

PROCEEDINGS
OF THE
105TH ANNUAL MEETING
of the
**FLORIDA STATE
HORTICULTURAL SOCIETY**

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1907-1908	P. H. Rolfs	1956	R. A. Carlton	1976	John W. Sites
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		1972	R. A. Dennison	1992	Daniel J. Cantliffe

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Berckmans, P. J.	1893	Holland, Spessard L.	1945	Reitz, Herman J.	1970
Berger, E. W.	1940	Hoyt, Avery S.	1950	Reitz, J. Wayne	1955
Berry, Robert E.	1987	Holt, R. D.	1914	Robinson, T. Ralph	1942
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Chase, J. C.	1939	Krome, William J.	1927	Skinner, L. B.	1931
Chase, S. O.	1939	Krome, Mrs. Isabelle B.	1960	Sloan, G. Dexter	1964
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Colburn, Burt	1970	Lipse, L. W.	1924	Smoot, John J.	1986
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Everett, Paul H.	1986	Mathias, A. F.	1972	Taber, George L.	1914
Fairchild, David	1922	Matthews, Richard F.	1992	Tait, W. L.	1962
Fifield, Willard M.	1955	Mayo, Nathan	1940	Talbott, George M.	1980
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Floyd, Bayard F.	1944	Menninger, Edwin A.	1964	Thompson, Ralph P.	1962
Floyd, W. L.	1939	Miller, Leon W.	1972	Thompson, W. L.	1962
Ford, Harry	1985	Miller, Ralph L.	1972	Thullbery, Howard A.	1962
Forsee, W. T., Jr.	1973	Montelaro, James	1985	Todd, Norman	1991
Gaitskill, S. H.	1909	Morton, Julia F.	1989	Veldhuis, M. K.	1972
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Garrett, Charles A.	1957	Mowry, Harold	1950	Webber, H. J.	1941
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Guzman, Victor L.	1987	Norman, Gerald G.	1967	Wilson, Lorenzo A.	1934
Harding, Paul L.	1968	Norris, Robert E.	1962	Wiltbank, William J.	1987
Hart, W. S.	1909	O'Byrne, Frank M.	1962	Winston, J. R.	1960
Hastings, H. G.	1939	Overman, A. J.	1988	Wolfe, H. S.	1964
Hatton, Thurman T.	1987	Painter, E. O.	1909	Young, T. W.	1978
Hayden, Mrs. Florence P.	1934	Peterson, J. Hardin	1950	Yothers, W. W.	1955
Hayslip, Norman C.	1981	Pratt, J. B.	1980	Ziegler, L. W.	1976

*Date year award made.

