Effect of Nitrogen-Potassium Balance and Irrigation on the Quality of a Penncross Creeping Bentgrass Putting Green and on Adelphi Kentucky Bluegrass

A study to evaluate the effect of varying ratios of nitrogen to potash and irrigation program on the quality of a Penncross creeping bentgrass putting green was initiated in 1982 at the Hancock Turfgrass Research Center. Three levels of irrigation will be utilized starting in 1983. Annual nitrogen rates are 0, 2 or 4 pounds annually. In this first year, no unusual results occurred.

A companion study was begun in 1982 on Adelphi Kentucky bluegrass. Irrigation treatments utilized were: a) 20 minutes of irrigation daily at noon; b) 80% of open pan evaporation; and c) on wilt. There were no unusual responses observed other than that the plots receiving daily irrigation were somewhat green through the latter part of the growing season.

Effect of Late Fall Nitrogen on Annual Bluegrass

Fall nitrogen treatments outlined in Table 7 were applied to annual bluegrass turf at the Hancock Turfgrass Research Center mowed at fairway height. This was a cooperative study with 2 students, Kurt Galisdorfer and Jeff Holmes. Application of ferrous sulfate did not improve quality ratings when nitrogen was applied. Nitrogen carriers gave responses as would be expected.