

University of GA Coop Ext Service

Nozzle Type Effects on 'TifSport' Bermudagrass Growth Regulation with Primo MAXX

Trial ID: Turf50-06 Location: UGA Griffin Campus
Study Director: Bill Nutt Investigator: Tim R Murphy

General Trial Information

Study Director: Bill Nutt **Title:** Research Coordinator
Affiliation: UGA-CAES **E-mail:** wfn@uga.edu
Investigator: Tim R Murphy **Title:** Weed Scientist
Affiliation: UGA-CAES **E-mail:** tmurphy@uga.edu

Trial Location

City: Griffin **Trial Status:** ONE-YEAR/FINAL
State/Prov.: GA **Initiation Date:** 7-5-06
Completion Date: 10-6-06

Cooperator/Landowner

Cooperator: Steve Kammerer **Organization:** Syngenta

Crop Description

Crop 1: CYNDA *Cynodon dactylon* Bermudagrass **Variety:** TifSport
Planting Date: 7-7-04

Site and Design

Plot Width, Unit: 6 FT **Site Type:** simulated golf course fairway
Plot Length, Unit: 15 FT **Replications:** 4 **Study Design:** Randomized Complete Block
Field Prep./Maintenance: Irrigated site maintained at 5/8 inches with reel mower.

Maintenance

No.	Date	Treatment Name	Rate	Rate Unit
1.	7-12-06	Broadcast Fertilizer 34-0-0	1	lb N/1000 sq ft

Application Description

	A	B
Application Date:	7-5-06	8-2-06
Time of Day:	3:45 pm	3:30 pm
Application Method:		Broadcast
Application Timing:		Post
Application Placement:		Foliar
Applied By:		B.Nutt
Air Temperature, Unit:	43 F	95 F
% Relative Humidity:	53	58
Wind Velocity, Unit:	3 mph	4 mph
Dew Presence (Y/N):		N
Soil Temperature, Unit:	80 F	96 F
Soil Moisture:	Normal	Good
% Cloud Cover:	60	50

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Crop Stage At Each Application

	A	B
Crop 1 Code:	CYNDA	CYNDA
Stage Majority:	Active Growth	Active Growth
Height, Unit:	0.625 in	0.625 in

Application Equipment

	A	B
Appl. Equipment:	Backpack	Backpack
	psi	psi
Nozzle Spacing, Unit:	20 inch	20 inch
Boom Length, Unit:	5 feet	5 feet
Boom Height, Unit:	18 inch	18 inch
Ground Speed, Unit:	3 mph	3 mph
Carrier:	Water	Water
	gpa	gpa
Propellant:	CO2	CO2
Tank Mix (Y/N):	N	N

Treatment Application Comment: 50 gpa treatment put out at 1.5 mph.

Date **Notes**

Trial Comments	
7-5-06	Plots #405 and 408 dropped due to spraying error.
7-12-06	Collected clippings with walk behind reel mower from area of 27.8 sq. ft. (2.167 ft. x 12.83 ft) per plot.
8-16-06	Bermudagrass, CYNDA, foliage tip burn observed in some Primo treated plots.
9-20-06	Plots #104 and #204 clippings were mistakenly mixed together, so the dry weight was not recorded for either.
9-27-06	Infestation of Annual Sedge may affect Bermudagrass clipping weights.

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Crop Code							CYND	CYND	CYND	CYND	CYND	CYND	
Crop Name							Bermuda	Bermuda	Bermuda	Bermuda	Bermuda	Bermuda	Bermuda
Crop Variety							Tifsport	Tifsport	Tifsport	Tifsport	Tifsport	Tifsport	Tifsport
Part Rated							Turf	Turf	Turf	Turf	Turf	Turf	Turf
Rating Date							10-4-06	7-12-06	7-19-06	7-26-06	8-2-06	8-9-06	
Rating Data Type							Quality	WEIDRY	WEIDRY	WEIDRY	WEIDRY	WEIDRY	
Rating Unit							1-9	gm/plot	gm/plot	gm/plot	gm/plot	gm/plot	
Days After First/Last Applic.							91 63	7 7	14 14	21 21	28 0	35 7	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code						
1	Untreated Check						A	8.1 bc	15.2 a	35.1 a	35.2 a	54.2 a 42.0 a	
2	Primo MAXX 8004XR fb	1 ME		11.0 fl oz/a			A	8.5 a	3.4 c	6.0 c	13.6 b	27.1 b 9.2 d	
	Primo MAXX 8004XR	1 ME		11.0 fl oz/a	+ 4wkA		B						
3	Primo MAXX 8004XR fb	1 ME		11.0 fl oz/a			A	8.2 bc	3.5 c	5.0 c	12.4 b	25.6 b 9.2 d	
	Primo MAXX 8004XR	1 ME		11.0 fl oz/a	+ 4wkA		B						
4	Primo MAXX 1/4TTJO5 TJ fb	1 ME		11.0 fl oz/a			A	8.3 abc	5.3 c	9.0 c	15.0 b	28.9 b 14.7 c	
	Primo MAXX 1/4TTJO5 TJ	1 ME		11.0 fl oz/a	+ 4wkA		B						
5	Primo MAXX 1/4TTJO5 TJ fb	1 ME		11.0 fl oz/a			A	8.4 ab	4.7 c	8.2 c	17.1 b	29.6 b 15.4 c	
	Primo MAXX 1/4TTJO5 TJ	1 ME		11.0 fl oz/a	+ 4wkA		B						
6	Primo MAXX AI11004 fb	1 ME		11.0 fl oz/a			A	8.5 a	4.8 c	5.7 c	12.0 b	24.0 b 9.7 d	
	Primo MAXX AI11004	1 ME		11.0 fl oz/a	+ 4wkA		B						
7	Primo MAXX AI11004 fb	1 ME		11.0 fl oz/a			A	8.5 a	4.0 c	4.9 c	14.2 b	23.4 b 9.7 d	
	Primo MAXX AI11004	1 ME		11.0 fl oz/a	+ 4wkA		B						
8	Untreated Check						A	8.0 c	10.0 b	25.1 b	28.4 a	47.2 a 35.8 b	
LSD (P=.05)							0.27	4.06	7.50	7.05	9.07	4.74	
Standard Deviation							0.18	2.74	5.07	4.77	6.13	3.21	
CV							2.2	42.99	41.04	25.78	18.88	17.59	