Proceedings of the **FLORIDA STATE** *Horticultural Society* 1992

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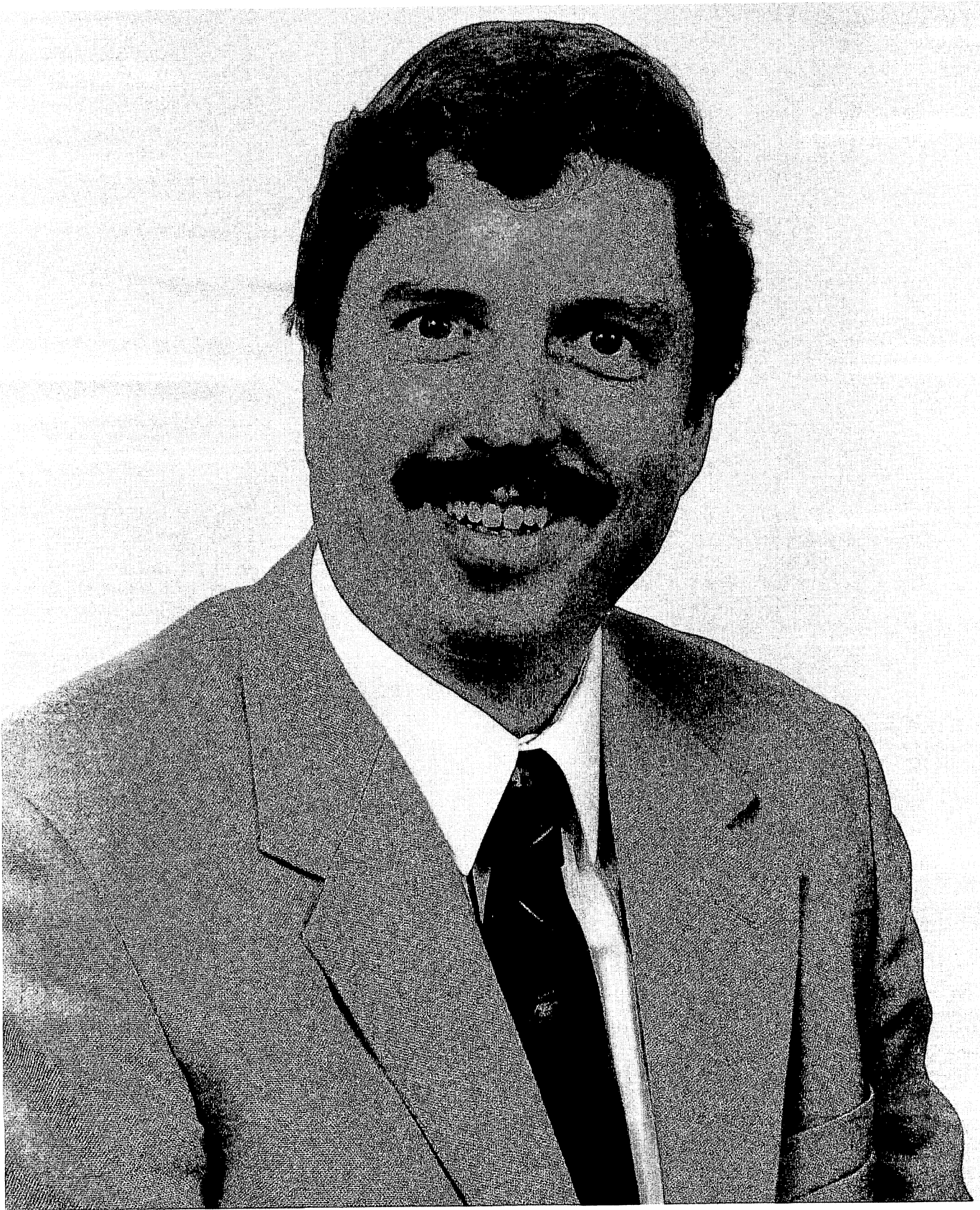
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DAN CANTLIFFE
Gainesville
PRESIDENT OF THE SOCIETY—1992

PRESIDENTIAL ADDRESS

The Florida State Horticultural Society in a Changing World

D. J. CANTLIFFE
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Horticultural Sciences Department
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During the recent 1992 Presidential Campaign, the word 'change' was used over and over. One candidate exclaiming that "America was in need of change," while another candidate vowed that "the only change that you would have if his challenger were elected would be the change in your pockets because that's all the money you'd have left after he got through taxing you." In many cases, change is a necessary part of life. If an organism does not change in response to changes in the environment it may not survive. This holds true for industries such as airlines, automotive and other businesses that would not remain profitable without adapting change to their business environment. These same analogies could, likewise, be focused on professional societies such as the Florida State Horticultural Society.

Many times change is not a fun thing to do. For example, leaving a warm bed on a cold morning isn't a lot of fun, however, in not doing so a person may find his or her job in jeopardy, especially if it happens too often. In the Florida horticultural industry, adapting to changes in Federal trade laws may not be a fun thing to do. Unfortunately, if horticultural producers do not adapt to the new NAFTA policies they may cease to exist. This subject will be discussed in great detail during these meetings in a format of the Principal Address, various papers in the Sectional Meetings, and a Sectional Workshop on Thursday sponsored by four FSHS Sections.

More at home to me, change has occurred recently in the horticulture departments at the University of Florida. First, the Ornamental Horticulture Department changed its name to the Environmental Horticulture Department. Then, this year, the Fruit Crops and Vegetable Crops Departments were merged into a single Horticultural Sciences Department. The reasons for these changes were essentially viewed as "strengthening" procedures to improve and maintain strong departments with large student numbers for the future.

