

uptake, transformation, or fate within plants and soil.

Although new root development was significantly reduced by prodiamine application, we could not detect significant differences in nitrogen uptake on any sampling dates between prodiamine-treated, dithiopyr-treated or untreated plants. Greater nitrogen uptake was detected in oxadiazon-treated plants compared to other herbicide treatments on week eight, likely resulting from the increased root development.

It's likely these results could vary by location, environmental conditions and soil. However, our data indicate that while not necessarily apparent through observations of surface quality, certain spring-applied pre-emergent herbicides have the potential to influence new root initiation within established warm-season turfgrass stands.

In particular, superintendents who would like to manage bermudagrass through the spring transition period with the healthiest root system may want to reconsider the use of prodiamine in their early-spring herbicide programs.

From a broader environmental standpoint, these data reveal a couple interesting observations about the bermudagrass system. First, despite the abnormally cold spring temperatures during this study, a newly developing root system and low rates of shoot growth,

nearly half of the nitrogen supplied to plants was taken up within 24 hours of application. This demonstrates a remarkable capacity for bermudagrass to rapidly acquire moderate quantities of nitrogen fertilizer during the spring transition period, well before rapid shoot growth is occurring.

Secondly, that herbicide-induced reductions in root growth by prodiamine didn't translate to significantly decreased nitrogen uptake appears to highlight the importance of the thatch/mat layer of turfgrass for intercepting nitrogen before it leaches deeper into the soil profile.

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**Greater nitrogen uptake was detected in oxadiazon-treated plants compared to other herbicide treatments.**

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# NTEP Changing the Ground Rules With Its Trial Guidelines

*By Curt Harler, Managing Editor*

**F**or years, the National Turfgrass Evaluation Program (NTEP) trials have been the standard reference for turfgrass performance. Starting this year, golf course superintendents will see some major changes coming to the long-established guidelines for the program.

The NTEP ([www.ntep.org](http://www.ntep.org)) trials were set up to develop and coordinate uniform evaluation varieties and to look at promising

selections in the United States and Canada. Results often are used to determine if a cultivar is well adapted to a local area or particular use on a golf course.

"Recently, NTEP has experienced a reduced number of entries," says Kevin Morris, executive director of the program headquartered in Beltsville, Md. In addition, many of the cultivars being released these

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*There will be less emphasis on the beauty-contest aspects of the testing, Kevin Morris says.*

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days are quite similar, he adds.

“As a result, companies do not promote as much,” Morris says. “If a seed firm doesn’t expect to find a marked advantage for its cultivar, it’s unwilling to invest money in a multi-year program which will yield it no promotional benefit.”

Typically, NTEP testing programs have been five years long. That gives plenty of time, at multiple locations, for a cultivar to experience all sorts of environmental stress. It’s likely the cultivar will experience dry months and wet months, as well as disease pressure and insect infestation.

NTEP is a fee-based program. With less money available for data analysis, cutbacks were dictated.

Probably the major difference is a cutback from five-year testing to four-year testing in a number of tests. The focus of the tests will change, as well.

“There will be less emphasis on the beauty-contest aspects of the testing,” Morris told a group of crop and soil scientists late last year.

To preserve value, there will be more focused, trait-specific testing done. For starters, NTEP will run a drought trial for cool-season species at five locations across the country. The test was established in fall 2009 and will run for two years.

Perennial ryegrass will be tested again in 2010, with Kentucky bluegrass being established in 2011.

In 2012 Morris plans a series of tall fescue trials. In each of these areas, the emphasis will be on evaluating specific traits, such as salt, drought and significant diseases.

In addition to the drought testing, expect to see a series of NTEP tests on herbicide screening, which will be done on the same



sites as completed variety trials. The completed rye plots may be the first of the varieties to undergo herbicide testing.

NTEP is also looking at working with the Lawn Institute to come up with WaterSense-labeled grasses. These would be varieties that would meet the Environmental Protection Agency standards for reduced water use.

