

PROCEEDINGS OF



**RESEARCH  
CONFERENCE**

**Thirty-Ninth Annual Report**

**1994**

Compiled and Edited by  
BRYSON L. JAMES  
P.O. Box 230  
McMinnville, TN 37110



# **Southern Nurserymen's Association, Inc.**

## **OFFICERS**

### **President**

Arthur A. "Buck" Jones  
Arthur A. Jones & Assoc.  
P.O. Box 339  
Greysen, GA 30221

### **Vice President/Treasurer**

William H. "Buzz" Barton  
Barton's Nursery & Lndscp.  
251 Ricemine Road, NE  
Tuscaloosa, AL 35406

### **Executive Vice President**

Danny Summers  
1000 Johnson Ferry Road, Suite E130  
Marietta, GA 30068  
Phone (404) 973-9026  
FAX (404) 973-9097

### **Immediate Past President**

Don Shadow  
Shadow Nursery, Inc.  
254 Shadow Nursery Road  
Winchester, TN 37398

## **DIRECTORS**

### **Chapter 1**

John C. Watkins  
Watkins Nurseries, Inc.  
P.O. Box 159  
Modlothian, VA 23113

### **Chapter 3**

James M. Zangger  
Greenleaf Nursery Co.  
HC 72, 82 South  
Park Hill, OK 74451-9500

### **Chapter 2**

William D. Reese  
Greenbriar Nurseries, Inc.  
Post Office Box 5189  
Ocala, FL 32678

### **Chapter 4**

William H. "Buzz" Barton  
Barton's Nursery & Lndscp.  
251 Ricemine Road, NE  
Tuscaloosa, AL 35406

## **RESEARCH CONFERENCE**

Dir. of Hort. Research & Chairman  
Dr. Bryson L. James  
P. O. Box 230  
McMinnville, TN 37110

Co-Chairman  
Jim Berry  
Flowerwood Nursery, Inc.  
P.O. Box 665  
Loxley, AL 36551

## ACKNOWLEDGEMENTS

The editor and the Board of Directors of the Southern Nurserymen's Association wish to express their sincere appreciation to Greg Davis, Richard Beeson, Jr., Richard E. Bir, Kris Braman, Alan Windham, Forrest Stegelin, John M. Ruter, Ted Whitwell, Walter Scroch, M.A. "Kim" Powell, Bridget Behe, Alexander X. Niemiera and Steve Newman for the fine job they did as Section Chairmen and Moderators.

We would like to extend our gratitude to all the researchers and nurserymen who attended our Conference and/or contributed to these Proceedings and continue to make this annual event an industry success.

## NOTICE

Mention of a trademark name on a proprietary product does not constitute a guarantee and/or warranty of the product by the researcher(s) or their respective Universities or the Southern Nurserymen's Association and does not imply it's approval to the exclusion of other products that may also be suitable.

Permission to reprint articles and quotations of portions of this publication is hereby granted on condition that full credit be given to both the author(s) and the publication, Proceedings SNA Research Conference along with the date of the Publication.

The Southern Nurserymen's Association is not responsible for the statements and opinions printed in the Proceedings SNA Research Conference; they represent the views of the author (s).

## **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 can not benefit from the research. What it does mean is that you should use the research information on a trial basis first, 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.

Should you desire additional information on any report, please write to the author. Mailing addresses are listed in the back of this book. We would like to extend an invitation to you to attend all sessions of the Research Conference held in Atlanta each year in conjunction with the SNA Horticultural Trade Show.



**39th ANNUAL  
SOUTHERN NURSERYMEN'S  
ASSOCIATION**

**RESEARCH CONFERENCE REPORT  
1994**

Southern Nurserymen's Association  
Danny Summers, Executive Vice President  
1000 Johnson Ferry Road, Suite E-130  
Marietta, GA USA 30068-2100  
(404) 973-9026 FAX(404) 973-9097

Proceedings of the SNA Research Conference is published annually by the Southern Nurserymen's Association and one copy is provided at no charge to all SNA Members, Horticultural Libraries, and Contributing Authors.

It is the fine men and women in Horticultural Research that we, the Southern Nurserymen's Association, pledge our continued support and gratitude for their tireless efforts in the pursuit of the advancement of our industry.