In 1987, FSHS Chairman Al Krezdorn appointed a Procedures, Policies, and Activities Review Committee to review the position and activities of the Florida State Horticultural Society and to suggest changes that would strengthen the Society now and in the future. Al was building on some recent changes which improved the Society. Up to 1964, the President of FSHS was essentially a one-term officer. In that year, Herman Reitz was moved up to Chairman of the Executive Committee to continue to gain from his valuable experience as President of the Society. In 1985, the Society's "Publication Policy" statement dropped the requirement for only original and unpublished work to be published in the Proceedings. This change was directed toward increasing participation from non-academics, especially growers and commercial people and from extension personnel. Afterall, this Society was

founded 105 years ago on April 10, 1888 by 13 fruit growers in Ocala.

The Procedures Committee, which I chaired and included Bill Castle, Mike Taylor, Ted Winsberg, Tom Yeager, Mike Hackman and Dick Mathews, suggested the following that were eventually adopted by the Executive Committee and the Society:

1. Initiate a newsletter and advertise meetings in trade journals to maintain greater contact with the membership.
2. Do not have the annual meeting each year in Miami and move the meeting time to October to obtain more favorable prices.
3. Use workshops at the annual meeting and pay expenses for non-member keynote speakers.
4. Set up a Site Selection Committee made up of the past chair of the Executive Committee, one or two members, and ex-officio membership by the Secretary and Treasurer.
5. Elect the President and Vice-Presidents to overlap.
6. Present a written report by the Treasurer at the Annual Business Meeting.
7. Limit the Editor, Secretary, and Treasurer terms as well as allow the membership to vote on these offices.
8. Adjust annual dues to reflect a 1990's Horticultural Society.

Many other suggestions have not yet been done, or were not adopted. Other items that may now have potential for review by the membership include:

1. Should we initiate a President-Elect in order to bring more continuity to the Executive Board and FSHS policy-making procedures?
2. Should we initiate travel grants for county agents and other members with tight or non-existent funding sources to attend the annual meeting?
3. Should we review the page charge procedures to fairly place the burden of publication costs back to the users?
4. If we don't require original work for publication in the Proceedings, can we referee original work?
5. Are we overlapping Sections too much, such as the Landscape and Garden and Ornamental Sections which have not filled paper quotas in the proceedings for the past several years? In Florida, these should be the biggest sections with the largest attendance figures.
6. Should we have a poster section at the annual meeting?
7. Is the exhibitor program effective?
8. How can we get the membership more involved in the activities of the Society?
9. How do we get growers back into action with the Society?
10. Should we become a more national and international society in membership makeup to strengthen our membership base?

Why should I spend so much of your time listening to all this? Afterall, you paid to come here; am I wasting your time? Let me get back to the words of change in the 1992 U.S. Presidential campaign and relate my concern that

carefully-directed change is also needed for the Florida State Horticultural Society in order for this Society to be viable and to exist in the future.

The Society began in 1888 as a result of Florida growers, primarily citrus growers, exchanging information in order for them to remain profitable. There was no USDA, no IFAS, and no county extension. Talks were given by growers relating their activities and problems as farmers. Today we have very few growers attending our annual meeting, and instead, we find our Proceedings to be filled by articles mostly written by academics.

By 1904 the Society had 605 members. At its peak membership count of 1976, FSHS had 1,936 members. This count remained strong through 1982 when we had 1,714 members. Today in 1992 we have 1,559 members.

Why has our membership steadily declined over the past 15 years? There are numerous reasons of which I will only provide a few at this time. Firstly, grower interest in the Society gave way to greater interest by academics but remained strong amongst commercial people. Ag industries have merged, lost money, and been under attack by the public for years. As a result, many agribusiness operations and companies have ceased to exist in the last 10 years. Hard budget times hit the extension service in the early to mid 1980's limiting many county agents from actively attending meetings. During this period the scope of the USDA and IFAS researchers changed from a major emphasis on mission-oriented, grower-oriented research to basic research wherein direct contact with daily grower problems was not always needed. And of course, most recently, hard economic times has significantly reduced positions in all sectors of our FSHS membership. The missing numbers in the membership in the past 10 years may have a direct correlation to lost positions in all sectors of horticulture.

