

North Carolina State University

**PREEMERGENCE SMOOTH CRABGRASS CONTROL IN COMMON BERMUDAGRASS WITH VARIOUS
RONSTAR FORMULATIONS**

Trial ID: 04-D19

Study Director: TRAVIS GANNON

Location: THORNDALE COUNTRY CLUB

Investigator: Fred Yelverton

Application Description

	A	B
Application Date:	3-4-04	3-29-04
Time of Day:	4:40 PM	2-3 PM
Application Method:	SPREAD	SPREAD
Application Timing:	MARCH 4	MARCH 29
Application Placement:	SOIL	SOIL
Applied By:	L.S. WARREN	T GANNON
Air Temperature, Unit:	73 F	62.4 F
% Relative Humidity:	53	48
Wind Velocity, Unit:	1.1 MPH	1.4 MPH
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	59 F	56 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	10	10

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	CYNDA BGRM	CYNDA BGRM
Stage Scale Used:	DORMANT	DORMANT
Height, Unit:	0.1 IN	0.1 IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	DIGIS W PRE	DIGIS W PRE
Height, Unit:	0 IN	0 IN
Density, Unit:	0 FT2	0 FT2

Application Equipment

	A	B
Appl. Equipment:	SHAK/SPRAY	SHAK/SPRAY
Operating Pressure:	28	28
Pressure Unit:	PSI	PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	XR 8002VS	XR 8002VS
Nozzle Spacing, Unit:	10 IN	10 IN
Band Width, Unit:	40 IN	40 IN
Boom Length, Unit:	40 IN	40 IN
Boom Height, Unit:	10 IN	10 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume:	32.5	32.5
Volume Unit:	GPA	GPA
Propellant:	COMCO2	COMCO2
Tank Mix (Y/N):	N	N

North Carolina State University

PREEMERGENCE SMOOTH CRABGRASS CONTROL IN COMMON BERMUDAGRASS WITH VARIOUS RONSTAR FORMULATIONS

Trial ID: 04-D19

Study Director: TRAVIS GANNON

Location: THORNDALE COUNTRY CLUB

Investigator: Fred Yelverton

Pest Code		DIGIS	DIGIS	DIGIS	DIGIS						
Rating Date		7-6-04	7-28-04	8-9-04	9-9-04						
Rating Data Type		CONTROL	CONTROL	CONTROL	CONTROL						
Rating Unit		%	%	%	%						
Days After Last Applic.		99	121	133	164						
Trt-Eval Interval		124 DA-A	146 DA-A	158 DA-A	189 DA-A						
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Other Rate Unit	Growth Stage	Appl Code				
1	OXADIAZON #1	2.0 G		2.0 lb ai/a		MARCH 4	A	100.0 a	100.0 a	96.3 ab	96.3 abc
2	OXADIAZON #1	2.0 G		3.0 lb ai/a		MARCH 4	A	100.0 a	100.0 a	100.0 a	93.8 abc
3	OXADIAZON #2	2.0 G		2.0 lb ai/a		MARCH 4	A	97.5 a	97.0 a	92.5 ab	91.3 abc
4	OXADIAZON #2	2.0 G		3.0 lb ai/a		MARCH 4	A	100.0 a	100.0 a	96.3 ab	98.8 ab
5	OXADIAZON #3	2.0 G		2.0 lb ai/a		MARCH 4	A	100.0 a	100.0 a	100.0 a	100.0 a
6	OXADIAZON #3	2.0 G		3.0 lb ai/a		MARCH 4	A	91.3 a	100.0 a	100.0 a	96.3 abc
7	OXADIAZON #1	2.0 G		2.0 lb ai/a		MARCH 29 B		100.0 a	97.5 a	93.8 ab	90.0 abc
8	OXADIAZON #1	2.0 G		3.0 lb ai/a		MARCH 29 B		100.0 a	100.0 a	100.0 a	98.8 ab
9	OXADIAZON #2	2.0 G		2.0 lb ai/a		MARCH 29 B		100.0 a	97.5 a	95.0 ab	92.5 abc
10	OXADIAZON #2	2.0 G		3.0 lb ai/a		MARCH 29 B		93.8 a	100.0 a	100.0 a	98.8 ab
11	OXADIAZON #3	2.0 G		2.0 lb ai/a		MARCH 29 B		75.0 a	97.0 a	73.8 b	75.0 bc
12	OXADIAZON #3	2.0 G		3.0 lb ai/a		MARCH 29 B		100.0 a	100.0 a	100.0 a	100.0 a
13	RONSTAR G	2.0 G		2.0 lb ai/a		MARCH 4	A	71.3 a	80.0 b	75.0 b	73.8 c
14	RONSTAR G	2.0 G		3.0 lb ai/a		MARCH 4	A	100.0 a	100.0 a	100.0 a	100.0 a
15	RONSTAR G	2.0 G		2.0 lb ai/a		MARCH 29 B		93.8 a	97.5 a	95.0 ab	95.0 abc
16	RONSTAR G	2.0 G		3.0 lb ai/a		MARCH 29 B		100.0 a	100.0 a	100.0 a	100.0 a
17	RONSTAR WSP	50 WP		2.0 lb ai/a		MARCH 4	A	100.0 a	100.0 a	100.0 a	98.8 ab
18	RONSTAR WSP	50 WP		3.0 lb ai/a		MARCH 4	A	100.0 a	100.0 a	100.0 a	100.0 a
19	BARRICADE	65 WG		0.75 lb ai/a		MARCH 4	A	75.0 a	100.0 a	100.0 a	98.8 ab
20	NONTREATED							75.0 a	0.0 c	0.0 c	0.0 d
LSD (P=.05)								32.25	12.86	23.33	23.86
Standard Deviation								22.81	9.09	16.50	16.87
CV								24.36	9.74	18.15	18.77
Grand Mean								93.63	93.33	90.88	89.88
Bartlett's X2								22.404	34.042	27.417	78.054
P(Bartlett's X2)								0.002*	0.001*	0.001*	0.001*
Friedman's X2								6.275	17.275	15.85	17.489
P(Friedman's X2)								0.997	0.571	0.667	0.557
Replicate F								0.771	1.617	1.392	1.213
Replicate Prob(F)								0.5148	0.1955	0.2547	0.3132
Treatment F								0.830	24.319	7.598	7.097
Treatment Prob(F)								0.6643	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

3-24-04 - No summer annual grasses have germinated in trial area. Trial area remarked.

5-13-04 - Trial area remarked. Currently the annual bluegrass is so dense that no summer annual grasses have emerged. In an attempt to encourage summer annual grasses, plot area was scalped to 1/2 inch.

5-20-04 - Trial area remarked. Currently, no summer annual grasses have emerged.

6-8-04 - Trial area remarked. Smooth crabgrass and goosegrass is beginning to emerge although not uniform enough to rate.

6-22-04 - Trial area remarked. Smooth crabgrass and goosegrass is beginning to emerge; however, it is not uniform and is currently under severe drought stress. Trial was evaluated; however, nontreated areas exhibited control because crabgrass has not uniformly germinated.

7-13-04 - Trial area remarked. Smooth crabgrass has emerged; however, it is not uniform. Additionally, it is extremely dry and unable to evaluate at this time.