Crop Code							CYND	CYND	CYND	CYND	CYND	CYND	
Crop Name							Bermuda	Bermuda	Bermuda	Bermuda	Bermuda	Bermuda	Bermuda
Crop Variety							Tifsport	Tifsport	Tifsport	Tifsport	Tifsport	Tifsport	
Part Rated							Turf	Turf	Turf	Turf	Turf	Turf	
Rating Date							8-16-06	8-23-06	8-30-06	9-6-06	9-14-06	9-20-06	
Rating Data Type							WEIDRY	WEIDRY	WEIDRY	WEIDRY	WEIDRY	WEIDRY	
Rating Unit							gm/plot	gm/plot	gm/plot	gm/plot	gm/plot	gm/plot	
Days After First/Last Applic.							42 14	49 21	56 28	63 35	71 43	77 49	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code						
1	Untreated Check						A	42.4 a	28.0 a	28.4 a	24.2 a	14.8 a 10.5 a	
2	Primo MAXX 8004XR fb	1 ME		11.0 fl oz/a			A	4.8 c	6.2 b	8.8 b	11.0 c	7.0 b 5.3 b	
	Primo MAXX 8004XR	1 ME		11.0 fl oz/a	+ 4wkA		B						
3	Primo MAXX 8004XR fb	1 ME		11.0 fl oz/a			A	4.5 c	6.2 b	8.8 b	10.2 c	7.5 b 4.8 b	
	Primo MAXX 8004XR	1 ME		11.0 fl oz/a	+ 4wkA		B						
4	Primo MAXX 1/4TTJO5 TJ fb	1 ME		11.0 fl oz/a			A	12.2 b	9.8 b	13.2 b	13.1 bc	8.3 b 7.0 ab	
	Primo MAXX 1/4TTJO5 TJ	1 ME		11.0 fl oz/a	+ 4wkA		B						
5	Primo MAXX 1/4TTJO5 TJ fb	1 ME		11.0 fl oz/a			A	11.2 b	10.4 b	12.6 b	12.8 bc	9.5 b 6.1 ab	
	Primo MAXX 1/4TTJO5 TJ	1 ME		11.0 fl oz/a	+ 4wkA		B						
6	Primo MAXX AI11004 fb	1 ME		11.0 fl oz/a			A	5.2 c	5.7 b	8.4 b	10.8 c	6.4 b 6.4 ab	
	Primo MAXX AI11004	1 ME		11.0 fl oz/a	+ 4wkA		B						
7	Primo MAXX AI11004 fb	1 ME		11.0 fl oz/a			A	7.9 bc	7.9 b	11.9 b	13.1 bc	8.8 b 6.3 ab	
	Primo MAXX AI11004	1 ME		11.0 fl oz/a	+ 4wkA		B						
8	Untreated Check						A	41.6 a	25.3 a	24.2 a	18.0 b	9.2 b 7.7 ab	
LSD (P=.05)							4.96	5.64	5.17	6.04	3.77	4.66	
Standard Deviation							3.35	3.81	3.49	4.08	2.55	3.12	
CV							20.67	30.6	24.02	28.85	28.48	46.21	

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

Nozzle Type Effects on 'Tifsport' Bermudagrass Growth Regulation with Primo MAXX

Crop Code						CYNDA	CYNDA
Crop Name						Bermuda	Bermuda
Crop Variety						Tifsport	Tifsport
Part Rated						Turf	Turf
Rating Date						9-27-06	10-4-06
Rating Data Type						WEIDRY	WEIDRY
Rating Unit						gm/plot	gm/plot
Days After First/Last Applic.						84 56	91 63
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Growth Stage	Rate Unit	Appl Code
1	Untreated Check				A		
2	Primo MAXX 8004XR fb	1 ME		11.0 fl oz/a	A		
	Primo MAXX 8004XR	1 ME		11.0 fl oz/a + 4wkA	B		
3	Primo MAXX 8004XR fb	1 ME		11.0 fl oz/a	A		
	Primo MAXX 8004XR	1 ME		11.0 fl oz/a + 4wkA	B		
4	Primo MAXX 1/4TTJO5 TJ fb	1 ME		11.0 fl oz/a	A		
	Primo MAXX 1/4TTJO5 TJ	1 ME		11.0 fl oz/a + 4wkA	B		
5	Primo MAXX 1/4TTJO5 TJ fb	1 ME		11.0 fl oz/a	A		
	Primo MAXX 1/4TTJO5 TJ	1 ME		11.0 fl oz/a + 4wkA	B		
6	Primo MAXX AI11004 fb	1 ME		11.0 fl oz/a	A		
	Primo MAXX AI11004	1 ME		11.0 fl oz/a + 4wkA	B		
7	Primo MAXX AI11004 fb	1 ME		11.0 fl oz/a	A		
	Primo MAXX AI11004	1 ME		11.0 fl oz/a + 4wkA	B		
8	Untreated Check				A		
LSD (P=.05)						5.07	4.09
Standard Deviation						3.42	2.76
CV						45.74	37.43

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