

Control Evaluations of Selected Materials on Lawn Height 'Park' Kentucky Bluegrass Using High a Application Volume of Water

J. A. Borger, and M. B. Naedel¹

Introduction

Green vegetation and control evaluations were conducted on a stand of mature 'Park' Kentucky bluegrass (*Poa pratensis*) at the Valentine Turfgrass Research Center, Penn State University, University Park, Pa. The objective of the study was to determine the vegetation reduction of 'Park' Kentucky bluegrass using selected compounds at 100 gpa application rate.

Methods and Materials

The study was a randomized complete block design with three replications. Treatments were applied on September 25 (SEPT), and October 28 (4 WAT), 2005 using a three foot CO₂ powered boom sprayer calibrated to deliver 100 gpa using two, flat fan, 11004 nozzles at 40 psi.

The test site was mowed at one and one half inches twice weekly with a rotary mower with clippings returned to the site.

Results and Discussion

The percent green vegetation was rated four times during the study (Table 1). Only turfgrass treated with Reward was not rated different than untreated turfgrass on the April 21, 2006 rating date. On this date, all other treated turfgrass had significantly less green vegetation than untreated turfgrass. With the exception of turfgrass treated with Reward, all treated turfgrass had less than 25% green vegetation on the final rating date. It should be noted that turfgrass treated with Finale at 1.5 %v/v, Fusilde at 1.0 % v/v, and any rate of Hyvar XL revealed an increase in the percent green vegetation from the November 28, 2005 rating date to the April 21, 2006 rating date.

It appears that these selected products, with the exception of Reward, can reduce the amount of 'Park' Kentucky bluegrass when applied at 100 gallons of water per acre in the spring of the year following a fall application of materials.

¹ Instructor and Research Technician respectively, Department of Crop and Soil Sciences, Penn State University, University Park, Pa, 16802

Table 1. Percent green vegetation of 'Park' Kentucky bluegrass in 2005 and 2006.

Treatment	Form	Rate % v/v	Timing	(% Green Vegetation)			
				9/25/05	10/28/05	11/28/05	4/21/06
ARSENAL 2	2SL	5.0	SEPT	86.7ab	20.0cde	1.0c	0.0d
ARSENAL 2	2SL	2.5	SEPT	86.7ab	28.3b-e	1.0c	0.0d
ARSENAL 2	2SL	2.5	SEPT/4 WAT	73.3bc	33.3bcd	1.0c	0.0d
FINALE	1SL	3.0	SEPT	5.3f	1.0e	1.0c	0.0d
FINALE	1SL	1.5	SEPT	5.3f	1.0e	1.0c	15.0bc
CHECK				100.0a	100.0a	100.0a	100.0a
FINALE	1SL	1.5	SEPT	3.7f	1.0e	1.0c	0.0d
ARSENAL 2	2SL	2.5	4 WAT				
PLATEAU	2SL	2.5	SEPT	56.7cd	10.3de	1.0c	0.0d
PLATEAU	2SL	1.25	SEPT	76.7bc	30.0b-e	4.0c	0.0d
FUSILADE	2EC	1.0	SEPT	63.3c	40.0bcd	8.7c	21.7b
FUSILADE	2EC	0.5	SEPT	76.7bc	50.0bc	8.3c	8.3cd
FUSILADE	2EC	0.5	SEPT	76.7bc	56.7b	3.7c	0.0d
ARSENAL 2	2SL	2.5	4 WAT				
REWARD	2EC	0.5	SEPT	38.3de	100.0a	40.0b	100.0a
HYVAR XL	2SL	5.0	SEPT	36.7de	1.0e	1.0c	3.3cd
HYVAR XL	2SL	3.0	SEPT	33.3e	1.0e	3.7c	10.0bcd

1 - Means followed by same letter do not significantly differ (P=0.05, Duncan's New MRT)