

# PROGRAM

## 92nd Annual Meeting Florida State Horticultural Society

November 6 - 9, 1979

Dutch Inn Resort Hotel  
Lake Buena Vista  
Host Community to Walt Disney World



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GENERAL SESSION .....	Netherlands C
CITRUS SECTION .....	Netherlands C
GARDEN AND LANDSCAPE SECTION .....	Conference A
HANDLING AND PROCESSING SECTION .....	Netherlands A
KROME MEMORIAL INSTITUTE .....	Conference B
ORNAMENTAL SECTION .....	Netherlands B
VEGETABLE SECTION .....	Netherlands D

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All papers will start promptly on schedule as shown so that it will be possible to go from one section to another to hear papers of personal interest.

Every person attending the meetings will register. Registration fee is \$15.00. Registration for the ladies' program is \$5.00. Student Registration is \$5.00.

THOMAS J. SHEEHAN, Program Coordinator.

**PROGRAM**  
**92nd Annual Meeting**  
**Florida State Horticultural Society**

**SOCIAL HOUR**

Tuesday Evening, November 6, 1979 — 6:30 p.m.  
Netherlands Ballroom  
Compliments of the Staff of the Dutch Inn

**LADIES' PROGRAM**

Wednesday, November 7, 1979  
Netherlands E  
Open 9 a.m. to 4 p.m.  
Coffee — 9 a.m. to 11 a.m. and 2 p.m. to 4 p.m.  
"GET ACQUAINTED LUNCHEON" at 12:30 p.m.  
Hague Lounge  
Thursday, November 8, 1979  
Netherlands E  
Open 9 a.m. to 4 p.m.  
Coffee — 9 a.m. to 11 a.m. and 2 p.m. to 4 p.m.

**ANNUAL BANQUET**

Thursday Evening, November 8, 1979 — 6:30 p.m.  
Netherlands Ballroom  
Toastmaster: Dr. William "Bill" Grierson  
Presentation of Awards  
Entertainment — To be announced

**FRUIT CROPS ALUMNI BREAKFAST**

Thursday Morning, November 8, 1979 — 7:30 a.m.

**UNDERGRADUATE STUDENTS HOSPITALITY ROOM**

Conference D  
Open Wednesday, November 7, 1979 — 1:30 p.m. to 5:00 p.m.  
Thursday, November 8, 1979 — 8:30 a.m. to 6:00 p.m.

**UNDERGRADUATE STUDENT LUNCHEON**

Conference C  
Wednesday, November 7, 1979 — Noon

**ANNUAL BUSINESS MEETING**

Netherlands C  
Thursday, November 8, 1979, 4:15 p.m.

## GENERAL SESSION

WEDNESDAY MORNING, NOVEMBER 7, 1979 — 9:30 A.M.

Netherlands C

JULIA MORTON, President

Presiding

Invocation .....	Charles D. Kine, Jr.
President's Address .....	Julia Morton
Principal Address .....	Dr. T. Nejat Veziroglu
Recognition of Students .....	Julia Morton
Recognition of Patrons .....	Bob Berry
Recognition of V-P .....	Julia Morton

## CITRUS SECTION

ROBERT H. FREEMAN, Vice President

Presiding

### WEDNESDAY AFTERNOON — NOVEMBER 7

1. 1:30—Performance of 'Sunburst' Citrus Hybrid. *C. J. Hearn*, Agricultural Research, Science and Education Administration, USDA, Orlando.
2. 1:50—Producing Citrus Nursery Trees in One Year from Seed. *W. S. Castle*, IFAS Agricultural Research and Education Center, Lake Alfred, and *W. G. Adams* and *R. Dilley*, Adams Citrus Nursery, Inc., Haines City.
3. 2:10—Bravo®, A Promising Spray Fungicide for Florida Citrus. *E. Moherok*, AM-MO Consulting, Inc., Clermont.
4. 2:30—The Influence of N, K and Irrigation on Tree Size and Fruit Production of Valencia Orange. *R. C. J. Koo*, IFAS Agricultural Research and Education Center, Lake Alfred.
5. 2:50—Color Infrared Aerial Photography a Management Tool. *G. J. Edwards* and *C. H. Blazquez*, IFAS Agricultural Research and Education Center, Lake Alfred.
- 3:10—Discussion and Intermission
6. 3:30—Citrus Grove Prices as Determined by Discounting Expected Income and Costs. *B. Abbitt*, Florida Sugar Cane League, Inc., Clewiston, *J. Holt*, IFAS Food and Resource Economics Department, Gainesville, and *J. A. Otte*, Wallace's Farmer, Des Moines, Iowa.
7. 3:50—Reaction of Eight Citrus Varieties Topworked on 'Milam' Trees with Severe Stem-Pitting Symptoms. *S. M. Garnsey*, Agricultural Research, Science and Education Center, USDA, Orlando, and *C. O. Youtsey* and *G. D. Bridges*<sup>1</sup>, Florida Department of Agriculture and Consumer Services, Winter Haven.
8. 4:10—Yield Comparison of One Old-Line and Eight Nucellar 'Washington' Navel Budlines on Ten Rootstocks. *C. O. Youtsey* and *G. D. Bridges*<sup>1</sup>, Florida Department of Agriculture and Consumer Services, Winter Haven.
- 4:30—Sectional Business Meeting

