

**PROCEEDINGS**  
OF THE  
**SIXTIETH ANNUAL**  
**MEETING**  
OF THE  
*Florida State Horticultural*  
*Society*  
*And Its Affiliates*

HELD AT  
ST. PETERSBURG, FLORIDA  
OCTOBER 28, 29 and 30  
**1947**



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Florida State Horticultural Society  
Officers Elect for 1948

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Avon Park

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Avon Park

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Ruskin

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Coconut Grove

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Homestead

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*Vegetable Section*  
Plant City

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J. FRANCES COOPER, Gainesville

DR. F. S. JAMISON, Gainesville

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TREASURER

LEO H. WILSON, Bradenton

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EXECUTIVE COMMITTEE

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*Chairman*

FRANK L. HOLLAND, Winter Haven

R. S. EDSALL, Wabasso

LEM P. WOODS, JR., Tampa

DALE TALBERT, Vero Beach

# CONSTITUTION

Article 1. This organization shall be known as the Florida State Horticultural Society, and its object shall be the advancement of Horticulture.

Article 2. Any person or firm may become an annual member of the Society by subscribing to the Constitution and paying three dollars. Any person or firm may become a perennial member of the Society by subscribing to the Constitution and paying the annual dues for five or more years in advance. Any person or firm may become an annual sustaining member of the Society by subscribing to the Constitution and paying ten dollars. Any person may become a life member of the Society by subscribing to the Constitution and paying fifty dollars. Any person or firm may become a patron of the Society by subscribing to the Constitution and paying one hundred dollars.

Article 3. Its officers shall consist of a President, three Vice Presidents, Secretary, Assistant Secretaries, Treasurer and Executive Committee of five, who shall be elected by ballot at each annual meeting. These officers shall take their positions immediately following their election. The duties of the Assistant Secretaries shall be outlined and supervised by the Executive Committee.

Article 4. The regular annual meeting of this Society shall be held on the second Tuesday in April, except when ordered by the Executive Committee.

Article 5. The duties of the President, Vice Presidents, Secretary and Treasurer shall be such as usually devolve on these officers. The President, Secretary and Treasurer shall be ex-officio members of the Executive Committee.

Article 6. The Executive Committee shall have authority to act for the Society between annual meetings.

Article 7. The Constitution may be amended by a vote of two-thirds of the members present.

Article 8. A section of the annual program of the Society shall be devoted to the discussion of sub-tropical fruits, exclusive of the commonly grown varieties of citrus fruits. This section shall be known as the KROME MEMORIAL INSTITUTE. It shall be presided over by a fourth vice president who shall be elected by ballot at each annual meeting of the members in attendance at the Institute. The fourth vice president shall be an ex-officio member of the Executive Committee.

Article 9. The Executive Committee may, at its discretion and on the basis of merit, nominate not to exceed five persons in any one year, for Honorary Membership in the Society. Honorary members shall enjoy all privileges of the Society.

Article 10. A section of the annual program of the Society shall be devoted to the discussion of vegetables and other truck crops. This section shall be known as the VEGETABLE SECTION OF THE FLORIDA STATE HORTICULTURAL SOCIETY. It shall be presided over by a Vice President, who shall be elected at each annual meeting of the Society by the members in attendance at the Session. The Vice President shall be an ex-officio member of the Executive Committee.

## BY - L A W S

1. The Society year shall be coextensive with the calendar year, and the annual dues of members shall be three dollars.

2. All bills authorized by the Society or its Executive Committee, for its legitimate expenses, shall be paid by the Secretary's draft on the Treasurer, O. K'd by the President.

3. The meetings of the Society shall be devoted only to Horticultural topics, from scientific and practical standpoints, and the presiding officer shall rule out of order all motions, resolutions and discussions tending to commit the Society to partisan politics or mercantile ventures.

4. All patron and life membership dues and all donations, unless otherwise specified by donor, shall be invested by the Treasurer in United States Government bonds. The earnings from these bonds shall be left as accrued values or reinvested in United States Government bonds of a guaranteed periodical value unless it is ordered by the Executive Committee or the Society that such earnings can be made available for operating expense. Receipts from perennial membership dues shall be placed on deposit at interest by the Treasurer. Only three dollars (\$3.00) from each perennial membership fee shall be available during any calendar year for payment of operating expenses of the Society.

# LIST OF MEMBERS

## 1947

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### HONORARY MEMBERS

Chase, J. C., Winter Park	Holland, Spessard L., Bartow
Fairchild, Dr. David, Coconut Grove	Hume, Dr. H. Harold, Gainesville
Floyd, W. L., Gainesville	Lipsey, L. W., Blanton
Haden, Mrs. Florence P., Coconut Grove	Mayo, Nathan, Tallahassee
Hastings, H. C., Atlanta, Ga.	Robinson, T. Ralph, Terra Ceia
Henricksen, H. C., Eustis	Swingle, Dr. W. T., Washington, D. C.

