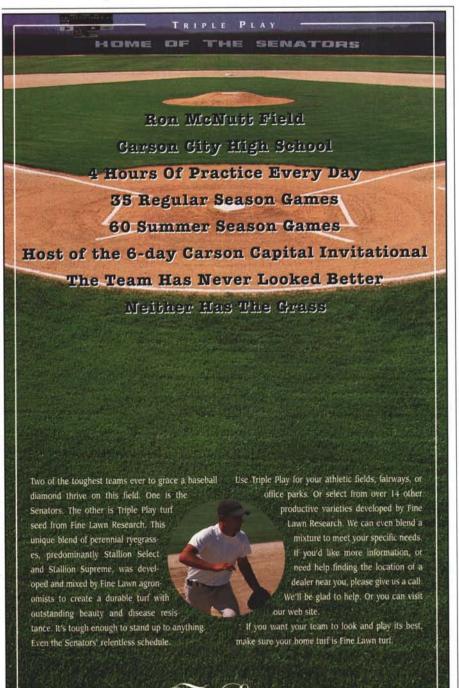
oration. Over time, a Primo treatment will actually result in a darker green turf. Embark, on the other hand, also reduces foliar growth for similar time periods, but is probably best noted for seedhead suppression. There is more initial concern with phytotoxicity from Embark applications, but it too can ultimately provide a dark green color response over time.

Whatever PGR you select, treat it with the same respect you give a pes-

ticide or other chemical application and always closely follow label instructions. *Never* apply PGRs to grasses that are under stress. This increases the chance of turfgrass phytotoxicity; is a waste of time, money and manpower; and is environmentally irresponsible.

Selected Benefits

Undoubtedly, much of the current interest in PGRs is due to the success



of Primo, and while not wanting to come across as a Primo salesman, I am definitely impressed with the overall performance of this PGR in the mid-South on bermudagrass turfs. Within a week's time, the visible growth response to Primo becomes quite obvious as the internode spacing on the stolons is reduced, resulting in a thicker, tighter playing surface.

This material is quite expensive, though, and many turf managers indicate to me that budgetary constraints keep them from considering Primo in their management programs. However, a PGR like Primo offers more than just growth suppression, so it might be wise to see how Primo or a similar PGR can pay for itself in a short time. Some of the additional benefits that have been realized from Primo applications include:

1. Better conversion programs when interseeding or overseeding one turfgrass into another one. Primo has been successfully used to slow the growth of one turfgrass and allow for better establishment of another.

2. Control of your mowing program even during inclement weather. A big problem sports turf managers faced this year in our area of the mid-South was the inability to cut grass regularly because of excessive rainfall. Area managers that used Primo on their bermudagrass fields were able to work around the rain and maintain adequate mowing heights without watching their sports fields turn into hay pastures before their eyes.

3. Improved turf quality and playability without sacrificing recuperative potential from divoting or other damage. Part of the improved quality comes from the tightening and thickening effects previously mentioned, and some of it is due to the color response. In particular, common bermudagrass sports turfs treated with Primo take on many characteristics of the higher quality, vegetatively bermudagrasses established (i.e. Tifway, MS-Choice, etc.). The recuperative or grow-in rates of Primo-treated bermudagrasses have been shown to be equal to if not better than untreated bermudagrasses. This eliminates a lot of the concern that has been expressed with older PGR chemistry, which regulated growth so completely the turf did not recuperate quickly after damage.

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4. Reduced mowing of difficult areas. Obviously you can benefit from treating difficult-to-mow areas, or edging baselines and fenced areas.

5. Improved cold tolerance and rooting. Preliminary research indicates that Primo improves the cold tolerance of turfgrasses, promotes rooting, improves water-use efficiency, and makes for tighter-knit sods that are more resistant to wear and easier to handle during installation.

Drawbacks

Does a PGR like Primo have its drawbacks? As with anything, the answer is definitely yes.

• Cost is no doubt a concern for many.

• I have also observed an increase in overall incidence of the disease dollar spot on Primo-treated turf.

 A third concern is that when you use a PGR like Primo you really need to commit to a complete program. Otherwise, you'll encounter the "coiled spring" effect, a phenomenon that will occur with almost any PGR. The analogy goes something like this: much of the lateral and upward growth potential of the plant following PGR treatment is held in check - the spring is compressed - and when the compression is removed, the plant growth (and the spring) is quickly released. We have observed tremendous surges in growth on Primo-treated bermudagrass turf about four weeks after treatment with high-end label rates.