### THURSDAY MORNING — NOVEMBER 8

9. 8:30—Frost Protection: A Rapidly Changing Program. *J. D. Martsolf*, IFAS Fruit Crops Department, Gainesville.
10. 8:50—Self-Heating Tree Wraps in Freeze Protection. *S. Reese*, Reese Groves, Lakeland, and *G. Yelenosky*, Agricultural Research, Science and Education Administration, USDA, Orlando.

<sup>1</sup>Retired

11. 9:10—January 3, 1979—Bark Splitting of Young Citrus Trees on Different Rootstocks. *G. Yelenosky*, Agricultural Research Science and Education Administration, USDA, Orlando.
12. 9:30—Biological Control of Citrus Blackfly in South Florida. *A. G. Selhime*, Agricultural Research, Science and Education Administration, USDA, Orlando.
13. 9:50—*Alternaria* Brown Spot of Dancy Tangerines and Its Control. *J. O. Whiteside*, IFAS Agricultural Research and Education Center, Lake Alfred.
- 10:10—Discussion and Intermission
14. 10:30—The Current Status of Imazalil: A Post Harvest Fungicide for Citrus. *H. J. Kaplan* and *B. A. Dave*, Pennwalt Corporation, Agricultural Technology, Monrovia, California.
15. 10:50—Factors Affecting Seed Germination in Vitro of the Strangler Vine, *Morrenia odorata* Lindl. *N. E. El-Gholl*, *W. H. Ridings*, and *C. L. Schoulties*, Florida Department of Agriculture and Consumer Services, Gainesville.
16. 11:10—The Effect of Citrus Rust Mite Damage on Fruit Drop in Three Citrus Varieties. *J. C. Allen*, IFAS Agricultural Research and Education Center, Lake Alfred.
17. 11:30—Migration of Citrus Rust Mite and Its Natural Enemies to the Spring Flush of Valencia Orange. *C. W. McCoy*, IFAS Agricultural Research and Education Center, Lake Alfred.

### THURSDAY AFTERNOON – NOVEMBER 8

18. 1:15—Results of 5 Years Continued Use of Abscission-Inducing Chemicals on 'Hamlin' Oranges. *G. K. Rasmussen*, Agricultural Research, Science and Education Administration, USDA, Orlando.
19. 1:35—Shaker Removal Methods Affect Valencia Orange Yields—Second Year. *H. R. Sumner*, Science and Education Administration, USDA, *G. E. Coppock*, Florida Department of Citrus, *D. B. Churchill*, Science and Education Administration, USDA, *S. L. Hedden*, Science and Education Administration, USDA, IFAS Agricultural Research and Education Center, Lake Alfred.
20. 1:55—Chemical and Air Shaker Orange Removal in South Florida (La Belle). *W. C. Wilson*, *J. R. Donhaiser*, and *G. E. Coppock*, Florida Department of Citrus, Agricultural Research and Education Center, Lake Alfred.
21. 2:15—Collecting and Handling Mechanical Harvested Oranges in South Florida (La Belle). *S. L. Hedden*, *H. R. Sumner*, and *D. B. Churchill*, Science and Education Administration, USDA, IFAS Agricultural Research and Education Center, Lake Alfred.
22. 2:35—Citrus Blight Diagnosis—Considerations and Procedures for Growers. *L. G. Albrigo*, IFAS Agricultural Research and Education Center, Lake Alfred, and *R. H. Young*, Horticultural Research Laboratory, USDA, Orlando.
- 2:55—Discussion and Intermission.
23. 3:15—Water Transport Characteristics of Limbs, Trunks, and Roots of Healthy and Blight-Affected 'Valencia' Orange Trees. *R. Young*, Agricultural Research, Science and Education Administration, USDA, Orlando.
24. 3:35—Hydraulic Conductivity of Wood of Trees with Citrus Blight. *M. Cohen*, IFAS Agricultural Research Center, Fort Pierce.
25. 3:55—Zinc and Phenolics in the Wood and Incidence of Blight in a Grove Containing Eight Selections of 'Hamlin.' *H. K. Wutscher* and *C. Hardesty*, Agricultural Research, Science and Education Administration, USDA, Orlando.
- 4:15—Annual Business Meeting

### GARDEN & LANDSCAPE SECTION

TOM MacCUBBIN, Vice President

Presiding

### WEDNESDAY AFTERNOON – NOVEMBER 7

26. 2:10—Economic Value of a Home Vegetable Garden in South Florida. *W. M. Stall*, IFAS Cooperative Extension Service, Homestead.