### PATRON MEMBERS

American Agricultural Chemical Co., Pierce	Gulf Fertilizer Co., Tampa
American Fruit Growers, Inc., Maitland	Hastings, H. G. Co., Atlanta, Ga.
Angebilt Hotel, Orlando	Hillsboro Hotel, Tampa
Armour Fertilizer Works, Jacksonville	Klemm, A. M. & Son, Winter Haven
Buckeye Nurseries	Lake Garfield Nurseries, Bartow
Chase & Co., Sanford	Manatee Fruit Co., Palmetto
Coral Reef Nurseries Co., Homestead	Mills The Florist, Jacksonville
Deerfield Groves, Wabasso	Nocatee Fruit Co., Nocatee
Deering, Chas.	Oklawaha Nurseries Co., Inc., Lake Jem
Exchange Supply Co., Tampa	Peninsula Chemical Co., Orlando
Exotic Gardens, Miami	Schnarr, J. & Co., Orlando
Florida Citrus Exchange, Tampa	Southern Crate Manufacturing Assn.
Florida East Coast Hotel Co., St. Augustine	Stead, Lindsay, P. O. Box 809, Ft. Pierce
Florida Grower Publishing Co., Tampa	Thomas Advertising Service
The Fruitlands Co., Lake Alfred	U. S. Phosphoric Products, Tennessee Corporation, 61 N. Broadway New York, N. Y.
Gardner, F. C., Lake Alfred	Van Fleet Co., Winter Haven
Glen St. Mary Nurseries Co., Glen St. Mary	Wilson & Toomer Fertilizer Co., Jacksonville

All addresses are in Florida unless otherwise shown.

## LIFE MEMBERS

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 Allenbrand, Alfred, Box 288, Frostproof  
 Alderman, A. D., Bartow  
 Andrews, C. W., John Crerar Library,  
 Chicago, Ill.
- Barber, C. F., Macclenny  
 Bartlum, W. Leonard, Fla. Agr. Supply Co.,  
 Orlando  
 Berger, Mrs. E. W., Gainesville  
 Bouis, Clarence G., Box 6, Ft. Meade  
 Bringham, M. S., Micco  
 Britt, John F., Ft. Pierce  
 Brown, A. C., Gainesville  
 Bullard, Henry F., c/o Bullard & Sprott,  
 Lake Wales
- Carnegie, Mrs. T. M., Fernandina  
 Champlain, A. E., RFD No. 1, Palmetto  
 Chase, Josua C., Winter Park  
 Chidester, D. D., 446 Painter Ave.,  
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- Christiancy, Cornelius, Port Orange  
 Clement, Waldo P., Georgiana  
 Conner, Wayne E., New Smyrna  
 Cook, R. F., Leesburg  
 County Agr. Agent Orange Co., Orlando  
 Crutchfield & Woolfolk, Pa. Produce Bldg.,  
 Pittsburgh, Pa.
- Dunedin Public Library, Dunedin
- Ellsworth, Wilma J. (Miss), Rt. No. 1,  
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- Fairchild, Dr. David, Coconut Grove  
 Fugazzi, John, c/o Fugazzi Bros.,  
 Clearwater
- Gifford, Dr. John, Coconut Grove  
 Guest, Mrs. Amy, N. Ocean Blvd.,  
 Palm Beach
- Haden, Mrs. Florence P., Coconut Grove  
 Hakes, L. A., Box 771, Orlando  
 Hastings, H. G., 16 West Mitchell St.,  
 Atlanta, Ga.
- Henricksen, H. C., Box 1045, Eustis
- Hernandez, Pedro, 108 Cienfuegos,  
 San Fernando, Cuba  
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 Hume, H. Harold, Gainesville
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- Lassen, H. C., Garden Spring Terrace,  
 Saratoga, Calif.
- Lauman, G. N., Ithaca, N. Y.  
 Leonard, George V., Hastings
- Manatee Fruit Co., 1st Natl. Bk Bldg.,  
 Tampa
- Martin, A. Wm., Box 36, Sebastian  
 Mathews, E. L., Plymouth  
 McCarty, B. K., Eldred  
 McCarty, Mrs. C. T., Eldred  
 Merritt, Dr. J. C., 297 Sherman St.,  
 St. Paul, Minn.
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 Montgomery, Robert H. (Colonel)  
 Coconut Grove
- Montgomery, Mrs. Robert H.,  
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- Mountain Lake Corporation, Lake Wales
- O'Byrne, Frank M., Lake Wales  
 Ohmer, C. J., West Palm Beach  
 Olivebaum, J. E., Clermont
- Pedersen, W. L., Winter Haven  
 Pennock, Henry, Sr., Jupiter  
 Phillips, Dr. P. & Sons, Orlando  
 Phipps, John S., N. Ocean Blvd.,  
 Palm Beach
- Phipps, H. C., N. Ocean Blvd.,  
 Palm Beach
- Phipps, Howard, Delray Beach  
 Pike, W. N., Blanton  
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 Prosser, Lew, Plant City
- Raulerson, J. Ed., Arcadia  
 Reasoner, N. A., Bradenton  
 Reid, W. C., Largo  
 Rhode, H., Sebring

Ricketson, Mrs. M. C., "Grayfield,"  
Fernandina

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Sandlin, A. R., Leesburg

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Sellards, Dr. E. H., State Geologist,  
Austin, Texas

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Stanton, F. W., Dock & Walnut Sts.,  
Philadelphia, Pa.

