University study shows improved color and quality with 50% reduction in chemical fertilizer

Results

ReeCourse treated plots, in combination with a significantly reduced application of chemical fertilizer (50% reduction to conventional treatment), yielded plots that had similar, or better, color and quality results than plots that were treated with only a conventional chemical fertilizer application.

Why are these results significant? The use of ReeCourse helps a turf manager to significantly reduce the use of chemical-based fertilizer, thus reducing both overall treatment costs and chemical use. Reducing chemical based inputs is the right thing environmentally to do, the ReeCourse product works to maintain or improve color and quality on the golf course, and you can save on your overall maintenance budget as well. These results don't even speak to the fact that the turf manager is cultivating a healthier turf when they use fewer chemical inputs. This healthier turf will then require fewer pesticides and fungicides over time since a healthier turf is more resistant to pest and disease.

Additionally, by reducing the amount of chemical fertilizer being used, a lower yield of grass clippings was seen which provides a potential opportunity for turf managers to reduce the frequency of mowing and thereby lower their labor expense, equipment maintenance expense, and fuel expense.

Trial Background

This independent trial was performed at, and by, a major turfgrass university department in the Southeastern United States from March – October 2013.

The purpose of this University trial was to evaluate color, quality, and clipping yield response to treatments of the ReeCourse Fairway Formula. The trial was designed to validate that ReeCourse can be used as a supplement to a conventional fertilizer program, allowing for reductions in fertilizer use without reductions in turfgrass color or quality.

ReeCourse treatments were applied to a hybrid bermudagrass (Tifway) fairway. The grass was mowed three times per week at a 1" height. This report outlines the ReeCourse treatments which were applied monthly at ½ gallon per acre. The treatments were compared to a conventional chemical fertilizer treatment which for this area of the United States is 1 pound per nitrogen per 1,000 square feet per month. Another treatment included ReeCourse applied bi-monthly at a rate of 1-gallon per acre. Though also effective this report focuses on the results achieved with the ½-gallon per acre ReeCourse treatment. Treatments were replicated four times in a randomized block design.

Trial Details

Table 1 below shows two treatments. The first treatment is applications of ReeCourse in combination with a reduced amount (50% reduction) of chemical fertilizer. The "ReeCourse" application was ReeCourse applied monthly at a ½-gallon rate plus the reduced chemical fertilizer amount. The "Never" application is the conventional chemical fertilizer application (at the full normal rate of 1 lb. nitrogen (N) / 1,000 SF / month); No ReeCourse applied.

PLOTS WITH REECOURSE CONSISTENTLY YIELDED IMPROVED TURFGRASS COLOR, ACROSS ALL N RATES.

Table 1. Effect of ReeCourse application on the color of Tifway hybrid bermudagrass, 2013.

Color Comparison									
Rating Date	5/1	6/4	6/10	6/23	7/7	7/15	8/5	8/19	9/10
Treatment	Relative Color (1-9)								
ReeCourse	5.2 ab	5.6 a	6.2 a	6.5 a	6.7 a	6.7 a	6.3 a	6.1 a	6.1 a
Never	4.8 a	4.9 b	5.7 b	5.7 b	5.9 b	6.2 b	5.8 b	5.5 b	5.5 b
ReeCourseGolf.com									

Within each rating date above, the means (or averages) shown followed by the same letter are not significantly different from each other

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Table 2 below shows the ReeCourse plus reduced chemical fertilizer plots ("ReeCourse") versus the conventional chemical fertilizer treated plots ("Control").

PLOTS WITH REECOURSE CONSISTENTLY YIELDED THE SAME, OR BETTER, QUALITY RATINGS WHILE USING 50% LESS CHEMICAL FERTILIZER.

Table 2. Relative quality of Tifway hybrid bermudagrass as affected by the application of ReeCourse monthly.

