Zoysia: a grass for the future — and not just on golf courses

New seeded zoysias will fit in because of lower prices and even lower management requirements.

■ Does zoysiagrass have a future in the green industry—not only on golf courses, but also on athletic fields and home lawns?

Dr. Milt Engelke of Texas A&M University says it does.

"The future is real bright," says Engelke. "This grass is greatly under-used. It, along with buffalograss, will be politically and environmentally 'correct' in the next few years."

Engelke: sees zoysia popularity spreading

Engelke, whose research has led to a "DALZ" series of experimental cultivars, thinks that consumer education will determine how widely the zoysias are actually accepted.

"Right now, one of the biggest problems is cost; it's extremely expensive," Engelke says. But he further notes that zoysia's initial costs are eventually offset by low maintenance costs, including much less water.

"The new zoysias," he adds, "will be far more cost-effective as production time is reduced. We'll see more zoysia in home lawns and athletic fields as the cost comes down. Education will be the bottom line. And it'll take a decade for us to properly educate the consumer."

Zoysiagrass is native to Asia, but is well adapted to warm humid and transition areas of the U.S. It begins to go dormant at about 55° F. Engelke believes that, given time, its popularity may also spread to the southern and western U.S.

Adjectives most often used to describe zoysia are uniform, dense and low-growing. Because of its density, zoysia has superior resistance to weeds. Its stems and leaves are tough and stiff, resulting in excellent playability on golf course fairways.

Success on the course—Golf course superintendents near Kansas City and in Tennessee rave about zoysia's performance on fairways.

Members of Lawrence, Kansas's Alvamar Golf & Country Club, where Dick Stuntz is superintendent, find the zoysia to their liking. And Stuntz appreciates the fact that "if you keep nitrogen applications down and control traffic, you can turn the water off."

He cuts his fairways at 1/2 inch, three times a week, and applies pesticides only when necessary.

"The vast majority of our areas have tolerated the low height of cut very well," he observes. "I'm headed for 3/8ths of an inch—not for playability, but for thatch control."

Here is the program his zoysia is on:

- **Fertilization:** 1 to 2 lbs. N per 1000 sq. ft. per season; 3 to 4 lbs. K_2O per 1000 sq. ft. per season
- **Poa control:** Roundup at 24 oz. per acre
- **Weed control:** pendimethalin at 1 1/2 lbs. per acre, twice per season (April 1-15 and May/June)
- **Post-emergence crabgrass control:** Daconate at 1 to 2 oz. per 1000 sq. ft.
- **White clover control:** Banvel 4S at 32 oz. per acre
- **White grub control:** trichlorfon at the third instar stage (when damage is detected) with pre- and post-irrigation

In order to avoid winterkill, Stuntz's program includes:

1. Eliminate cart traffic, if possible.
2. Around Sept. 15, raise height of cut to 3/4 or 7/8 inch.
3. Use adequate K_2O.
4. Make sure drainage is adequate.

David Stone at The Honors Course, Ooltewah, Tenn., finds the biggest problem is keeping bermudagrass out of his zoysia fairways. He uses a variety of bermudagrass herbicides to get good results, when applied four times per year (June 1, July 1, Aug. 1, Sept. 1).

Stone: bermuda encroachment a problem

"You can never totally eliminate the bermuda in our area, but you can totally control it," he claims.

Besides the work being done at Texas A&M University, Jack Murray in Florida is also conducting research on seeded zoysias, which would make the grass more practical for a wider range of uses.

Says Engelke: "The biggest problem with zoysiagrass is management. Most people over-manage it. But I see zoysia becoming much more dominant in the next decade, and seeded zoysias will fit in because of even lower management requirements."

—Jerry Roche

—The American Zoysiagrass Association is a new organization working on raising the consciousness level of the turfgrass industry toward the zoysias. For more information, contact Frank Whitbeck at Windrock Grass Farms, Little Rock, Ark.: (800) 225-0303.

Advantages	Disadvantages
✓ Heat/cold tolerant	x Slow recovery
✓ Slow upright growth	x Weak color
✓ High quality surface	x Susceptible to winterkill
✓ Disease resistant	x Thatch accumulation
✓ Drought tolerant	x Production drawbacks (establishment, regrowth, repair)
✓ Low water use	x Growth cycle
✓ Low nutrition requirements	x Compacts easly
✓ Tolerant to salt water	x Damaged by nematodes
✓ Wear tolerant	

Sources: Dr. Milt Engelke, Dick Stuntz