3.75	L	2.0	PT/A		JUN 12 A	5.0 ab	0.0 a
5	POWER ZONE	2.91	EC	3.5	PT/A		JUN 12 A	2.5 b	0.0 a
6	SPEED ZONE	2.2	EC	3.0	PT/A		JUN 12 A	5.0 ab	0.0 a
7	SPEED ZONE	2.2	EC	5.0	PT/A		JUN 12 A	7.5 a	0.0 a
8	SPEED ZONE - ST. AUG.	0.81	EC	4.0	PT/A		JUN 12 A	1.3 b	0.0 a
9	SPEED ZONE - ST. AUG.	0.81	EC	6.0	PT/A		JUN 12 A	3.8 ab	0.0 a
10	TRIMEC CLASSIC	3.32	L	4.0	PT/A		JUN 12 A	1.3 b	0.0 a
11	TRIMEC SOUTHERN	4.58	L	2.0	PT/A		JUN 12 A	3.8 ab	0.0 a
12	TRIMEC BENTGRASS	2.1	EC	4.0	PT/A		JUN 12 A	3.8 ab	0.0 a
13	CHECK							1.3 b	0.0 a
LSD (P=.05)							4.31	0.00	
Standard Deviation							3.02	0.00	
CV							84.83	0.0	
Bartlett's X2							3.786	0.0	
P(Bartlett's X2)							0.976	0.00*	
Replicate F							1.038	0.000	
Replicate Prob(F)							0.3874	1.0000	
Treatment F							1.469	0.000	
Treatment Prob(F)							0.1814	1.0000	

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

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Trial Comments

06-12-02: TREATMENTS APPLIED AT 3:30 PM

06-13-02: 1ST IRRIGATION AT 2:00 AM; NO DISCOLORATION OBSERVED

06-14-02: NO DISCOLORATION OBSERVED

06-18-02: AGSSS IN PLOTS TREATED WITH NB 30165 VERY SLIGHTLY PALE GREEN WITH NECROTIC LEAF TIPS (5% INJURY) BUT NOT CONSIDERED OBJECTIONABLE

06-26-02: AFFECTED AGSSS A SLIGHT YELLOWISH-GREEN APPEARANCE BUT NOT CONSIDERED OBJECTIONABLE

07-10-02: NO COLOR OR QUALITY DIFFERENCES WERE OBSERVED