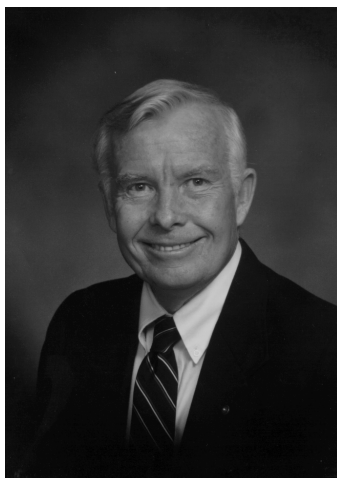
**ADDITIONAL COPIES:**

SNA Members	\$15.00*
Horticultural Libraries	\$15.00*
Contributing Authors	\$15.00*
Non-Members	\$25.00*

\*includes shipping and handling

© Published November, 1994

**THE PORTER HENEGAR MEMORIAL AWARD**  
**for**  
**HORTICULTURAL RESEARCH**  
**1994 RECIPIENT**



**Dr. Jerry T. Walker Receives  
Porter Henegar Memorial Award**

The Southern Nurserymen's Association (SNA) honored University of Georgia's Dr. Jerry T. Walker by presenting him with the 1994 Porter Henegar Memorial Award on Friday, August 5. The award was presented during the recent 39th annual SNA Horticultural Research Conference, which is held in conjunction with the SNA Horticultural Trade Show. The award, originally known as the Research Award of Merit, was created in 1968 to honor those individuals who have made outstanding contributions to ornamental horticulture research and more specifically to the SNA. In 1972, the award was renamed the Porter Henegar Memorial Award to honor one of SNA's past Executive Secretaries, the late Porter Henegar.

Dr. Walker is a Professor of Plant Pathology and has been the head of the Plant Pathology Department at the University of Georgia (UGA), Griffin, Georgia for the past 21 years. He has published more than 100 scientific papers, mostly related to ornamentals, nematodes and air pollution. He is currently a contributing author to World Book. He received an A.B. Degree from Miami University, Oxford, Ohio and M.S. and Ph.D. degrees from Ohio State University. Prior to his position at UGA, he worked 8 years as a plant pathologist and researcher at the Brooklyn Botanical Garden, NY.

THE  
BRYSON L. JAMES  
STUDENT RESEARCH COMPETITION

1994 AWARDS

This long-standing program was renamed in August 1989, in honor of Dr. Bryson L. James, Director of Horticultural Research for the Southern Nurserymen's Association. Dr. James has been an active participant and leader in the annual Research Conference for more than 30 years and 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 the guidelines for the Student Competition as well as this year's winners:

1. Any student of a university or college having researchers that participate in the Southern Nurserymen's Association Research Workers Conference and not more than a one (1) academic year removed from graduation and whose research was completed prior to graduation.
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 since it may provide unlimited funding and an unfair advantage.
3. Previous first-place winners are not eligible.
4. The student must have submitted a title to the SNA Conference Chairman by the specified time in the Call For Titles. The paper should be submitted to the Section Chairman for the Student Paper Award no later than **July 1**. Also, a copy should be sent to the appropriate "topic" Section Chairman.
5. The paper should follow the guidelines for the SNA Research Workers Conference in relation to format and subject matter.
6. The student and his 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). Total 150 points.

**1994 AWARD WINNERS**

1st Place - \$1,000.00	Jeff L. Sibley, Auburn University
2nd Place - \$ 600.00	Chris Wilson, Clemson University
3rd Place - \$ 400.00	D. A. Findley, Auburn University

