

Bent on improvement

Prestige the siren call for bentgrass breeders, seed firms

By MARK LESLIE

Glamour. That's what bentgrasses spell in the world of golf.

The market size is minuscule compared to other species of turfgrass. Yet, more and more companies are vying for that tiny piece. Why?

• "I don't know. I think they have to learn their lesson," said Bill L. Rose, president of Tee-2-Green Corp., who has had nearly a corner on the market for 30 years with Pennncross and its sister cultivars. "Two hundred pounds of seed can supply a whole golf course. The new construction isn't a big market. But everybody can't wait to get in it."

• "It doesn't make sense," said Dr. Milt Engelke of Texas AM. "I wouldn't put bentgrass high on my list if I were starting a business, because of the cost of creating such a variety and the limited market. I'd spend my time on something you can get volume out of."

• "Glamour, absolutely," said Steve Tubbs, vice president of Turf Merchants. "All of a sudden, it's a churning pot, and everybody wants to get into the act. It's the smallest, most elite market of cool-season turfgrasses. There's a little tiny piece of the pie and everybody's going after it, with probably more products than have existed until now."

There appears to be an industry feeling that producing a bentgrass legitimizes a seed company. But it is a dangerous market to enter.

Superintendents' jobs are on the line with bentgrasses more than any other turf, said Kevin Morris, director of the National Turfgrass Federation and its National



Suddenly, the market is overflowing with bentgrass cultivars. Here, experimental bents are compared with some existing varieties.

Oregon State University reports there are 3,975 acres of certified creeping bentgrass being grown in 1994. By comparison, 78,000 certified acres of perennial ryegrass are being grown. Averaging 500 pounds of seed per acre, the entire crop of bentgrass will be 2 million pounds. Perennial rye, averaging 1,500 pounds, will be upwards of 140 million to 150 million pounds.

Turfgrass Evaluation Program, run under the U.S. Department of Agriculture in Beltsville, Md.

Therefore, "they have been reluctant to try something new on a large scale. It's been difficult for seed companies to break into that market because Pennncross is so established."

"If a superintendent has good greens, he keeps his job. If he doesn't, he loses it," Rose said simply.

Testing is long and tedious — but necessary — in this world of bentgrass.

"It is such a sophisticated market, you can't just blow into it and make a lot of promises that you can't back up," said Tubbs. "These grasses have to be tested and tried for years before some

golf course guy puts his whole course at risk."

But Tubbs warned that this striving for glamour may lead to disaster.

"Seed Research of Oregon, Lofts, Pickseed West, International Seeds, Jacklin, TMI... they're all coming out with their own bentgrasses," he said. "Suddenly it's pandemonium. It will be just like we've done to the tall fescue or perennial rye market. There will be too many players, selling underprice. So it will remove the last remaining, profitable market in the cool-season turf business."

Will anyone win?

"It depends on the person who can make their product the most profitable for a distributor to sell," he said.

Colonial types show positive results in lower input uses



By MARK LESLIE

BELTSVILLE, Md. — The latest national bentgrass trials taught turfgrass breeders a lot about colonial bentgrasses, including some things that may lead to its increased use for certain areas, according to Kevin Morris, director of the U.S. Department of Agriculture's National Turfgrass Evaluation Program here.

Since colonial bents are a bunch-type grass, they are most often passed over for the creeping-type bents which provide better putting surfaces. But colonials have their own favorable attributes, Morris said.

"They have good dollar spot resistance and good winter color. And they tend to require, in general, less maintenance than creeping, less water and less fertilizer," he said.

On the down side, colonials tend to be more susceptible to brown patch and don't respond as well to lower height of cut, Morris said.

"We're looking at alternatives: low-input fairway grasses," said Skip Lynch, marketing director of Seed Research of Oregon. "There are big bonuses with colonial bents."

"In the Pacific Northwest, the fashion now is to combine perennial ryegrasses with colonial bents for fairways and tees," Lynch said.