27. 2:30—Indian Atlantia, An Ornamental Tree for Landscaping in South Florida. *C. W. Campbell*, IFAS Agricultural Research and Education Center, Homestead.
- 2:50—Intermission
28. 3:10—Economics of Landscaping Factors for Conserving Energy. *D. E. Buffington*, IFAS Agricultural Engineering Dept., Gainesville.
29. 3:30—Versatility of the Modern Daylily. *J. Wooten*, Miami.
30. 3:50—Using Ecological Communities as a Basis for Environmental Education Work. *R. M. Craig*, USDA, Soil Conservation Service, Gainesville.
- 4:10—Sectional Business Meeting

### THURSDAY MORNING – NOVEMBER 8

31. 8:50—Turf, Energy, and the Environment. *P. Busey* and *E. O. Burt*, IFAS, Agricultural Research Center, Fort Lauderdale.
32. 9:10—What is 'Floritam'? *P. Busey*, IFAS Agricultural Research Center, Fort Lauderdale.
33. 9:30—Some Eriophyid Mites of Woody Ornamentals and Shade Trees. *H. A. Denmark*, FDACS, Division of Plant Industry, Gainesville.
34. 9:50—Incidence of Acarina on Three Species of Urban Landscape Plants. *S. L. Poe* and *S. M. Burgess*, IFAS, Entomology & Nematology Department, Gainesville, *J. A. Reinert*, IFAS, Agricultural Research Center, Fort Lauderdale.
- 10:10—Discussion and Intermission
35. 10:30—Preharvest Respiratory Trend of the Prickly Pear. *S. Lakshminarayana*, Depto. de Biotecnologia, University Autonoma, Metropolitana-Izatapalapa, Apdo; *M. A. Moreno Rivera* and *L. Alvarado y Sosa*, Depto. de Industrias Agricolas, Escuela Nacional de Agricultura, Chapingo, Estado de Mexico, Mexico.
36. 10:50—Shrinkage of Tomato Fruits During Ripening. *D. D. Gull*, Vegetable Crops Department, Gainesville.
37. 11:10—Effect of Waxing and Lining Materials on Storage Life of Some Citrus Fruits. *W. A. Farooqi*, *M. Ahmad* and *Z. M. Khalid*, Food Science Division, Nuclear Institute of Agriculture and Biology, FAisalabad, Pakistan.
38. 11:30—Distribution System and Marketing Problems of Florida Grapefruit in Japan. *H. Kitagawa*, Kagawa University, Faculty of Agriculture, Miki, Kagawa, Japan and *K. Kawada*, University of Florida, IFAS, AREC, Lake Alfred.

### THURSDAY AFTERNOON – NOVEMBER 8

- 4:15—Annual Business Meeting

### HANDLING AND PROCESSING SECTION

PAUL L. DAVIS, Vice President

Presiding

### WEDNESDAY AFTERNOON – NOVEMBER 7

39. 1:30—Extraction of Protein from Water Spinach (*Ipomoea aquatica*). *J. H. Bruemmer* and *B. Roe*, U.S. Citrus and Subtropical Products Laboratory, Winter Haven.
40. 1:50—Proline Content in Florida Frozen Concentrated Orange Juice and Canned Grapefruit Juice. *S. V. Ting* and *R. L. Rouseff*, Florida Department of Citrus, AREC, Lake Alfred.
41. 2:10—Tangeretin Content of Florida Citrus Peels Determined by HPLC. *R. L. Rouseff* and *S. V. Ting*, Florida Department of Citrus, IFAS, AREC, Lake Alfred.
42. 2:30—The Influence of Color in Florida Commercial Frozen Concentrated Grapefruit Juices. *R. L. Huggart* and *P. J. Fellers*, Florida Department of Citrus, AREC, Lake Alfred, and *G. De Jager* and *J. E. Brady*, Florida Department of Citrus, Lakeland.

