



What's Happening in 1993?

By UW-Madison Turfgrass Group

Research and education are the cornerstone of our industry and over the last few years we have begun to focus our attention on the "epicenter" of this endeavor—the Noer Facility. Activities abound at the Facility even during the stillness of the winter. But, before we discuss these activities, I have noticed some confusion, during my travels, among our allied industries, between our Noer Facility and the National O.J. Noer Research Foundation. I urge you to be clear in your communications to distinguish and clarify their perceptions.

Facility Manager

The loss of Tommy Salaiz, our first facility manager, has made for an interesting winter and one in which Julie and I began our indoctrination to University politics. I can only say how grateful we should be for the experience and wisdom of Wayne and Chuck. Much open discussion occurred regarding the future of the position which resulted in the approval to solicit applications. Position descriptions were sent to all turfgrass programs in the nation, including Canada, and the response has been wonderful. Applications have been received from nine different states with candidates who possess excellent practical experience and a sound appreciation of research. We are interviewing the candidates during the latter part of April and may have made a selection by the time this issue goes to press. This is very exciting stuff!

Field Day

The second Field Day held at the Noer Facility will be Tuesday August 17th, 1993. This year's Field Day will include an equipment show, the opportunity to wander through the demonstration areas, and a guided tour of the research plots. Please mark your calendars (you may notice it is the day after the WGCSA meeting at SentryWorld); we'd like it to be the Best Ever!

Turfgrass Pathology Research— Dr. Julie Meyer, Department of Plant Pathology

Snow Mold Research

In the face of environmental concerns about the use of mercury-based fungicides, the management of gray snow mold will be a major research direction this year and in years to come. In 1992, a bentgrass cultivar trial was established and will be rated for snow mold tolerance over several seasons. In the fall of 1993, evaluations of non-mercury fungicides as well as an evaluation of brewery waste composts/extracts on control of snow mold will be conducted in both southern and northern locations.

Long-term research on snow molds will also be started this year. There is some encouraging work on biological control of gray snow molds that was done in the late 1980's in Ontario, Canada. Researchers at the University of Guelph found isolates of a nonpathogenic fungus, *Typhula phacor-*

rhiza, that suppressed gray snow mold disease to tolerable levels. *Typhula phacorrhiza*, is a close relative of the *Typhula* fungi that cause gray snow mold, except that it lives on organic matter and is not a pathogen. This spring we will begin isolation and evaluation of potential biocontrol organisms such as *Typhula phacorrhiza*. We will also be collecting isolates of snow mold fungi from across the state so we can begin to determine the temperature and moisture ranges when the sclerotia of these fungi begin to germinate. This is important to know so that fungicide applications can be timed in the fall to correspond with sclerotia germination—the most vulnerable stage of the life cycle and the time that fungicide applications would be most effective.

Necrotic Ring Spot Research

Necrotic ring spot is a persistent disease on Kentucky bluegrass that needs much more research. Dr. Gayle Worf did excellent work in discovering the pathogen that causes this disease. We would like to carry on his work and continue studying the biology and management of this pathogen. We will set up a cultivar resistance study and also look for opportunities to suppress this pathogen biologically. The first step planned in this direction is to see if the disease can be suppressed by increasing microbial activity of the turf with organic fertilizers or composts. We will attempt to establish a disease nursery of necrotic ring spot for demonstration as well as research purposes.

Additional Cultural Management Research

In addition to snow mold and necrotic ring spot cultivar trials, I would like to continue Dr. Worf's experiments on management of *Helminthosporium* leaf spot with species mixtures. We also have the NTEP tall fescue plots, with 96 cultivars, that will be checked and rated for disease throughout the season.

We know there are interactions between turf fertility and turf diseases, and there are many good research topics to study in this area. This year we plan to evaluate the control of summer patch on *Poa annua* with acidic fertilizers, the effect of organic fertilizers on suppression of dollar spot (and brown patch if weather conditions are right), and the effect of nitrogen on dollar spot of bentgrass. Dr. Wayne Kussow will be a valuable consultant and collaborator in these studies.

We have excellent weather data equipment at the Noer Facility and this is a good opportunity to begin to organize this data for use with disease forecasting models that are available for several diseases, including dollar spot, leaf spot, and *Pythium*. We will also set up the PestCaster and evaluate how well these forecasting models work under our Wisconsin conditions.

Soil and Fertility Research— Dr. Wayne Kussow, Department of Soil Science

Nutrient and Pesticide Losses from Turf

The objective of this long-term study is to determine how subsoil compaction influences runoff and leaching losses of nutrients and pesticides from turf. Installation of the plots and runoff collection systems was largely completed in 1992. Some adjustments remain to be made and pan lysimeters installed in each plot. The Kentucky bluegrass will be managed to simulate a home lawn situation with regard