Stead, Lindsay, Box 809, Ft. Pierce

Stevens, Edmund, Verge Alta, Puerto Rico

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Taber, Mrs. George L., Glen St. Marys

Taylor, J. S., Largo

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Todd, E. G., Avon Park

Towns, Thomas R., Holguin, Cuba

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Urbana, Ill.

Trueman, Roy B., Trueman Fert. Co.  
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Wilson & Toomer Fertilizer Co., Box 4459,  
Jacksonville

Wirt, E. L., Box 144, Babson Park

Woods, L. R., Tampa

Yothers, W. W., 457 Boone Street, Orlando

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Alexander, J. F., Bartow

Adams Packing Assn, Auburndale

Brown, Mrs. Vet L., Bartow

Bryan, R. L., Bartow

Chase, Randall, Sanford

Clark, John D., c/o Waverly Grs. Coop.,  
Waverly

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Dolomite Products, Inc., Ocala

Faircloth, Jack, S. Dixie, West Palm Beach

Farm & Home Machinery Co., Inc.,  
Orlando

Fawcett, Chas. F., Box 186, Orlando

Florence Citrus Grs. Ass'n, Florence Villa

Fla. Agr. Research Inst., Box 392,  
Winter Haven

Floridagold Citrus Corp., Lake Alfred

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Giddings, W. W., Polk Packing Co.,  
Winter Haven

Grant, A. J., 259 Scotland St., Dunedin

Growers Fert. Coop., Lake Alfred

Gulf Fert. Co., Box 2721, Tampa

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Co., Jacksonville

Hodnett, J. Victor, Winter Haven

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Lyons Fertilizer Co., Box 310, Tampa

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Naco Fert. Co., Box 1114, Jacksonville

Nicholson, Donald F., Orlando

Nicholson, Donald J., 1224 Palmer St.,  
Orlando

Palm Harbor Citrus Growers Association,  
Palm Harbor

Pasco Growers Cooperative, Dade City

Peninsular Fert. Works, Box, 1273, Tampa

Pinkerton, J. B., City Point

Raoul, Loring, The Raoul Co., Sarasota

Rickborn, J. H., Box 1401, Lakeland

Roess, M. J., Box 388, Jacksonville

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Ft. Pierce

- Ryburn, Alexander, Box 977, Vero Beach
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Dunedin
- Slough Grove Co., Inc., Dade City
- Smith, Francis Prescott, Box 442, Winter  
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- Snively Grove, Winter Haven
- Snively, Thomas V., Winter Haven
- Swann, Thomas B., Box 232,  
Winter Haven
- U. S. Phosphoric Products, Division  
Tennessee Corp., Box 3269, Tampa
- Virginia-Carolina Chemical Corp.,  
Box 2311, Orlando
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- Walker, Ralph N., Auburndale
- Wards Nursery, Box 177, Avon Park
- Waring, W. L. Jr., Box 310, Tampa
- Whitfield, Chas. S., 1110 Chichester Rd.,  
Orlando
- Williams, D. C., Rt 2, Cocoa
- Wilson & Toomer Fert. Co., Jacksonville
- Wolfe, J. C., Box 310, Tampa
- Woods, Fred J., Box 2721, Tampa
- Woods, Lem P., Box 2721, Tampa
- Wray, Floyd L., Hollywood
- Bailey, E. R., Sanibel Packing Co.,  
Sanibel
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- Barber, B. D., Clearwater
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- Bass, C. A., 79 N. W. 34th St., Miami
- Baskin, J. L., Box 1050, Orlando
- Bazemore, J. F., Box 1020, Orlando
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- Beerhalter, A., Rt 3, Box 300, Ft. Pierce
- Beisel, C. G., Ass't Chief Research Dept.,  
Fla. Citrus Cannery Coop., Lake Wales
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- Brooks, Dr. Chas., 110 N. Shine St.,  
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- Brown, T. O., Brown & Co., Frostproof
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- Burrichtier, A., Homestead
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- Cadmus, Harold J., Box 57, Lockhart