What can be done to strengthen the Society and its membership base? In my Presidential Letter to the membership in the June 1992 FSHS Newsletter, I wrote that "I encourage each person reviewing this Newsletter to send me their comments and feelings on any issue facing the Society today and in the future." Further, I said, "now is your chance, let me have it!" I received only three replies. One asked that we get into more education regarding irradiation benefits. Another letter was from a long-standing member since 1944 who faithfully attended annual meetings and was heavily involved in the Krome Section. This

'48-year' member related that FSHS appears to be "a closed Society" run by "the good-old-boy network." This member suggested "that new people should be brought into the operation and leadership of the Society." This member went on to say that growers have been "pushed" away from the Society by meetings in non-production areas of the state such as Miami, the high costs of attending hotel meetings, and that the major focus of "the Society has changed to feed the publish or perish frenzy of the academic community." The third letter was from another long-time member of over 45 years who is concerned about poor grower attendance at the annual meetings and poor grower participation in the Society's activities. This member asks if the Society can put "more emphasis on workshops" and states that "the Society needs more personality."

The Florida State Horticultural Society is in existence for its members. You, the members, have something special, help keep it special. The Society needs member input, and as a Society run by volunteers, it needs your help on committees, officer positions, and every aspect of Society involvement. The Society has 12 standing committees consisting of no less than 110 members. Several people, by design in the FSHS Constitution, are on more than one committee. Membership on the various awards committees is restricted to those persons who did not present a paper in the previous year; thus, it sometimes becomes difficult to come up with a new list of active volunteers on an annual basis for all the sundry committee assignments. Assignment to committees directly affects the Society's personality, and can shape its direction for the future. Let the Executive Committee know what you as members want for your Society. Let the President, Chairman or Secretary of the Society know of your interests to serve on one of the many committees.

Change is only meaningful when it is in a positive direction, when the people support it. In the long term, change becomes accepted procedure, the norm. You, the members, can change the Society to any direction that you want.

In his 1986 Presidential Address, Al Krezdorn summarized by saying "we can become the focal point of horticultural technology if we are willing to continually evaluate and change when change is justified. We cannot become a provincial, self-satisfied group living in the past. As important as is our previous history, it is our future that must be our concern."



Dr. Daniel Cantliffe, Chairman of Horticultural Sciences at the University of Florida, Gainesville, was initiated along with IFAS students, into Alpha Zeta, Honorary Society of Agriculture International, March 27, 1993. Dr. Jim Davidson, right, Dean of IFAS, witnessed the affair. Dr. Cantliffe comes from North Jersey and got his BS degree in agriculture from Delaware Valley College, Doylestown, PA, his PhD at Purdue University, Lafayette, Indiana.

PRINCIPAL ADDRESS

By Carl Loop
President, Florida Farm Bureau Federation
Gainesville, FL 32614

The Florida Farm Bureau Federation Regarding NAFTA—A Position Statement

Since the International Trade Commission's report in 1991, it has been recognized that Florida's winter fruit and vegetable industry would suffer economically from a Mexican Free Trade Agreement. Other economic reports indicated that winter fruit and vegetable producers would be the segment of the agricultural economy that suffered while feed grains, soybeans, certain horticultural crops and the livestock sector, as a whole, would benefit.

Florida Farm Bureau and its members have participated through the public comment process as well as serving on the private sector Agricultural Technical Committee (ATAC). The public comments were focused on the U.S. International Trade Commission, U.S. Trade Representative and her staff, Secretary of Agriculture and his staff as well as the Florida Congressional Delegation.

Through the Florida Farm Bureau's policy process, our members directed that our organization was to become an active participant in the negotiations process. It was the organization's goal to work with negotiators to develop the best agreement for Florida agriculture. Now that the NAFTA has been initiated and made public, it is up to our members to formulate Florida Farm Bureau's position. Our members must now decide if the negotiated agreement provides Florida agriculture enough fairness in competition with Mexican agriculture.

