

PROCEEDINGS OF



RESEARCH CONFERENCE

Fifty-Eighth Annual Report

2013

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**58th Annual
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2013**

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Special thanks are extended to the sponsors of the 2013 SNA Research Conference, Bennett's Creek Nursery and Lancaster Farms. Without the financial contributions of these sponsors, the conference could not be held.

We extend our gratitude to all the researchers and nurserymen who attended the 57th Annual SNA Research Conference and/or contributed to these Proceedings. You make this annual event a success.

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Using Research Data Safely and Effectively

Good research is conducted under an exact set of controlled conditions, varying only the specific treatments which are to be evaluated. Results from the specific treatments are directly applicable to your operations only if all the conditions in your operation are controlled the same as in the research. Unfortunately, this seldom happens. However, this does not mean that you cannot benefit from the research. What it does mean is that you should use the research information on a trial basis if your plant species, soil type, watering method, size and age of plant, climatic region, etc. is different than that described by the researcher.

What an alert grower should expect to gain from these research reports is ideas – ideas as to the best control for insects, disease, nematodes and weeds – labor saving ideas such as chemical pruning and using growth regulators to minimize maintenance. Also, ideas on water management, nutrition, alternative growing media, new plants for landscaping and guides for improving profits and marketing skills can also be found.

Should you desire additional information on any report, please contact the author.

THE PORTER HENEGAR MEMORIAL AWARD
for
HORTICULTURAL RESEARCH

John W. Olive



The Southern Nursery Association honored John W. Olive with the Porter Henegar Memorial Award during the 58th Annual SNA Research Conference. Dr. Charlie Hall, last year's recipient, made the presentation at the SNA Awards Luncheon.

Originally known as the Research Award of Merit, the recognition was created in 1968 to honor those individuals who have made outstanding contributions to ornamental horticulture research and specifically to members of the association. In 1972, the award was renamed the Porter Henegar Memorial Award in honor of one of SNA's former Executive Secretaries. Nominations are made each year by the SNA's Director of Research and past award winners.

A native of Columbus GA, John Olive received his B.S. in Agronomy from the University of GA and a Master's degree in Plant Pathology from UGA in 1986. He worked in the UGA Extension Plant Disease Clinic in Athens for 3 years where he helped diagnose disease problems for commercial growers as well as homeowners. In 1989, John accepted a position in Mobile to work as plant pathologist at the Ornamental Horticulture Research Center (in Springhill). In 1990 he became the superintendent (director) of the Research Center. Besides coordinating research projects at the center, he assists commercial growers, identifying plant diseases, troubleshooting other problems and helping recommend controls.

John has been attending and participating in the SNA Research Conference since 1989. He has co-authored papers in several different sections and has served as the plant pathology section chairman. He has chaired and been a judge on the Bryson James Student Research Competition several times.

Although his position as Center Director has a lot of administrative responsibilities, he has been fortunate to work with great research faculty who have encouraged him to actively participate in their research.

The Bryson L. James Student Research Competition 2013 Awards

This long-standing program was renamed in August 1989, in honor of Dr. Bryson L. James, longtime Director of Horticultural Research for the Southern Nursery Association. As Dr. James has been an active participant and leader in the annual Research Conference for more than 50 years, the award, named in his honor, is a tribute to his tireless efforts on behalf of the researchers, the association and the industry. Listed below are guidelines for the Student Competition as well as this year's winners:

1. Any student of a university or a college having researchers that participate in the Southern Nursery Association Research Conference, are not more than one (1) academic year removed from graduation and whose research was completed prior to graduation are eligible to compete.
2. Research is to be that of the presenter and a part of his/her educational studies. Contract work, unless a part of a thesis or classroom report (credit given), is not acceptable, as it may provide unlimited funding and an unfair advantage.
3. The number of student papers from a single university or college may be limited, should time restraints dictate.
4. The student must have submitted a title to the SNA Conference Editor by the deadline specified in the Call For Titles. The paper should then be submitted to the Section Editor for the Student Competition no later than the specified deadline.
5. The paper must follow the guidelines for format and subject matter as stated in the Call For Titles for the SNA Research Conference.
6. Student and advisor should be listed as co-authors.
7. Oral presentation must be limited to seven (7) minutes. An additional three (3) minutes will be allotted for questions. A penalty of two (2) points per minute or part thereof for every minute over seven (7) minutes will be assessed.
8. Judging shall be based on preparation of the paper (50 points) and oral presentation (100 points) for a total of 150 points.

2013 Bryson L. James Student Competition Award Winners

B.S. Candidates

- | | |
|-----------------------|---------------------------------|
| 1. David R. Tyrpak | Clemson University |
| 2. Kimberly Shearer | North Carolina State University |
| 3. Laura E. Kaderabek | North Carolina State University |

M.S. Candidates

- | | |
|-----------------------|---------------------------------|
| 1. Tyler Hoskins | Virginia Tech |
| 2. Kristin Van Kampen | Clemson University |
| 3. Ted. C Yap | North Carolina State University |

Ph.D. Candidates

- | | |
|-----------------------|---------------------------------|
| 1. Elizabeth D. Riley | North Carolina State University |
| 2. Adam F. Newby | Ohio State University |
| 3. Emily Rotich | Tennessee State University |

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VA	7-12	Nutrient Movement in a Bark-Based Substrate During Irrigation. Tyler C. Hoskins, James S. Owen Jr., Alex X. Niemiera and Julie Brindley
NC	13-17	Current Issues and Recent Advances in the Container Substrate Industry. Brian E. Jackson and William C. Fonteno
NC	18-23	Mini-Horhizotron: A Novel Technique for Observing and Quantifying Root Systems of Plants in Pot Culture. Lesley A. Judd, Brian E. Jackson, and William C. Fonteno
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