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1947 FLORIDA



- California Spray Chem. Corp., Box 1231,  
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- Carlton, R. A., Box 1986, West Palm Beach
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- Cassens, R. T., Box 613, Ft. Pierce
- Charles, Wilbur G., Box 323, Winter Haven
- Chase, Frank W., Windermere
- Chase, Randall H., Sanford
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- Chicone, Jerry J., Box 9, Winter Garden
- China Tung Oil, Inc., Gainesville
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- Clearwater Growers Ass'n, Clearwater
- Coe, Dana G., Providence Rd., Lakeland
- Cobin, Milton, Fairchild Tropical Garden,  
Cocoanut Grove
- Colee, Harold, Hildebrandt Bldg.,  
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- Colter, R. L., Box 830, Lakeland
- Conover, Dr. R. A., Subtropical Exp. Sta.,  
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- Constantine Farms, Inc., Clearwater
- Cotton, Dr. R. H., Plymouth
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Winter Haven
- Creighton, John T., Dept. Ent. University  
of Florida, Gainesville
- Crenshaw-McMichael Seed Co., Box 1314,  
Tampa
- Crumb, Frank K., Box 307, Lakeland
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- Daly, Charles F., West Coast Fert. Co.,  
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Gainesville
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Coral Gables
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- Dye, John B. Sr., Box 821, Ft. Lauderdale
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St. Augustine
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Cocoanut Grove
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c/o Harold L. Wilson, Jr., Bartow
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c/o Al Whitmore, Orlando
- Floridagold Citrus Corp., Box 535,  
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 Lake Alfred  
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 Graves, J. R., Box 922, Vero Beach  
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 Greene, Barnett E., American Fruit Grs.,  
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 Griffin, Ben Hill, Jr., Box 155, Frostproof  
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 Groebe, R. H., Barrett Div., Cocoa  
 Groff, G. W., Laurel  
 Grove, W. R., Laurel  
 Gunn, C. D., Rt. 3, Box 40A, Gainesville  
 Hanna, L. C., Hanna Rd., Lutz  
 Harding, Dr. Paul L., 415 N. Parramore,  
 (USDA), Orlando  
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 Homestead  
 Hartt, E. W., Box 308, Avon Park  
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 Hayman, W. Paul, Box 711, Bartow  
 Hayslip, Norman C., Belle Glade  
 Hayward, Wyndham, Winter Park  
 Henderson, H. C., Box 977, Winter Haven  
 Henderson, J. Riley, Box 392, Orlando  
 Henderson, W. R., Sherman Wms., Co.,  
 Tampa  
 Hennes, Jaffa E., South Lake Apopka  
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 Henry, W. M., Plant City  
 Herlong, Byron, Leesburg  
 Hill, Arthur M. Jr., Box 306, Vero Beach  
 Hill, T. C. Jr., 1101 Wallace Bldg., Tampa  
 Hines, T. R., Box 2721, Tampa  
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 Holden, B. H., Rt. 2, Box 486, Homestead  
 Holland, Frank L., Winter Haven  
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 Horton, Elsie C., Haines City  
 Howard, Frank L., Lake Spring,  
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 Hunter, Wm. P., 1039 Cypress St.,  
 Gainesville  
 Ingle, J. L., Stauffer Chem. Co., Apopka  
 James, Mrs. Roy L., 5900 4th St. S.,  
 St. Petersburg  
 James, R. H., Box 635, Dunedin  
 Jamison, Dr. F. S., Exp. Sta., Gainesville  
 Johnson, S. C. & Son, Inc., St. Petersburg  
 Johnson, Warren O., Box 1058, Lakeland  
 Jones, H. S., 2005 DeLeon Ave.,  
 Vero Beach  
 Jones, J. W., 1931 S. Fernando, Orlando  
 Jones, W. J., c/o DiGiorgio Fruit Corp.,  
 Winter Haven  
 Jordahn, A. C., Box 292, Cocanut Grove  
 Kanawha Groves Co., Ft. Pierce  
 Kaspar, P. E., Sherwin Williams Co.,  
 Tampa  
 Kazaros, Robert S., 1610 Delaney St.,  
 Orlando  
 Keenan Laboratories, Frostproof  
 Keene, R. D. Inc., Winter Garden  
 Kelsheimer, E. C., Veg. Crop Lab.,  
 Bradenton  
 Kendall, Harold E., Box 186, Goulds  
 Kensett, J. G., 2612 Jetton Ave., Tampa  
 Kent, L. D., 3860 Poinciana Ave., Miami 33

- Kent, Miss Olga, 3850 Poinciana Ave.,  
Miami 33
- Kew, Theodore J., 1721 Westchester Ave.,  
Winter Park
- Kilgore Seed Co., Plant City
- Kime, Chas. D. Jr., Rt. 1, Box 130,  
Winter Haven
- Kinard, R. R., Box 607, Homestead
- King, Batty, Bonita Springs
- King, John R., State Plant Board,  
Gainesville
- Kingham, Fern, Box 53, Davenport
- Kinsey Groves, (Mrs. Juliet Fox),  
Winter Haven
- Krome, Wm. H., Box 596, Homestead
- Krome, Mrs. Wm. H., Box 596, Homestead
- Lamont, Henry, Rt. 2, Ft. Pierce
- Langley, J. A., Haines City
- Lawless, W. W., Lake Alfred
- Lee, C. S., Oviedo
- Leonard, Geo. V., Hastings
- Lewis, H. F., Terra Ceia
- Lipscomb, S. F., Bartow
- Lipsey, L. W., Blanton
- Little, C. S., (Lyons Fert. Co.), Odessa
- Livingston, Bert, Florida Grower, Tampa
- Logan, John Henry, Box 540, Clearwater
- Long, J. S., City Hall, Tampa
- Loudon, Hugh R., Box 75, Babson Park
- Lowles, Amos W., Box 246, Port Orange
- Lucas, Glenn, Box 564, Leesburg
- Luckhardt, Robert L., A. A. F. Regional  
Hosp., Coral Gables
- MacCarthy, H. P., 5911 Cherokee Ave.,  
Tampa
- McClanahan, H. S., John F. Seagle Bldg.,  
Gainesville
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- McCormack, Jack, Radio Sta. WGBS,  
Miami
- MacDowell, Dr. L. G., Fla. Citrus Comm.,  
Lakeland
- McCarthy, E. A., Box 310, Tampa
- McKay, M. F., 707 S. Willow, Tampa
- McKinnon, W. M., 901 Magnolia Ave.,  
Sanford
- McLain, L. R., (Gulf Fert. Co.),  
Box 2721, Tampa
- McLane, W. F., (Lyons Fert. Co.)  
Box 310, Tampa
- McMichael, H. D., Box 1314, Tampa
- McMullen, W. R., 2711 Jetlon Ave.,  
Tampa 6
- McNutt, M. H., c/o McNutt-Heasley,  
Orlando
- McPeck, John K., 328 S. Lakeview Dr.,  
Sebring
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PROCEEDINGS  
OF THE  
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*Text of Addresses*  
*Delivered at*  
*60th Annual Meeting*  
*Florida State*  
*Horticultural Society*



