MAINTENANCE

Paspalum could be the problem-solver of new grasses

By MARK LESLIE Year 2000 Grass.

That's what Dr. Ronny Duncan calls seashore paspalum. The grass of the future — of the next millenium.

The University of Georgia plant breeder and stress physiologist is studying the grass species under a grant from the U.S. Golf Association's Green Section, and he is excited about its possibilities.

According to Duncan, seashore paspalum:

• Grows in pH soil from extremely acidic 4.0 to highly alkaline 9.8.

Grows naturally along the ocean, so is unaffected by salt water and periodic water-logging.
Requires fewer pesticides

than most other grasses. • Possesses drought resistance

equal to centipedegrass and hybrid Bermudagrasses.

• Not only is hardy against effluent water but will withstand heavy metals like nickel and cadmium.

• Stands up to temperatures as cold as 15 degrees Fahrenheit.

• Has very fine-textured cultivars that can be mowed to oneeighth inch height.

• And in addition to all that, it uses about one-fourth the fertilizer Bermudagrass requires and one-tenth that for bentgrass.

"It's adaptability is tremendous," Duncan said. "Bermudagrasses have their niche. Bentgrasses have their niche. Tall fescues have their niche. If you go a little bit outside that niche, they're all right, but go far out and they're in trouble.

"I've never seen a grass with this [paspalum's] versatility. It's unlimited as to what we can do with it. It seems to be well adapted to a number of environmental stresses."

Superintendents at the handful of golf courses that have seashore paspalum rave about it.

"When the tide gets really high, it almost covers half our No. 4 fairway, and when it recedes the grass shows little or no effect," said Gary Miles, an 18-hole supervisor at Sea Island on St. Simons Island, Ga.

"It's very salt-tolerant," said Robert Antal, the superintendent until May 3 at Alden Pines Country Club in Pine Island, Fla., where he has tended seashore paspalum tees, greens and fairways for six years. "We had a storm a couple of weeks ago. Four fairways were under water for a couple of days. It browned up a little, but within four days it was green again.

"My course looks as nice as any around. When people come down here they think we've overseeded." At Sea Island, paspalum was native to the site.

"It is competing equally well with Tifdwarf," Duncan said. "Neither one has a competitive advantage. They look very similar. After you separate them, you can see subtle differences."

"This grass has a tremendous amount of potential," said Duncan. "It looks like it's going to be that **16** *May 1993* Year 2000 Grass we're looking for when all the [environmental] regulations come down.

"It will have the capability of being grown on greens, tees and fairways. We expect maintenance requirements and overhead costs to be substantially lower with this grass and others that are currently available."

Antal, who on May 3 began a new job at Golden Hills Country Club in Ocala, Fla., said the paspalum at Alden Pines is "super in the winter, but a bit tough to maintain in the summer, basically because it grows so fast."

Duncan said he has some cultivars of seashore paspalum that are "much, much better" than the type at Alden Pines.

Duncan began his research with six cultivars, and now has 30, ranging in quality from St. Augustine-like to Tifdwarf Bermuda-like.

He expects to release perhaps three or four fine-textured cultivars "some years down the road." The major characteristic of the

grass he wants to improve is cold

tolerance.

Duncan said breeders have been able to improve cold tolerance on other species by 10 degrees. If he can do the same with seashore paspalum, it will be tolerant to 5 degrees. Yet he is targeting zero degrees. "That's Year 2000 Grass," he said. "That's shooting for the moon and hoping to hit it. But we have to have some type of target to shoot for."

Today, paspalum's living range is close to Bermudagrass'. It does not survive well much north of At-



Dr. Ronny Duncan times called seashore

siltgrass or couchgrass, seashore paspalum is native in America along the coast from North Carolina to Florida, along the Gulf Coast, and along the Baha Peninsula area north a bit past Los Angeles. It also grows in the Caribbean, Central America, Africa and Australia.

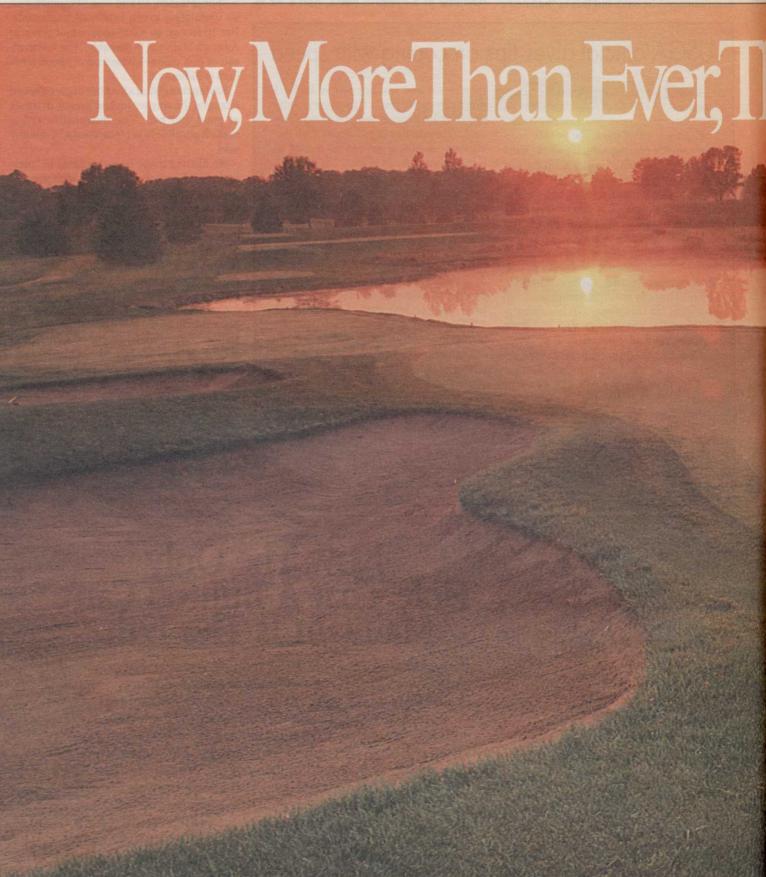
lanta. Six-degree tolerance would

substantially

expand that

Some

region.



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