



USDA-CSREES 2007 National Water Quality Conference

Integrating Substrate, Water, Nutrient and Pathogen BMP's for the Nursery and Greenhouse Industry

We are developing a web-based Knowledge Center for Water and Nutrient Management and Conservation, for the Nursery and Greenhouse Industries. The scope of this Knowledge Center requires that we take a more global approach to best management practices, in that these operations are typically intensive users of resources, in relatively confined areas. We intend to provide an integrated knowledge base, not only of best application methods for water and nutrients, but also for surface water, pathogen and substrate related management issues, which feed back directly into best management decision processes for producers. As information providers, we are using this knowledge base to identify gaps in our research programs that will feed back directly into our extension programs for growers. One example of our current group research interest is in coupling sensing substrates and aerial environmental data for more precise irrigation scheduling, by using robust wireless network capabilities. Another example is integrating surface water management issues, to provide growers with better information on seasonal and spatial pathogen dynamics in containment ponds, which is a major concern for those operations that recycle irrigation water. By providing on-line access to in-depth learning modules through the Knowledge Center, we hope to reach out to producers and provide them with a comprehensive information and learning experience. Our presentation will illustrate how we are structuring and developing this project, with examples of the educational modules and tools that will become a part of the Knowledge Center.

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