## PRESIDENT'S ADDRESS

F. M. O'BYRNE

*Lake Wales*

This is the first year that our regular annual meeting occurs in the fall instead of the spring. Each season has its own advantages. We ask that our members evaluate the merits and demerits of a fall meeting and give us their opinions. It is your Society, and we wish to meet at the time which suits you best.

At its last meeting, your Society called upon our State and Government agencies to finance and push with all possible speed the investigation of the Tristeza disease of citrus, which attacks trees on sour orange stock.

Due to Dr. Camp's presentation of the problem in Texas and largely through the efforts of E. M. Goodwin, a large grower of Mission, Texas, the interests there raised \$20,000.00 to help finance the campaign. The State Plant Board of Florida allotted \$2,000.00 from its emergency fund for this purpose.

In June of 1946, your officers made a trip to Tallahassee and presented the matter to Governor Millard Caldwell and his Budget Commission. Due to the keen interest and support of Commissioner-of-Agriculture Nathan Mayo, and on his motion, the Budget Commission approved the transfer of \$20,000.00 from his General Inspection Fund to the State Plant Board to help finance the investigation.

Due to the exactness required of State Expenditures, we felt that we should have a revolving fund raised from the Citrus industry for use in meeting promptly pay rolls and bills incurred in South America until such time as they could be put into proper shape for payment by the Comptroller. The leaders of the industry were acquainted with the situation and contribu-

tions solicited. From this source, we realized \$16,070.00. Officers were elected from the contributors and the funds placed at the disposal of Dr. A. F. Camp, Director of the Citrus Experiment Station. The investigation is progressing favorably and will be reported upon in detail at this meeting. We feel that your Society has been of great service to the Industry in this particular matter.

During the past summer, your President made a trip to Louisiana, Texas and Mexico. The groves in Louisiana sell practically all their fruit in New Orleans and so hardly affect us. There will be no great increase in plantings there.

The groves in Texas, on the whole, look fine, though there are occasional bad spots due to lack of drainage. During recent years, their plantings have run much more heavily to oranges than formerly. A few years ago, they were planting mostly Ham-lins and now they are planting heavily to Valencias. They are also continuing to plant Ruby Red grapefruit.

The soil in Texas is heavy and they can raise vegetables or cotton between the tree rows for the first three years, very largely defraying the cost of raising the grove.

Their production costs are lower than ours, due principally to their using less fertilizer than we do and also to the fact that they have been getting all the Mexican labor they wanted for twenty-five cents an hour plus a house. Mexicans able to drive a truck or tractor get slightly more. When you think that we pay sixty-five cents per hour for common labor, you can see where much of the difference in care costs lies. Since my return, Mexico has raised the price on this labor five cents per hour, so that eventually our care costs may tend to become equalized.

The Texas growers are doing no oil spraying, believing that they can get by with natural controls. I saw three groves rather badly infested with scale. The time may come when they will have to spray with oil. They control rust mites by dusting, mostly by airplanes.

Their main headache is their irrigation water. Mexico is cutting off some streams of good, fresh water and using it locally. The concentration of salts in the Rio Grande is increasing. During periods of drought, the salt concentration in the grove soils becomes high and the trees suffer until a heavy rain comes and flushes the salts out of the soil. They had a very heavy rain just before I arrived. They are now planning a master drainage system, as well as a larger irrigation system. They feel that this will permit them to reclaim some soil which is now unsuited for citrus.

Texas grove values went up at the same time ours did, but not quite as high. They dropped when ours did and none of them were bragging about the amount of money they made last year. Still and all, it looks to me as if they would be in the business for a long time to come.

There are many acres of young grove just planted. I did not learn if these plantings were real estate promotions or additional acreage planted by owners of bearing groves. My guess is that Texas has almost as many groves planted as the Rio Grande will irrigate. They have plans for the development of many more acres northwest of their present plantings. How they hope to get irrigation for these groves, is beyond me.

The groves in Mexico are likewise on heavy soil. They look fine and were carrying ripe Valencia oranges the last of August. There was no drying or crystallization at the stem-ends in any of the fruit I purchased. The fruit was almost too sweet.

There are many groves that have just been planted. Fully fifty per cent of the citrus groves I saw in Mexico are below

bearing age. Of the bearing groves observed, fully eighty per cent are young groves and but twenty per cent are of any considerable age.

The groves I saw were well cared for with modern machinery, International tractors and such equipment. The trees are on sour orange stock and are quite vigorous. Many groves were carrying a second bloom the last of August. I called on Government Agricultural officials, asking the extent of the new plantings. They could give me no figures, but said they were very large.

