



A commercial greenhouse production of herbaceous ornamentals

A Growing Partnership is Emerging

By James C. Locke

The U. S. Department of Agriculture's Agricultural Research Service and the Toledo Botanical Garden have been developing a new relationship during the past year. You may have noticed an increased amount of activity around the research greenhouse area, even preceding the construction project to expand this facility.

In 2002, the USDA began establishing a research project, initiated by congressional action and located in the Toledo area. The research entity has been titled the "Greenhouse Production Research Group" and its primary function is to conduct fundamental and applied research that will enable the ornamental greenhouse industry in the Great Lakes region to be more competitive. The USDA group is housed on the campus of the University of Toledo to enable interaction with faculty and students in conducting the research studies, but lacking adequate greenhouse facilities to validate and demonstrate the research findings, the Toledo Botanical Garden was the logical partner. In addition to providing greenhouse facilities, TBG has also provided meeting room facilities to conduct planning meetings and grower focus group sessions. In the future, TBG will utilize its expertise in providing educational materials and training sessions to transfer the research information to those it will benefit -- the growers.

Initially the USDA leased approximately 3,500 sq. ft. of greenhouse space to conduct some plant growth studies. With the expansion of the project, additional greenhouse space will be needed and plans are underway to lease an addition 4,500 sq. ft. of space. If you happen to wander into the greenhouse, don't be surprised to see some unusual plants and growing arrangements. In order to do the research, many strange looking sensors, gadgets, wires and computers will be employed to measure and record research

information. Many of the plants will express various stress symptoms resulting from nutrient deficiencies, moisture conditions and disease interactions.

All of this is to say that the atypical plants that you might encounter in the USDA research area are research plants and not production specimens. You might think of the analogy of patients in the ICU of a local hospital with wires, monitors, tubes, etc. attached to facilitate the patient's recovery. Similarly, these research plants need to be carefully monitored to provide the information necessary to develop better recommendations for growing ornamentals more efficiently and economically.

So remember, if you are at the Garden and you see government vehicles, individuals in white lab coats, or plants growing with gadgets and wires attached to them, think of it as the Medical University of Ohio for plants. We look forward to being part of TBG for years to come and anticipate that the TBG side of the partnership will provide an excellent means of getting new research information out to the grower community. Thanks, TBG for being part of this new, exciting research activity based in the Toledo community! **TBG**

Personnel currently involved in the project

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