

History and development of the Indian River Research and Education Center from 1947 to 1997

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members in recognition of the
center's 50th anniversary:

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The Indian River Research and Education Center, previously known as the Indian River Field Laboratory, had its beginning in 1947. During that year Dr. W. T. Young, Assistant Horticulturist with the Citrus Experiment Station, Lake Alfred, established research on an 80-acre plot owned by St. Lucie County. The site included 35 acres of bearing citrus grove and a small frame house located off Kings Highway, west of Fort Pierce. Dr. Young conducted a citrus soil survey, water salinity studies, water table studies, and fertility trials. In 1948, Dr. R. K.

Voorhees, and in 1949, Mr. W. T. Long were assigned as resident staff members of the Citrus Experiment station with offices in the frame house. Research begun by Dr. Young, Dr. Voorhees, and Mr. Long expanded into programs including nutritional sprays, insect control, cover crops, and weed control in citrus.

The first major step toward the establishment of a permanent agricultural research laboratory was the execution of a renewable lease by St. Lucie County to the State Board of Education. The County Commissioners'



This county-owned frame house served as the office-laboratory from 1946 to 1950.

decision to lease the county acreage was not made until public opinion was sounded, including, in addition to agricultural people, a newspaper poll, and the endorsement of a num-

ber of local and statewide civic and professional organizations. The County Commissioners, Lane H. Jennings, Chairman; J.B. Brewer, R. L. Griffin, R. W. Leonard, and M. A. Patrick unanimously approved the execution of the lease in 1949. This lease provided the 80-acre site with the existing grove and farm house available for both short-term and long-range research by scientists attached to the Citrus Experiment Station.

Realizing the need for research on vegetable and pasture crops, a group of growers and representatives of agricultural businesses headed by Mr. Cornelius van der Lugt and Mr. Charles D. Kime, agricultural extension agent, worked toward the addition of a vegetable and pasture research division of the laboratory. The severe late blight epidemic of 1948-1949, which destroyed

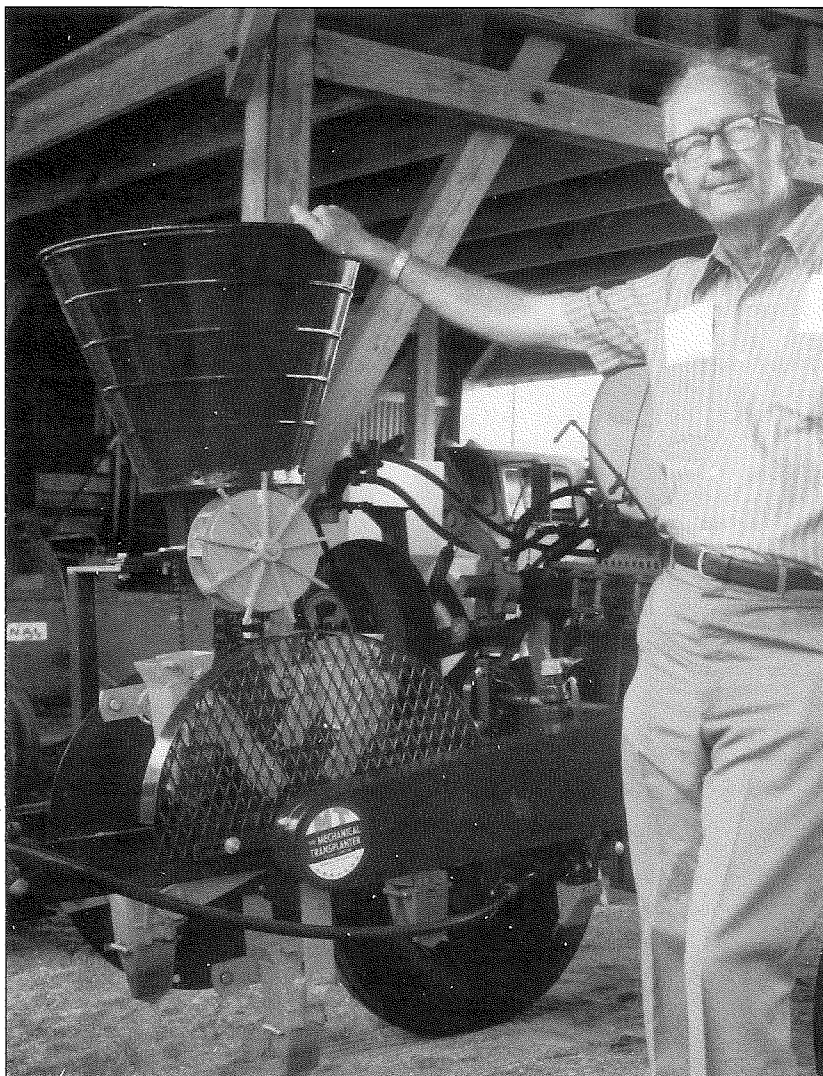


View of the Indian River Field Laboratory - 1961.

