



Delayed Hexazinone Applications Unveil Improved Brunswickgrass (*Paspalum nicorae* Parodi) Control



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Introduction

- Brunswickgrass, also known as brown-seeded paspalum, has become a major weed across the Southeastern U.S. and has had devastating impacts on both the livestock and seed industries in Florida.
- Contaminated seed lots have been denied distribution to Australia and other countries where bahiagrass seed has been imported.
- Over \$400,000 of Bahiagrass seed left unharvested annually in a 4 county area alone.
- Currently, control methods for this weed are limited, making it difficult to control.
- Early research indicates hexazinone has significant activity on brunswickgrass; Hexazinone at rates of at least 0.84 kg/ha resulted in at least 97% control 30 DAT.

Hypothesis

- Hexazinone will provide selective control of brunswickgrass in bahiagrass pastures.



Fig. 1. Hexazinone treated area: 1.12 kg/ha - July application



Fig. 2. Hexazinone at 0.84 kg/ha 1 WAT

Objectives

- Determine the application rate of hexazinone for adequate control of brunswickgrass.
- Determine the proper application timing for brunswickgrass control.

Materials and Methods

- Research was initiated on 3 farms in Citrus county (Fig. 3).
- Each experimental location contained (28) 6 m. x 15 m. experimental plots.
- Designed using a RCBD, with 4 replications.
- All applications were made with an ATV at 280 L/ha.
- Hexazinone was applied at 0, 0.56, 0.84, and 1.12 kg/ha at monthly intervals from May to September.
- Pre and post-treatment counts were recorded at 2, GPS-referenced locations.
- Count data were converted to % of initial to determine control.
- Data were subjected to ANOVA.



Fig.3. Geographical area where brunswickgrass infestations are believed to be the highest, and research is being conducted.