"They make a wonderful surface. It's probably a more fair playing surface for the higher-handicap players than creeping bentgrasses. A high-handicapper can't 'pinch' a ball like a low-handicapper. The result is a fairer lie for that high-handicapper."

Researchers reap seed harvest in China

By PETER BLAIS

PEOPLES REPUBLIC OF CHINA — The roads may be a mess and agricultural technology behind the times. But the PRC has one of the best phone systems in the world.

Why?

"China didn't have to go through the learning curve we did in the United States," said Dr. Milton Engelke, one of four U.S. researchers who spent three weeks last summer collecting various turfgrasses in south and central China. "There are no telephone poles or underground cable lines. The phone system is relatively new and calls are made via microwave."

Likewise, the Chinese golf industry will benefit from its late entry into the game and the efforts of researchers like Engelke. The Texas A&M University professor expects last summer's turf search to result in new strains of grass that will show up in China within the next five to seven years.

Some of the 15 species of turfgrasses collected in China were the equivalent of the best found in the United States.

— Charles Taliaferro
Okla. State University

"China won't have to use the old, common turfgrasses U.S. courses have worked with for years. New Chinese courses will have state-of-the-art grasses from day one," Engelke said.

Engelke, U.S. Golf Association Green Section Research Director Michael Kenna and Oklahoma State University professors Charles Taliaferro and Ronald Tryl visited the city of Beijing and four provinces — Guangdong, Yunnan, Sichuan and Jiangsu. They collected 107 germplasm samples during their three-week tour.

Of the 15 species collected,

most were Bermudagrass. Some were the equivalent of the best turfgrasses found in the United States, according to Taliaferro. That came as no surprise to Kenna, who noted that China and the United States have similar landmasses and locations relative to the equator.

The researchers found the warm-season turf everywhere, even at altitudes over 6,000 feet in portions of northwest Yunnan Province and as far north as 45 degrees latitude.

"Grasses from those areas could prove very useful for breeding in cold hardiness," Taliaferro said.

Zoysia was prevalent along the coast, but rarely inland. That surprised the team, since zoysia is common in inland Korea, Taiwan, Japan, Indonesia and the Philippines, Kenna said.

"We were disappointed in the amounts of zoysia and Stenotaphrum species found," the

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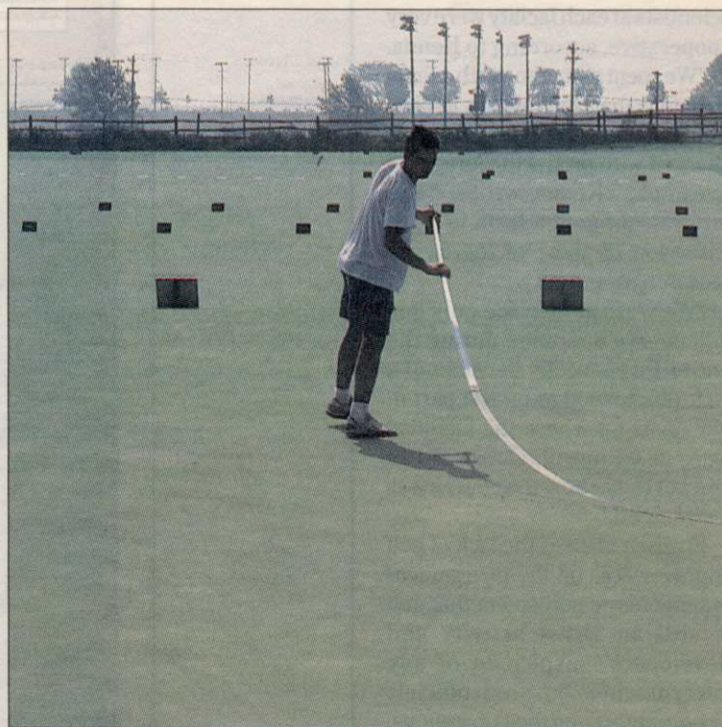


Photo courtesy of Larry Kassell, Tee-2-Green Corp.