While the majority of the time and effort put into WaterSense so far by EPA has been aimed at indoor water-use efficiency (low-flow shower heads, water-saving urinals), for outside building projects, turf is a stated target for water saving. It’s the only crop specifically mentioned by EPA.

At the moment, the program focuses on single-family homes, not golf courses or sports turf. The EPA’s Landscape Design Criteria give a builder a water budget. EPA developed a tool to help contractors figure these calculations to support the criteria. The first version of the tool, released in November 2008, was based on methodology developed by the irrigation industry. A second version incorporates additional research and recommendations suggested by stakeholders as part of the public comment process.

Whether the recommendations will drift from home lawns to golf courses remains to be seen. Even if the government doesn’t make the requirements mandatory beyond home lawns, it does provide a handy crib sheet for state water regulators and, as such, could turn up in regulations that do have an effect on superintendents.

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## The Service Factor

**A**s the golf course industry reconsiders its future, solutions to industry woes are coming from all corners. Brace for impact. It's not pretty.

Instead of focusing on the core values of recreation, simplicity and affordability that somehow managed to get the game through 400 years (despite hard-to-use equipment and so-so course conditions), the knee-jerk reaction is not to look to the past for guidance. Instead, folks want us to look to the hospitality industry.

More service, more "touch points" and more branding. Translation: more nonsense.

What about stuff that really matters, like less cost, less time to play and less intimidation factor? It's not on the agenda.

Instead of peeling away at the multilayered and often bloated golf experience, many in the industry want to pile on more annoyance as well as more tips to be handed out. They want to do for golf what Marriott did for courtyards. Splendid.

Unfortunately, the golf "experience" has become wrought with too many layers that only add time and stuffiness to a round. Just look at what the new LPGA commissioner had to say recently about playing the game.

"My invites have gone through the roof since getting this job," Mike Whan told the Orange County Register. "But my interest in playing has gone way down. I can't fathom the idea of taking six hours to play golf."

Nowhere is this extravagant mentality to the golf experience more

INSTEAD OF PEELING AWAY AT THE ALREADY-IRRITATING GOLF EXPERIENCE, MANY IN THE INDUSTRY JUST WANT TO PILE ON MORE ANNOYANCE

BY GEOFF SHACKELFORD



evident than in the bizarre notion that changing your shoes in the parking lot is an evil, right up there with not fixing ball marks and refusing to love Bobby Jones with all your heart.

The image of someone getting out of his car, opening the trunk and putting on his FootJoys is ... disturbing? So much so that we have massive, energy-wasting locker rooms that have added hundreds of millions to the cost of clubhouse construction and maintenance. All for a stinky room that accounts for about 1 percent of the time most normal folks are at a golf course.

I recently asked PGA player Geoff Ogilvy what he loves about the "Aussie model" of golf compared to America's.

"For less than \$50 or so you can access all but a few public courses in Australia and private membership is only a few thousand dollars a year at most clubs," said the 2006 U.S. Open winner. "The maintenance budgets for the courses are quite small because water usage is always very carefully controlled.

"Also in Australia, golf is generally free from bag drops, valet parking and locker-room attendants," Ogilvy adds. "None of which really makes your day any better or worse, does it? In fact, I've always thought changing my shoes in the parking lot and walking to the

tee with my bag on my shoulder was part of the experience."

Architect Bill Coore recently pulled up to a high-end Scottsdale course in his beat-up pickup truck he uses for errands. Knowing the kind of club it was, Coore intentionally bypassed the lavish circular driveway, parked his truck in the back of the well-landscaped lot and carried his dinky 15-year-old bag toward the front entrance. As he approached the clubhouse, a greeter emerged and asked if he could help Coore in a tone that screamed, "You made a wrong turn, buster."

Coore replied, "As a matter of fact, I'm here to play a little golf." To which the greeter asked coldly, "Are you a guest of a member?"

Coore was a member, and the man allowed the co-architect of some of the world's finest modern designs to pass through. However, Coore says he never encountered that kind of condescension during a recent stay in Australia.

And in the future, Coore is confident he'll experience a lot less of that type of "service," despite increased calls for it to attract more players to the game.

Will the game really miss it?

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