TABLE OF CONTENTS

SECTION 1 - BRYSON L. JAMES STUDENT RESEARCH COMPETITION

ORIGIN	PAGE NO.	TITLE AND AUTHOR(S)
TN	16-20	Allelopathic Influences of Fresh and Composted yard Waste on Seed Germination. Keith D. Mickler and Don B. Williams.
SC	21-24	Field Production of Wildflower Sod. Anne Marie Johnson and Ted Whitwell.
NC	24-26	Seed Germination of Three Provenances of <i>Rhododendron catawbiense</i> : Influence of Light and Temperature. D. Bradley Rowe, Frank A. Blazich, Stuart L. Warren and Thomas G. Ranney.
GA	27-30	Inducing Acclimation of Azaleas by Reducing Water Supply. Thomas Anisko and Orville M. Lindstrom.
AL	31-32	Styrene-Lined and Copper-Coated Containers Influence Root-Zone Temperature and Growth of Red Maple Cultivars. T.J. Brass, G.J. Keever, C.H. Gilliam and D.J. Eakes.
AL	33-35	BA-Induced Offset Formation in Hosta. D.A. Findley G.J. Keever and C.H. Gilliam.
AL	36-39	Cultivar and IBA Concentration Influence Rooting of <i>Buddleia</i> . Chris Montgomery, Bridget Behe, Joseph Eakes and Tammy Krentz.
AL	40-41	Influence of Herbicide Rate and Weed Pressure on Prostrate Spurge. Vanessa F. Hepburn and Charles Gilliam.
AL	42-43	Transplant Size Influences Post-transplant Growth and Development. D.M. Lauderdale, D.J. Eakes, C.H. Gilliam and G.J. Keever.
AL	44-46	Weed Control with Herbicide-Coated Fertilizers. Cynthia K. Crossan, Charles H. Gilliam, Gary J. Keever and D. Joseph Eakes.
SC	47-49	Response of Gardenia and Pennisitum to Low Concentrations of Oryzalin in Irrigation Water. Raj Bhandary and Ted Whitwell.
AL	50-52	Light Environment Influences Gas Exchange of Selected Red Maple Cultivars in the Southeastern United States. Jeff L. Sibley, D.J. Eakes, C.H. Gilliam and W.A Dozier, Jr.
SC	53-56	Ground Covers Influence Isoxaben and Trifluralin Content in Simulated Nursery Runoff Water. Chris Wilson, Ted Whitwell and Melissa Riley.



## "SNA RESEARCH CONFERENCE - VOL. 39-1994"

---

ORIGIN	PAGE NO.	TITLE AND AUTHOR(S)
SC	57-59	The Effect of Grassed Waterways on the Pesticide Content of Runoff Water. J.A. Briggs, M.B. Riley and Ted Whitwell.
KY	60-63	Deterency of Neem-Based Insecticides to Japanese Beetles on Six Preferred Host Plants. Carl Harper and Daniel A. Potter.
TN	64-66	Arthropod Diversity and Seasonality Among Different Varieties of the Flowering Dogwood. D.Scott Neitch, Jerome F. Grant and Mark T. Windham.
SC	67-70	Early Season Drenches of Bonzi and Sumagic for Height Control on Container-Grown Herbaceous Perennials. Gary R. Bachman, Bill Miller and Ted Whitwell.

### SECTION 2 - CONTAINER-GROWN PLANT PRODUCTION

TN	72-74	The Effects of Container Drainage Hole Size on Plant Growth of Ageratum. Donna C. Fare and W. Edgar Davis.
MS	75-77	Chemical Root Pruning of Container-Grown Trees using Trifluralin and Copper Impregnated Fabric. Steven E. Newman and Jesse R. Quarrels.
FL	78-80	Container Production System Comparison for Pine, Oak and Palm. Tom Yeager, Claudia Larsen, Roger Newton and J.C. Tort.
MS	81-85	Physical Analysis of Fresh and Aged Rice Hulls Used as a Peat Moss Substitute in Greenhouse Media. Shelly D. Dueitt and Steven E. Newman.
AL	86-88	Use of Cocoa Bean Mulch as a Media Amendment for Potted Chrysanthemums. Kenneth C. Sanderson.
AL	89-91	Broiler Litter Compost Affects Growth of Annual and Perennial Plants. Virginia V. Allen, Bridget K. Behe and David G. Himelrick.
SC	92-95	Effectiveness of Several N-Source Products for Container-Grown Plants. Kevin Tucker and Don Wagner.
VA	96-99	Water Drained from Soilless Substrate Perched Water as an Indicator of Substrate N Availability. Alex X. Niemiera.
NC	100-103	Nitrogen Nutrition of Containerized <i>Cryptomeria japonica</i> 'Elegans Aurea'. Laura G. Jull, Stuart L. Warren and Frank A. Blazich.
AL	104-107	Influence of Container Size and Spacing on First-Year Field Performance of <i>Pinus taeda</i> . David B. South, Janusz B. Zwolinski and John B. McRae.