The following concerns must be addressed satisfactorily for Florida Farm Bureau to support the NAFTA agreement. As we move through our policy process and as our members have more opportunity to study the NAFTA other provisions may be added.

1. **PHASE OUT PERIODS** - Florida's winter fruit and vegetable industry asked for exclusion from the agreement, but did not receive it. The agreement allows import sensitive crops a 10- to 15-year phase-out with Tariff Rate Quota's (TRQs). While winter fruit and vegetables are the only commodities to receive this benefit, our members feel that the phase-out should be extended to 20-years for all import sensitive crops.
2. **CONVERSION OF QUOTAS** - Certain farm program crops utilize Section 22 to limit imports quantitatively to maintain the integrity and viability of those programs. The quantitative import restrictions were converted to tariffs with those tariffs being reduced and eliminated under the NAFTA. Our producer members are concerned that increased production in peanuts or other crops as well as imports being processed and exported to the U.S. could damage and destroy certain programs. Feeder cattle producers also have expressed concern for the integrity of the Counter Cyclical Beef Import Law and the loss of market for over half a million feeder calves shipped out of Florida on an annual basis. The signatories must develop a dependable and reliable data gathering system to track both imports and exports.
3. **RULES OF ORIGIN** - Florida Farm Bureau continues to support a strong country of origin rule and the



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necessary data to assure that it is implemented. This issue is strategic in assuring the success of the NAFTA and providing protection to the domestic industries of all members of the NAFTA.

4. **SANITARY AND PHYTOSANITARY RULES** - Florida Farm Bureau continues to call for strong sanitary and phyto-sanitary rules based on recognized science. This area is key to all segments of Florida's agriculture. There is concern among our members about livestock diseases and pests moving across the border as well as the use of false sanitary requirements to restrict market access of livestock products. The horticultural industry is concerned that a reduction in phyto-sanitary requirements may adversely impact the U.S. plant import laws and release plant pests and diseases throughout the U.S. Finally, our members are also

concerned about the potential for human health occurrences if sanitary and phyto-sanitary requirements are relaxed.

5. **GRADES AND STANDARDS** - While we do not believe that there should be a harmonization of grades and standards, we feel that each country should have the right to develop their own Federal grade standards. These standards should be honored and recognized by the member countries. Products being shipped into a country should meet those grade standards and marketing order quality requirements.
6. **GROWER DISPUTES IN TRADE OR AGRICULTURAL COMMODITIES** - There should be mechanisms in place to resolve grower disputes arising out of trade of agricultural commodities. This could include the development of laws and implementation of regulations such as Packers and Stockyard Act (PSA) and the Perishable Agricultural Commodities Act (PACA) that resolve disputes and guarantee prompt pay for producers.
7. **PERIODIC EVALUATION OF PROGRESS** - Florida Farm Bureau supports the periodic (possibly every four years) review of all signatory countries' environmental and labor laws and implementation at the grower level of those laws. There is a tripartite panel designated that could be responsible for this evaluation. In the event a signatory country is not making suitable progress in implementing those laws, the NAFTA should temporarily freeze all agricultural provisions until satisfactory progress has been documented.

Additional Emphasis Comments

Florida growers have a real concern with the proposed North American Free Trade Agreement, although there is not an agreement to look at this time it is assumed it will be patterned after the U.S./Canadian agreement.

Winter fruits and vegetables from Florida compete head-on with Mexican production—the same commodities, at the same time of the year, for the same market. This is nothing new and has been a real problem thru the years. With cheap prices and dumping, it takes very little to disrupt this market. These are highly perishable, seasonable products.

The only protection we have are import tariffs which are not adequate in most cases and the Section 301 Trade Complaint Settlement Procedure which has been slow and less than satisfactory at best. They are of little protection, but our growers see their loss as a real blow.

Because of past problems and competition from Mexico, this is a very emotional problem and one that is easier to be against than to try to gather information and mold an agreement that is the best possible.

