

University of GA Coop Ext Service

Efficacy of Revolver for *Poa trivialis* Transition on a Bermudagrass Putting Green

Trial ID: Turf30-03

Study Dir.: Bill Nutt

Location: Cabin Creek

Investigator: Tim R Murphy

GENERAL TRIAL INFORMATION

Study Director: Bill Nutt

Title: ARCI

Affiliation: UGA-CAES

Investigator: Tim Murphy

Title: Weed Scientist

Affiliation: UGA-CAES

TRIAL LOCATION

City: Griffin

Trial Status: ARCHIVED

State/Prov.: GA

Initiation Date: 4-18-2003

COOPERATOR/LANDOWNER

Cooperator: Laurence Mudge

Org: Bayer

City: Camden

State/Prov: SC

Cooperator: Randy Dougherty

Org: Cabin Creek Golf Course

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	POATR	Roughstalk Bluegrass	<i>Poa trivialis</i>

Crop 1: CYNDA	Bermudagrass/ <i>Cynodon dactylon</i>	Variety: Tifdwarf	Perennial Age: 8	yrs
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SITE AND DESIGN

Plot Width, Unit: 6 FT Plot Length, Unit: 10 FT Reps: 4

Site Type: Putting Green Nursery

Study Design: RANDOMIZED COMPLETE BLOCK

MAINTENANCE

Field Prep./Maintenance: Irrigated site. Maintained at 7/32 inch clipping height.

APPLICATION DESCRIPTION

	A	B	C
Application Date:	4-18-2003	5-2-2003	5-16-2003
Time of Day:	11:00 am	10:00 am	10:32 am
Application Method:	Broadcast	Broadcast	Broadcast
Application Timing:	Post	Post	Post
Applic. Placement:	Foliar	Foliar	Foliar
Air Temp., Unit:	75 F	77 F	74.3 F
% Relative Humidity:	77	70	80
Wind Velocity, Unit:	0 mph	1 mph	0.6 mph
Dew Presence (Y/N):	N	N	Y
Soil Temp., Unit:	70 F	74 F	71 F
Soil Moisture:	High	Good	High
% Cloud Cover:	40	20	100

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CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	CYNDA Green	CYNDA Green	CYNDA
Stage Scale:	50%	50%	80%
Height, Unit:	0.21 inch	0.21 inch	0.21 inch

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	POATR	POATR	POATR
Density, Unit:	80 %	80 %	40 %

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	Backpack*	Backpack	Backpack
	high volume tank		
	down pipe and boom (3 nozzle)		
Operating Pressure:	21 psi	21 psi	26 psi
	21 psi - down pipe		
	30 psi - regulator		
Nozzle Type:	8008 .955 ml/sec	8008	8004
Nozzle Size:	Flat fan	Flat fan	Flat fan
Nozzle Spacing, Unit:	20 inch	20 inch	20 inch
Boom Length, Unit:	5 feet	5 feet	5 feet
Boom Height, Unit:	20 inch	20 inch	20 inch
Ground Speed, Unit:	3 mph	3 mph	3 mph
Carrier:	Water	Water	Water
Spray Volume, Unit:	50 gpa	50 gpa	25 gpa
Propellant:	C02	C02	C02
Tank Mix (Y/N):	Y	Y	N

Trial Comments

5-16-03

Plots that have received A and B fungicide treatments looked healthier.

Bermudagrass [CYNDA] density was greater than in untreated plots; showed less bare ground.

Poa trivialis [Roughstalk Blugrass, POATR] seemed less conspicuous in these plots also - perhaps due to greater Bermudagrass density.

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Trial ID: Turf30-03		Study Dir.: Bill Nutt									
Location: Cabin Creek		Investigator: Tim R Murphy									
Weed Code								Turf		Turf	
Crop Code								Quality		Quality	
Rating Data Type								0-10		0-10	
Rating Unit								0-10		0-10	
Rating Date								5-2-2003		5-16-2003	
Trt-Eval Interval								14 DA-A		28 DA-A	
Trt Treatment		Form	Form	Product	Product	Grow	Appl				
No.	Name	Conc	Type	Rate	Rate Unit	Stg	Code				
1	Untreated Check						A	7.0 a	7.0 b	7.0 a	7.0 a
2	Revolver	22.5	SC	0.105	fl oz/1000 ft2	14 d-B	C	7.0 a	7.0 b	5.8 bc	5.6 c
3	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	7.0 a	7.0 b	5.3 c	5.4 c
4	Chipco Signature +	80	WP	4.0	oz/1000 ft2	active	A	7.0 a	8.0 a	6.3 b	5.0 d
	Fore fb	80	SP	8.0	oz/1000 ft2	active	A				
	Chipco Signature +	80	WP	4.0	oz/1000 ft2	14 d-A	B				
	Fore fb	80	SP	8.0	oz/1000 ft2	14 d-A	B				
	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C				
5	Revolver +	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	7.0 a	7.0 b	5.9 b	6.0 b
	FeSO4 (2.5% Fe) - Hi-Yiel		SL	13.0	fl oz/1000 ft2	14 d-B	C				
	(= 1.0 lb. Fe/acre)										
LSD (P=.05)								0.00	0.00	0.51	0.37
Standard Deviation								0.00	0.00	0.33	0.24
CV								0.0	0.0	5.46	4.09