All of the Mexicans to whom I talked seemed to think they would have no fruit to export. I can not see how they can fail to have a surplus for with their present plantings, I was able to buy fresh orange juice everywhere I went in Mexico. I do not see how they can possibly absorb all the increased production that I saw in sight. Will the State Department want the United States to admit this Mexican fruit in furtherance of the Good Neighbor Policy?

There is one thing that I would like to stress. From the time I reached "The Valley" in Texas, all the way through Mexico and back through "The Valley" again, I could get freshly squeezed orange juice at any time. It was *offered and pushed*. In a McAllen, Texas, hotel, I was told that the only fruit juice they could give me was fresh orange juice. Likewise, throughout Mexico, I could get fresh orange juice in every town of any size. It was not poured out of a can, nor had it been squeezed out a couple of hours before and grown flat and tasteless. It was often squeezed before your eyes.

It makes my face red when I recall tales told me winter after winter by visitors to my home town, who say they had to take canned orange juice or go without. We growers should look into the situation in our home towns to see to it that visitors asking for orange juice can always get freshly squeezed orange juice in our hotels, restaurants and drug stores. I feel that

the growers have done a much better job in Texas and Mexico in securing the co-operation of their hotels and drink shops. Even the Mexican radio commercials featured "naranjas."

Many years ago, Congressman Drane reported that Mr. Goodall, who manufactures all of the Palm Beach clothes and ties, asked him if citrus growing was a profitable industry. Congressman Drane, to Mr. Goodall's surprise, replied that citrus growing was not an industry. Mr. Goodall said, "Well, if citrus growing is not an industry, what is it?" Congressman Drane replied, "It is a disease. You either have it or you don't. Those who have it are to be pitied, for they go right on raising citrus, even when they may lose money doing it."

Subsequent to that conversation, the citrus industry has enjoyed some wonderful seasons, but last season brought us back to conditions that Congressman Drane had in mind. Almost everything that could happen to depress citrus prices occurred. Many of the depressing influences were beyond our control, but many of them are not. Where controls are available, we should apply them.

First, we should try to see that we have no such large carry-over of canned citrus juice as we had last fall. A large carry-over will always depress prices.

Second, we need to give more attention to quality and less to quantity. The market will always absorb more good oranges than it will poor oranges. We have been straining to produce as many boxes per tree as possible. Let us concentrate on producing good fruit.

Third, we need in some way to reduce the number of sales agencies offering Florida fruit for sale. The buyers constantly play one sales manager and his quotations against the other and beat prices down. Buyers in the North buy sparingly when the market is weak and apt to break even further. A strong and rising market helps everyone. California demonstrates year

after year the great advantage of fewer selling agencies.

Fourth, we as producers must realize that any decay that occurs in our fruit comes out of the grower's pocket. Many think that they handle the fruit so that it reaches the jobber with little or no decay, the grower's interest is over. This is a mistake. If decay is heavy in the fruit before it is consumed, occurring in the hands of the wholesaler, retailer or housewife, it will result in many switching to fruit grown in dryer regions, where decay is not so heavy.

Florida fruit has rightly been called "Balls of Juice." Such fruit will decay unless it is very carefully handled. During the war, most of our houses switched from clipping fruit to pulling it. The pickers prefer to pull fruit and some will tell you there is less decay in pulled fruit than when it is clipped. This may be true when pulled by an expert, with care, but when the ordinary picker pulls fruit, he is interested in speed and not in care. A picker in a hurry should always use clippers.

Last year, a grower was checking the picking of a crop in another grower's grove. The fruit had been purchased "on the tree" by an independent buyer. As soon as the boss left, the pickers put up their clippers and started to pull the fruit. The checker protested, without results. He made the mistake of thinking it was none of his business as it was not his fruit and had been bought "on the tree." Soon the pickers were picking the fruit and dropping it to the ground, then picking it up in sacks and emptying it into the field boxes.

No wonder that this fruit decayed badly before it was consumed. Most of the decay showed up on the sides of the fruit. Such handling of fruit hurts every grower in the State, for no matter how carefully your house handles your fruit, it is bound to be penalized considerably because of rough handling by other houses.

We growers should see to it that we grow the highest quality fruit that our

groves are capable of producing and that all fruit is handled like eggs from the tree to the car and then on to market. Any decay which occurs before that fruit is consumed, means money out of our pockets. Believe it or not!

We are going to see higher and higher

production in the years to come. Competition will be more and more keen. It is up to us to see that Florida fruit is handled right, handled carefully and sold to the best possible advantage. Otherwise, we will have the disease of citrus growing and be in very hopeless shape.

## THE RELATION BETWEEN THE HORTICULTURIST AND HIS BANKER

T. G. MIXSON, Pres.

*First National Bank*

St. Petersburg, Florida

Mr. President, Honorable Guests, and Members of the Florida State Horticultural Society.

I am honored to be accorded a place on your program. It is a privilege to be associated with you in my capacity as Chairman of the Citrus Committee of the Florida Bankers Association—as a banker to some of you, and a pleasure to see many of my friends among you.

