upon chemical seed treatment as an opportunity rather than a problem. With the use of slides, he illustrated the different turfgrass problems and stressed the need of genetic diversity as one solution to these problems.

The second speaker was Prof. Kenyon T. Payne, dept. of crops and soil science, Michigan State University. Payne gave some aspects of turfgrass needs; he chose to approach his subject in several areas: the grasses themselves; seed and its production and distribution; education; industry and environment.

Ronald Gianettino, vice-president of Keyes, Martin & Co. advertising agency concluded the session with a presentation on the marketing and advertising of seeds, past, present and future.

The next morning conferees heard reports from the West given by Arnie Bonnicksen, Arden Jacklin and Alan Hick before the Lawn Seed Division meeting opened, presided over by chairman John Vaughan.

Robert A. Russell gave a more complete report on the seed labelling discussions with seed control officials. Alan Hick covered the topics that had been brought out in the Planning Committee session. James Jenks spoke on the highway specifications problems in Virginia and Maryland. Doyle Jacklin reported on the noxious weeds list; as a result, a recommendation was passed to have a committee to look over these various lists.

Arden Jacklin's discussion resulted in a resolution to be sent to the board of directors of A.S.T.A. to get a legal opinion on the protection of Kentucky bluegrasses under the Plant Variety Protection Act and/or the Plant Patent Act. Doyle Jacklin submitted a resolution designed to codify existing seed testing research on varietal and identification information.

The speaker for the Lawn Seed Division was Dr. Roy Nittler, N.Y. Dept. of Seed Investigations, Geneva, New York. He discussed new seed testing techniques and their application of variety differentiation.

Optimum Nitrogen Rates Cited As Major Sod Problem

An Ohio State University agronomist has cited application of optimum rates of nitrogen fertilizer as a major problem facing the sod grower today.

K. R. English says that because sod is used to establish many new turfgrass areas, large sod fields must be carefully managed to produce a top quality crop which can be used in laying a new site. Poorly developed sod will fall apart and establish slowly. Insufficient nitrogen produces a weak, thin turf which allows weeds to move in and take over. Conversely, too heavy nitrogen applications cause excessive top growth and weakened root and rhizome systems.

Speaking before the annual American Society of Agronomy recently, English added that a study conducted at Michigan State University considered several ways to decide how much nitrogen the sod grower should use for efficient sod production.

Ammonium nitrate was applied several times at various rates during the growing season to Merion Kentucky bluegrass grown on an organic soil in Michigan.

Increasing the rate of nitrogen applied increased clipping yields which would necessitate more frequent mowing. Excessive nitrogen rates—60 pounds nitrogen per acre per month or more—gave less root

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Dr. Robert W. Toler, (c) associate professor of plant pathology with the Texas Agricultural Experiment Station and Department of Plant Sciences at Texas A&M University, receives the Distinguished Service Award. F. J. Milberger of Bay City, association president, (r) makes the presentation. Looking on is Dr. David Rosberg, head of the plant sciences department.

Texas Sod Producers Honor A&M Pathologist

The Texas Sod Producers Association has honored an assocciate professor of plant pathology at Texas A&M University with a Distinguished Service Award.

Dr. Robert W. Toler received the award at the annual meeting of the Texas Sod Producers Association in Corpus Christi recently. He was honored with a plaque upon which was inscribed: "In recognition of his outstanding research accomplishments in the control of St. Augustine Decline disease and the significant contribution of his research efforts to the Commercial Sod Producing Industry of Texas.

Toler, who specializes in virus diseases, was leader of the project work which recently uncovered a new variety of St. Augustine grass that has resistance to SAD (St. Augustine Decline), a virus disease. The new variety has been jointly released by the agricultural experiment stations of Texas and Florida and is called Floratam.

Dr. Toler joined the Texas A&M staff in March, 1966. Before coming to Texas he was stationed in Georgia as a plant pathologist with the Agricultural Research Service, USDA. He is a native of De Witt, Arkansas and holds degrees from the University of Arkansas and North Carolina State University.

MAJOR SOD PROBLEM *(from page 45)*

and rhizome growth. This means weaker sod and slower sod development, thereby decreasing production efficiency, English said. On this organic soil, some nitrogen—at least 15 pounds nitrogen per acre per month—was needed for good sod.

Timing of nitrogen application was very important. Discontinuing or reducing nitrogen applications during the hot summer months gave stronger, more mature sod in the fall of the year. Heavy nitrogen applications should definitely be avoided during the summer months, he emphasized.

English also pointed out that clipping yields ranged from a low of 0.25 ton dry weight per acre from the unfertilized plot for the year to a high of 4.25 tons per acre on the plot receiving 120 pounds nitrogen per acre per month.

He said that as the rate of nitrogen applied was increased, the nitrogen content in the clippings increased to a maximum of 6.1 percent. Sod which received lower nitrogen rates gave generally faster rerooting into new soil.

Nitrate levels in the soil increase with the heavy nitrogen treatments, but due to variability the use of soil nitrate tests did not prove to be a useful tool to predict the nitrogen needs for sod.

The agronomist added that there was a general increase in soil nitrate levels during the season, indicating that nitrogen was being released by soil microorganisms at warmer soil temperatures.

Plictran Miticide Registered By EPA

Plictran 50W miticide has been registered by the Environmental Protection Agency for use on ornamentals.

The product may be used in intergrated mite control programs. It causes little harm to predatory mites and insects and is essentially nontoxic to honeybees.

Plictran is compatible with commonly used insecticides and fungicides recommended in ornamental plant spray programs. It is a wettable powder formulation that mixes easily with water and can be applied through conventional equipment. Tricyclohexyltin is the active ingredient.

The ornmentals included in the Federal registration are greenhouse-grown carnations, chrysanthemums, poinsettias and roses.

More than 77 percent of WTT readers use mowers commercially in their business or service operation