43. 2:50—Evaluation of a Beverage Clouding Agent from Orange Pectin Pomace Leach Water. *M. V. Herera*, Medellin-Columbia, S.A., *R. F. Matthews*, University of Florida, IFAS, Gainesville, and *P. G. Crandall*, University of Florida, IFAS, AREC, Lake Alfred.
- 3:10—Discussion and Intermission
44. 3:30—The Specific Heat of Citrus Juices and Concentrates. *C. S. Chen*, Florida Department of Citrus, IFAS, AREC, Lake Alfred.
45. 3:50—Effect of pH on Clarification of Citrus Juices by Low Methoxyl Pectins. *R. A. Baker*, U.S. Citrus and Subtropical Products Laboratory, Winter Haven.
46. 4:10—Particle Size Distribution of Commercial Tomato Juices. *J. G. Surak*, *V. Wang*, *R. F. Matthews*, *H. A. Padua*, and *R. M. Hamilton*, University of Florida, IFAS, Gainesville.
- 4:30—Sectional Business Meeting

### THURSDAY MORNING — NOVEMBER 8

47. 8:30—Residues of Ethylene Dibromide Present in Fumigated Fiberboard Carton Material. *J. R. King*, *D. L. von Windeguth*, and *A. K. Burditt, Jr.*, USDA, AR, SEA, Subtropical Horticultural Research Unit, Miami.
48. 8:50—Seasonal Variation in Tolerance of Florida Grapefruit to a Combination of Methyl Bromide Fumigation and Cold Storage. *C. A. Benschoter*, USDA, AR, SEA, Subtropical Horticultural Research Unit, Miami.
49. 9:10—The Effects of Methyl Bromide as a Fumigant for Florida Oranges and Grapefruit in the Control of the Caribbean Fruit Fly. *T. T. Hatton* and *R. H. Cubbedge*, USDA, AR, SEA, Orlando.
50. 9:30—Quality Comparison of Mechanically Harvested Oranges. *D. B. Churchill* and *H. R. Sumner*, USDA, SEA, University of Florida, IFAS, AREC, Lake Alfred.
51. 9:50—Innovations in Florida Citrus Packinghouses. *J. Ellis*, Lake Garfield Citrus Cooperative, Bartow, and *J. W. Rushing*, Fruit Crops Department, IFAS, University of Florida, Gainesville.
- 10:10—Discussion and Intermission
52. 10:30—Florida Citrus Packinghouse Energy Consumption Survey. *W. F. Wardowski*, IFAS, Cooperative Extension Service, and *W. M. Miller*, University of Florida, IFAS, AREC, Lake Alfred.
53. 10:50—Energy Requirement of the TASTE Citrus Juice Evaporator and its Reduction by Automatic Control—A Pilot Plant Evaluation. *R. D. Carter* and *C. S. Chen*, Florida Department of Citrus, IFAS, AREC, Lake Alfred.
54. 11:10—Evaluations of a Low Cost Small Scale Solar Dryer for Florida Fruits and Vegetables. *C. J. Wagner, Jr.*, *R. L. Coleman*, and *R. E. Berry*, U.S. Citrus and Subtropical Products Laboratory, Winter Haven.
55. 11:30—Storage Stability of Solar Dried and Hot-Air Dried Green Peppers. *R. L. Coleman*, *C. J. Wagner, Jr.*, *R. E. Berry*, and *W. L. Bryan*, U.S. Citrus and Subtropical Products Laboratory, Winter Haven.

### THURSDAY AFTERNOON — NOVEMBER 8

56. 1:15—Biology and Control of *Geotrichum candidum*, the Cause of Citrus Sour Rot. *G. Eldon Brown*, Florida Department of Citrus, AREC, Lake Alfred.
57. 1:35—Cold Water Mist and Humidification of Citrus During Degreening. *A. Raynor*, Art Raynor, Inc., Bartow, *W. F. Wardowski*, IFAS, Cooperative Extension Service, and *W. M. Miller*, University of Florida, IFAS, AREC, Lake Alfred.
58. 1:55—Harvest Conditions, Packinghouse Treatments, and Shipping Temperatures for Export of Florida Bell Peppers. *L. A. Risse*, *J. J. Smoot*, *A. T. Dow*, *T. Moffitt*, and *R. Cubbedge*, USDA, AR, SEA, Orlando.
59. 2:15—Florida Muscadine Grape Juice: Processing and Evaluation Compared to Commercial Grape Beverages. *R. P. Bates* and *D. Gursky*, University of Florida, IFAS, Gainesville.

