



INSTITUTE OF FOOD AND
AGRICULTURAL SCIENCES
UNIVERSITY OF FLORIDA

FLORIDA
COOPERATIVE
EXTENSION SERVICE

GOLF TURF NEWS

By BRUCE J. AUGUSTIN AND ED FREEMAN
IFAS, University of Florida

Bermudagrass Decline Investigations

In recent years a localized decline and death of turf has been observed on bermudagrass greens. The symptoms first appear as chlorotic yellow patches, 8 to 24 inches in diameter. The turf begins to thin out, and eventually a bare spot will develop. It is common to see green shoots next to chlorotic shoots in the area around the edge of the patch. Affected areas have very poor root systems and a lack of rhizome development. Articles about Bermudagrass Decline with photographs were published in *Florida Turf*, Summer, 1982 and *Grounds*

Maintenance, October, 1982.

Research on this problem has concentrated in three basic areas. First, a number of chemical treatments have been evaluated for control of Bermudagrass Decline. Last year the compounds were sprayed on the turf surface. This year, we are injecting several fungicides with a nemaject to place the chemicals more effectively in the rootzone. To date no chemical control has been found. The second phase of our research is searching for possible causal agents of the decline. Bacteria studies are still continuing to determine why large populations have been found in bermudagrass turf. Also, we are investigating a brown fungus that has been found repeatedly on roots in affected areas. Thirdly, we are collecting data from superintendents on when the problem occurs, their cultural practices, turf and soil conditions, and control measures they have tried.

The best recommendation at the current time for control of Bermudagrass Decline is a cultural one. Aerification is extremely important to open up the soil and allow oxygen into the rootzone. Use an aerifier that will deeply penetrate the turf. Aerify as frequently as possible, every 3-4 weeks during the growing season. Next, topdress and work it into the aerifier holes. Topdressing will also help mask some of the damaged areas. Application of a non-ionic wetting agent also is important to help water penetrate the soil, especially if there is a thatch layer. By following these practices when the chlorosis symptoms first begin, it is possible to check the problem. If Bermudagrass Decline is a re-occurring problem, these cultural practices should be followed throughout the summer.

Editor's Note:

At the research update on Bermudagrass Decline held on August 29th at Atlantis Country Club, Ed Freeman warned of the dangers of Pythium infections on high sand content greens. The following article by Dr. Clint Hodges from Iowa State University is quite informative and timely. ■

ARBOR
Tree &
Landscape Co., inc.

Equiped for the Large Job
Not too big for a Small Job

A COMPLETE SERVICE COMPANY

- Expert Personnel
- Stump Grinding
- Root Pruning
- Trimming, Removal
- Planting, Transplanting
- Bracing & Cavity Work

732-2211
499-4461