I am intensely interested in the aims of your organization and the contribution you are making to the economy of our state. You have gone far in the production of quality products and their distribution. You have done an outstanding job in research—producing more and more consumer products and yet there is more to be done when we are faced with mounting volumes of production from year to year. We have seen in the past year and a half, fruit—both fresh and canned—in excess of what the market might consume on a profitable basis, based on temporary conditions prevailing at the time. I am frank to say that I do not have the answers to these problems and sometimes have almost doubted whether you have them—notwithstanding the wonderful progress you have made in the past twenty-five to forty years.

Although our Bankers' Association has

had a Citrus Committee for years, I do not know of any constructive cooperative effort which has developed between our association and your several organizations or agencies. Let me stress however that individual banks and bankers have taken an active part in your problems and I believe have made outstanding contributions to the industry.

During August of this year, our committee composed of officers of many of the outstanding banks in the Citrus area met in Lakeland and after mature thought, adopted the following statement of policy.

### STATEMENT OF POLICY

The Florida Bankers' Association through its Citrus Committee recognizes that the citrus industry is foremost in the economy of the state. It is further recognized that there is an ever increasing supply of citrus and because of this the industry is faced with serious problems in marketing and distribution. The Florida Bankers Association therefore is vitally interested in and is anxious to cooperate in improving these conditions.

It has been observed with interest and gratification the thought, study, and intelligence which are being given to the solution of these problems by the Florida Citrus Commission, citrus trade bodies, and canners especially as related to the movement of immature fruit and further improvement of the standardization of quality both in fresh and processed fruit.



It is believed the solution of these problems requires the unselfish cooperation of all parties interested in the citrus industry. The marketing of the increased production lies in a wider distribution and more favorable acceptance by the ultimate consumer. It is felt that increased thought, study and research should be given to production of better quality fruit, perfection of processing and merchandising methods and development of new consumer products.

Because of its sustained interest in the development of the citrus industry, the Florida Bankers' Association reaffirms its desire and willingness to render every possible assistance to growers, processors, and distributors, and their affiliated organizations.

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Copies were sent to the key organizations in order to acquaint you with our interest in the industry. It is felt that the Citrus Committee through the Florida Bankers' Association might exchange ideas, and from these meetings find the answers to the knotty problems which lie ahead.

Fortunately, for the industry as a whole—we had a freeze in the early spring which gave buoyancy to a sagging market and the industry had a fair year. In the face of this, press reports have indicated that we had a sizable volume which was not marketed by reason of an unusual amount of drops and grapefruit which had no market.

You are plagued in almost every normal year with the shipment of fruit early in the season which you and I would not eat and after the consumer gets a taste you see the reaction in the market. I make this statement fully cognizant of the fact that competition is keen from other citrus producing sections and that it is a problem to move your production within a specific period.

Then we have speculation both in the fresh fruit and by the canner—You have to look no farther than the beginning of the past season to know of the disastrous

results which were visited upon the speculators and the industry also suffered.

Then we have the price cutter—both in fresh and canned fruit—he gets stocked up on merchandise in both forms—without first knowing where it is to be sold—and the result—price reductions and more suffering.

You are faced with another problem—that of a large number of shippers offering at varying prices when volume is heavy—in many cases resulting in losses to wholesale and retail distributors who have bought at relatively higher prices and then find it necessary to dispose of their stock at lower competing prices—These losses do not build with such distributors good will for Florida fruit, notwithstanding its top quality.

With the purchasing power of our country remaining for the current season at its present capacity. I think it is reasonable to expect the trade to consume our present crop at fair prices, provided it is quality goods. I advance this thought because of what was consumed last year with the market faced with the largest crop on record and seventeen million cases of canned goods overhanging the market. When those merchants and distributors who bought blindly in the 1945-46 season at high prices reduced to a reasonable level the public took the goods out of trade channels.

I hope that false moves will be cut to a minimum in the future.

Many of our banks are lending liberally in the production and marketing of canned fruit. Some are lending on groves. I have thought loans of this latter type might be expanded if we could ever get insurance protection against hurricane and freeze damage. However, no concrete progress has been made on the insurance program. This of course would make it more attractive to local banks—They should not take undue risks with yours and other customer's deposits. We do not have unlimited taxing power from which to receive ap-

propriations to make good the deficits to the capital account.

Some of our banks are now serving fresh and canned juice to all who visit their banking offices—thus popularizing your products. Our bank during the winter season keeps on display the products of most of the canners in the state for purposes of showing home folks and visitors some of the products our state produces and acquainting them with our canned citrus products, other fruits and vegetables and labels. Many of the 200,000 visitors to our city last year saw this exhibit.

While many of our merchants feature canned goods in their display advertising—there are many who do not. Why not contact those who do not and urge them to do so—they advertise prune juice, apple juice, pineapple juice, and tomato juice.

I have been impressed with the progress

made by the vegetable growers in the production of quality products—In the relative past few years their distribution has improved immeasurably. I still feel that much can be done by that unit in grading and packaging—taking care that the culls are fed to livestock, thus offering the best grades for consumption and improved prices.

Let me urge you, whether it be citrus—specialties or vegetables to refrain from pricing yourselves out of the market.

In conclusion, even though I may not have covered all the phases of the industry, nor those referred to completely, I trust that what I have said has some merit. Your bankers are keenly interested in what you are producing and marketing for it means so much to you and the economy of the state.