**"SNA RESEARCH CONFERENCE - VOL. 39-1994"**

---

ORIGIN	PAGE NO.	TITLE AND AUTHOR(S)
GA	108-109	Use of Biobarrier for Control of Rooting-Out in Pot-In-Pot Production Systems. John M. Ruter.
VA	110-112	Supraoptimal Root-Zone Temperature Influences Medium Solution Composition. Ronald F. Walden and Robert D. Wright.
NC	113-118	Substrate Temperatures in Above and Below-Ground Containers in a Pot-In-Pot System. Al Hight and Ted Bilderback.
NC	119-122	Initial Growth of Seedlings of Rosebay Rhododendron as Influenced by Day/Night Temperatures. Mark C. Starrett, Frank A. Blazich and Stuart L. Warren.
MS	123-125	Pruning, Flower and Fruit Removal on the Growth of Magnolia 'Little Gem'. Adolph J. Laiche, Jr.
MS	126-129	Evaluation of Spring and Summer Slow Release Fertilizer Application Rates. Adolph J. Liache, Jr.
MS	130-132	Evaluation of Kenaf Fiber Core as a Component of Container-Plant Growth Media. Adolph J. Laiche, Jr. and Steven E. Newman.
SC	133-136	Efficacy of a Fall Fertilization Program. Gary R. Bachman and Ted Whitwell.
NC	137-137	Growth Response of Sourwood as Influenced by Temperature, Photoperiod and Media. Frank A. Blazich, Stuart L. Warren and Mack Thetford.
LA	138-139	Comparison of Three Controlled-Release Fertilizers in Production of New Verbena Cultivars. Allen D. Owings, Peggy Reed and Traci Compton.
LA	140-141	Evaluation of Fertilization Practices in Container Production of Mayhaws. Allen D. Owings and Edward W. Bush.
LA	142-143	Purple Coneflower Production as Influenced by Incorporated Rates of Osmocote and Dolomite. Allen D. Owings and Peggy Reed.
SC	144-146	Evaluation of Growing Media Composed of Sewage Sludge. Don Wagner and Kevin Tucker.
TN	147-148	Container Production of Hostas in Middle Tennessee. R.J. Sauve, C.J. Cantanzaro and J.T. Ling.

**"SNA RESEARCH CONFERENCE - VOL. 39-1994"**

---

ORIGIN	PAGE NO.	TITLE AND AUTHOR(S)
<b>SECTION 3 - FIELD PRODUCTION</b>		
GA	150-151	Production of Native Ericaceous Plants with Pine Bark Soil Amendments. John M. Ruter.
NC	152-155	Soil Nitrate Movement in an Overhead Irrigated Field Shade Tree Nursery. Richard E. Bir and Greg D. Hoyt.
TX & TN	156-158	Effects of Antitranspirant Sprays and Hydrophilic Polymer Root Dips in the Growth of Bare-Root Northern Red Oak Seedlings Transplanted to the Field or Containers. Michael A. Arnold and Randall K. Culbertson.
FL	159-161	Evaluation of ROOTS on Root Regeneration of Live Oak. R.C. Beeson, Jr.
NC	162-164	Growth and Survival of 'Whitespire' Birch Grafted on Five Species of Birch Rootstocks. Everett P. Whitman, II and Thomas G. Ranney.
TN	165-167	Effects of Nursery Aisle Cover Crops. Reed W. Cripps, John M. Skelley and Erik S. Suffridge.
<b>SECTION 4 - ENTOMOLOGY</b>		
TN	169-171	Impact of Environmental Conditions on Arthropod Species Diversity in Dogwoods. D. Scott Neitch, Jerome F. Grant and Mark T. Windham.
GA	172-173	Tedders Trap: A Useful Tool for Monitoring Insect Pests in Shade Tree Farms. Beverly Sparks and S. Kris Bramen.
SC	174-177	Assessment of Insect Pests on Improved Maple Cultivars in South Carolina Tree Nurseries: The First Two Years. R. Ken Allen and David R. Alverson.
TN	178-179	Shoot Boring Caterpillars, <i>Proteoteras</i> spp. (Lepidoptera: Tortricidae) Major Pests of Red Maple in Tennessee Nurseries. F.A. Hale and M. Halcomb.
SC, GA, TN, FL & AL	180-184	Update on Management of the Top Seven Landscape Pest Groups. D.R. Alverson, S.K. Bramen, F.A. Hale, W.G. Hudson, R.F. Mizell III, B. Sparks and M.L. Williams.
VA	185-186	Management of Aphids on River Birch. P.B. Schultz.
NJ	187-190	Evaluation of Pyrethroid Insecticides for Control of Nursery Pests. Mark A. Coffelt.