60. 2:35—Effect of Storage Temperature and Duration on Quality, Survival and Yield of Containerized Tomato Transplants. *L. A. Risse*, and *T. Moffitt*, USDA, AR, SEA, Orlando, and *H. H. Bryan*, IFAS, University of Florida, Homestead.
- 2:55—Discussion and Intermission
61. 3:15—Low Pressure (Hypobaric) Storage of Several Fruits and Vegetables. *D. H. Spalding*, and *W. F. Reeder*, USDA, AR, SEA, Miami.
62. 3:35—The Effect of Pallet-Stacking Patterns on Transit Temperatures, Fumigation and Arrival Condition of Grapefruit Exported to Japan. *P. W. Hale*, *L. A. Risse*, *T. Moffitt*, and *R. Cubbedge*, USDA, AR, SEA, Orlando, and *D. L. von Windeguth*, USDA, AR, SEA, Miami.
63. 3:55—Effects of Film Packaging and Growth Regulators on Keeping Quality of Grapefruit. *K. Kawada*, *W. Grierson*, and *L. G. Albrigo*, University of Florida, IFAS, AREC, Lake Alfred, and *P. W. Hale*, USDA, AR, SEA, Orlando.
- 4:15—Annual Business Meeting

## KROME MEMORIAL SECTION

T. E. CROCKER, Vice President

Presiding

### WEDNESDAY AFTERNOON – NOVEMBER 7

64. 1:30—Fruit Set in Four Rabbiteye Blueberry Cultivars. *F. S. Davies* and *D. W. Buchanan*, IFAS, University of Florida, Gainesville.
65. 1:50—Effects of AVG (Aminoethoxyvinylglycine) on Bloom Delay, Fruit Maturity and Quality of 'Tifblue' and 'Woodward' Rabbiteye Blueberries. *E. D. Dekazos* and *R. B. Russell*, USDA-SEA, Athens, Georgia.
66. 2:10—Financial Analysis of Establishing, Developing and Producing Rabbiteye Blueberries for Florida. *F. E. Stegelin*, IFAS, University of Florida, Gainesville, and *T. D. Hewitt*, IFAS Agricultural Research Center, Marianna
67. 2:30—Effect of Mating System on Time of Ripening and Fruit Weight in Blueberry. *S. Z. El-Agamy*, *P. M. Lyrene* and *W. B. Sherman*, IFAS, University of Florida, Gainesville.
68. 2:50—Results of a Survey on Pick-Your-Own, Grape, Blueberry and Peach Establishments. *T. E. Crocker* and *B. Wall*, IFAS, University of Florida, Gainesville.
- 3:10—Discussion and Intermission
69. 3:30—Seasonal Peak of Rickettsia-Like Bacteria Associated with Phony Peach Disease. *J. M. Wells* and *D. J. Weaver*, USDA-SEA, Byron, Georgia.
70. 3:50—Evaporative Cooling with Overhead Sprinkling for Rest Termination on Peaches. *Phyllis R. Gilreath* and *D. W. Buchanan*, IFAS, University of Florida, Gainesville.
71. 4:10—Dose-Response Data for Selected Insecticides on the White Peach Scale, *Pseudaulacaspis pentagona* (Targ.). *J. C. Ball* and *F. G. Martin*, IFAS Agricultural Research Center, Monticello.
- 4:30—Sectional Business Meeting

### THURSDAY MORNING – NOVEMBER 8

72. 8:30—Hybrid Pear Cultivars for Florida. *C. P. Andrews*, IFAS Agricultural Research Center, Monticello, and *W. B. Sherman*, IFAS, University of Florida, Gainesville.
73. 8:50—Weed Control with Oryzalin (Surflan) in Pecan and Nectarine Orchards. *C. E. Arnold* and *J. H. Aldrich*, IFAS Agricultural Research Center, Monticello.
74. 9:10—Developing and Using Pecan Budgets. *T. D. Hewitt*, IFAS Agricultural Research Center, Marianna.
75. 9:30—Tropical Fruit Tree Potting Media Experiment. *E. D. Ackerman*, Rare Fruit Council International, Miami.

76. 9:50—Stenoma Moth S. catenifer in Avocados. *D. O. Wolfenbarger*, 29220 S.W. 187th Avenue, Homestead.
- 10:10—Discussion and Intermission
77. 10:30—Yellow Strap Leaf of Papaya. *R. A. Conover*, IFAS Agricultural Research and Education Center, Homestead.
78. 10:50—The Genus Spondias in Florida. *John Popenoe*, Fairchild Tropical Gardens, Miami.
79. 11:10—Evaluation of Alternative Methods for Planting Papayas. *R. A. Conover*, IFAS Agricultural Research and Education Center, Homestead.
80. 11:30—Development of Systems for Obtaining Parasexual Carica Hybrids. *R. E. Litz* and *R. A. Conover*, IFAS Agricultural Research and Education Center, Homestead.
- 11:50—Discussion

