

PROCEEDINGS OF



**RESEARCH
CONFERENCE**

Forty-Ninth Annual Report

2004

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We would like to extend our gratitude to all the researchers and nurserymen who attended the 49th Annual Conference and/or contributed to these Proceedings and continue to make this annual event an industry 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 write to the author. We would like to extend an invitation to you to attend all sessions of the SNA Research Conference held in Atlanta each year in conjunction with *The World's Showcase of Horticulture*®.



49th Annual
Southern Nursery Association

Research Conference Proceedings 2004

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It is the fine men and women in horticultural research that we, the Southern Nursery Association, pledge our continued support and gratitude for their tireless efforts in the pursuit of the advancement of our industry.

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The Porter Henegar Memorial Award for Horticultural Research



*Dr. Austin K. Hagan (left)
with Stuart Warren (right).*

The Southern Nursery Association (SNA) has honored Stuart Warren, Department of Horticultural Science of North Carolina State University, with the Porter Henegar Memorial Award during the 49th Annual SNA Research Conference held in conjunction with SNA's Annual Meeting and Convention in Atlanta, GA. Dr. Austin K. Hagan, a faculty member at Auburn University and winner of the award last year, made the presentation to Warren during the SNA Research Conference.

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. In 1972, the award was renamed the Porter Henegar Memorial

Award in honor of one of SNA's former Executive Secretaries. SNA's Director of Research Dr. Bryson L. James and past award winners make nominations each year.

Warren began a PhD graduate program at N.C. State University in 1982, working with Dr. Walt Skroch, finishing his degree in 1986. In 1987, Dr. Stuart Warren was hired by N.C. State University to conduct groundcover management in field-grown nursery stock and weed, water and nutrient management studies of containerized plant production in Western North Carolina at the Mountain Horticulture Crops Research and Extension Center, Fletcher, N.C. In 1989, he and his family moved to Raleigh, and Warren began teaching Landscape Maintenance and Tree and Grounds Maintenance courses in the 2- and 4-year programs while continuing his research program. From 1994 to 1996, he carried a 3-way appointment with ornamental extension weed management responsibilities. Dr. Warren also served as the Director of Graduate Programs from 1997 to 2001 for the Department of Horticultural Science at N.C. State University.

Warren is a premier teacher. He received a University Outstanding Teacher Award in 1992 and is a member of his University's Academy of Outstanding Teachers. In 1996, he received the National Association of Colleges and Teachers of Agriculture (NCTA) Teacher Fellow Award.

One of his greatest extra curricular contributions to students has been as a coach and adviser of the Associated Landscape Contractor's of America Student Career Days competition team. For the past 14 years, he has coordinated the formation, organization, fund raising and preparation of 18-40 students as a team that travels to and participates in this national event. Since 1999 he has been involved in taking students to the United Kingdom, France, Italy, Spain and other countries on two-week trips with 10-12 students. The students receive one credit for their participation in the "travel course."

The Bryson L. James Student Research Competition 2004 Awards

This long-standing program was renamed in August 1989, in honor of Dr. Bryson L. James, 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 40 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 both to the Section Editor for the Student Competition and to the appropriate "topic" Section Editor 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.

2004 Bryson L. James Student Competition Award Winners

B.S. Candidates

1st Place	-	\$500	Deidre Jones, Clemson University
2nd Place	-	\$300	Jennifer Watts, Montana State University
3rd Place	-	\$200	Josh Clark, Auburn University

M.S. Candidates

1st Place	-	\$500	Carroll Williamson, North Carolina State University
2nd Place	-	\$300	Adam Newby, Auburn University
3rd Place	-	\$200	Brian Jackson, Auburn University

Ph.D. Candidates

1st Place	-	\$500	James Owen, North Carolina State University
2nd Place	-	\$300	Krishna Nemali, University of Georgia
3rd Place	-	\$200	Michelle McGinnis, North Carolina State University

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