

USGA funds \$4.15 million in new research over 5 years

By Peter Blais

Turfgrass breeding will be the main focus of the \$4.15 million in research money the United States Golf Association Green Section will award over the next five years.

The USGA Executive Committee approved 19 projects totaling \$2.36 million at its spring meeting, according to Green Section National Director Jim Snow. The remaining \$1.79 million will be awarded over the next five years as projects progress and the need for additional research in other

areas materializes.

The five-year funding program covers the years 1993-97 and coincides with the end of the USGA's 10-year research program that concludes this year, Snow said.

"Turfgrass breeding was by far the single biggest recipient of funding in the initial round," the USGA national director said. "We're looking for grasses that use less water and fewer chemicals. Those projects received \$1.63 million of the \$2.36 million awarded so far. Most projects are

funded for five years."

But Snow expects the bulk of the remaining money to eventually find its way to research in the other three areas — alternative pest management programs, turfgrass stress resistance through biotechnological methods, and cultural practices (the effects of using effluent irrigation water, for example).

Researchers receiving funding and their projects were:

- Dr. Peter Day, Cook Col-

lege, Rutgers University, "Development of improved turfgrass with herbicide resistance and enhanced disease resistance through transformation."

- Dr. Milton Engelke, Texas A&M University, "1.) Breeding and development of bentgrass, and, 2.) Breeding and development of zoysiagrass."

- Dr. Read Funk, Cook College, Rutgers, "Breeding and evaluation of Kentucky bluegrass, tall fescue, perennial ryegrass and bentgrass

for golf turf.

- Dr. Glenn Burton, University of Georgia, United States Department of Agriculture, "Bermudagrass breeding — vegetative."

- Dr. Charles Taliaferro, Oklahoma State University, "Breeding and evaluation of improved turf Bermudagrass varieties."

- Dr. James Read, Texas A&M, "Interspecific hybridization of poa pratensis (Kentucky bluegrass) and P. arachnifera (Texas bluegrass) for development of heat and drought tolerant bluegrasses."

- Dr. Terrance Riordan, University of Nebraska, "Buffalograss: breeding and management for water and energy efficient golf course turf."

- Dr. Bridget Ruemmele, University of Rhode Island, "Colonial bentgrass (Agrostis tenuis) breeding and cultivar development."

- Dr. Ron Duncan, Georgia Experiment Station, "Development of stress tolerant sea-shore paspalum for golf course usage."

- Dr. Donald White, University of Minnesota, "Improvement of poa reptans for golf turf."

- Dr. Donald Kobayashi, Rutgers, "Identification of parasitic bacteria as biological control agents against summer patch disease."

- Dr. Jeffrey Krans, Mississippi State University, "The Recovery of Rhizoctonia solani resistant creeping bentgrass germplasm using the host-pathogen interaction system."

- Dr. Sam Ha, Virginia Polytechnic Institute, "Development of genetically engineered creeping bentgrass resistant to fungal disease."

- Dr. Daniel Bowman, University of Nevada, Reno, "Characterization of water-use requirements and gas exchange of buffalograss turf."

- Dr. Robert Carrow, Georgia Experiment Station, "Seeded Bermudagrass water use, rooting, and shoot growth under soil stresses."

- Dr. Charles Mancino, University of Arizona, "Turfgrass irrigation with municipal effluent, organic contaminants, nitrogen fate, turf Kc values and water requirements."

- Dr. William Vance Baird, Clemson University, "Low temperature and drought-related gene expression in Bermudagrass."

- Dr. Richard White, North Carolina State University, "Physiological basis for selection and maintenance of bentgrass with superior drought resistance."

- Dr. Noel Jackson, University of Rhode Island, "Use of VA Mycorrhizae in establishment and maintenance of greens turf."

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