### THURSDAY AFTERNOON – NOVEMBER 8

81. 1:15—Effect of Tetracycline Antibiotics on Pierce's Disease of Grapevine. *D. L. Hopkins*, IFAS Agricultural Research Center, Leesburg.
82. 1:35—A New Classification of the Native Grapes of Florida. *D. J. Rogers*, University of Colorado, Boulder, Colorado, and *J. A. Mortensen*, IFAS Agricultural Research Center, Leesburg.
83. 1:55—Rootstocks for Citrus in the Limestone Soils of Southern Florida. *C. W. Campbell*, IFAS Agricultural Research and Education Center, Homestead, and *S. Goldweber*, IFAS Cooperative Extension Service, Homestead.
84. 2:15—Grower Process for Limes: Projections through 1981-82. *R. L. Degner*, *J. S. Shonkwiler*, and *G. Cubenas*, IFAS, University of Florida, Gainesville.
85. 2:35—Tropical Fruits and Their Indigenous Relatives in Southern Florida. *Mary Ann H. Ogden*, IFAS, University of Florida, Gainesville, and *C. W. Campbell*, IFAS Agricultural Research and Education Center, Homestead.
- 2:55—Discussion and Intermission
86. 3:15—The Potential Use of Lipid Markers in Chemotaxonomy of Tropical Fruits. *H. E. Nordby* and *Nancy T. Hall*, U.S. Citrus and Subtropical Products Laboratory, Winter Haven.
87. 3:35—Promising Mexican Guava Selections Rich in Vitamin C. *S. Lakshminarayana*, Universidad Autonoma Metropolitana, Iztapalapa, Mexico, and *M. A. Moreno Rivera*, Escuela Nacional de Agricultura, Chapingo, Mexico.
88. 3:55—Proximate Characteristics and Composition of Sapodilla Fruits (Manilkara achras L.) grown in Mexico. *S. Lakshminarayana*, Universidad Autonoma Metropolitana, Iztapalapa, Mexico, and *M. A. Moreno Rivera*, Escuela Nacional de Agricultura, Chapingo, Mexico.
- 4:15—Annual Business Meeting

### ORNAMENTAL SECTION

RONALD A. HAMLIN, Vice President

Presiding

### WEDNESDAY AFTERNOON – NOVEMBER 7

89. 1:30—A Cost Appraisal of Capillary Mat, Chapin, Handwater and Overhead Irrigation Systems Used in Potted Chrysanthemum Production. *J. W. Prevatt*, IFAS, Cooperative Extension Service, Bradenton, *B. K. Harbaugh*, IFAS, Agricultural Research and Education Center, Bradenton, and *J. A. Otte*, Wallaces Farmer, Des Moines, Iowa.
90. 1:50—Financial Feasibility of a Small Bedding Plant Nursery. *R. Semprevio*, VPI, Agricultural Economics Department, Blacksburg, Virginia, *D. L. Gunter* and *J. R. Strain*, IFAS, Food and Resource Economics Department, Gainesville.
91. 2:10—Pixiola®: A New Cut-Flower for Florida. *G. J. Wilfret*, IFAS, Agricultural Research and Education Center, Bradenton.
92. 2:30—Mini-pot Garden Chrysanthemums; Cultivar Characteristics and Consumer Preference. *G. J. Wilfret* and *B. K. Harbaugh*, IFAS, Agricultural Research and Education Center, Bradenton.



93. 2:50—Influence of Temperature, Ethylene, and CO<sub>2</sub> on Leaf Abscission in Fittonia verschaffeltii. *F. J. Marousky*, USDA, SEA, Bradenton.  
3:10—Discussion and Intermission
94. 3:30—The Influence of Linear Drip Irrigation Placement in Mulched and Non-Mulched Soils on Pompon Chrysanthemum Production and Soil Nutrient Distribution. *A. J. Overman*, IFAS, Agricultural Research and Education Center, Bradenton, *F. G. Martin*, IFAS, Statistics Department, Gainesville, and *J. L. Green*, Oregon State University, Horticulture Department, Corvallis, Oregon.
95. 3:50—Melaleuca Bark and Solite-slag as Potential Potting Media for Foliage Plants. *R. T. Poole* and *C. A. Conover*, IFAS, Agricultural Research Center, Apopka.
96. 4:10—Production of Six Foliage Crops in Spent Mushroom Compost Potting Mixes. *B. Henny*, Ralston Purina Co., Zellwood.  
4:30—Sectional Business Meeting

