

# Turf Colorants for Aesthetics or as an Alternative to Overseeding



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## Objectives:

*Evaluate how new turf colorants perform throughout the winter months in the southeastern region of the United States.*

In the southern United States, turf managers have traditionally overseeded their bermudagrass each fall in order to maintain playability and aesthetically pleasing playing surfaces through the winter months. During the spring to summer period, the overseeded grass will begin to die, bringing along a host of transitional challenges for turf managers.

An increasingly popular alternative to overseeding bermudagrass are using turf colorants to provide green surfaces without the transition competition in the spring. A product evaluation study was initiated at North Carolina State University Turfgrass research facility in Raleigh, NC in November 2011 to monitor the longevity and quality of color for a number of turf colorants that were on the market at that time.

Products were applied at two application rates (80 and 120 GPA) according to the recommended label dilution rates on an ultradwarf bermudagrass putting green and on a bermudagrass mowed to a fairway height-of-cut.

Data collection during this two-year project includes visual quality and percent coverage ratings along with digital image analysis to document change in color over time.

In year one, colorants were applied in a single application during the month of November and monitored through March. Observations during the

**Figure 1. Miniverde bermudagrass during winter 2011, fifteen days after treating with turf colorants.**



mixing process indicated that some products were much more difficult to go into solution than others, which could lead to inadequate spray coverage and clogging. This can cause an increase in the amount of time it takes to make an application as well as cleaning of equipment. After the colorants were applied, the initial color of the products varied greatly with some exhibiting a dark green color, while others were more of a blue or lime-green color. Over time, products tended to shift to a grayish or bluish color which gives an indication of how long a product will last until a second application is needed.

Other preliminary and ongoing evaluations are being conducted with these products including: viscosity testing, monitoring a product’s tendency to “rub off,” and timing of sequential applications. By the end of the study in 2013, we will have a better understanding of how these products perform and

therefore provide better recommendations on how to properly use them.

**Summary**

- NC State University researchers are characterizing the variation in appearance and performance of the turf colorants.
- First year data indicates that products can be separated based on initial color and color longevity, as well as from mixing and application parameters. But due to the number of treatments in the test there are also similarities among treatments.
- Once the second year of the study is completed there will be a better understanding of when these products need to be applied, the required waiting period to avoid “rub off,” and the best time to make sequential applications.

**Figure 2. Bermudagrass irrigated with potable water and treated with Primo Maxx performed best during summer months followed by seashore paspalum irrigated either with potable or saline water and bermu-**

Bermudagrass (Pioneer Athletics)	Southwest Green (Pioneer Athletics)
Endurant (Geoponics)	Solarogren Green Paint (Solarfast)
Evergreen (Milliken)	SprayMax Green Turf Paint (Harrell’s)
Go Green (Enviroseal)	Super Cover (J.C. Whitlam)
Green Dye Turf Colorant (World Class Athletic Surfaces)	[Titan] Green Turf (Burnett Athletics)
Green Lawngr (Becker Underwood)	Turf Cote (Poulenger USA)
Green Lawngr Graphics (Becker Underwood)	Turf Worx – Original Green (US Specialites)
Green Lawngr Lineman (Becker Underwood)	Turf Worx – Southwestern Green (US Specialites)
Kameelyan – Bermuda (D. Ervasti Sales)	Turf Worx – Sugar Hill Green (US Specialites)
Kameelyan – Blue (D. Ervasti Sales)	Ultradwarf Plus (Pioneer Athletics)
Lesco Green (John Deere Landscaping)	Ultradwarf Super (Pioneer Athletics)
Mtp Turfgreen (Missouri Turf Colorant)	Wintergreen Plus (Precisions Laboratories)
Regreen (Precision Laboratories)	