



BY DR. GRADY MILLER Professor, North Carolina State University

Questions?

Send them to Grady Miller at North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or email grady_miller@ncsu.edu

Or, send your question to David Minner at Iowa State University, 106 Horticulture Hall, Ames, IA 50011 or email dminner@iastate.edu.



Green with envy

I read with great interest your article on evaluating green turf colorants in Applied Turfgrass Science. After reading your article, I may try using a colorant this year to green up common bermudagrass. Can you tell me about how irrigation practices influence the color? Does the colorant get mowed off very quickly?

Sports turf managers have been quietly using colorants/dyes/paints to provide green color and hide damaged turf areas for years. Recently, the foreclosure market in California encouraged companies to go out and paint drought-stricken abandoned yards green resulting in national attention. At the same time golf course superintendents in the Southeast were trying to save money and improve golf course conditions by painting rather than overseeding. All this attention has resulted in an increased interest among turf managers in "painting turf." I guess one could say painting turf is currently in vogue.

I ran paint matching trials in Florida for a local paint company years ago and thought it had great potential-but there did not seem to be much interest. I think there were two or three companies back then that sold a turf colorant or green turf paint specifically for coating the entire turf surface (not paint for logos or other field markings). At last count there are about 10 companies that have a product for painting turf green. Most of these companies only have one product, but a few have several colors available. At least one company has a standard product line, as well as the capacity to custom blend shades of green.

With more interest among turf managers, comes more interest in product development. At the 2011 Sports Turf Managers Conference in Austin, I will be presenting a detailed look at using modern turf colorants/paints on athletic fields. So, if the information in this article does not satisfy your curiosities, come hear the talk and ask questions. Accept this as my unsolicited advertisement for the Conference and a personal plug for my presentation!

Before answering your questions, some general comments on applying colorants use may be helpful. First question I often get is "Will it damage my turfgrass?" It has been my experience that the most common turf colorant products currently on the market cause no harm to the turfgrass plant when used at reasonable rates. In some cases, it may even increase turf growth rate (due to increased heat from darker color).

How does one apply a colorant? Well they may be applied using various types of equipment from a small pump-up single-nozzle sprayer, to airless paint machines, to a large boom sprayer designed to spray pesticides/fertilizers. One may use standard equipment, adapt equipment for more efficient colorant application, or purchase/build specialized equipment specifically for colorant applications. Most start with the equipment they already have in their shop with a few modifications.

If one does not want to figure everything out on their own, there are individuals/companies in some towns that have specialized equipment and extensive experience applying colorants to all sorts of turfgrass areas from small front lawns to expansive golf courses fairways. You may even want to pay someone to do it for you the first time before you invest time in developing your own equipment and techniques.

Something else you should know is that the products will make anything they touch green forever, from your spray equipment to the clothes and shoes you wear while spraying. Pay particular attention to not get it on concrete surfaces or other semipermeable surfaces near your fields. Consequently, I would not suggest application on windy days.

For adequate coverage, I would recommend colorant be applied at 80 gallons per acre (total paint + water volume) or greater. I have seen them go out as high as 250 gallons per acre, but I do not think that high a rate is necessary. While coverage and longevity can be related to application rate, I think the best balance is somewhere around 100 to 120 gallons per acre for most products. One may also have to play around with dilution rate for a particular product. Most companies suggest you dilute them between 1:6 and 1:10 (paint:water).

The paint has a better color if you can time its application just before the turf (bermudagrass) goes dormant. If you paint too early you just mow the colorant off. You may try putting out a plant growth regulator (PGR) before using colorants to slow down the turf growth if you want to spray before the turf goes dormant. If your turf is 100% dormant, it will take more colorant because dry turfgrass really soaks up the colorant. We found that a light irrigation before applying colorant on dormant turf can help.

So, to answer your questions about irrigation, once a colorant dries on the turfgrass surface, most do not come off very easily. Irrigation wetness may momentarily darken colors, but it should have no long term influence on color longevity. Once turf is dormant, there is not much need in irrigating the turf. The same is true for mowing. You may want to mow a few times for a little "cleaning," but that would be an irregular practice.