I have enjoyed being with you on this occasion.

## GRADUATE WORK IN HORTICULTURE AT THE UNIVERSITY OF FLORIDA

By H. S. WOLFE

*Department of Horticulture*

University of Florida, Gainesville, Fla.

Horticulture has been for many decades the most important industry of Florida, but this fact has only slowly made its impress upon the educational system of the state. It was not until 1912 that there was a distinct and separate department of Horticulture in the College of Agriculture of the University, it having been treated previously as a phase of botany. Through the years since that time this department has devoted itself to training men for more effective participation in the production of citrus and other fruits, of vegetable crops and of ornamental plants. More course work in citrus culture is offered at the University of Florida College of Agriculture than in any other agricultural college in

the United States. We take a justifiable pride in the sound training we have given our graduates and in the prominent places they hold in the horticultural industry of our state.

Graduate work in horticulture actually antedates the establishment of a separate department, since the first candidate for a Master of Science with a concentration in horticulture was so registered in 1905. The first M. S. degree for work in this field was given in 1909 to H. S. Fawcett, a man who later became the outstanding leader in the study of citrus diseases. Since his graduation, thirty-two men have received the M. S. degree for horticultural study and research, and have gone largely into teaching and research work in this state and in many foreign countries. In this graduate training the staff of the teaching department have enjoyed the warm and close cooperation of

the horticulturists on the staff of the Agricultural Experiment Station, and the research workers and facilities of the Station have greatly broadened the type and scope of the research problems available for pursuit by candidates for the Master's degree.

With the expansion of the research work carried on at the branch stations, there has been an increase of staff until now some of these branches have a larger staff of skilled research men than the Main Station had 20 years ago. We are particularly interested today in the situation at the Citrus Experiment Station with the tremendous expansion of which in the last few years you are familiar in some degree. The Board of Control has recently, with the full approval of Director Mowry and Vice-Director Camp, made it possible to utilize the facilities of the Citrus Station and its staff for instructional purposes. It is now possible to have students work out the thesis research for the M. S. degree at the Citrus Station, where facilities for research in many phases of citrus culture are much superior to those available at Gainesville. Furthermore, a plan is being worked out which will permit graduates of the College of Agriculture with a horticulture major and special emphasis in citrus culture to interne, as it were, for a semester or a year at the Citrus Station. This period of practical experience in the best modern grove, packinghouse or processing procedures should be a valuable adjunct to the sound training in basic principles and the limited practice in operations which are considered sound educational procedure.

The way is now open for a further step in horticultural graduate training. It is a great pleasure to say that in the near future we expect to announce that by reason of this same effective cooperation, the Ph. D. degree may be obtained in horticulture at the University of Florida. The research program of our Agricultural Experiment Stations has been greatly expanded in recent years, both in the field of citrus and in that of vegetables. There are at least 6

or 7 men working in each of these broad fields who are fully qualified to direct the research work of candidates for the doctorate. Many other universities in this country give the Ph. D. degree in horticulture with a concentration in vegetable crops, but only our great rival state in citrus production offers a Ph. D. to horticulture students specializing in the citrus field. California has trained many research men for her own service and for other subtropical countries, and Florida will now be able to do the same. Already we have a young man from India who plans to work for a Ph. D. in horticulture, specializing in citrus production.

Facilities and staff at our Citrus Experiment Station are so well developed that a candidate for the doctorate may carry on research in any one of three separate areas: citrus production, citrus fruit handling, or citrus processing. The extensive experimental groves of the Station, as well as the thousands of acres of commercial plantings within a few miles of the Station and available for cooperative research use, together with the splendid library and laboratory facilities of the Station, afford ample scope for research in citrus production. The new research packing-house at the Citrus Station, together with the same library and laboratory facilities, assures proper opportunity for students to carry on advanced research in the handling of citrus fruit to best advantage. And the excellent new building for research in processing problems of citrus fruits, together with the big commercial processing plants located in Polk and adjacent counties, offer unrivalled facilities for thesis research in this important citrus field.

On the vegetable crops side, there is a new processing laboratory nearly completed at the Main Station at Gainesville, and both there and at Bradenton are fields and laboratories for research in production of vegetables. Mention may also be made of the fact that this year for the first time it is possible to offer undergraduate courses

in the processing of fruits and vegetables, so that there can be a sound basis for work on the graduate level.

The various physical facilities which I have mentioned as suitable for use in research by candidates for a Ph. D. would be of small value without properly trained and experienced research men to direct the work. We can take pride in the calibre of the research workers on our Station staffs. And the fact that they are busy with investigation of problems important in the citrus and vegetable industries makes it possible for doctoral candidates to select genuinely practical problems for their thesis research too.

I have stressed mainly the research facilities of the Agricultural Experiment Stations, because these are exactly the facilities which the Department of Horticulture of the College of Agriculture does not have in amount sufficient to permit work on the doctoral level. But we have the teaching resources of all the other agricultural departments of the College to supplement our own in the necessary courses to prepare a man for advanced research in horticulture, and this combined with the research men and facilities of the Stations makes possible this latest advance in the training of men for horticultural service in Florida.

# CITRUS SECTION