Quality Comparison									
Rating Date	4/22	5/1	5/14	5/21	6/4	6/10	6/17	7/24	8/27
Treatment	Relative Quality (1-9)								
ReeCourse	5.0 a	5.8 a	6.3 a	8.3 a	5.3 a	7.3 a	6.5 a	7.5 a	7.8 a
Control	5.8 a	6.0 a	3.8 b	6.8 a	4.3 a	6.0 b	6.3 a	6.8 b	6.5 b
ReeCourseGolf.com									

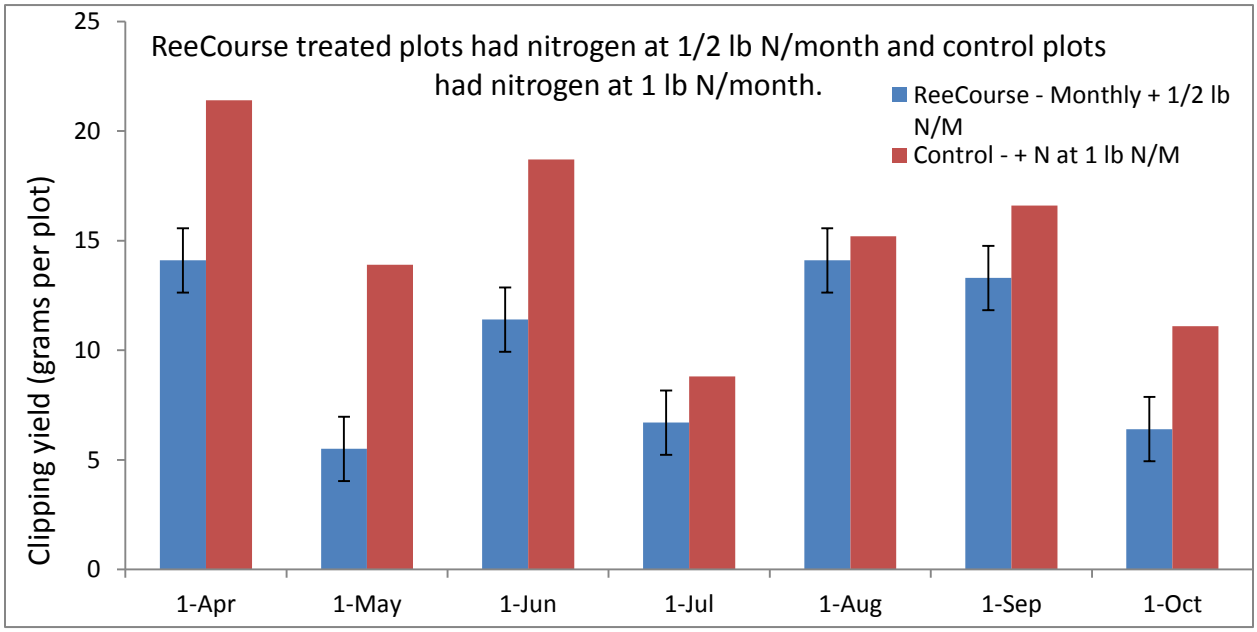
Within each rating date above, the means (or averages) shown followed by the same letter are not significantly different from each other

Chart 1

Chart 1. In addition to color and quality performance, the plots of ReeCourse with a significantly reduced chemical fertilizer application (50% reduction) showed that the clipping yield was significantly reduced versus plots which received a conventional chemical fertilizer application (1 lb. nitrogen (N) / 1,000 SF / month). This is very important because it demonstrates that using ReeCourse with a significantly reduced chemical fertilizer application "slows" the growth of the grass and allows the turf manager to cut the grass less frequently.

THIS IS AN OPPORTUNITY TO SAVE MONEY ON LABOR COSTS, EQUIPMENT MAINTENANCE, AND FUEL EXPENSE.

Chart 1. Relative clipping yield of hybrid bermudagrass as affected by application of ReeCourse.



ReeCourse Golf Conclusions

ReeCourse Fairway Formula plus a significantly reduced application of chemical fertilizer (a 50% reduction) generated similar, or better, results to that of the conventional chemical fertilizer alone treatment with respect to color and quality.

ReeCourse plays an important role in reducing a golf course's dependence on chemical-based fertilizer while maintaining the course's color and quality expectations. Golf course superintendents and management companies understand the need to implement "green" initiatives and sustainability practices in order to reduce the chemical footprint on the property and what runs off into waterways. ReeCourse Formulas are all-natural soil microbial products that help address and support these efforts.

Please contact ReeCourse Golf, LLC to discuss the trial results:

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