

**PROCEEDINGS OF**



**RESEARCH  
CONFERENCE**

**Thirty-Six Annual Report**

**1991**

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



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

## **OFFICERS**

### **President**

J. Fred Fisher, II  
Fisher's Landscaping  
P.O. Box 16776  
Hattiesburg, MS 39402

### **Vice President/Treasurer**

Larry D. Edwards  
Turtle Creek Nursery  
P.O. Box 668  
Huntersville, NC 28078

### **Executive Vice President**

Danny Summers  
1511 Johnson Ferry Road, Suite 115  
Marietta, GA 30062-6438  
Phone (404) 973-9026  
FAX (404) 973-9097

### **Immediate Past President**

Robert A. Jenkins  
Micah Jenkins Nursery  
P.O. Box 30066  
Charleston, SC 29407

## **DIRECTORS**

### **Chapter 1**

Larry D. Edwards  
Turtle Creek Nursery  
P.O. Box 668  
Huntersville, NC 28078

### **Chapter 3**

Don Shadow  
Shadow Nursery, Inc.  
Route 1, Box 37A  
Winchester, TN 37398

### **Chapter 2**

Arthur A. Jones  
Aurthur A. Jones & Associates  
P.O. Box 339  
Greysen, GA 30221

### **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



*SIXTEEN GREAT STATES!*



### **Annual SNA Research Conference**

This two-day Horticultural Research Conference is held annually in conjunction with the SNA Horticultural Trade Show and Convention, recognized by Tradeshow 200 as one of the 200 largest trade shows in the U.S. The event is held in Atlanta and has become world-renowned for quality research. Participants are the top horticultural research and educational leaders representing the south's top universities. Nurserymen and industry participants are invited to attend any and all sessions. Research presented at the conference is published in the annual publication "SNA Research Conference Proceedings" contained herein. For more information on the SNA Research Conference or the SNA Horticultural Trade Show and Convention, contact the Southern Nurserymen's Association at the following address:

Southern Nurserymen's Association  
1511 Johnson Ferry Road, Suite 115  
Marietta, GA 30062-6491  
(404) 973-9026 FAX (404) 973-9097

## **ACKNOWLEDGEMENTS**

The editor and the Board of Directors of the Southern Nurserymen's Association wish to express their sincere appreciation to Fred T. Davies, Jr., Bonnie Appleton, Kenneth Tilt, Beverly Sparks, Jerry T. Walker, Robert E. McNeil, Will Witte, Ted Whitwell, James Aitken, Win Dunwell, Walter Skroch, M.P. "Mel" Garber, and Will Corley 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.

## **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.

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 Trade Show.



**36th ANNUAL  
SOUTHERN NURSERYMEN'S  
ASSOCIATION**

**RESEARCH CONFERENCE REPORT  
1991**

Southern Nurserymen's Association  
Danny Summers, Executive Vice President  
1511 Johnson Ferry Road, Suite 115  
Marietta, GA 30062  
(404) 973-9026

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 advancements of our industry.


**ADDITIONAL COPIES:**

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

\*includes shipping and handling

© Published October, 1991

**THE PORTER HENEGAR MEMORIAL AWARD  
for  
HORTICULTURAL RESEARCH  
1991 RECIPIENT**



(Photo Here)

**Charles H. Gilliam Honored  
By Southern Horticulturists**

The 1991 Porter Henegar Memorial Award was presented to Charles H. Gilliam from Auburn University on Friday, August 2nd. Gilliam was honored by his peers with this annual award recognizing those individuals who had made outstanding contributions to ornamental horticulture research and more specifically to the SNA. Gilliam (B.S. University of Tennessee-Martin, M.S. and Ph.D. Virginia Tech) joined the faculty in the Department of Horticulture at Auburn University in 1980 as an Assistant Professor with responsibilities in teaching and research. Prior to accepting the position at Auburn, Dr. Gilliam was on the faculty at Ohio State University. He is a native of Lexington, Tennessee. Currently he and his wife, Gail, live outside Auburn with their two children, Jeremy and Catherine.

He has an active research program involving weed control in ornamentals in field and container grown plants, water use efficiency and water quality as its relates to container grown plants. Dr. Gilliam's present teaching responsibilities at Auburn University include Nursery Management and serving as the departmental graduate program officer.