TRIAL BY FIRE

A researcher sprays water onto the bentgrass trial plots at Pennsylvania State University. The test fields around the country are maintained at high-intensity levels similar to those found on golf courses. These tests will make it easier for emerging golf countries to choose the best cultivars. As Dr. Milt Engelke said: "New Chinese courses will have state-of-the-art grasses from day one." (See story at left.)

China has 'wealth' of material thought useful to the West

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USGA representative wrote in his report to the U.S. Department of Agriculture, the agency that sponsored the trip.

"Most of the Zoysia material found had been imported into the PRC [Peoples Republic of China] from adjacent South China Sea countries, although some of the collections were likely indigenous types."

Added Engelke: "We collected some zoysiagrasses we'd never seen before. Zoysias will play an increasingly important part on U.S. courses."

The team also collected specimens of bentgrass, centipedegrass and even buffalograss apparently imported from the United States several years earlier.

Collecting germplasm was one of two purposes of the trip. The other was to develop cooperative relationships with Chinese plant scientists that would foster further interaction in turfgrass research programs in both countries.

"Everybody gains by sharing our [U.S.] talents [turfgrass expertise] and their resources to develop new varieties. The Chinese end up with state-of-the-art grasses without the development costs and we end up with better turf for U.S. courses," Engelke said.

The Americans spoke to scientists at the South China Agricultural University in Guangzhou; Xiaoshiao Grass Research Center in Xindian County, Yunnan Province; Kunming Institute of Botany; Nanjing Agricultural University; Jiangsu Jurong Agricultural School; Green Sea Turfgrass Construction Co. in Nanjing; and the PRC National Germplasm Facility.

Their Chinese hosts and the scientists at each facility were very cooperative, according to Kenna.

"We spent more time with animal scientists than with plant scientists because animal husbandry is charged with producing forage for livestock," Kenna wrote. "The turfgrass programs seem to be an extension of some of the forage research programs."

"We were able to see only one golf course operation during the entire three weeks because of a lack of knowledge on the part of our hosts on where the facilities were or an unwillingness to call and get to see how the course was maintained."

Engelke blamed the lack of golf course access on the government bureaucracy's perception that golf is still an elitist activity and developers' suspicions of any government-sponsored officials wandering around their operations. The one they did see had been under construction five years, slowed by government regulations and lack of infrastructure. Some earthmoving had been completed for the driving range while the course opening is likely years away, Kena said.

There are only about 20 golf courses in China, although dozens more are on the drawing board. It is often seen as the next boom area for Asia-Pacific golf development

"As the Chinese golf industry develops, they will need the cooperation of the Western turfgrass industry," Taliaferro said. "They have a wealth of genetic material that Western scientists would love to examine."

"Fostering cooperation between scientists and industry

'We collected some zoysiagrasses we'd never seen before. Zoysias will play an increasingly important part on U.S. courses.'

— Dr. Milt Engelke

in the two countries couldn't help but aid the Chinese. They are importing golf course grasses

now and paying little attention to what they have right there."

Engelke hopes to return in 1995 to the north coast between Shanghai and Beijing "where we know there are zoysiagrasses with the characteristics and texture we're looking for."

"It was a successful trip," Taliaferro said, "because it provided a basis for future germplasm collections and established substantive relationships between scientists in the two countries."

Creeping bent #1 in Oregon

SALEM, Ore. — Creeping bentgrass is the highest value farm commodity produced in Oregon, according to the state's Department of Agriculture and Marketing Division. Average grass seed from the Willamette Valley has a value of \$1,500 per ton, whereas creeping bent can be valued as high as \$30,000 per ton in places like Japan.



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Okayama, Japan

Garrett Deck, Golf Course Superintendent
The Harvest Golf Course
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Oak Hill Country Club
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