

CLEMSON UNIVERSITY - Dr. A. Robert Mazur, Project Leader

Funds Granted - \$3,000 — Investigations of the Influence of Fungicides on Availability of Nitrogen Fertilizer Materials for Putting Green Turf.

Studies have been initiated on both bentgrass and bermudagrass putting greens to determine the efficiency of nitrogen utilization under normal management conditions. Previous studies have implicated several fungicides with suppressing nitrification in soils. Many of these fungicides are widely used on turfgrass areas and with particularly high frequency on golf putting greens. Nitrogen will be monitored in leachates, soil samples and plant tissue. Investigations will be conducted to determine the influence of different fungicides on organisms in putting green soils as well as on the rates of mineralization and denitrification.

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Funds Granted - \$2,000 — Warm Season-Cool Season Combination Turfgrass Study.

A continuing study - several promising common bermudagrass selections have been made which exhibit open type growth which better lend themselves to overseeding with cool season grasses. Several new bluegrasses, bentgrasses and tall fescues that show promise under Piedmont conditions are being overseeded to determine which best complement these bermudagrasses.

Various management practices are also being imposed and studied for their impact on combination turf. Varied fertilizer treatments, mowing height, vertical mowing and auxiliary cultural practices are to be imposed. Population shifts will be observed and reported. This combination cool season and warm season concept appears to have promise, particularly in the new era when conservation of resources has come to the forefront. If the system is perfected, dollar savings in golf course management will be realized.

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COLORADO STATE UNIVERSITY - Dr. J. D. Butler, Project Leader

Funds Granted - \$1,000 — To Study Establishment Techniques and Management Criteria for Alkaligrasses As They Relate to Golf Course Management.

Management at 1/4 inch putting height showed good results in spring but with higher summer temperatures alkaligrass did not do as well as the bentgrasses. At 3/8 inch cut in 1976 it performed better than at 1/4 inch in 1977 tests.

Fertilizer studies in 1977 indicated that alkaligrass improved in appearance with increased rates of nitrogen which ranged from 1 to 8 pounds per 1,000 square feet.