## "SNA RESEARCH CONFERENCE - VOL. 39-1994"

ORIGIN	PAGE NO.	TITLE AND AUTHOR(S)
FL & GA	191-193	Outbreak of the Asian Ambrosia Beetle, <i>Xylosandrus crassiusculus</i> (Motschulsky), is Cause for Concern. R. Mizell, S.K. Bramen, B. Sparks and W. Hudson.

### SECTION 5 - PATHOLOGY AND NEMATOLOGY

TN	195-196	Beech Bark Disease - Incidence and Severity. Brenda Rutherford, Robert Vance, Mark Windham and Jerome Grant.
TN	197-198	Efficacy of Fluazinam for Control of Brown Patch of Tall fescue Sod Caused by <i>Rhizoctonia solani</i> . Alan S. Windham.
TN	199-201	Efficacy of Fluazinam for Control of Phytophthora Crown Rot of African Violet Caused by <i>Phytophthora parasitica</i> . Alan S. Windham.
SC	202-204	Ineffectiveness of Garlic Extracts for Controlling Dogwood Anthracnose in Field Tests. S.D. McElreath, J.-M. Yao, and F.H. Tainter.
SC	205-207	In Vitro Responses of <i>Cornus florida</i> Callus to Partially Purified Culture Filtrate of <i>Discula destructiva</i> . D.E. Wedge, V.W. Baird and F.H. Tainter.
GA	208-211	Newer Chemicals Fail to Control Leaf Nematodes on Hiemalis Begonia. Ronald D. Oetting, Jerry T. Walker, Marcia Johnson-Clark and John Melin.
NC	212-216	Resistance of <i>Cornus kousa</i> Taxa to Dogwood Anthracnose and Powdery Mildew. Thomas G. Ranny, Larry F. Grand and John L. Knighten.

### SECTION 6 - ENGINEERING, ECONOMICS, STRUCTURES & INNOVATIONS

GA	218-220	Adapting Macrapid Plant Selector Software for Student/Customer Self-Instruction. E.Neal Weatherly, Jr., James T. Midcap and Alexander L.A. Archer.
AL	221-223	Potential of SPAD-502 Chlorophyll Meter for Determination of Leaf Greenness. Jeff L. Sibley, D.J. Eakes, C.H. Gilliam and W.A. Dozier, Jr.
MS	224-225	Cost and Effectiveness of Broadcast Treatment of Talstar for Imported Fire Ants. David H. Tatum and Ken Hood.
GA	226-227	Developing a Computerized Plant Selector Program. David B. Nichols.
LA	228-231	Use of Employee Empowerment to Enhance Profitability in a Retail Nursery/Landscape Firm. Roger A. Hinson and Sandra Cyrus.

## "SNA RESEARCH CONFERENCE - VOL. 39-1994"

ORIGIN	PAGE NO.	TITLE AND AUTHOR(S)
NC	232-234	Development of Automated Multiple Potting and Transplanting Systems. B.K. Huang and L.Wang.
NC & FL	235-238	Impact Dynamics of Seedlings/Plugs in an Automated Transplanting System. Juanhua Gao and Lei Cui.
NC	239-242	Optimal Analysis of Planting Tray Cells. Juanhua Gao and Jianghong Yu.
GA	243-245	The Green Industry's Interlinks with Georgia's Economy. Steven C. Turner and Warren Kriesel.
KY	246-248	Profitability Sensitivity Within Retail Nurseries, Lawn and Garden Stores. Forrest E. Stegelin.
TN	249-251	Research Priorities of Tennessee Nurserymen. Phillip C. Flanagan and R.J. Sauve.
FL	252-253	A Synopsis of Students and Organizations Participating in the Environmental Horticulture Internship Program. D.B. McConnell and T.H. Yeager.
TX	254-256	The Impact of Federal Income Tax Code on Marketing Container-Grown Nursery Crops. Jeffrey R. Stokes, Charles R. Hall and James W. Mjelde.

