



Paspalum's pitch to bypass bermuda

Commercial cultivars use less fertilizer, drink brackish water

By Chris Harrison

Seashore Paspalum is making its bid to bypass bermudagrass as the favorite turfgrass in the Coastal South and other arid, salty areas.

"Our biggest weed problem is keeping out wild bermudagrass," says Chuck Pula, park and recreation director for the City of Winter Springs in Central Florida. He has about a dozen paspalum ball fields (including soccer, football, baseball, and lacrosse) in two different Paspalum cultivars: SeaDwarf and SeaIsle-1.

"It's not perfect, but it is one tough grass that takes off fast and does well," he adds. "It definitely needs to be aerated through the season or you get 'witches broom' – round clumps where it tightens up."

He learned that lesson the hard way in 2006 when a labor situation forced cutbacks in the usual maintenance program.

University researchers agree that, despite some challenges to be addressed by anyone growing seashore paspalum, it is a variety to be reckoned with in any hot area where saltwater intrusion or brackish irrigation water is a problem.

Pula draws fresh water for their fields from nearby Lake Jessup, but does not necessarily see that as good news. "I wish the water had some salt in it, it would help us keep weeds down."

He finds salt, whether granular, rock or heated and applied as a liquid, is the best herbicide against bermudagrass intrusion. "It gives us a quick hit, but the bermuda does come back," he says. The rock salt

gave him problems for the first time this past year when it was applied late to football fields and it did not get watered in fast enough. "The kids were eating it, tossing it at each other, and complained that it hurt when they fell on it," he says.

The book on paspalum is that the grass performs well in salty conditions, requires much less N fertilizer than bermudagrass. Golf course superintendents find it plays nicely once the players overcome their shock at seeing an upright grass. In fact, some golfers like the mini-tee effect that paspalum's upright stance gives.

Georgia Plant Breeder Paul Raymer called paspalum "Bermudagrass on steroids." Indeed, it shows great grow-in speed and recovery when stressed. "It is the last warm-season grass

to go dormant. It can be overseeded. It produces few viable seedheads," Raymer says.

Planting technique

Seashore paspalum can be planted as sod, sprigs, plugs, or sod-to-sprigs. Plugs are the least desirable as plugs have been trained to grow in a confined space and are less aggressive at grow-in. The preferred methods of installation are sod and sprigs. Like other grasses, paspalum sod comes in rolls or as flat slabs delivered on pallets. Sprigs are cut at the sod farm into pieces with live roots attached and are spread out on the soil at the project site.

Pula, who had SeaIsle-1 on football and soccer fields for over three years and

SeaDwarf on a huge complex that includes football and lacrosse fields, says the grass has held up well. He has a field in the new Aloha variety and feels it and SeaIsle-1 do better than the SeaDwarf, which seems to require more water.

They sodded their water retention basins. Elsewhere they sprigged the fields.

"Grow-in was fantastic," Pula says. "It was amazing how quickly the sprigs ran." The playing fields, sprigged in late March, were ready to play by August 1.

A new method of installation called sod-to-sprigs is gaining popularity. This method takes live sod and cuts it into sprigs on the project site. The idea is that the sod-to-sprigs method delivers more live material at the site. Once

"PASPALUM IS BERMUDAGRASS ON STEROIDS."
- RAYMER



Photos courtesy of City of Winter Springs (FL) Parks and Recreation

the sod material is chopped into individual sprigs, it is spread onto the soil, cut into the soil and then watered.

The University of Florida says sprigging rates should range from 5-10 bushels per 1,000 square feet. The best time for establishment is during periods of most active growth, when temperatures exceed 70 degrees.

In the height of the growing season, paspalum looks good, too. The "Wow!" factor is cited by almost everyone who has either planted paspalum or has done research on the grass.

"Paspalum is so hot because it is so pretty," says Lou Conzelmann of WCI Communities, developer of Tuscany Reserve in Naples, FL. This is an upper-end housing development that is built around a golf course. Paspalum is used throughout.

Golf courses love the stuff. In fact, the SeaDwarf cultivar was featured on a couple of different shows in last fall on the Golf Channel. Episodes of Playing Lessons with the Pros were taped at the Tuscany Reserve Course and Old Palm, Palm Beach Gardens, FL. Both are tee-to-green SeaDwarf courses.

Fertility

Todd Lowe, USGA Florida region agronomist, notes that paspalum does well at rates of 3-6 pounds N per thousand per year. "But be sure to keep the K, and micronutrients like Fe, Mn, Ca and Mg under control," he advises.

Clemson Turfgrass Specialist Bert McCarty says a lot of Ca is required, 15 pounds per 1000 per month, at the high end but much less in the summer. He recommended a light verticutting at 0.8 to 1.6 mm, weekly and aerification three to five times a year. "Remove the cores, topdress," McCarty said. "Go deep, say eight inches, once a year."

Like any other grass, there are diseases to deal with. Dave Spak of Bayer Crop Sciences says turf managers can expect good results with Tartan at two ounces and Signature at four ounces on greens at the Hammock Bay Golf & Country Club, Naples, FL to treat large patch. Superintendent Rodney Whisman agreed that the treated greens were two of his worse. "Now they are the two best," he said.

"At \$200 per acre, Tartan won't break the bank," Spak notes.

Identifying materials to help control diseases will be a key factor in paspalum's success. Clemson Plant Pathologist Bruce Martin noted that large patch, dollar spot, pythium blight and root rots, leaf spot, fairy ring and perhaps fusarium patch all will hit paspalum. So will sting, lance, stubby root and other nematodes.