Results

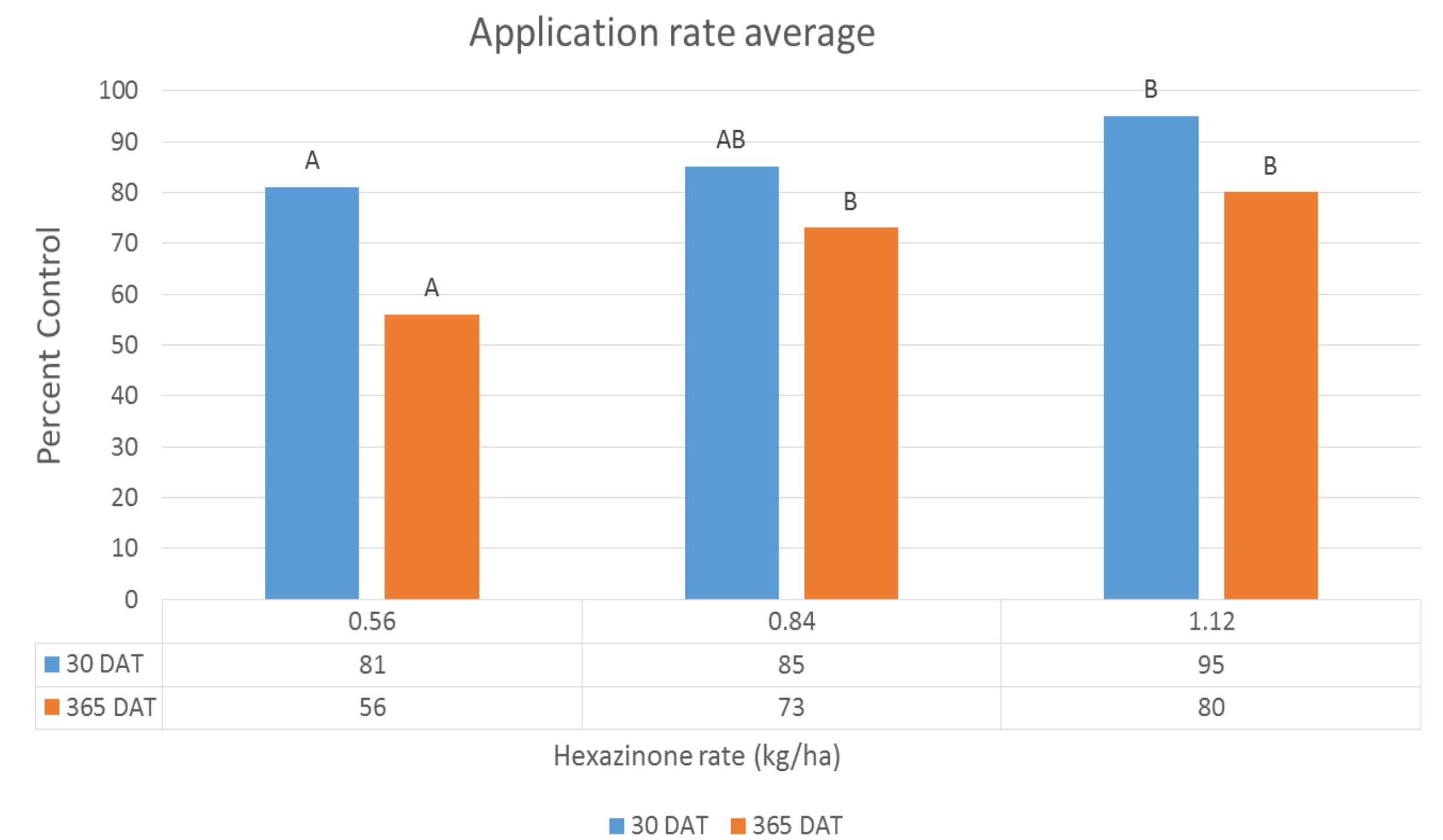


Fig. 4. Application rates averaged across all application months

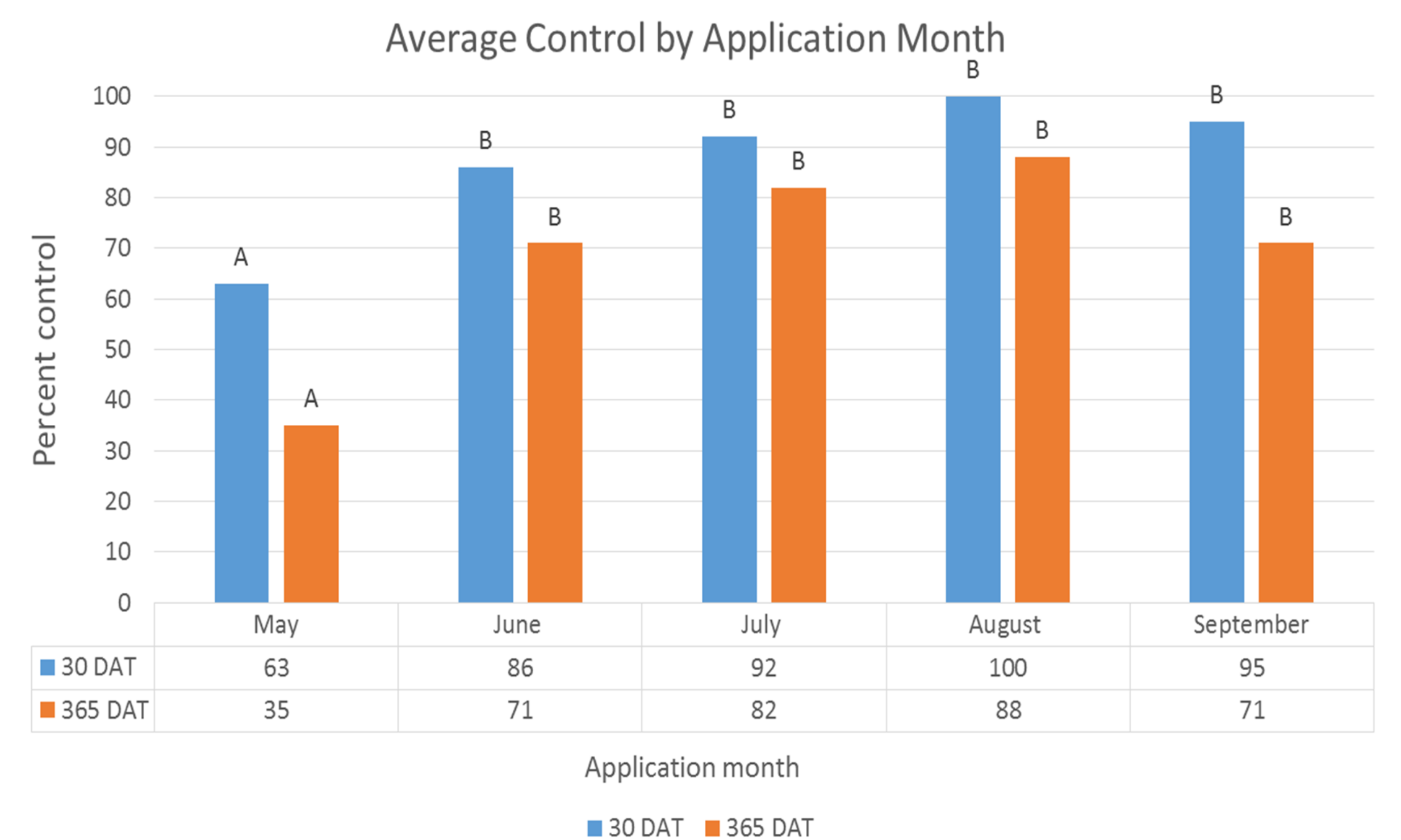


Fig. 5. Application month averaged across all application rates

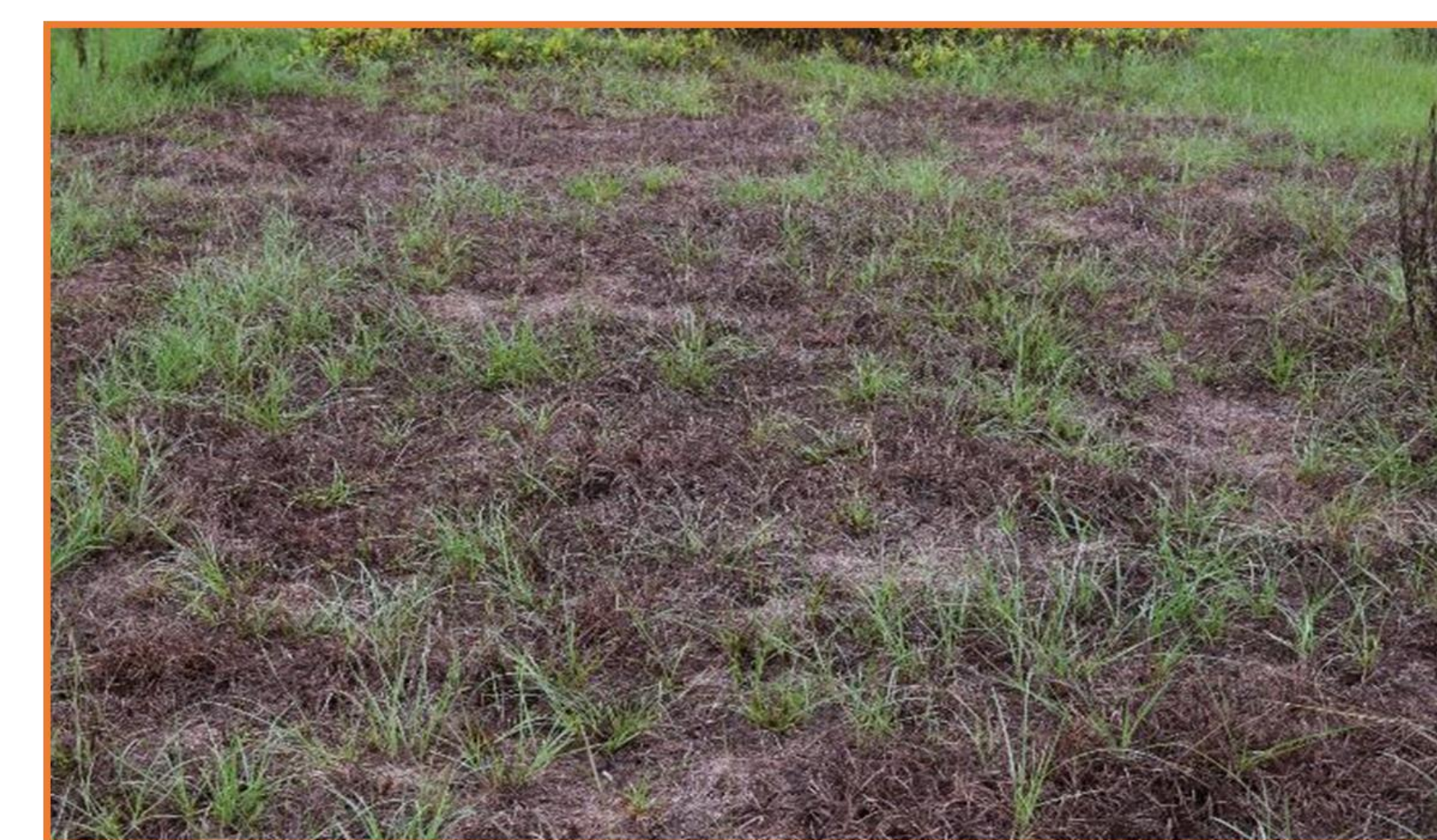


Fig. 6. Hexazinone at 0.84 kg/ha 3 WAT

Conclusions

- All application rates achieved 80% control or better 30 DAT, while 0.84 kg/ha or greater was necessary to achieve at least 70% control 365 DAT (fig. 4).
- Applications made during the month of June or after provided the greatest level of control (Fig.5).
- Hexazinone will provide selective control of brunswickgrass in bahiagrass pastures.