### SECTION 7 - GROWTH REGULATORS

MS	258-260	A Leaching Frame for Determining Media Retention of Drench-Applied Plant Growth Regulators. Jesse R. Quarrels and Steven E. Newman.
FL	261-263	Effect of Atrimec and Embark Trim-Cut on Growth of Asiatic and Confederate Jasmine. Jeffery G. Norcini and James H. Aldrich.
GA	264-265	Method of Application Affects Response of Hollyhock ( <i>A/cea rosea</i> ) to Bonzi. Joyce G. Latimer, Ronald D Oetting, Sherrod A. Baden and Paul A. Thomas.
VA	266-268	Growth Management in Commercial Production of Bedding Plants: Pansies ( <i>Viola x Wittrockiana</i> ). Thomas J. Banco and Marcia Stefani.
AL	269	Offset Stage of Development Affects Hosta Propagation by Division. M.T. Wilton, G.J. Keever and D.J. Eakes.
AL	270-272	Influence of Primo on Flower Color of Potted Chrysanthemums. Kenneth C. Sanderson and Mark S. West.

## "SNA RESEARCH CONFERENCE - VOL. 39-1994"

ORIGIN	PAGE NO.	TITLE AND AUTHOR(S)
NC	273-275	Uniconazole Alters Stem Anatomy of 'Spectabilis' Forsythia. Mack Thelford, Stuart L. Warren and Frank A. Blazich.
AZ & GA	276-277	Climate Alters the Effect of Paclobutrazol on Leaf Morphology of Landscape Plants. Chris A. Martin and John M. Ruter.

### SECTION 8 - PROPAGATION

TN	279-282	Response of Tissue Cultured Red Maple Plantlets to High Pressure Sodium, Incandescent and Ambient Light. John Day, Willard T. Witte and Hermon Dickerson.
NC & PA	283-285	Propagating Bottlebrush Buckeye from Stem Cuttings. Richard E. Bir, H.W. Barnes, J.L. Conner and T.E. Bilderback.
NC	286-287	Seed Germination of Annual Vinca as Influenced by Light and Temperature. Frank A. Blazich, Paul H. Henry and Farrell C. Wise.
AL	288-289	Stock Plant Effects on Foster Holly Cutting Development. Cecil Pounders and Stephen Garton.
FL	290-292	Cupric Hydroxide Affects Root Length and Flowering of <i>Lantana</i> during Propagation and Following Transplanting. Sven E. Svenson and Diane L. Johnston.
GA	293-295	The Effects of Timing and Growth Regulator Treatment on the Rooting of <i>Cephalotaxus harringtonia</i> . Andrea Southworth and Michael A. Dirr.
AL	296-297	Propagation of Alstroemeria Hybrids: A Potential New Herbaceous Perennial for the Southeast. Stephen Garton and Cecil Puonders.

### SECTION 9 - WEED CONTROL

SC	299-302	Harry Bittercress ( <i>Cardamine hirsuta</i> ) Seed Production and Dispersal in the Propagation of Landscape Plants. Gary Bachman and Ted Whitwell.
VA	303-304	Tolerance of Groundcovers to Preemergence Herbicides. Jeffery F. Derr.
SC	305-308	Weed Management in Ferns. Gary R. Bachman and Ted Whitwell.
KY	309-313	New Preemergence Herbicides and Herbicide Combinations for Use in Field-Grown Ornamentals. Leslie A. Weston and Robert E. McNiel.
MS	314	Phytotoxicity of Prism on Four Container-Grown Woody Ornamentals. David H. Tatum.