"Preventive treatment is definitely better on large patch," Martin said. "Curative is not the way to go." As with any grass, the way to reduce problems is to minimize organic matter, maintain consistent water, use wetting agents, and aerify.

Grow-in

Establishment of sod during periods of hot, dry weather requires frequent light irrigation until new roots are established in the native soil. Normally, one to two irrigations, or rainfall with a total application of 0.1 to 0.3 inches per day, will be adequate during the first couple of

weeks. If the weather turns cloudy or cool, the grass requires less water and less frequent irrigation than it will during hot, dry weather.

Irrigation frequency should be reduced after roots become established in the native soil. Root establishment can be determined by lifting a corner of the sod and observing the root formation or the degree to which the roots have attached the sod to the underlying soil.

Some turf managers have trouble remembering that seashore paspalum requires more frequent irrigation during establishment than during the rest of its lifetime. In fact, it is important that sports turf managers be aware that general maintenance requirements for water on paspalum are much less than at grow-in or for most other turfgrass varieties.

Manatee County, FL turf producer Rex Cunningham produces the Aloha, 2000, and SeaIsle varieties of Seashore Paspalum. He says that paspalum has the same group of insect pests one would find with zoysia or bermudagrass: sod webworm, armyworm, billbugs and mole crickets. He uses a cheap test for insects.

"Put some lemon soap in a five-gallon bucket and put it on the turf," he says. It brings the insects up for air. It is a pretty cheap test to use when you see signs of insects."

Armyworm can be a bear to fight. "We had an armyworm invasion and it saved me about three weeks worth of mowing," Cunningham quips ruefully.

TOUGH stuff

Perhaps one of the toughest tests a grass can get is to have cars driving on it. At the sports complex in the City of Winter Springs, SeaDwarf paspalum is planted on the parking areas.

"It does very well, even in the traffic lanes," Chuck Pula says.

This past July 4, the city held a big event. Pula was forced to allow parking on the sports fields in addition to the usual areas. That would be death to bermudagrass. "We had 850 cars parked right on the sports fields. It was incredible to see how well the paspalum held up."

Even in areas with oil drips or where people had let their engines run and the grass got overheated, it bounced back fast. "It recuperates well," Pula concludes. "It's not going away."

"IT'S NOT PERFECT, BUT IT IS ONE TOUGH GRASS THAT TAKES OFF FAST AND DOES WELL." - PULA

For Chuck Pula, cutworm has been the biggest problem, especially on fresh turf. "Unless you see it right away and make an expert determination that it's cutworm, the field will go brown in three days," he says.

Damage looks like a chemical overspray or fertilizer mistake. Often the brown area has straight lines. They applied Lesco's liquid insecticide or Precise in granular form to take care of the cutworm.

Some negatives

Paspalum is a great grass in season. On the flip side, its dormant color is a dirty brown. Some feel that is less attractive than dormant zoysia.

Another factor to keep in mind is that those planting Paspalum are on the "bleeding edge" of a new variety. While its ability to tolerate a variety of stresses has driven the success of paspalum so far, agronomists note that individual varieties show broad variation in their ability to cope with different stresses.

"There has been a lag in research with seashore paspalum," says Tim Murphy, University of Georgia weed specialist. "We need to know

what pests - weeds, insects and diseases - are affecting it. One challenge is that many paspalums that are close relatives of seashore paspalum are considered weeds.

The good news is we are now seeing seashore paspalum included on (weed and insect control) labels," Murphy adds.

At least three pre-emergence and four post-emergence materials are available for weed control. And chemical companies are looking to label more materials.

Paspalum has had some legal problems, too.

Legal resolution

As if agronomic challenges are not enough, seashore paspalum producers had some marketing problems. Those, however, are resolved and should trouble growers no more.

SeaDwarf Paspalum is one of the nicer commercial varieties. There were questions over patent, marketing and licensing rights to SeaDwarf Seashore Paspalum. The principals resolved them this past Spring.

In a joint statement, Environmental Turf Inc. (ETI), Fort Pierce, FL; and SFR Holding Company Inc., Denver announced an agreement settling the dispute over who had the authority to license the grass and sell the right to SeaDwarf to a third party.

SeaDwarf was developed by Stewart T. Bennett, Michael Depew and Paul Tillman. In the early days, Bennett, as president of the original company, granted a master domestic license and master worldwide license to ETI, while Depew and Tillman, as majority shareholders and the majority of the Board of Directors, sold SeaDwarf's patent and trademark to a precursor of SFR Holdings. Subsequently, a dispute arose among the stakeholders as to which company had the rights.

The terms of the agreement say that SFR holds the trademark and the exclusive patent on SeaDwarf with ETI having all rights to the trademark and patent as the Master Licensor. SFR retains the rights to sublicense, propagate, distribute, market and sell SeaDwarf in Mexico and is currently developing a network of licensed SeaDwarf sod producers in Mexico.

ETI holds the exclusive patent rights and marketing rights as Master Licensor to sublicense sod growers to propagate, distribute, market and sell both domestically and internationally. This means that ETI is the central source and marketing company for SeaDwarf in the U.S. and worldwide, with SFR acting as the licensing agent for growers in Mexico in cooperation with ETI. The status of all sod producers currently licensed in the U.S. and internationally by ETI remains unchanged.

Going forward, ETI will support SFR and all SeaDwarf producers in Mexico. Environmental Turf licensees may sell/import SeaDwarf into any country.

Chris Harrison is a free lance writer who specializes in turf subjects. ■

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