



## **Observations About Greens Grown on Three Different Soils**

*T.A. Nikolai, P.E. Rieke, J.N. Rogers III, P. Grow and M. Smucker  
Department of Crop and Soil Sciences*

The type of greens mix a golf course superintendent has impacts his management strategies. In an attempt to broaden our knowledge on how to best manage greens of different soil types, an area has been established to study the differences between USDA (80% sand, 20% peat), 80% sand, 10% soil, 10% peat, and sandy clay loam/sandy loam (push-up) green mixes. All greens were seeded with Penncross creeping bentgrass and are maintained at a 5/32" height of cut. The collars are maintained at a cutting height of 3/8".

Three replications of each soil type exist. One-half of each soil block has been rolled three times a week since June 5, 1995; the other half has not been rolled. Data collection has included stimp meter readings, soil temperature data, clipping weights, moisture content samples, root samples, and disease presence.

On August 1, 1995, a shoe spike study was initiated. Since establishment, each green has been trafficked with metal spikes, Soft spikes, and Green spikes. What follows are a list of questions for observations you may find interesting to make.

- 1) Do there appear to be any color and/or quality differences on the turf grown in the different soils?
- 2) Do there appear to be any color and/or quality differences between the rolled and unrolled plots?
- 3) Is there any dollar spot? If so, on what soil type does it seem most severe?
- 4) Is there any localized dry spot present? On which soil? Is it more severe on rolled or non-rolled plots?
- 5) Is there algae growth? Does rolling affect the amount of algae on the sandy clay loam greens?
- 6) Is there a difference in scalping injury due to rolling?
- 7) Is there a difference in wear injury between the plastic spikes and the metal spikes?