

# Turfgrass Color Evaluation on Green Height 'Penn A-4' Creeping Bentgrass

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## Introduction

This study was conducted on a mature stand of 'Penn A-4' creeping bentgrass (*Agrostis stolonifera*) at the Valentine Turfgrass Research Center, Penn State University, University Park, Pa. The objective of the study was to determine the effect of various products on turfgrass color.

## Methods and Materials

This study was a randomized complete block design with three replications. All treatments were applied on July 1 (JULY), and July 15 (14DAT) using a three foot CO<sub>2</sub> powered boom sprayer calibrated to deliver 40 gpa using two, flat fan, 11004 nozzles at 40 psi.

The test site was maintained similar to that of a golf course green with respect to irrigation, fertilization and mowing. The test plot size was 21 ft<sup>2</sup>.

## Results and Discussion

Turfgrass color was rated 14 times during the study (Table 1). All treated turfgrass revealed better color than untreated at some point during the study. The 5 oz/M rate of iron sulfate provided the most green color (10) on several rating dates. On the July 4 rating date, turfgrass treated with iron sulfate at 2 oz/M, Ferromec at 5 oz/M, and Quelent FE at 5 oz/M plus Amino Green at 0.0606 lb N/M were also rated 10 for color. Turfgrass treated with iron sulfate at 2 oz/M was rated 10 for color on July 16 and 17. On the July 17 rating date, Turfgrass treated with Ferromec at 5 oz/M also was rated at 10 for color. In general, turfgrass treated with Quelant FE, Ferromec, and Quelant FE plus Amino Green tended to have a similar pattern of enhanced turfgrass color response.

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**Table 1.** Color ratings on a scale of 0-10 where 0 = brown, 7= acceptable, and 10 = dark green of creeping bentgrass taken in 2005.

Treatment	Form	Rate oz/M	Color					
			7-1	7-2	7-4	7-5	7-6	7-8
QUELANT FE	0.24L	0.5	7.3	8.2	7.7	8.2	8.3	8.0
QUELANT FE	0.24L	1	7.7	8.3	8.0	8.5	8.5	8.3
QUELANT FE	0.24L	1.5	7.8	8.5	8.7	9.0	8.7	8.5
QUELANT FE	0.24L	2	7.3	8.3	8.8	9.2	9.0	8.5
QUELANT FE	0.24L	5	7.8	8.8	9.0	8.8	8.7	8.7
IRON SULFATE	WP	0.5	8.3	8.0	9.2	9.0	8.5	8.5
IRON SULFATE	WP	1	8.3	8.5	9.0	8.8	8.7	8.5
IRON SULFATE	WP	1.5	8.8	9.0	9.7	9.2	9.0	8.8
IRON SULFATE	WP	2	9.7	9.3	10.0	9.7	9.3	8.8
IRON SULFATE	WP	5	10.0	10.0	10.0	10.0	10.0	9.3
CHECK			7.3	7.3	7.5	7.7	7.5	7.8
FERROMECC	1.8L	0.5	7.5	8.3	8.2	8.2	8.0	8.3
FERROMECC	1.8L	1	7.7	8.3	8.5	8.3	8.2	8.3
FERROMECC	1.8L	1.5	7.8	8.8	8.7	9.0	9.0	8.7
FERROMECC	1.8L	2	8.0	9.0	9.0	8.8	9.0	8.5
FERROMECC	1.8L	5	8.3	9.7	10.0	9.3	8.8	8.8
QUELANT FE	0.24L	0.5	7.3	8.0	9.2	8.8	8.0	8.0
AMINO GREEN (18-3-1)	1.8L	0.006 lb N/M						
QUELANT FE	0.24L	1	7.7	8.7	9.0	8.7	8.3	8.3
AMINO GREEN (18-3-1)	1.8L	0.012 lb N/M						
QUELANT FE	0.24L	1.5	7.8	8.8	9.0	8.3	8.5	8.7
AMINO GREEN (18-3-1)	1.8L	0.018 lb N/M						
QUELANT FE	0.24L	2	7.3	9.3	9.7	9.3	8.7	8.7
AMINO GREEN (18-3-1)	1.8L	0.0244 lb N/M						
QUELANT FE	0.24L	5	7.8	9.8	10.0	9.5	9.0	8.7
AMINO GREEN (18-3-1)	1.8L	0.0606 lb N/M						

