

## Michigan Turfmen See Research in Thatch Work, Turf Management, Soil Evaluation, at Field Day

Participants at Michigan State University's Turfgrass Field Day in July viewed long-term scientific investigations such as Prof. Leyton Nelson's study of optimum management practices to minimize thatch build-up. Nelson, an MSU extension specialist, is evaluating factors such as cutting height, clipping return, and nitrogen rates in the development of thatch.

"Thatch has only recently become a problem in lawns and is not widely known or recognized yet," Nelson commented. "The lawn owner notes a disease or drought problem rather than the major role of thatch."

Nelson's display was one of 16 projects which dotted the East Lansing turf research plots as over 400 turfgrass professionals toured the four acres of experiments and demonstrations of recent developments in turf management. Dr. James Beard, MSU turfgrass researcher, and Dr. Paul Rieke, MSU soil scientist, coordinated the Field Day, and headed a roster of speakers composed mostly of MSU staffers.

Among the other exhibits were Beard's evaluation of 14 bentgrass varieties and his exhibit on the comparative rates of establishment with various sodding and seeding practices. MSU extension specialist Prof. Stuart Hildebrand displayed bluegrass

and red fescue variety evaluations.

Rieke's exhibit of soil mixtures and relative infiltration rates indicated the effects of coarse sand, fine sand, fine sandy loam, and peat on growth. Rieke noted that soil mixes prepared for putting greens must possess properties of rapid infiltration and drainage, reasonable water holding capacity, resistance to compaction, and ability to hold a well-played ball.

"Control of Diseases of Turfgrasses," a massive report by Dr. Nicky Smith, described organisms and diseases, their most likely victims, and control measures available. Such diseases as rust in Merion, snow mold in bentgrass, and helminthosporium in bluegrass were covered.

Dr. William E. Wallner of the MSU Extension Service described turfgrass insect control. He divided turf insects into two groups based on their feeding habits: root feeders and leaf feeders. "Generally chemical control measures for one group are not effective for the other," he emphasized. Among the root feeders he cited white grubs and wireworms. Webworms, cutworms, chinch bugs, and leafhoppers fall into the leaf feeders category.

Extension agent Dr. Carter Harrison handed out tips on key plant structures for the identi-

fication of problem lawn weeds such as quackgrass, tall fescue, and nimblewill.

"Effects of Pre-emergence Herbicides on Desirable Turfgrass Species" were viewed by Dr. William Meggitt, weed researcher. His work, which began last year, will eventually evaluate several herbicides.

Other events in the busy day-long schedule included a visit to controlled-climate chambers where biochemical mechanisms of high temperature growth stoppage in Merion bluegrass are being studied, and a stop at Extension Agent Dr. Robert E. Lucas' display of "Watering and Water Sources for Turf." The latter exhibit recommended that water be applied to wet soil to a depth of six inches with each irrigation to encourage deep rooting.

### New Nematode Attacks Florida St. Augustinegrass

A new nematode pest causing severe damage to St. augustinegrass in Florida has been discovered by nematologists with the state's Gainesville Agricultural Experiment Stations.

Specialists say the glossy white, lemon-shaped nematode was discovered in a sample of grass from Boynton Beach, south of West Palm Beach.

The parasite was identified as a cyst nematode, a type not previously known to cause economic damage in the state.

Detailed study of the nematode indicates that it's a new species.

This species has since been discovered in other locations on the lower east coast of Florida, always infecting St. augustinegrass.

Researchers point out that infected grass turns yellow and growth slows down as the nematode damages roots.

Studies are continuing on control methods. But until satisfactory chemical control can be worked out, Dr. V. G. Perry, who has co-authored a technical bulletin on the new species with Dr. A. A. DiEdwardo, suggests St. augustinegrass under attack by the pest should be replanted with another kind of grass.



Soil infiltration rates are explained to Turfgrass Day visitors by Dr. Paul Rieke (right), MSU soil scientist, who poured water into different soil mixes to show rate of movement through them.