Weed Code								Turf		Turf		Turf		CYNDA	
Crop Code								Quality		Quality		Quality		Density	
Rating Data Type								0-10		0-10		0-10		0-100	
Rating Unit								0-10		0-10		0-10		0-100	
Rating Date								6-25-2003		7-30-2003		8-25-2003		5-16-2003	
Trt-Eval Interval								68 DA-A		103 DA-A		129 DA-A		28 DA-A	
Trt Treatment		Form	Form	Product	Product	Grow	Appl								
No.	Name	Conc	Type	Rate	Rate Unit	Stg	Code								
1	Untreated Check						A	5.1 b	7.8 a	8.63 a	54 b				
2	Revolver	22.5	SC	0.105	fl oz/1000 ft2	14 d-B	C	5.9 ab	8.0 a	8.63 a	48 c				
3	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	6.3 a	8.0 a	8.69 a	51 bc				
4	Chipco Signature +	80	WP	4.0	oz/1000 ft2	active	A	6.3 a	8.1 a	8.63 a	65 a				
	Fore fb	80	SP	8.0	oz/1000 ft2	active	A								
	Chipco Signature +	80	WP	4.0	oz/1000 ft2	14 d-A	B								
	Fore fb	80	SP	8.0	oz/1000 ft2	14 d-A	B								
	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C								
5	Revolver +	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	6.1 a	8.0 a	8.56 a	51 bc				
	FeSO4 (2.5% Fe) - Hi-Yiel		SL	13.0	fl oz/1000 ft2	14 d-B	C								
	(= 1.0 lb. Fe/acre)														
LSD (P=.05)								0.86	0.51	0.251	5.0				
Standard Deviation								0.56	0.33	0.163	3.3				
CV								9.4	4.13	1.89	6.06				

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code								CYNDA	CYNDA	CYNDA	CYNDA
Crop Code								Density	Density	Density	Density
Rating Data Type								0-100	0-100	0-100	0-100
Rating Unit								5-27-2003	6-10-2003	6-25-2003	7-30-2003
Rating Date								39 DA-A	53 DA-A	68 DA-A	103 DA-A
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Product Rate	Product Rate Unit	Grow Stg	Appl Code				
1	Untreated Check						A	50 c	65 a	69 a	83 a
2	Revolver	22.5	SC	0.105	fl oz/1000 ft2	14 d-B	C	54 bc	64 a	70 a	84 a
3	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	59 b	66 a	74 a	86 a
4	Chipco Signature +	80	WP	4.0	oz/1000 ft2	active	A	68 a	65 a	70 a	86 a
	Fore fb	80	SP	8.0	oz/1000 ft2	active	A				
	Chipco Signature +	80	WP	4.0	oz/1000 ft2	14 d-A	B				
	Fore fb	80	SP	8.0	oz/1000 ft2	14 d-A	B				
	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C				
5	Revolver +	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	61 ab	68 a	70 a	85 a
	FeSO4 (2.5% Fe) - Hi-Yiel (= 1.0 lb. Fe/acre)		SL	13.0	fl oz/1000 ft2	14 d-B	C				
LSD (P=.05)								8.3	4.8	6.8	5.6
Standard Deviation								5.4	3.1	4.4	3.6
CV								9.24	4.78	6.24	4.27

Weed Code								CYNDA	POATR	POATR	POATR
Crop Code								Density	Density	Density	Density
Rating Data Type								0-100	0-100	0-100	0-100
Rating Unit								8-25-2003	5-16-2003	5-27-2003	6-10-2003
Rating Date								129 DA-A	28 DA-A	39 DA-A	53 DA-A
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Product Rate	Product Rate Unit	Grow Stg	Appl Code				
1	Untreated Check						A	88 a	40 a	35 a	33 a
2	Revolver	22.5	SC	0.105	fl oz/1000 ft2	14 d-B	C	86 a	45 a	23 b	18 b
3	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	88 a	40 a	16 c	5 d
4	Chipco Signature +	80	WP	4.0	oz/1000 ft2	active	A	88 a	31 b	15 c	4 d
	Fore fb	80	SP	8.0	oz/1000 ft2	active	A				
	Chipco Signature +	80	WP	4.0	oz/1000 ft2	14 d-A	B				
	Fore fb	80	SP	8.0	oz/1000 ft2	14 d-A	B				
	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C				
5	Revolver +	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	86 a	39 a	15 c	11 c
	FeSO4 (2.5% Fe) - Hi-Yiel (= 1.0 lb. Fe/acre)		SL	13.0	fl oz/1000 ft2	14 d-B	C				
LSD (P=.05)								4.0	6.6	5.4	3.7
Standard Deviation								2.6	4.3	3.5	2.4
CV								3.01	10.92	17.04	16.94

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code							POATR	
Crop Code							Density	
Rating Data Type							0-100	
Rating Unit							6-25-2003	
Rating Date							68 DA-A	
Trt-Eval Interval								
Trt No.	Treatment Name	Form Conc	Form Type	Product Rate	Product Rate Unit	Grow Stg	Appl Code	
1	Untreated Check						A	26 a
2	Revolver	22.5	SC	0.105	fl oz/1000 ft2	14 d-B	C	14 b
3	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	1 c
4	Chipco Signature + Fore fb	80	WP	4.0	oz/1000 ft2	active	A	2 c
	Chipco Signature + Fore fb	80	SP	8.0	oz/1000 ft2	active	A	
	Chipco Signature + Fore fb	80	WP	4.0	oz/1000 ft2	14 d-A	B	
	Chipco Signature + Fore fb	80	SP	8.0	oz/1000 ft2	14 d-A	B	
	Revolver	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	
5	Revolver + FeSO4 (2.5% Fe) - Hi-Yiel (= 1.0 lb. Fe/acre)	22.5	SC	0.21	fl oz/1000 ft2	14 d-B	C	4 c
			SL	13.0	fl oz/1000 ft2	14 d-B	C	
LSD (P=.05)								3.0
Standard Deviation								2.0
CV								20.83

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)