**THE  
BRYSON L. JAMES  
STUDENT RESEARCH COMPETITION**

**1991 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. Each eligible university or college may enter up to two (2) students.
4. Previous first-place winners are not eligible.
5. The student must have submitted a title to the SNA Conference Chairman by the specified time in the Call For Titles.
6. The paper should be submitted to the Section Chairman for the Student Paper Award no later than **July 1**. Also, a copy is sent to the appropriate "topic" Section Chairman.
7. The paper should follow the guidelines for the SNA Research Workers Conference in relation to format and subject matter.
8. The student and his advisor should be listed as co-authors.
9. 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.
10. Judging shall be based on preparation of the paper (50 points) and oral presentation (100

**1991 AWARD WINNERS**

1st Place - \$1,000.00	John M. Sherman, Mississippi State Univ.
2nd Place - \$ 600.00	Gary R. Bachman, Clemson University
3rd Place - \$ 400.00	Renee J. Keese, Clemson University



## TABLE OF CONTENTS

ORIGIN PAGE NO. PAPER AND AUTHOR(S)

### SECTION 1 - STUDENT COMPETITION

North Carolina	17	Seed Germination of <u>Pieris floribunda</u> : Influence of Light and Temperature. Mark C. Starrett, Frank A. Blazich, and Stuart L. Warren.
Tennessee	19	Effects of Light Intensity and Leaf Temperature on Lesion Growth Rates in Dogwood Anthracnose Disease. John M. Parham and Mark T. Windham.
South Carolina	21	Ornamental Herbicides Detection in Nursery Irrigation and Containment Water. Renee J. Keese, Ted Whitwell, N. Dwight Camper and Melissa Riley.
Virginia	23	Impact of Late Season Insect Defoliation on Tree Growth. IM. A. Coffelt and P. B. Schultz.
Alabama	27	Evaluation of Photoelectric Sensors for Robotic Transplanting. Joseph B. Craven, Jr., Larry J. Kutz and Bridget K. Behe.
South Carolina	30	An Integrated Pest Management Extension Program for Nursery Producers in South Carolina. Jerry T. Moody and Mary C. Halbrooks.
Alabama	34	Preemergence Herbicide Use in Seed-Propagated Chestnut Oaks. J.A. Reeder, C.H. Gilliam, G.R. Wehtje, and D.B. South.
South Carolina	37	Relationship of Bronze Speckle of Marigold to Iron DTPA in Peat-based Media. Joseph P. Albano and Mary C. Halbrooks.
Alabama	40	Reactive Layer Coated Slow Release Fertilizers. Patricia R. Knight, D. Joseph Eakes, and David R. Brown.
South Carolina	43	Exploring Episodic Growth and its Benefit to the Grower. Jeff S. Kuehny and Mary C. Halbrooks.
Tennessee	46	Effects of Chemical Root Pruning on Root Regeneration and Cellular Structure of Viburnum Root Tips. Phillip C. Flanagan and W.T. Witte.

