

RUTGERS UNIVERSITY

**Breeding and Evaluation of Kentucky Bluegrass, Tall Fescue,
Perennial Ryegrass, and Bentgrass for Golf Turf**

1991 Research Grant: \$ 5,000
(Ongoing support)

Dr. C. Reed Funk
Principal Investigator

This extensive program continues to collect, evaluate, enhance, and preserve turfgrass germplasm and participate in the development of turfgrass cultivars with improved stress tolerance, increased persistence, greater pest resistance, and reduced maintenance requirements.

Dr. Funk has also cooperated in the evaluation of colonial bentgrass breeding materials from DSIR-New Zealand. He has agreed to maintain these materials until a breeding program in the USA can be identified.

(Please Note; The Turfgrass Research Committee is proud to continue its support of Dr. Funk's prolific breeding program. The Committee's small grant covers but a small fraction of the costs of the program.)

ST. SIMONS ISLAND, GEORGIA

Mole Cricket Pheromones

1991 Research Grant: \$10,000
(Completed)

Dr. A. Leon Stacey
Principal Investigator

The objective of this project was to isolate and utilize pheromones to affect mole cricket population dynamics on golf courses. Biologically active materials were found and, with further refinements, may be produced for commercial marketing. No previous research has been done with mole cricket pheromones. The current research could potentially develop into a new and environmentally sound approach to managing turf insect pests.

Various glands and body parts were dissected from both male and female crickets. During the cricket flight season, acetone homogenate of the spermatheca (♀ crickets) and an unknown gland (♂ crickets) were biologically active and appeared to act as attractants (sex or aggregating pheromones). An alarm substance from the rectum (♀ and ♂) significantly reduced "fly-in" crickets. Currently, cooperation from the USDA-ARS research center in Peoria, Illinois is under consideration to determine the chemistry of these pheromones.