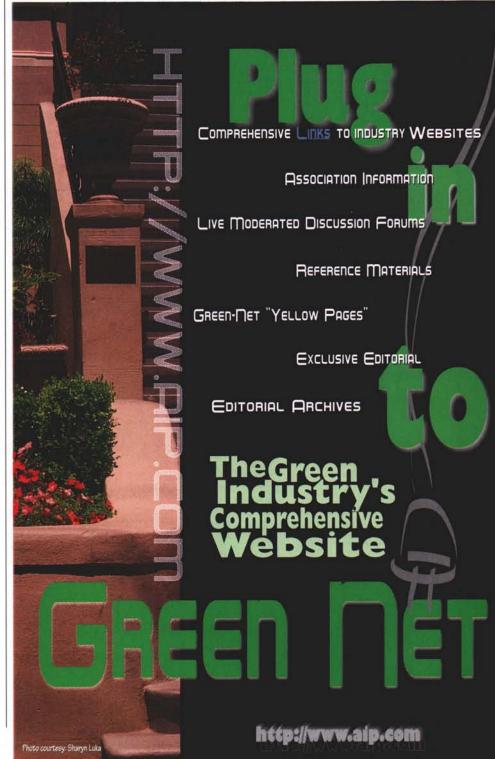
Universal Benefit

A way that I believe everyone can find a place for Primo in his or her program is for field marking with turf paint.

I read in sportsTURF a few years ago about researchers in California combining Primo with paints. We have evaluated Primo mixed with white athletic field paint (3:1 dilution of water:paint) for field striping with a CO2-powered sprayer at painting rates delivering what amounts to 1, 2 or 3 oz of Primo per 1,000 square feet. The turf was Tifway bermudagrass mowed three times weekly at 7/8 inch. Our preliminary results indicate that line striping can be reduced at least 50% for 1 to 2 week periods (i.e., you can cut the need for painting roughly in half) and the line integrity improved with the increasing Primo rates.

Incorporating Primo into your field striping program will not remove the necessity to stripe the fields again, but will save time in future markings since the lines can easily be seen for remarking and will not likely require stringing-off again. Moreover, using Primo in combination with the paint instead of mixing with one of the many non-selective chemicals commonly used in field marking (some of which are illegal) will not result in strips of dead turf that will affect field playability, safety, and quality.

Dr. Michael Goatley is an associate professor and agronomist in the Department of Plant and Soil Sciences at Mississippi State University.





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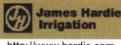






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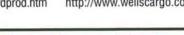
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THE FRONT LINES

From the Shadow of the Golden Dome

By Dave Ashman

At a meeting a few weeks ago, one of the speakers told the following story of the legendary Notre Dame football coach Knute Rockne. Like all legends, the facts may be open to interpretation, but the end result never changes: the hero finds a way to get the job done.

What Are You Willing to Do?

The story begins with Coach Rockne looking for a new assistant to join his staff at Notre Dame. The speaker tells of the meticulous nature of the head coach. "A disciplined man with an eye for details" is the description the speaker would like us to remember.

The coach had three candidates to

choose from, and they all had different strengths and skills. Rockne did not have a clear-cut idea of what football experience he desired in the candidates; however, he did know he wanted a person who could make decisions on his own. He felt strongly that the candidate must be able to make a commitment to the program and see it through to the end.

As the speaker tells the story, the coach decided to devise a test for the three candidates. The test had to show an individual's ability to make decisions and show what a person is willing to do to make the program stronger. Rockne decided on a simple and fair method to test each candidate. He invited each candidate to an interview in his office. He would meet each of them for about half an hour,

> and then each person would be placed in the test scenario. After asking all of his questions, the coach would walk each candidate to the door of his office. On the other side of the door. Rockne placed a piece of paper on the floor. The test was what the candidate would do next. The first candi-

date was well qualified and had good credentials. After the short meeting, Rockne walked him to the door. The candidate walked right out and over the piece of paper on the floor. He never saw it

The second candidate was also well qualified and had outstanding refer-



Rockne devised a simple and fair method for choosing an assistant.

ences. After the short meeting, Rockne walked him to the door. The candidate spotted the paper on the floor and kicked it out of the way and under a table.

The third candidate was qualified but did not have the same depth of experience as the other two. After the short meeting, Rockne walked him to the door. The candidate spotted the paper on the floor, bent down and picked it up, examined it and threw it away.

Which candidate did Rockne hire? According to the speaker, he selected the third candidate. This candidate made a decision on his own and showed that he was willing to do whatever was needed, including picking up trash in the office. He did what others would not do. The moral of the story is that people who are willing to go just a little farther will make your program stronger.

If you have a story or anecdote you would like to share, call (562) 425-2449 or write it down (include your name and phone number) and mail it to: Ashman & Associates, 3164 North Greenbrier Road, Long Beach, CA 90808.



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