## "SNA RESEARCH CONFERENCE - VOL. 36-1991"

---

ORIGIN	PAGE NO.	PAPER AND AUTHOR(S)
Mississippi	50	Application of Callus Culture for the Study of Blackspot Disease Resistance in Roses. John M. Sherman, K. Shiv Reddy, James A. Spencer and Steven E. Newman.
South Carolina	53	Influence of Iron DTPA Chelate Concentrations on the Occurrence of a Specific Physiological Disorder in Geranium. Gary R. Bachman and Mary C. Halbrooks.
<b>SECTION 2 - CONTAINER-GROWN PLANT PRODUCTION</b>		
Florida	57	Growing Landscape Plants in Yard Waste Compost. Dennis B. McConnell and Aziz Shralipour.
North Carolina	61	Use of Horticultural Rockwool, Poultry Litter Compost and Pinebark as Container Media. T.E. Bilderback and W.C. Fonteno.
Georgia	63	Predicting Air Space and Water Retention of Pine Bark-Sand Potting Media from Analyses of Medium Components. M. A. Nash and F. A. Pokorny .
Georgia	66	Slow Release Fertilizer Evaluations on Containerized Shore Juniper. James T. Midcap, Howell R. Roberts and Mark C. Johnson.
Alabama	71	Azalea Production with 12 to 14 Month Slow Release Fertilizers. D. Joseph Eakes and John W. Olive.
Virginia	74	Timing of Osmocote Reapplication on Growth of 'Helleri' Holly. Robert D. Wright and Alex X. Niemiera.
Virginia	77	Efficiency of Nutrient Uptake from Slow-Release Fertilization. Dan Milbocker.
Florida	78	Effect of Slow-Release Fertilizers on Nitrate Nitrogen Run-Off. Geri Cashion and Tom Yeager.
Alabama	81	Nitrogen Levels in Irrigation Effluent from Container Nurseries. Donna C. Fare, Charles H. Gilliam, Gary J. Keever, John Olive, and James C. Stephenson.
Virginia	84	Nitrogen Leaching from Osmocote as Influenced by Irrigation Amount. Alex X. Niemiera.
Virginia	86	Nutrient Run-off from Overhead Irrigated Containers. Dan Milbocker.

**"SNA RESEARCH CONFERENCE - VOL. 36-1991"**

---

ORIGIN	PAGE NO.	PAPER AND AUTHOR(S)
Florida	88	Overhead Irrigation: How Much Water Reaches the Medium Surface? Richard Beeson and Gary Knox.
Florida	91	Overhead Irrigation of Containers at Dawn Restricts Plant Growth Compared to Maintaining Field Capacity. Richard C. Beeson, Jr.
Alabama	93	Effects of Container Size and Sub-irrigation on Growth of Two Tree Species. Ken Tilt, Ronald Shumack and John Olive.
Texas	96	Water Relations of Selected Container Grown Landscape Plants under Drought Conditions. Fred T. Davies, Jr., Jayne M. Zajicek and Sharon A. Duray.
Tennessee	99	Development of a Growth Curve Model for Root Regeneration of Chemically Root Pruned Viburnum. Phillip C. Flanagan and W.T. Witte.
Arizona and Kentucky	102	Container Dimensions Affect Container Media Temperature Patterns. Chris A. Martin and Dewayne L. Ingram.
North Carolina	105	Comparison of Light Intensity and Temperatures Under White and Black Shadecloth. E. Lewis Phillips, T.E. Bilderback, Richard E. Birr and Doug Torn.
Florida	107	Influence of Shade on Leaf Physiology and Growth of <u>Rhododendron</u> x 'Pink Ruffles'1. Jeffrey G. Norcini, Gary W. Knox, and Peter C. Andersen.
Mississippi	110	Effects of Selected Pruning Treatments on the Growth of Container-Grown <u>Ternstroemia gymnanthera</u> . Adolph J. Laiche, Jr.
Louisiana	113	Commercial Nursery Production of <u>Crataegus Opaca</u> in Louisiana. E. W. Bush, C. E. Johnson and J. T. Payne.
Louisiana	116	Media and Water Quality Influence Growth of Container-Grwon Azaleas. D.L. Fuller, E.W. Bush and D.A. Wall.
Alabama	118	Effects of Leaf Shining Compounds on Foliage Plant Growth. Kenneth C. Sanderson.

## "SNA RESEARCH CONFERENCE - VOL. 36-1991"

---

ORIGIN	PAGE NO.	PAPER AND AUTHOR(S)
Alabama	122	Evaluation of Six Garden Chrysanthemum Cultivars for Spring Sales in Four-Inch Pots Using No Light/No Shade Culture . Kenneth C. Sanderson.
Louisiana	124	Fumigation of Container Nedia with Basamid. W. L. Brown and R. J. Constantin.
North Carolina	128	Growth Response of <u>Pieris floribunda</u> as Influenced by Temperature and Photoperiod. Mark C. Starrett, Frank A. Blazich, and Stuart L. Warren.
Texas	129	Production of Container-Grown Firebush ( <u>Hamelia patens</u> Jacq.) as Influenced by Growing Medium and Slow-Release Fertilizer. Tim D. Davis, Steven W. George, and Billy W. Hipp.
Georgia and Kentucky	132	Influence of Root-Zone Temperatures and Elevated CO <sup>2</sup> Assimilation Rates of 'Rotundifolia' Holly. John M. Ruter and Dewayne L. Ingram.
Florida	135	Response of 'Delaware Valley White' Azalea to Preplant Nitrogen Amendments. Tom Yeager, Fred May, Claudia Larsen and Matt Jenks.
Virginia	139	Influence of High Temperature and Exposure Time on Nitrification in a Pine Bark Medium. Ronald F. Walden and Robert D. Wright.

