"The Seed Police?"

Did you ever wonder if what you purchase in a bag of seed is actually what the label says it is? A Registered Seed Technologist is one of the few reliable resources for accurately determining seed purity and viability, yet, what if you wanted to know the variety?

Researcher's at Ohio State University in Dr. Karl Danneberger's laboratory (Dr. Patty Sweeney and Rob Golembiewski) utilized current analytical techniques for effective discrimination of turfgrass varieties. In developing a protocol procedure, varieties of chewings fescue, creeping bentgrass, Kentucky bluegrass, tall fescue, and perennial ryegrass were tested.

The two questions that the researchers addressed were 1) could current genetic techniques be used to discriminate turfgrass varieties from seed, and 2) could genetic material from a single seed be used for variety identification. The answer to both questions was yes! Several university laboratories throughout the country could provide this service.

(From: Patricia Sweeney, R. Golembiewski, and K. Danneberger. 1996. Random Amplified Polymorphic DNA Analysis of Dry Turfgrass Seed. HortScience 31(3):400-401.)

Short Cutts

continued from page 2

lest the national shows. Also, many new products are sneak previewed only for attendees of the EXPO. Preliminary programs have been mailed to NYSTA members, so register now! If you'd like more information, contact Beth Seme, Executive Director of the New York State Turfgrass Association, at (800) 873-TURF(8873).

Farewell From Joe Neal

Joe Neal, Associate Professor of Weed Science, couldn't leave without saying a personal goodbye—Ed.

You may recall from the last issue of *CUTT* that I will be leaving Cornell to accept a similar position at North Carolina State University. I could not leave without thanking you and the turfgrass and landscape industry organizations for the support, encouragement, and friendships offered so freely over the past twelve years. My decision to leave has more to do with opportunities and family ties in North Carolina than with

continued on page 7

Nitrogen Fertilization and Brown Patch

The goal of an Integrated Pest Management (IPM) program is to maximize plant health so that as stress and pest pressures increase the plant is able to maintain acceptable quality. Several questions arise from the examination of this goal. How do you know if your plant is healthy? Even if the plant is healthy, if pest pressure is severe, will the plant be attacked? An of course, what is acceptable quality?

Researchers at the University of Maryland, Dr. Michael Fidanza and Dr. Peter Dernoeden, investigated the interaction among nitrogen source, application timing, and fungicide on Rhizoctonia Blight (brown patch) on perennial ryegrass maintained at golf course fairway height. With the scarcity of information available regarding the influence of turfgrass nutrition on disease incidence and severity, this is important research. The research focused on spring vs. fall emphasized fertilization programs of Ringer's Lawn Restore (a slow release nitrogen source) and water soluble urea. The interesting aspect of the work was the fungicide treatment. Ipridione (Chipco 26019 among others) was applied at the recommended rate, but at 21 day intervals as opposed to the 10 to 14 day interval on the label to determine if N fertilization influenced disease severity (i.e. will the brown patch kill the turf?).

In general, the plots not treated with the fungicide did not maintain acceptable quality as a result of severe brown patch infestation. In addition, spring N fertilization enhanced growth of the fungus during the initial infection periods from late June to late July in Maryland. However, there was a significant reduction in brown patch associated with the fall emphasized program of Ringer's Lawn Restore as compared to the spring program with water soluble urea. While the reduction was significant, the turf quality was deemed unacceptable for golf course fairway turf.

These results support the work of our Dr. Eric Nelson, who observed reduced brown patch when using Lawn Restore back in 1990! Furthermore, the Maryland researchers concluded, "in regions where brown patch is not a chronic and sever disease problem, fungicide application frequency may not be as important as it was under conditions of this study". A conclusion that truly challenges us to practice IPM.

(From: Michael Fidanza and P. Dernoeden. 1996 Interaction of Nitrogen Source, Application Timing, Fungicide on Rhizoctonia Blight in Ryegrass. HortScience 31(3):389-392.)

Scanning the Journals

A review of current journal articles

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