USGA Update

What's Wrong With the Ultradwarfs?

By Patrick O'Brien and Chris Hartwiger

We are hearing this frequently from calls to the office, or by e-mail correspondence, or at TAS visits this summer, "Mr. USGA agronomist, what's wrong with the ultradwarfs? Unfortunately, this simple question may be misleading and imply that there is a turfgrass problem as the reason for the poor performance.

TifEagle is by far the ultradwarf grass questioned by most - and usually because it is by far the most widely planted ultradwarf. Mini-Verde and Champion are the two other popular ultradwarfs that are also used in the Southeast Region. From our observations, the problems seen and heard about are not ultradwarf issues but rather one or more factors at a particular course that cause poor turf performance and quality.

The ultradwarfs continue to be the choice for virtually all regrassing or reconstruction projects in the Southeast. Golfers want bermudagrass putting green surfaces that will not mutate, and will provide faster and smoother surfaces. These are the new standards promised by the ultradwarfs.

Below are some key points that we feel are essential to maintain healthy ultradwarf putting greens in the Southeast Region.

Address Existing Issues

Turfgrass variety is only one of the many factors that influence the performance of a putting green. While the ultradwarfs can be a major



Ultradwarf test plots at the IFAS Research Center in Ft. Lauderdale

improvement over Tifdwarf or Tifgreen, simply replacing the grass will not make other preexisting problems disappear. Unfortunately, some clubs have made the mistake of not taking the opportunity to resolve other issues such as poor construction, shade, surface drainage, etc.

To avoid this, ask yourself the question, "Why were my existing greens in poor condition before regrassing?" Address as many of these factors as possible prior to regrassing and your success rate will improve dramatically.

Thatch Control

Often we hear that managing the accumulation of organic matter in the top of the profile has been neglected for the first few seasons.

Ultradwarfs produce 8 to 10 times the amount of thatch compared to the old industry standards.

Numerous secondary problems can result once organic matter weight exceeds 3% by weight in the upper rootzone, including disease problems, nutrient issues, and water-management concerns. Applying 4,000 to 5,000 pounds of sand annually per 1,000 square feet is the key to maintain a high sand matrix and not an organic matrix in this zone. Be sure to use ASTM test #1647 to determine organic matter percentage by weight in the zone of organic accumulation. Aeration and topdressing programs can be fine tuned with this information.

Disease Issues

Spring dead spot and bermudagrass decline issues are the diseases observed most often. Spring dead spot is fairly easily prevented with Eagle fungicide and Rubigan. Be sure to follow all label recommendations.

Bermudagrass decline usually occurs in the mid to late summer after some form of injury, such as mower scalping, has occurred and during extended periods of cloudy and rainy weather. This is a weak fungus and generally requires some other stress to allow it to weaken the plant. Raising mowing height in mid to late summer is the best approach to avoid problem, rather than expensive fungicide programs that seldom provide much benefit.

Lime

Liming is another practice that can elevate the soil pH in the upper rootzone and make conditions more favorable for many pathogens, including those involved with spring dead spot and bermudagrass decline. When superintendents apply lime, it tends to stay in the thatch and upper rootzone, and measurements of soil pH if taken from a deep plug may give a false sense of security. Testing the pH in the upper rootzone area will provide additional information and maybe even far different values.

Rootzone Construction

Sometimes we hear of grass failure and after checking the rootzone, observe the use of a 100% sand rootzone. Use of a straight sand rootzone is not recommended. Desiccation, winter injury, and low soil nutrients have been a problem in these types of root zones. In addition, rootzones

2004 Plants of the Year Part 2

In an on-going effort to promote the production, sale and use of superior Floridagrown plants, the Florida Nurserymen & Growers Association is pleased to announce the 2004 selections of the Florida Plants of the Year. This program was launched to promote underutilized, but proven Florida plant material. These proven ornamentals are selected on an annual basis by a group of growers, horticulturists, retailers, landscape professionals and University of Florida faculty.