### SECTION 3 - FIELD PRODUCTION

Tennessee and North Carolina	144	A Potential Method for Predicting Suckering Propensity of Apple Rootstocks. Michael A. Arnold and Eric Young.
North Carolina	148	The Affect of Nitrogen Application Techniques on the Growth of Drip Irrigated Flowering Dogwood, Oriental Dogwood, Red Maple and Mountain Laurel. R. E. Bir, J. L. Conner and T. G. Ranney.
Tennessee	151	Effect of Aisle Cover Crops on Surface Runoff Quantity and Quality. Reed W. Cripps and Herbert K. Bates.
Mississippi	155	Chemical Root Pruning of Field-Grown Crape Myrtle. Thomas C. Moss and Steven E. Newman.

ORIGIN	PAGE NO.	PAPER AND AUTHOR(S)
Mississippi	158	Transplanting of Sycamore Trees Grown in Fabric Bags. Steven E. Newman.

#### SECTION 4 - ENTOMOLOGY

South Carolina	162	Initial Survey of Leafhopper Damage to Patented Red Maples. David R. Alverson and R. Ken Allen.
South Carolina	164	Life History of the Crapemyrtle Aphid. David R. Alverson and R. Ken Allen.
South Carolina	167	Biology and Ecology of the Azalea Stem Borer, <i>Oberea myops</i> . Joseph D. Culin & Clyde S. Gorsuch.
Alabama	170	Low vs. High Volume Sprays for Control of Nantucket Pint Tip Moth on Virginia Pine. Patricia P. Cobb.
Virginia	172	Evaluation of Insecticides for Orangestriped Oakworm Control, 1990. M. A. Coffelt and P. B. Schultz.
Virginia	174	Impact of Late Season Insect Defoliation on Tree Growth. M. A. Coffelt and P. B. Schultz .
Georgia	177	Phenology and Parasitism of the Native Holly Leafminer in Georgia . S.K. Braman.
Georgia and Virginia	181	Soaps and Oils, A New (Old) Alternative to Conventional Insecticides. Ronald D. Oetting, Peter B. Schultz, Joyce G. Latimer, Beverly Sparks, and Will Hudson.
Mississippi	186	Phytotoxicity of Talstar® on Finished Poinsettias: Effects of Application Rate and Ortho X-77®. Barney A. Coats, David Tatum, and James Jarrett.
Virginia	188	Evaluation of Bagworm Control Strategies, 1990. P. B. Schultz and M. A. Coffelt.
Florida and Georgia	189	Insecticides and Acaricides Registered for Use On Ornamentals Plants. Russell F. Mizell, III, William Hudson and Beverly Sparks.
Tennessee	192	Releases of Biological Control Agents for Area-Wide Management of Musk Thistle in Commercial Nurseries in Tennessee. Jerome F. Grant and Paris L. Lambdin.

ORIGIN	PAGE NO.	PAPER AND AUTHOR(S)
Tennessee	196	Release of the Korean Lady Beetle, <u>Chilocorus kuwanae</u> , for Control of Several Coccids on Ornamentals in Tennessee. Paris L. Lambdin and Jerome F. Grant.

#### SECTION 5 - PATHOLOGY AND NEMATOLOGY

Georgia	199	Stem Water Potential of Root-Knot Nematode Infected Japanese Holly in the Georgia Piedmont. J. T. Walker.
Georgia	204	Nematode Distribution on an Ebb and Flow Bench System. J.T. Walker and Ron D. Oetting.
Tennessee	207	Chemical and Cultural Control of Dogwood Anthracnose. Mark T. Windham, Alan S. Windham, and Daniel A. Brown.
Tennessee	209	A Simple Assay for Separating Fungi Associated with Dogwood Anthracnose. R. N. Trigiano, N. E. Gerhaty, M. T. Windham, and D. A. Brown.
Tennessee	212	Laboratory Assays for Use in Dogwood Anthracnose Research. D.A. Brown, M.T. Windham, and R.N. Trigiano .

