DNA fingerprinting pegs rogue cultivars

BY LARRY KIEFFER

TAMPA, Fla. — Developing techniques to identify "off-types" of Bermuda-grass through DNA analysis has become a market-driven research project in Florida. Superintendents in the state increasingly face job insecurity as these off-types appear on their golf courses, particularly on the greens.

The objective is to find a reliable means of verifying a cultivar before it is planted. With his job on the line, the superintendent wants to make sure he is getting what his boss is paying for.

"We have found that DNA fingerprinting has proved to be a powerful tool for identifying off-types in Tifway Bermuda-grass," said Dr. Phil Busey, one of four researchers with the University of Florida's Institute of Food and Agriculture.

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Biosolids gain favor

BY MARK LESLIE

OGUNQUIT, Maine — Nutrient-rich, disease-suppressant "biosolids" compost is gaining support and becoming a player in the world of golf course design and maintenance.

Some took notice when Firestone Country Club used a biosolid compost to rebuild its greens two years ago. Others have watched as several courses in Ohio purchased the Kurtz Bros. sludge compost product, Technigrow.

Now courses are contracting companies like Kurtz and Brown & Ferris Industries (BFI) to provide biosolids for the root-zone mix on greens in new course construction and

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Course marketing entering new media

• The Internet

BY PETER BLAIS

ST. GEORGE, Utah — Developers of a golf and residential community in southwest Utah have started their own web page to keep the 2,000 investors informed about the project's status on a daily basis.

Golf Ventures Inc., a publicly traded company specializing in golf and related real-estate development, is building Red Hawk International Golf Community, located 30 minutes from Zion National Park and 90 minutes from Las Vegas.

Through its web site — www.gvim.com — GVI keeps investors apprised of daily developments at the 670-acre project, home to a 27-hole Fred Couples/ Gene Bates-designed golf course, clubhouse, tennis facilities and 945 residences. The first phase, 18 holes and 114 dwelling units, should be completed by spring 1998.

"We use a digital camera to take photos and update them on the web page on a regular basis," com-

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PUBLIC GOLF FORUM

TV and Radio

BY MARK LESLIE

LINCOLNSHIRE, Ill. — Intimidated by the mere thought of doing a television or radio commercial — the dynamics, the costs, the stage fright — most golf course operators flee exclusively to other media to promote their facilities.

Resist no longer, urges Vince Alfonso Jr., president of Alfonso Creative Golf Enterprises in Williamsville, Ill. Alfonso will conduct a one-day seminar, "Marketing Your Course on TV and Radio," following the Public Golf Forum here this month.

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You want a fairway mower that comes from a large family.

That's the Toro Reelmaster® family. The most complete line of choices for every climate, type of turf and budget.

Its roots go back to our first reel mower in 1922.

It spawned a family that's kept on growing because Toro innovation is non stop.

To offer you the most advanced mowers for the finest quality of cut.

You want a fairway mower that comes from a large family.

Biosolids win proponents

Continued from page 1 for top dressing material.

"Increasingly, there is documentation showing advantages to compost," said Dr. Norm Hummel, a former Cornell University professor who has formed his own agronomic consulting firm. "One big advantage is, they are very rich in nutrients, so growing is much easier than with peat.

"Secondly, there is quite a bit of research documenting that these have tremendous disease-suppressive activity. It eliminates pythium root rot, which is a particular problem during the grow-in phase."

So Hummel supported the decision when golf course architect Brad Booth of Ogunquit investigated use of a BFI compost material in building one of his projects.

"It is a viable option," Hummel said. "We go through the same steps to decide the optimum mix ratio. And quality control is still a very important part of the process.

"On the down side," he added, "composts, as a rule, don't have the same amount of water-holding capacity that peats do in comparable amounts. Also, there is a big question about long-term stability because these composts... will continue to decompose and change in the profile. This happens with younger peats, like sphagnum peat moss. But some of the older ones — peat humuses and reedsedge — don't change as much."

John Kelly, BFI compost and product marketing sales manager in Portsmouth, N.H., said the product on Booth's project is made from municipal biosolids (wastewater treatment sludge). It goes through primary and secondary wastewater treatment, then is composted using a process from Holland called Gicom tunnel technology.

"We mix the biosolids with sawdust and sometimes add wood ash and a recycled short paper fiber," Kelly said. "We mix it up and put it inside chambers, cook it at over 130 degrees for two weeks, take it out of the chamber and cure it for two weeks. Then we age it from three months to a year, depending on the use [six months to a year for golf course quality]."

Kelly said the product's benefits are many — "a broad spectrum of nutrients, both primary and secondary; a natural, organic source of nitrogen; plenty of microbial action; disease-suppressant characteristics; and it's organic matter, which is hard to find now and golf course soils need to be replenished.

"It minimizes pesticide and fertilizer use," he added. "You're recycling. It's economical. It's readily available year-round. It's easy to use. It's a consistently produced, managed process, so you will get reliable, predictable results. And it's weed-seed free."

"This specs out very good," said Booth. "It has high microbial activity, and I'm pleased with its overall consistency."

Explaining why biosolids have been slow to gain supporters in the golf industry, Kelly said: "It takes time to gain the confidence of golf superintendents and educate golf course architects and construction people. Composting has taken hold in the last 10 years, but especially the last five."

Besides construction and re-construction projects, biosolids have been cited for success in top-dressing situations.

While his brother Jim is using the product at Lakewood Golf Course in Skowhegan, Maine, for constructing tees, Bob Browne of Natanic Country Club in Vassalboro, Maine, used it in top dressing to fight summer patch.

"I didn't have much luck growing grass in a wooded area," Bob Browne said. "I aerated, pulling the plugs in the fall and filled them with 100-percent compost. Come spring, we had good healthy grass.

"I think it's a great use for that product."

At the Sharaton Tara Golf Course in Danvers, Mass., superintendent Wally Orecchia mixed biosolids with his top dressing sand and reported the quickest turnaround he had ever seen in getting the greens in play.
A number of questions have plagued man over the years. But now, there is an answer to perhaps the most exasperating of all: What makes a golf hole great? Golf enthusiasts can see what the experts think are the best holes in golf and why, when Architect's Corner arrives at the American Society of Golf Course Architects' (ASGCA) website.

The new series is at http://www.golfdesign.org, and will feature each ASGCA member's favorite hole with a personal description and photo or illustration.

Architect's Corner will allow visitors to see what considerations architects face in their designs. Golf enthusiasts will be able to learn from each architect's expertise and vision of the behind-the-scenes planning and processes linking a hole from tee to green.

"This is a great way for our members to explain the subtle details that really separate a good hole from a great one," said Denis Griffiths, ASGCA president. "It will teach more golfers about course design and hopefully help them further appreciate this wonderful game."