Who Is New From the U To You?

At a recent MGCSA Research Committee meeting Dr. Angela Orshinsky, a new turf pathology asset to the Association was introduced. The Committee is excited about the opportunities that are ahead.

Angela Orshinsky, Ph.D., joins the Department of Plant Pathology as an extension assistant professor. Her research will focus on two components of an effective IPM program: early diagnosis of disease and the implementation of biological control strategies to manage diseases and weeds.

Angela will collaborate with extension educators, government agencies and industry personnel to implement an education program that will provide timely and accurate updates on diseases of importance to Minnesota's horticultural industry including fruit and vegetable growers, the turf and grounds foundation, master gardeners, and the Minnesota nursery and landscape association.

Dr. Orshinsky's interests and research goals include integrated pest management (IPM) practices aimed to reduce agricultural inputs by preventing the introduction and spread of plant pathogens, by early pathogen detection, and by implementing sound cultural and biological practices.

"It is my mission to provide the horticultural community with the tools and knowledge that they need to implement IPM programs that are effective, economical, and have a minimal impact on our environment," Orshinsky's brief UMN biography read. "My research interests focus on two components of an effective IPM program: early diagnosis of disease and the implementation of biological

control strategies to manage diseases and weeds. As part of my research program, DNA-based diagnostic tools will be developed and used to conduct pathogen surveys.

These surveys will assess the potential for disease outbreaks across Minnesota so that the appropriate management plans can be initiated. The other aspect of my research program is the study of biological control organisms including their mechanisms of action, secondary metabolite production, and the impact of cultural practices on the fate of biocontrol organisms and naturally occurring microbial communities. The results of my research will directly contribute to the knowledge and tools available to the horticultural pathology extension education program."

As a welcoming gesture, the MGCSA has matched funding from the MTGF to provide Orshinsky with start up grant funding totaling $60,000 over the next three years. Less than eight weeks into her new position, Orshinsky has applied for, and hopes to get, funds from the GCSAA EIFG to match the MGCSA funding to study and develop a rapid response identification technique for Rhizoctonia and Waitia patch. Her background in DNA research leads her to believe that rapid molecular diagnostic tools may be applicable to other diseases as well. It is hoped that by increasing the speed and accuracy of pathogen identification, many turf diseases will be controllable through cultural practices and result in fewer or more targeted chemical inputs.

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