Texas A&M’s White making strides toward more stress-tolerant bentgrass

Richard White is an associate professor in turfgrass pathology and management at Texas A&M University in College Station. He is currently testing new bentgrass varieties that are supposedly more tolerant to the higher temperature and moisture levels found in humid Southern states, similar to the conditions found at Texas A&M located 90 miles northwest of Houston.

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Golf Course News: What grasses are you working with?

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What makes College Station a good area to test these grasses?

R.W: Water management is a critical issue here. It’s actually easier to grow bentgrass in the hotter, drier states like New Mexico or Arizona than it is in slightly cooler but more-humid areas like this. The evaporative demand in desert states can be measured routinely and an appropriate amount of water applied to make up for water loss.

But in a humid area, the course manager tends to over water. With soil moisture near capacity, many detrimental effects. Plants in high soil-moisture areas have less leaf water potential. That makes them less able to take up moisture through the roots than grass in arid climates. The result is reduced photosynthesis and not as much energy for the plant.

G.N.C: Are you doing any other bentgrass research?

R.W: We’re looking at a number of bentgrass blends to try to take advantage of any genetic diversity that would make them more tolerant of summer stresses. Among those we’re looking at are Mariner, Crenshaw, A-4, Loft’s L-93 and Penncross.

Blends have been used in other types of cool-season grasses, but not traditionally with bentgrasses. We’re hoping to develop blends that are more disease-resistant and allow decreased fungicide applications.

G.N.C: What are the potential problems associated with bentgrass blends?

R.W: Different varieties have different colors and textures. One variety could grow well on a particular part of a green and another on a different part. The different varieties could segregate themselves into different areas of a green and rather than a uniform-appearing putting surface, you could end up with a mottled look. It wouldn’t affect the putting quality much. It would be more of an aesthetic thing.

G.N.C: Will more Southern courses be putting in bentgrass?

R.W: Falcon Point in Katy is using bentgrass, but that’s about it around here. In fact, many courses that had bentgrass are switching back to Bermuda-grass. It’s not our intent to reverse that conversion. College Station just happens to be an excellent testing area. If we can find some bentgrasses that are successful here, we know they’ll succeed in areas that place less stress on bents.

AUDUBON CANADA EXPANDS
COLLINGWOOD, Ont., Canada — Scott Martin, national coordinator for Canada’s Audubon Cooperative Sanctuary System (ACSS), reports there are now more than 170 Canadian courses signed on with ACSS. Twenty-five have joined since Martin was hired in February. He can be contacted at the following address: 115 First Street, Suite 116, Collingwood, Ontario, Canada, L9Y 1A5. Telephone: 705-429-2277; fax: 705-429-1435; email: acss@cois.on.ca

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