#### SECTION 6 - ENGINEERING, ECONOMICS, STRUCTURES, AND INOVATIONS

South Carolina	216	Nursery Crop Information Delivery Using CD-ROM Technology - An Update. R.A. Baumgardner and David M. Price.
Florida	217	Container Media Moisture Determination with an Electronic Sensor. Juan I. Valiente and Tom H. Yeager.
Alabama	219	Recycling Newspapers as Capillary Irrigation Mats. Kenneth C. Sanderson.

#### SECTION 7 - GROWTH REGULATORS

Mississippi	224	Modification of <u>Photinia</u> x <u>Fraseri</u> Growth with Atrinal® and Hand Pruning. Allen D. Owings and Steven E. Newman.
-------------	-----	---

## "SNA RESEARCH CONFERENCE - VOL. 36-1991"

---

ORIGIN	PAGE NO.	PAPER AND AUTHOR(S)
Alabama	227	Flowering of 'Shishi-Gashira' Camellia Promoted by Sumagic. Gary J. Keever and John A. McGuire.
Virginia	231	Evaluation of B-Nine, Bonzi, and Sumagic on some Nursery-grown Bedding Plants . Thomas J. Banko and Marcia A. Stefani.
Alabama	234	Effects of Sumagic on Seed-propagated <u>Physostegia virginiana</u> 'Alba'. C.F. Deneke, P.F. Thomas, and G.J. Keever.
Georgia	237	Chemical Growth Regulation of Container-Grown Ornamental Groundcovers. Paul A. Thomas and Joyce G. Latimer.

### SECTION 8 - PROPAGATION

Indonesia	242	Lemon Tea (Citrus limon Burn.) Cuttings. Kartini M. Deroes, Edwin Wijaya and Junita Gunadi.
North Carolina	244	Seed Germination of <u>Leucothoe fontanesiana</u> as Influenced by Light and Temperature. Frank A. Blazich, Stuart L. Warren, Juan R. Acedo, and Reid O. Whitehead.
Georgia	246	Development of a Liquid-Based Computer-Controlled Micropropagation Apparatus. Carol Robacker and Ward Simonton.
Georgia	248	Effect of Benzyladenine and Myo-inositol Sprays on Cold Hardiness and Overwinter Survival of <u>Stewartia monadelphica</u> Cuttings. Timothy J. Smalley and Orville M. Lindstrom, Jr.
Mississippi	253	Stimulation of Axillary Shoots of Hybrid Tea Roses in vitro. Linda Jayroe-Cournoyer and Steven E. Newman.

### SECTION 9 - WEED CONTROL

Virginia	257	Preemergence Herbicide Evaluation in Wildflowers. Jeffrey F. Derr.
North Carolina	260	Soil Fumigants for Establishing Wildflowers. L.B. Gallitano and W.A. Skroch.

## "SNA RESEARCH CONFERENCE - VOL. 36-1991"

---

ORIGIN	PAGE NO.	PAPER AND AUTHOR(S)
North Carolina	261	Response of Ornamental Grasses to Graminicides. C.J. Catanzaro, W.A. Skroch and J.D. Burton.
North Carolina	263	Proposed N. C. Noxious Weed Regulations- A Preventative Approach for Weed Control in Nurseries. Gene B. Cross.
Louisiana	266	Response of Container-Grown Herbaceous Flowering Perennials to Isoxaben and Isoxaben Combinations. Wayne C. Porter.
Georgia	269	Control of Prostrate Spruce in Container-Grown 'Stewartsonia' Azalea. John M. Ruter and Norman C. Glaze.
Alabama	273	Movement of Herbicides in Container Media. Charles Gilliam, Donna Fare, Gary Keever, Glenn Wehtje, and Danny Lacompte.
South Carolina	275	Tolerance of Ornamentals to Basagran. Chris Wilson and Ted Whitwell.