For a plant to be considered a Plant of the Year, set criteria must be met. Selected plants have good pest resistance, require reasonable care and are fairly easy to propagate and grow. The award-winning plants must also exhibit some superior quality, improved performance or unique characteristic that sets it apart from others in its class. Here are two 2004 selections for your consideration:

Common Name: Purple Trumpet Tree Botanical Name: *Tabebuia impetiginosa 'Ipa'*

Hardiness: Zones 9b-11

Mature Height and Spread: 15'-25' Tall x 10'-15'

wide

Classification: Flowering tree

Landscape Use: Small shade or specimen tree Characteristics: A variable species in size and shape



Purple Trumpet Tree

of flower giving masses of pink color in the spring. This flowering tree prefers to be dry in winter. Some features of this tree are a sin-

gle trunk and palmately compound leaves.

Common Name: Pelican Flower Botanical Name: Aristolochia grandiflora

Hardiness: Zones 8b-11

Mature Height and Spread: A climbing vine,



Pelican Flower

30' high, or as tall and wide as the support

Classification: Subtropical flowering vine, root hardy in zone 9

Landscape Use: Trellis, pergola, large structure, tree or

Characteristics: A very strong grower with large fantasical-

fence.

ly-shaped flowers that have a unpleasant odor for part of their life. Heart shaped leaves and 10" heart shaped dark purple and white flowers are pollinated by flies. Foliage is a larval source for Gold Rim butterflies found throughout the state. with high clay soils and poor surface drainage can cause problems, such as decline due to standing water. All of these problems can be avoided with better construction and renovation building techniques.

Water Quality

Do not neglect water quality. If turfgrass performance is marginal with an older bermudagrass variety, do not expect anything better with the ultradwarfs. Take the time to address water quality.

Overseeding

Like it or not, overseeding competes with and shades a bermudagrass surface. If overseeding is a must, consider using a lighter rate or join the growing number of courses that paint instead of overseed. Also, there are numerous products that can assist early removal of overseeding. Keep in mind that overseeding does contribute to organic matter levels in the upper portion of the rootzone. Extra aeration and topdressing are required.

Take Home Message

Ultradwarfs have the potential to provide the highest quality putting surfaces possible at sites where bermudagrass is the preferred turf species. Hopefully, this article has given the reader some ideas about maintaining the new ultradwarfs. More importantly, we hope the reader will study up on

these new varieties and seek as much information as possible before problems arise.

Is Your Turf-Care Facility The Site of an Accident Waiting to Happen?

By Jim Baird

These were the words of the prosecutor in a recent court case in Australia that convicted the Warringah Golf Club and their former superintendent of criminal negligence. A pesticide used on the golf course was discharged from a spray tank onto an uncontained concrete wash pad that drained into a nearby creek. Contamination of the waterway resulted in the deaths of an estimated 10,000 fish and numerous waterfowl.

Could this happen on your golf course? Do you have a dilapidated turf-care facility and pesticide storage and containment areas that do not conform to environmental regulations? According to the legal brief in the these aforementioned case: "The evidence shows that a draft environmental policy and a master plan for the golf course were essentially not acted upon.

Furthermore, the President has given evidence that the board had in recent years focused on other matters in the belief that they had no responsibility in respect of environmental matters

and that it was entitled to delegate such responsibilities to management employees."

So ultimately who was responsible? The Club was ordered to pay approximately \$600,000 in fines, court fees, and costs of cleanup as well as installation of proper pesticide storage and handling facilities. The superintendent was sentenced to community service, had to pay substantial legal fees, and lost his job

If your facility needs improvement, now is the time to take the necessary measures to protect our environment and the game of golf. Consult your state or local environmental regulatory agencies for information on standards and specifications regarding the safe storage and handling of chemicals on the golf course.

This regional update and others written by the Green Section staff may be found on the USGA Web site at: www.usga.org/green.

Editor's Note: With recent studies showing high levels of arsenic (regardless of the source) in golfcourse soil and groundwater samples, regulators are taking harder looks at golf course operations and record-keeping. Expect more in-depth inspections in the future. Mix/load areas, pesticide storage facilities and wash-down pads are areas that need to be brought up to modern standards of containment and safety. Is your maintenance area an "accident waiting to happen?"

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