The International Trade Commission report of February of 1992, says that fruits and vegetables will be the most adversely impacted commodities and Florida the most impacted state.

With the big difference in production cost because of cheap labor, the land tenure system, subsidies such as irrigation systems, etc., it's going to be difficult for the U.S. to compete. Then there is the cost imposed on U.S. growers in the environmental and regulatory areas.

Even if we get a good agreement, we do not believe it can be policed or enforced. Mexico has been a contracting party of GATT since 1986, but still has import licensing requirements that are GATT illegal.

Our growers have spent a lot of time and money developing their operations and markets with the belief that their government would protect them from unfair foreign competition. We must not betray that trust.

Then there is the problem or reliable data on which to make sound decisions.

For these reasons, among others, a lot of Florida growers and some commodity groups, particularly in citrus and tomato, have taken a position to ask to be exempt from any agreement.

Florida Farm Bureau has no problem supporting this position, except we do not believe this is a viable option and if we take this position, we are afraid we will be cut-out of the process altogether. However, there is some basis for an exemption and since the Mexicans have some things they hope to exempt, like corn, we think that highly sensitive fruits and vegetables also should be exempt.

If an exemption is not achieved, then, we repeat, there must be safeguards in the agreement:

1. We must have a long phase-in period—15 to 20 years.
2. Sanitary and phytosanitary regulation must not be weakened.
3. We must have strong country-of-origin laws to prevent produce from being funnelled through Mexico. Also, we need some way to address the substitution problem.
4. We must have a workable snap-back provision that is quick and automatic.
5. We need a timely dispute settlement mechanism.
6. The environmental regulations, especially Mexican use of chemicals, must be harmonized to a greater extent with those in the U.S. *and be enforced.*
7. An agreement should be worked out to protect property and patent rights of producers who develop new technologies.
8. We must conclude at the same time, the environmental concerns and labor being considered under a parallel agreement.
9. We would like to see consignment sales not be allowed.

AWARD OF HONORARY MEMBERSHIP



Dr. Richard F. (Dick) Matthews

Dr. Richard F. (Dick) Matthews is Professor of Food Science and Extension Specialist at the University of Florida. He received his Bachelor of Science in Horticulture from the University of Florida in 1952 and his Ph.D. from Cornell University in 1960. Dr. Matthews began his professional career with the General Foods Research Center in Tarrytown, New York and the T. J. Lipton Research Center in Englewood Cliffs, New Jersey. In 1965 he started as Extension Food Technologist at the University of Florida in Gainesville. His responsibilities included citrus, fruit and vegetable processing extension. Pesticide residue education programs were a major part of his activities.

Dr. Matthews has served the Florida citrus processing industry since 1965. As coordinator for an annual short course for citrus processing, he has assisted the industry in maintaining the highest level of processing efficiency, product quality and food safety. He received industry awards

for the short courses in 1970, 1983 and 1990. The short course proceedings have been published since 1975 and provide a valuable reference for the industry. He also serves on the annual Citrus Processing and Technology Conference and the annual Citrus Engineering Conference.

Dick is an active member of the Florida State Horticultural Society, serving as Handling and Processing Section Vice-President, as member of the executive committee at-large, as president of the Society in 1987, and as chairman of the Society in 1988. He also has published 21 papers on processing and quality of fruits and vegetables in the Proceedings of the Society.

Throughout his career, Dick has contributed to the advancement of Florida horticulture. As a dedicated member of the Florida State Horticultural Society, and through his outstanding extension education programs and research for the citrus processing industry, Dick Matthews is deserving of this honor.

AWARDS OF THE SOCIETY

Presidential Gold Medal Award



William M. Miller

Award granted to William M. Miller, Professor of Agricultural Engineering, Univ. of Florida, IFAS-CREC, Lake Alfred, for having contributed most to Florida Horticulture through work published in the Proceedings of the Florida State Horticultural Society over the preceding six-year period in the Handling and Processing Section.

Awards for Outstanding Papers

Awards for outstanding papers in Volume 104 of the Proceedings of the Florida State Horticultural Society presented at the annual meeting of the Society held in Miami Beach, Florida, October 29-31, 1991.

