

Phytotoxicity Test of Amino Acid Complex on T-1 Creeping Bentgrass

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Introduction

The objective was to determine if the given products (Table 1) are phytotoxic to turfgrass.

Materials and Methods

The trial was conducted at the Iowa State University Horticulture Research Station, Ames, Iowa. Plots were located on a mature stand of T-1 creeping bentgrass (*Agrostis stolonifera*) maintained at green height (0.130 in.) and were arranged in a randomized complete block design with three replications. Soil pH was 8.1 with soil P and K contents of 11 and 39 ppm, respectively. Soil type was a Nicollet clay-loam (fine-loamy, mixed, mesic, Typic Hapludoll).

Applications were made on July 12, 2013 according to Table 1. All products were applied through TeeJet 8002VS nozzles in a spray volume equivalent to 2 gal/1,000 ft²

powered by carbon dioxide supplying 40 lb/square inch.

Results and Discussion

There was no phytotoxicity observed at any time throughout the trial. All treatments and replications maintained consistent high quality and color ratings. No differences were observed in comparison with the control.

Table 1. Treatment list and rates.

Trt	Product	Rate oz/ 1,000 ft ²	Rate mL/ plot
1	Control	-	-
2	Aji 8-2-2 +Fe	20	14.79
3	Aji 8-2-2 +Fe	40	29.58