thousands of acres of Indian River area grown tomatoes, provided the incentive for research on tomatoes. Several important conferences were held with officials of the University of Florida and State Legislators. From these meetings evolved the second major step toward a permanent agricultural research laboratory for the Indian River area. The North St. Lucie River Drainage District donated to the State Board of Education 720 acres adjoining the 80 acres leased from St. Lucie county. This valuable contribution provided ample acreage, not only for immediate needs, but for future expansion of research programs into other fields of agriculture which could be of importance to the Indian River area as well. With the property under the ownership of the State Board of Education, state-financed buildings could be constructed.

Some of those who were active in arranging or attended a conference with Dr. J. Hillis Miller, President of the University of Florida for the purpose of assuring the acceptance of the 720 acres were: Willard M. Fifield, Director, and Dr. J. R. Beckenbach, Associate Director, of the Florida Agricultural Experiment Stations, Gainesville; D. H. Saunders, State Representative; C. van der Lugt, Chairman of the North St. Lucie Drainage District; Charles D. Kime, County Agricultural Agent; and Dan McCarty of Fort Pierce, (who later became governor of Florida). Completion of the transaction is recorded in a letter from Director Willard M. Fifield dated November 6, 1951 which acknowledged receipt of the deed to the 720 acres of land.

As a result of other meetings concurrent with those involving the



Norman Hayslip, the first director of the Indian River Research and Education Center, is pictured with an automatic plug mix seeding applicator tested at the Center. The new seeding technique developed at the Center was used extensively for peppers and tomatoes in plastic mulch covered beds.

land donation, the Everglades Experiment Station transferred Mr. Norman C. Hayslip to Fort Pierce in 1950 to survey the research needs and to establish a research program on vegetable and pasture crops, with special emphasis on tomato production. Mr. Hayslip and Dr. W. T. Forsee, Jr., Director of the Everglades Experiment Station, had previously made a survey of the "old land" tomato production problems in 1946-47 to determine why growers were moving to virgin soil for each new tomato crop production cycle. The early work of accumulating equipment and preparing land for research plots required the assistance and cooperation of many local people and businesses since State funds were not available at that time.

The laboratory was officially

named the "Indian River Field Laboratory" in 1950 and was established to serve the agricultural research needs of Florida with special emphasis on a five county region comprising Martin, Okeechobee, St. Lucie, Indian River, and Brevard Counties.

By the end of 1951, the Indian River Field Laboratory was firmly established to conduct research on citrus, vegetable, and pasture crops. However, improvements to the new research unit were required to upgrade the standards necessary for an effective and efficient scientific research center that would attract and retain capable specialists that could adequately serve the agricultural needs of Florida and the Indian River area. Gradual, but steady progress was made year by year through the resources and efforts of the Directors of the Citrus and Everglades

Experiment Stations at Lake Alfred and Belle Glade, and the continued support and cooperation of the agricultural and business community throughout the five counties comprising the Indian River area.

A Plant Pathology position was established shortly after the vegetable-pasture section was added so that research could focus on pending tomato and other vegetable diseases. This position was first held for a short time by Dr. W. D. Hogan followed by Dr. J. F. Darby in 1951. Dr. Darby worked with sweet corn and tomato diseases. In 1954 Dr. D. M. Coe replaced Darby, who was transferred to Sanford, and in 1957 Dr. R. E. Stall replaced Coe. In order to expand research on pasture production, Dr. A. E. Kretschmer, Jr. was transferred from the Everglades Experiment Station in

Belle Glade to this laboratory in 1955.

Meanwhile, during the early 1950's Dr. Herman J. Reitz and Mr. W. T. Long initiated research in citrus rootstocks, soil fertility studies, examinations of depth of rooting of citrus trees, and long-term study on the timing of scabicide sprays. In 1951 Dr. R. K. Voorhees resigned, and in 1952 Dr. Frank J. Reynolds joined the citrus section to conduct research on citrus diseases. Mr. Long and Dr. Reynolds resigned in 1954. Dr. J. R. King was appointed Entomologist in 1955 and was active in the expansion of the research facilities at this laboratory. In 1956, Drs. R. R. Hunziker and M. Cohen filled vacancies in the citrus section. Also in 1956, Mr. Harold Holtsberg made the laboratory his headquarters for investigations with the Citrus Insect Survey Research Project. Dr. J. R. King resigned from the faculty in 1960 and was replaced by Dr. Robert C. Bullock. Dr. R. R. Hunziker resigned from the faculty in 1960 and was replaced by Dr. David V. Calvert in 1962. In 1964, Dr. R. E. Stall transferred to Gainesville and was replaced by Dr. N. G. Vakili in 1965. Dr. Vakili resigned in 1967. Drs. R. M. Sonoda and J. B. Brolmann were appointed to the faculty in 1969.