### SECTION 10 - LANDSCAPE

Georgia	278	Establishment and Maintenance of Wildflowers on Erodible Sites. W. L. Corley and James E. Dean.
Georgia	280	Seedbed Preparation Alternatives for Establishment of Wildflower Meadows and Beauty Spots. W. L. Corley.
Georgia	282	Cold Hardiness Potential of Four Selections of <u>Raphiolepis umbellata</u> . Orville M. Lindstrom and Will L. Corley.
Georgia	285	An Economic Analysis of Xeriscaping. Gary L. Wade and E. Neal Weatherly, Jr.
Tennessee	289	Operation and Management of the Trial Garden System at the University of Tennessee. Douglas Crater, and Susan Wilson.
Tennessee	292	The Woody Ornamentals Research/Teaching Garden at the University of Tennessee. Willard T. Witte.
Tennessee	295	Allelopathic Potential of Landscape Mulches to Control Weeds. D.B.Williams, K.K.Stein, and J.B.Walsh.



## "SNA RESEARCH CONFERENCE - VOL. 36-1991"

---

ORIGIN	PAGE NO.	PAPER AND AUTHOR(S)
North Carolina	299	Pools and Aquatic Plants in the Garden. M.A. Powell.
North Carolina and South Carolina	300	Illicium Evaluations in the NCSU Arboretum. P. R. Fantz, J. C. Raulston, and Robert McCartney.
North Carolina	305	Styrax Evaluations in the NCSU Arboretum. J. C. Raulston.
Louisiana	310	Effects of the 1989 Advective Freeze on Landscape Palms in the New Orleans Area. Severn C. Doughty and Daniel J. Gill.
Mississippi	315	Evaluation of U.S. National Arboretum Crape Myrtle Selections. Adolph J. Laiche.
Virginia	317	Evaluation of Landscape Fabrics with Organic vs. Inorganic Mulches. Bonnie Appleton, Jeffrey Derr and Susan French.
Virginia	320	Root Growth During Recovery of Transplanted River Birch Trees. Dan Milbocker.
Florida	321	Flowering Herbaceous Perennials for Zone 8. David W. Marshall.
Florida	325	ELM - Environmental Landscape Management - A "Systems" Approach to Florida Landscapes. Sydney Park Brown and Gary W. Knox.
Florida	326	Nitrogen Rapidly Leaches from Cypress Wood Chip Mulch. Tom Yeager, Ed Gilman and Diane Weigle.
Texas	329	Effects of High-Salt Irrigation on the Elemental Tissue Analysis of Three Maple Species. Marvin D. Hatter and David L. Morgan.

### **SECTION 11 - MARKETING**

Georgia	334	Environmental Marketing - An Opportunity for Garden Centers. Melvin P. Garber.
Georgia	336	The Importance of Advertising Media and Store Characteristics in Landscape Plant Purchase and Retail Outlet Selection Decisions. Steven C. Turner.

## "SNA RESEARCH CONFERENCE - VOL. 36-1991"

---

ORIGIN	PAGE NO.	PAPER AND AUTHOR(S)
Texas	339	Measuring and Assessing the Image of Retail Nurseries and Garden Centers. Charles R. Hall.
Alabama	343	Profile of the Owner or Active Manager of a Perennial Plant Business. Lisa Beckett and Bridget Behe.
Alabama	345	Merchandising Strategies of Perennial Plant Businesses. Bridget Behe and Lisa Beckett.
Alabama	348	Consumer Evaluation of a Soiless Potting Mix with Composted Broiler Litter. Bridget Behe, Charles Gilliam, and Jim Donald.
Tennessee	350	Landscape Plants: Production and Marketing Trends. John R. Brooker.
Tennessee	354	Economic Factors Affecting the Demand for U.S. Nursery Stock. Larry A. Johnson, Kim H. Jensen, John R. Brooker.
Tennessee	359	Trends in International Markets for Greenhouse and Nursery Products That Impact the United States. Kim H. Jensen, Larry A. Johnson, John R. Brooker.
Tennessee	363	A Study of Nursery Crop Insurance in Tennessee. Surendra P. Singh and Sam Osawaru.

### **AUTHORS ADDRESSES - Pages 366-373\***

\*Includes an itemized listing, by state, of each author, their complete mailing address and phone number.