Citrus Section

B. J. Boman, "Flood irrigation efficiency measurements in an Indian River area citrus grove"

Garden and Landscape Section

W. J. Carpenter, E. R. Ostmark, and T. J. Sheehan, "Recommendations for germinating fringetree *Chionanthus virginicus* L. seed"

Krome Memorial Section

K. D. Larson, B. Schaffer, and F. S. Davies, "Mango responses to flooding in limestone soil"

Handling and Processing Section

W. M. Miller and C. J. Wagner, "Impact studies in Florida citrus packinghouses using an instrumented sphere"

Ornamental Section

M. E. Kane, N. L. Philman, and D. Clayton, "A technique for enhanced propagation of viviparous tropical water lilies"

Vegetable Section

R. K. Jansson and S. H. LeCrone, "Efficacy of nonconventional insecticides for control of diamondback moth *Plutella xylostella* (L.) in 1991"

Council Memorial Tomato Research Award

J. B. Jones, J. P. Jones, R. E. Stall, and T. A. Zitter for the publication "Compendium of tomato diseases"

President's Industry Award

D. J. Hall, "Effect of pH and storage on solutions of imazalil"

Graduate Student Awards

First Place: J. D. Lea-Cox with J. P. Syvertsen, "Salinity increases nitrogen leaching losses from citrus"

Second Place: E. R. Terry with W. M. Stall, "Smooth amaranth (*Amaranthus hybridus*) interference in muskmelon (*Cucumis melo*)"

Third Place: Harold Teller with Mickey Parish and Robert Braddock, "Microbially produced off-flavors in orange juice"

Honorary Membership Award

Richard F. Matthews

Presidential Gold Medal Awards

R. C. J. Koo	W. Grierson	C. A. Conover
R. A. Conover	Paul F. Smith	A. H. Rouse
J. R. Orsenigo	T. W. Young	J. O. Whiteside
W. E. Waters	James W. Strobel	C. R. Barmore
J. F. Morton	W. S. Castle	J. F. Price
S. J. Locascio	C. W. Campbell	L. A. Risse
C. A. Conover	R. M. Craig	A. G. Smajstrla
J. H. Bruemmer	V. L. Guzman	W. B. Sherman
Derek G. Burch	J. P. Jones	Ann R. Chase
W. M. Miller		



(Row 1, left to right) Society registration the first day at the Hyatt Regency, Tampa. Executive Committee Meeting just before Annual Meeting starts with **Dan Cantliffe**, President, **Larry Jackson**, Committee Chairman, and **Mohamad Ismail**, Executive Secretary. The Meeting in progress at right.

(Row 2, left to right) Sectional Vice-Chairmen are: **Bruce Schaffer**, Krome. **Steve Nagy**, Handling and Processing. **Michael Irely**, Citrus. **Richard Henley**, Garden and Landscape. **Jeff Norcini**, Ornamentals.

(Row 3, left to right) V.P. **Tom Williams**, Vegetables (introducing **Ernest Terry**, presenting his student paper). **Dick Mathews** is presented The Honorary Membership Award by **President Cantliffe**. **Rick Jansson** receives the Vegetable Award. **Harvey Snively** receives Century Club certificate for gift to FSHS Endowment Fund. **Jim Price** (podium) and **John W. Scott** present drawing Awards at Business meeting.

(Row 4, left to right) Outstanding Paper Awards: **Bruce Schaffer**, Krome. **J. B. and J. P. Jones**, Council of Memorial Tomato Research Award. **Dakshina Seal** receives Vegetable Award for **Rick Jansson**. **William M. Miller**, The Presidential Gold Medal Award. And another drawing Award at Business meeting, received by **Jim Dilley**.

(Row 5, left to right) **Nancy Philman** and **Mike Kane**, Ornamentals Award. **Dennis McConnell** reads list of Patron Members supporting student activities in FSHS. **Mr. Carl Loop** presents keynote address at opening session. A hallway gathering of **Heinz Wutscher**, **Tim Hatton**, **Bill Krome** and **Mrs. Krome**. (Photos by Norm Childers, Editor)