A milestone in this early history was the construction of a \$62,000 modern office-laboratory unit completed in 1960. This unit was added to a previously constructed \$20,000 greenhouse-laboratory building. The facility, completely air conditioned, provided office and laboratory space for the entire faculty and staff for both sections. Additionally, three greenhouses built on the Center made the facility one of which the Indian River region was justly proud.

Expansion of Facilities and Research 1961-1997

The citrus and vegetable-agronomy groups maintained their separate administrative responsibilities to the Citrus and Everglades Experiment Stations, respectively, until 1975. At that time the Center was organized into one group under a single Center Director, Mr. Norman C. Hayslip. Mr. Hayslip remained director of the Center for 3 1/2 years. After Hayslip retired, Dr. David V. Calvert was named the second Center Director in 1979. Under Dr. Calvert's administration, the University of Florida construct-

ed the newest facility. The O. C. Minton Hall construction, totaling \$1.8 million was completed in December 1986. The 9,375 square foot building contains state-of-the-art laboratories to enable the IFAS research and education program to expand with the growing research and education needs of the Indian River region. With the growing needs of the area during the years of Calvert's direction, several additional faculty were hired at the Center. Horticulturist, Dr. Peter J. Stoffella was hired in 1980. Dr. Brian J. Boman, Agricultural Engineer, joined the faculty in 1985 and Dr. Charles A. Powell, Plant Pathologist, joined the team in 1990. Dr. Mortimer Cohen retired from the faculty in 1984. In 1995, after 17 years as Center Director, Dr. Calvert returned to a fulltime research program. Also in 1995, Dr. J. B. Brolmann retired from the faculty, and Dr. Calvin E. Arnold was named the third Center Director.

Considerable changes occurred in the region's citrus, vegetable, and cattle industries within the last fifty years. The acres of bearing citrus trees increased in the Indian River area from 33,000 acres in 1948 to 198,272 acres in 1996. Production increased from 5.6 million boxes of total citrus in 1948 to 52.3 million boxes in 1996. This represents over a 9-fold increase in citrus production for the area since 1948. Total dollar returns increased from \$12,700,000 to an estimated \$165,000,000 during the period.

In the 1940's to 1980 most Indian River area tomato farmers produced their crops on virgin soil, moving to new land twice a year. During these years Fort Pierce and St. Lucie County were the center of the production area. Large quantities of tomatoes were packed and shipped from the State Farmer's Market and surrounding private packing houses.

As virgin land for tomatoes diminished, growers sought land further from Fort Pierce, and eventually some moved to the Immokalee area in search of virgin soil or ceased farming. Acreage in the Indian River area subsequently declined until very few growers were left during the 1980's. However, in recent years the acreage of tomatoes and peppers is increasing.

In 1948 there were 85,000 head of beef cattle with cash receipts of \$1,700,000, and in 1994-95 there were 303,000 total cattle and calves

in the Indian River area, including Okeechobee County, with total live-stock cash receipts of \$189,270,000 in 1994. In 1948 there were 38,000 acres of pasture, and in 1994-95 crop and improved pasture in the Indian River region amounted to 989,173 acres.

The 1960's through the 1980's saw many new research discoveries. Citrus production increased in the area and the Center responded with an expanded citrus research program, including development of water and nutrient management for citrus. Also, much emphasis was placed on the identification and control techniques for insects, fungi, and viruses affecting the new groves planted under poorly drained flatwoods soil conditions. Vegetable and pasture research continued to expand as well, with development of production, nutrition, physiological, and other cultural management methods for sustaining forage and vegetable crop production. Several new varieties of tomatoes and tropical forage legumes were developed and released for southern Florida. Optimum plant populations were determined for yields and growth of tomatoes, bell pepper, celery and southern peas.

More recent studies involved development of best management practices for the optimum production of citrus, vegetable, and pasture crops. This research has expanded into areas that are providing valuable information on effective pest management, more efficient fertilizer utilization, and improved water quality.

In 1995, the facility's name was changed to the Indian River Research and Education Center. The name is perhaps most appropriate because throughout the 50-year history, the Center has served as an active partner within the Indian River area agricultural community.

The Indian River Field Laboratory (now the Indian River Research and Education Center) has always worked in close cooperation with manufacturers and suppliers of agricultural products, extension personnel, growers, and ranchers. This teamwork among those most interested in expansion and betterment of agriculture has continued to date and has resulted in major studies which have had a healthy influence on the economy of Florida and the Indian River area.