**"SNA RESEARCH CONFERENCE - VOL. 39-1994"**

---

ORIGIN	PAGE NO.	TITLE AND AUTHOR(S)
GA	315	White Clover Control in Wildflower Meadows. W.L. Corley and T.R. Murphy.

**SECTION 10 - LANDSCAPE SECTION**

TN	317-319	Crabapple Bloom Sequence at Greenville, TN, 1994. Willard T. Witte and Hubert P. Conlon.
MS	320-323	Cold Tolerance of <i>Lagerstroemia indica x fauriei</i> Cultivars in USDA Zones 7 and 8. April D. Edwards Steven E. Newman, Frank B. Matta and Adolph J. Laiche, Jr.
KY	324-327	Crabapple Evaluations in Kentucky. Robert E. McNiel.
TX	328-331	Researching the Landscape Plant Establishment Continuum: Where to Focus for the Best Return on Investment? Michael A. Arnold.
FL	332-334	Production Method Influences Landscape Establishment Rate. Edward F. Gilman, Richard Beeson and Diane Wedge.
NC	335-336	Trends in Southern Landscape Gardening. M.A. Powell.
SC	337-338	Crabapple Cultivars for Urban and Roadside Landscapes. James B. Aitken.
GA	339-340	Native Grasses for Southeastern Wildflower Meadows. W.L. Corley and K.R. Reynolds.
GA	341-342	Effect of Cultural Levels on the Appearance of Open Celled Pavers. David B. Nichols.
NC	343-346	A New Approach to Measuring Hydraulic Properties of Urban Soils. William C. Fonteno and Stuart L. Warren.
NC	347-348	North Carolina Urban Tree Evaluation Program. Thomas G. Ranney and Richard E. Bir.
VA	349-350	Small Trees and Shrubs for Use Under Power Lines. Bonnie Appleton and Barbara Touchette.
KY	351-354	Observations of Daylily Performance During the First Year in the Field. Winston Dundwell.
NC	355-358	1993-94 Winter Hardiness Evaluatons in the NCSU Arboretum. J.C. Raulston
NC	359-363	Trumpetvines ( <i>Campsis</i> ) for Landscape Use. J.C. Raulston and Greg Grant.

## "SNA RESEARCH CONFERENCE - VOL. 39-1994"

ORIGIN	PAGE NO.	TITLE AND AUTHOR(S)
NC	364-368	<i>Prunus laurocerasus</i> Evaluations in the NCSU Arboretum. Tom Foley and J.C. Raulston.
NC	369-373	<i>Cupressus</i> Evaluations in the NCSU Arboretum. Tom Foley and J.C. Raulston.

### SECTION 11 - MARKETING

FL	375-378	Initial Evaluation of an Extension Program Promoting Environmental Landscape Management. Gary W. Knox, Glenn D. Israel and Sydney Park Brown.
AL	379-381	Marketing Perennials in the Southeast. Bridget K. Behe and Virginia V. Allen.
TN	382-384	Marketing Problems of Tennessee's Green Industries - A Student Survey. Douglas Airhart, Rachael Kluth, Andy Bell, Ryan Cole, Kristi Ellenburg, Andrew Keller, Jennifer Shadow and John Skelly.
TN	385-387	An Analysis of Out-Of-State Buyers of Tennessee Nursery Stock. S.P. Singh, Sam O. Dennis, Enefiok Ekenam and Fisseha Tegegne.
KY	388-390	Consumer Demand Elasticities of Selected Annuals and Perennials. Forrest E. Stegelin.

### SECTION 12 - WATER MANAGEMENT

VA	392-394	Recycled Irrigation Solutions and Method of Fertilization Influence Geranium Growth in a Subirrigation System. Patricia R. Knight, D. Joseph Eakes, Charles H. Gilliam and Hary G. Ponder.
FL	395-398	Water Use and Energy Efficiency of Four Greenhouse Irrigation Systems. R.W. Henly, C.A. Neal and F.S. Zuzueta.
FL	399-402	Evaluation of a Unique Greenhouse Subirrigation System with Two Container Systems. R.W. Henly, U. Bednarzik and C.A. Neal.

### AUTHORS ADDRESSES

403-413