### THURSDAY MORNING – NOVEMBER 8

97. 8:30—Influence of pH on Activity of Viterra®2 on Growth and Shelf Life of Maranta and Pilea. *C. A. Conover* and *R. T. Poole*, IFAS, Agricultural Research Center, Apopka.
98. 8:50—Foliage Plant Problems Diagnosed by Commercial Grower's Clinic—A Three Year Summary. *B. A. Barmby*, IFAS, Cooperative Extension Service, Orlando, and *A. J. Pate*, IFAS, Agricultural Research Center, Apopka.
99. 9:10—Evolution and Evaluation of Pests of Ornamental Plants in Florida: A Research Priority Tool, A Production Planning Tool, A Field Diagnosis Tool. *M. Borel*, *E. I. du Pont de Nemours & Co., Inc.*, Eustis.
100. 9:30—Incidence of Cymbidium Mosaic and Odontoglossum Ringspot Viruses in Commercial Orchids in Relation to Disease Control Methods. *G. C. Wisler*, FDACS, Division of Plant Industry, Gainesville, and *F. W. Zettler*, IFAS, Plant Pathology Department, Gainesville.
101. 9:50—Contamination in Plant Tissue Cultures. *J. F. Knauss*, Dr. Knauss' Plant Lab. Inc., Lake Worth and *M. Taylor*, IFAS, Agricultural Research Center, Apopka.  
10:10—Discussion & Intermission
102. 10:30—Effect of Root-Knot Nematodes on Pothos. *P. S. Lehman* and *D. E. Stokes*, FDACS, Division of Plant Industry, Gainesville.
103. 10:50—Pesticide Application, Human Exposure and Risk. *A. W. Engelhard*, *R. C. Ploetz*, and *A. J. Overman*, IFAS, Agricultural Research and Education Center, Bradenton.
104. 11:10—A New Root, Crown, Stem, and Leaf Rot of Poinsettia. *A. W. Engelhard* and *R. C. Ploetz*, IFAS, Agricultural Research and Education Center, Bradenton.
105. 11:30—Nonpathogenicity of Pseudomonas aeruginosa to coconut palm. *R. E. McCoy* and *H. M. Donselman*, IFAS, Agricultural Research Center, Ft. Lauderdale.

### THURSDAY AFTERNOON – NOVEMBER 8

106. 1:15—A Leaf, Stem and Flower Blight of Arabian Violet, Exacum affine, caused by Botrytis cinerea. *R. C. Ploetz* and *A. W. Engelhard*, IFAS, Agricultural Research and Education Center, Bradenton.
107. 1:35—Host Range, Virulence, and Control of Pythium splendens from Peperomia orba. *B. A. Kidney*, IFAS, Plant Pathology Department, Gainesville.
108. 1:55—Control of Mealybugs on Caladium. *J. F. Price*, IFAS, Agricultural Research and Education Center, Bradenton.
109. 2:15—Growth Responses of Potted Chrysanthemum to Controlled-Release Fertilizers with Two Irrigation Systems. *S. E. Rosenbaum*, IFAS, Ornamental Horticulture Department, Gainesville, *B. K. Harbaugh*, IFAS, Agricultural Research and Education Center, Bradenton, *T. A. Nell*, IFAS, Ornamental Horticulture Department, Gainesville, and *G. J. Wilfret*, IFAS, AREC, Bradenton.

110. 2:35—Influence of N Fertilization on the Utilization of Nutrients by Bermudagrass and overseeded Ryegrass Turfgrasses. *J. B. Sartain*, IFAS, Soil Science Department, Gainesville, and *A. E. Dudeck*, IFAS, Ornamental Horticulture Department, Gainesville.
- 2:55—Discussion and Intermission
111. 3:15—Biological Control of Insects and Mites on European Greenhouse Crops: Research and Commercial Implementation. *R. A. Hamlen*, IFAS, Agricultural Research Center, Apopka.
112. 3:35—Effect of Supplemental Light and Gibberellic Acid on Flowering of Field Grown *Chrysanthemum maximum*. *B. Tjia* and *T. J. Sheehan*, IFAS, Ornamental Horticulture Department, Gainesville.
- 4:15—Annual Business Meeting

## VEGETABLE SECTION

GARY W. ELMSTROM, Vice President

Presiding

### WEDNESDAY AFTERNOON – NOVEMBER 7

113. 1:30—Effect of Two and Four Row Beds with Drip or Sprinkler Irrigation on Strawberry Fruiting Response. *E. E. Albrechts* and *C. M. Howard*, IFAS, ARC, Dover.
114. 1:50—Efficient Use of Water and Fertilizer for Vegetable Production. *C. M. Geraldson*, IFAS, AREC, Bradenton.
115. 2:10—Response of Drip Irrigated Vegetables to Frequency of Water Application and Fertilizer Placement. *A. A. Cszizinsky*, IFAS, AREC, Bradenton.
116. 2:30—Plant Arrangement for Maximum Watermelon Yield. *G. E. Brinen*, IFAS Cooperative Extension Service, Gainesville, *S. J. Locascio*, IFAS, Vegetable Crops Department, Gainesville, and *G. W. Elmstrom*, IFAS, ARC, Leesburg.
117. 2:50—Crop Management Study in Four Vegetable Cropping Patterns for North Florida. *M. C. Palada*, and *R. D. William*, IFAS, Vegetable Crops Department, Gainesville.
- 3:10—Discussion and Intermission
118. 3:30—The First Four Years of Integrated Pest Management in Everglades Celery: Part II. *V. L. Guzman*, *W. G. Genung*, *T. A. Zitter*, and *M. J. Jones*, IFAS, AREC, Belle Glade.
119. 3:50—Growth and Phenology of Cabbage in a Winter Production Area. *James Strandberg*, IFAS, AREC, Sanford.
120. 4:10—Estimating Fresh Market Cabbage Maturity Dates in a Winter Production Area. *James Strandberg*, IFAS, AREC, Sanford.
- 4:30—Sectional Business Meeting

