A LOOK AT SOD PRODUCTION IN NEW JERSEY

Ralph E. Engel Department of Soils and Crops Rutgers University

Since you are a group of sod growers, I am sure you wish comments on the business nature of the sod industry in New Jersey. It must be classed as slow. The slowdown in new construction is the biggest reason. The turf-type ryegrasses which give quality turf readily from seed have given competition to sod. Also, sodding has lost some appeal because such things as weedy soil and use of Kentucky bluegrass in shaded lawns have caused some loss of confidence in sodding. I believe a good certified sod program will help sod producers in the long run.

With regard to research and new developments in sod, cutting sod thinly has become clearly established as preferable to thicker cutting. An earlier study in Illinois supported this procedure. More recently, our tests showed that thinner cutting of Merion Kentucky bluegrass gave quicker rooting. Some of our greenhouse studies suggested that excising of the roots causes more intense root development.

Research on use of nitrogen in the seedbed before or after sodding appeared to be of little assistance to early root development of Kentucky bluegrass. Use of nitrogen on the turf shortly before cutting did not hinder rooting.

In one study, we found that brief use of a canopy over Merion Kentucky bluegrass sod in late winter, that gave moderate greenup, caused a marked reduction in early rooting as compared with the uncovered more dormant turf. While food reserves can be an important factor in this type situation, does growth stage of the grass plant have more complex or sophisticated factors associated with root initiation? This should be a good area for research.

A few years ago we conducted some studies on rooting of muck and mineral grown sod into mineral soil. In this study, we obtained Merion Kentucky bluegrass sod from several mineral and muck sources.

Measurements on depth of early rooting, root weight and sod attachment strength did not prove one type superior to the other in rooting potential. There were greater differences between individual source of sod than between muck and mineral. There appeared to be differences in drought tolerance with the different sources of sod, but the limit of our tests did not permit any conclusions. We found significant differences in rhizome content of the various sources of sod, but we found no correlation of rhizome content and early rooting.

Among the technical, production and marketing concerns, one of our greatest needs is a better method of growing and installing shade tolerant sod on shady lawn areas. A high percentage of our lawns have shade and most attempts at sodding are too often no help to the owner and, in turn, hurt future sod business for sod growers. We know that the red fescues, our best shade grass, start readily from seed, are readily crowded out by generous nitrogen fertilization, are slow rooting and intolerant of high soil moisture. We need better methods of growing a Kentucky bluegrass-red fescue mixture and surer techniques of transplanting and maintaining red fescue during sod cutting and transplanting. Part of this need may be an educational problem. But it is also one of a number of problems that are worthy of research.

The sod industry needs to establish some premises for the turf-type ryegrasses as they relate to the future of the industry. Should they be used in a mixture? What will be the long-term impact of these grasses on the sod industry? We need more weed-free sod? We need sod grown on soil that blends with the soil where the sod will be used. All this is saying that research and development studies are needed if sod growing fulfills the need and prospers as it should.