Consortium to Study Drought Tolerant Grasses for Midwest

By Scott A. Mackintosh, Manager

A steady stream of new technology is constantly entering the turfgrass industry. Turgfrass managers have access to computer driven irrigation systems, weather stations that forecast disease outbreaks, computer controlled spray equipment, lightweight mowing equipment and new turfgrasses that are greener, finer-bladed and more disease resistant. This technology has been available for only 10 to 15 years; imagine what will be developed in the next ten years. If the Ohio State Turfgrass Biotechnology Consortium has its way, drought tolerant turfgrasses will become an integral part of turfgrass management soon.

The Turfgrass Biotechnology Consortium consists of 12 researchers that will try to develop drought tolerant turfgrass. The benefits of growing healthy turfgrass are numerous; at the same time, finding ways to grow healthy turfgrass with fewer inputs is essential.

An average homeowner's lawn is about 7,500 square feet which requires an inch of water or 4,500 gallons a week to maintain acceptable growth and quality. In dry regions of the country, lawns and golf courses cannot be irrigated with drinking water. In all likelihood more regions across the country will also place a premium on drinking water. Development of drought tolerant turfgrass could not come at a better time.

What has the Consortium excited is the discovery of a gene that controls proline, an amino acid associated with drought tolerance. The gene, which was isolated from an East Indian lentil plant, increases proline concentration within plant cells during drought conditions. Proline prevents water loss within the cells to keep them alive. The Ohio Turfgrass Foundation realizes the potential benefits of developing the isolated gene in turfgrass and has granted the Consortium $100,000 over two years.

In other news the Noer Facility is brimming with activity. Research data is being collected as if tomorrow's forecast called for a foot of snow. The research team at the Facility should have some interesting observations and discussion for the upcoming Field Day and for the 1995 Winter Conference.

The Facility is getting a little face lift this summer. A kiosk has been assembled in front of the building and will contain a map of research plots, current research observations and pesticide application rates, dates and reentry periods. The Facility will expand by 20 acres this fall. The new land will provide researchers an area to conduct prairie stand and athletic field research.

On August 17, 1994 I am resigning as manager of the O.J. Noer Turfgrass Research and Education Facility. My wife and I decided that it was better for our children to have family close by. The decision to resign was not easy, but we feel that it is the right decision. We can honestly say that our time spent in Wisconsin will remain near and dear to us both.

I have enjoyed meeting everyone in the turfgrass industry. The level of commitment to supporting turfgrass research in Wisconsin is remarkable. This unique support has given me valuable insight and education to the benefits of a strong research program. Lastly, I would like to thank the UW Turfgrass Faculty for their support and camaraderie. I could not have worked with a nicer group of people.