### THURSDAY MORNING – NOVEMBER 8

121. 8:30—Tolerance of Tomato to Manual Defoliation. *J. P. Jones*, AREC, Bradenton.
122. 8:50—Bacterial Wilt of Tomato in Florida: History, Status, and Sources of Resistance. *R. M. Sonoda*, IFAS, ARC, Fort Pierce, *J. J. Augustine*, IFAS, AREC, Bradenton, and *R. B. Volin*, IFAS, AREC, Homestead.
123. 9:10—Bud Rot of Pepper. *D. E. Dougherty*, IFAS, ARC, Immokalee.
124. 9:30—Dispersion Analyses and Sampling Plans for Insect Pests in Florida Celery. *C. A. Musgrave*, *H. W. Beck*, and *S. L. Poe*, IFAS, Entomology and Nematology Department, Gainesville.
125. 9:50—Sample Size, Age of Celery Petiole, and Rearing Conditions Affect Emergence of Leafminers, and Parasites. *E. H. Tryon, Jr.* and *S. L. Poe*, IFAS, Entomology and Nematology Department, Gainesville.
- 10:10—Discussion and Intermission

126. 10:30—Phytotoxicity of Cadmium to Bushbean, Tomato, and other Plants. *S. S. Woltz and C. G. Chambliss*, IFAS, AREC, Bradenton.
127. 10:50—Pepper Response to Sulfur-coated Urea, Mulch and Nitrogen Rate. *S. J. Locascio and J. G. A. Fiskell*, IFAS, Vegetable Crops Department and Soil Science Department, Gainesville.
128. 11:10—Residue of Endosulfan on Sweet Potato. *N. P. Thompson and P. C. Bardalaye*, IFAS, Food Science and Human Nutrition Department, Gainesville, and *V. H. Waddell*, IFAS, AREC, Homestead.
129. 11:30—Residue of CDEC on Lettuce and Radish. *N. P. Thompson and P. C. Bardalaye*, IFAS, Food Science and Human Nutrition Department, Gainesville, and *V. L. Guzman*, IFAS, AREC, Belle Glade.

### THURSDAY AFTERNOON – NOVEMBER 8

130. 1:15—Price-Acreage Relationships for Florida Sweet Corn. *Jose Alvarez*, IFAS, AREC, Belle Glade.
131. 1:35—Economic Characteristics of the Containerized Vegetable Transplant Industry in Florida. *C. N. Smith and M. N. Miller*, IFAS, Food and Resource Economics Department, Gainesville.
132. 1:55—Direct Marketing Alternatives for Tomatoes and Pole Beans in South Florida. *R. L. Degner and Gervasio Cubenas*, IFAS, Food Resource and Economics Department, Gainesville.
133. 2:15—Comparison of Energy Requirements for Fresh-Market Tomato Harvesting by Mechanical and Manual Methods. *R. C. Fluck and L. N. Shaw*, IFAS, Agricultural Engineering Department, Gainesville.
134. 2:35—A Plant Cutter with a Three Apron Pick-up for Tomato Harvesters. *L. N. Shaw*, IFAS, Agricultural Engineering Department, Gainesville.
- 2:55—Discussion and Intermission
135. 3:15—Overcoming Thermodormancy in Lettuce by Seed Priming. *A. C. Guedes and D. J. Cantliffe*, IFAS, Vegetable Crops Department, Gainesville, *K. D. Shuler*, IFAS Cooperative Extension Service, Belle Glade, and *Ernest Munter*, Florida Lettuce, Inc., South Bay.
136. 3:35—Cherry-type Tomatoes in Florida: An Evaluation of Four Cultivars. *G. J. Wilfret and D. S. Burgis*, IFAS, AREC, Bradenton.
137. 3:55—Guidelines for Pepper Quality Improvement. *R. K. Showalter and L. N. Shaw*, IFAS, Vegetable Crops Department and Agricultural Engineering Department, Gainesville.
- 4:15—Annual Business Meeting

