

NORTH CAROLINA STATE UNIVERSITY - Dr. William B. Gilbert, Project Leader

Funds Granted - \$1,500 — Effect of Management and Fertilization Practices on Bentgrass in the Carolinas.

Various nitrogen and cultivation treatments are being applied to Penncross bentgrass grown under field conditions, mowed at 1/4 inch. Variables include nitrogen sources, nitrogen rates, nitrogen timings, and cultivation. Data is being taken on turf quality, disease development, weed and insect invasion, thatch development, rooting depth, and pH of the soil. Treatments began on a uniform stand of grass on June 1, 1977. To date the data taken has not demonstrated that the treatments have had a significant effect on the grass. Summer nitrogen applications are light, however, and more pronounced treatment effects are anticipated within the year with heavier applications of nitrogen, cultivation, and cool weather.

PENNSYLVANIA STATE UNIVERSITY - Dr. Joseph M. Duich, Project Leader

Funds Granted - \$2,000 — Bentgrass Breeding Project.

This program is pointed toward the development of superior bentgrasses for greens, tees and fairways through selection and breeding. One experimental variety, PBSB, shows great promise as an improvement over Penncross creeping bentgrass. It is presently under test and observation at some 20 golf courses. Included in these tests are the new nine holes at Congressional, 18 fairways at Oakmont were overseeded and one Kentucky bluegrass fairway at Saucon Valley. Formal release of PBCB is anticipated in 1978 through the Penncross Bentgrass Association of Oregon. Over 2,000 pounds have been distributed to over 125 cooperators in the United States, Canada, Mexico and South Africa at no cost. In contrast, Penncross was tested with 8 pounds of seed prior to release.

Fairway bentgrass trials included several new cultivars, many submitted by the Green Section staff. Bentgrasses that exhibit rhizome growth are the prime object of search, selection and breeding. The feasibility of growing compatible bluegrass-rhizome type colonial bents appears to be a very viable objective worthy of considerable effort in the pursuit of better grasses for better golf.

RUTGERS UNIVERSITY - Dr. C. Reed Funk, Project Leader

Funds Granted - \$2,000 — Breeding Grasses for Golf Course Use.

This is a continuing project, one that has produced a number of improved cultivars of Kentucky bluegrass for the turfgrass industry. Over 4,000 new plots of bluegrass, ryegrass and fescues were established at the Adelphi research station during the past season. Five acres of spaced-plant nurseries were also established. Several new bluegrass hybrids were developed which are showing improved performance for fairway type turf with a good ability to compete with Poa annua. Unfortunately, most such hybrids are not adequate seed producers. Additional work is in progress and more crosses are planned for next year.