Pair, Claude H. and Allan S. Humphreys. 1977. Sprinkler irrigation. USDA Leaflet Number 476.

South Florida Water Management District. 1989. Xeriscape plant guide II. South Florida Water Management District, West Palm Beach, Florida.

Watkins, John V. and Thomas J. Sheehan. 1988. Florida landscape plants. Revised Edition. The Univerity of Florida Presses, Gainesville.

Zazueta, Fedro S. 1984. Understanding the concepts of uniformity and efficiency in irrigation. Fla. Coop. Ext. Serv. Agricultural Engineering Fact Sheet AE-43. Univ. of Fla., Gainesville.

Proc. Fla. State Hort. Soc. 104:379-380. 1991.

## DEVELOPMENT OF A COMMERCIAL PLANT GROWERS CLINIC IN DADE COUNTY AND TRENDS REPORTED FOR THE FIRST YEAR

D. L. HULL Dade-IFAS, Cooperative Extension Service Homestead, FL 33030

R. T. MCMILLAN, JR.

University of Florida Tropical Research and Education Center Homestead, FL 33031

Abstract. Southern Florida growers have requested for some time that a plant diagnostic laboratory be established in their area to assist them in identifying disease, insect, and nutritional problems. The commercial plant growers clinic for southern Florida was established in March, 1990, at the Tropical Research and Education Center in Homestead. During the March-December 1990 period, over 350 samples were received. The majority of these samples were cultural in nature and revealed the complexities of growing problems that exist under southern Florida's unique conditions.

A 1979 commercial ornamental horticultural advisory committee established a list of priorities for the commercial ornamental extension program in Dade County. Listed among the top priorities was the establishment of a diagnostic laboratory for the Tropical Research and Education Center in Homestead. The ornamental horticulture indus-

0

Broward, Monroe and Palm Beach Counties being rep-Florida Agricultural Experiment Station Journal Series No. N-00522. Table 1. Plant diagnosis for ornamentals, fruits and vegetables in 1990. Counties\* Home Р D Μ Consultants Co.z Gov.<sup>y</sup> В Nurseries Owners 7 6 198 0 1 206 8 69 10 Ornamentals 0 0 0 0 14 0 1 0 14

1

1

2

<sup>2</sup>Co. - Chemical Company Distributors.

22

<sup>y</sup>Gov. - County, City, and U.S.

Crop

Fruits

Vegetables

\*Counties: Dade (D), Broward (B), Monroe (M), and Palm Beach (P).

Table 2. Plant	t diagnosis	for	ornamentals,	fruits	and	vegetables i	n l	991.
----------------	-------------	-----	--------------	--------	-----	--------------	-----	------

		Home				Counties <sup>x</sup>			
Crop	Nurseries	Owners	Consultants	Co. <sup>z</sup>	Gov. <sup>y</sup>	D	В	М	Р
Ornamentals Fruits Vegetables	759 83 111	59 10 0	61 1 2	28 6 32	24 6 13	679 75 111	51 4 0	1 0 0	23 4 0

<sup>2</sup>Co. - Chemical Company Distributors.

'Gov. - County, City, and U.S. \*Counties: Dade (D), Broward (B), Monroe (M), and Palm Beach (P). try in Dade County had increased dramatically during the 1970's with a peak of nearly 1100 nursery businesses approaching 4000 acres in production. During the 1980's the nursery industry leveled off in Dade County with fewer firms, 700 presently, and nearly 6100 acres in production. This includes both container ornamentals and field nurseries with Dade County still listed as the number one nursery county in the state (Fla. Dept. of Agr., Division of Plant Industry, personal communication).

The services of a diagnostic laboratory were added to the Tropical Research and Education Center in March, 1990 and promoted from July, 1990 to the present. The diagnostic laboratory was set up for all agricultural interests in Monroe, Dade, Broward and Palm Beach counties but is used primarily by the ornamental industry in Dade County.

The commercial plant growers clinic has been needed for some time and the increased usage has proved the need for this local laboratory. During 1990, 206 nurseries used the laboratory with 198 samples from Dade County (Table 1). Fourteen groves used the services during this time while 22 vegetable growers sent in samples for diagnosis (Table 1).

Since January 1991, 759 nurseries, 83 groves and 111 vegetable farms have submitted samples (Table 2). The majority of the samples are still from Dade County with

0

99

0

0

resented (Table 2). In addition samples were also received from other states as well as from foreign countries (Table 2).

The effectiveness of the diagnostic laboratory is also demonstrated by the 49 new host records, 38 in ornamentals, 7 in tropical fruits and 4 in vegetables, that were discovered in the first 20 months of operation (Table 3).

Samples are processed within 2 to 3 days and the growers often have an answer to serious problems within a week if a disease organism has to be cultured. It is estimated that nearly one-half of the nurseries in Dade County have come in contact with the laboratory either through its services or the application of laboratory results and recommendations. The next step will be to computerize the results of the

Proc. Fla. State Hort. Soc. 104:380-382. 1991.

**CREATING A LANDSCAPE FOR WILDLIFE** 

CRAIG HUEGEL Wildlife and Range Sciences Dept. IFAS, University of Florida 12175 125th St. N. Largo, FL 34644

FRANK MAZZOTTI Wildlife and Range Sciences Dept. IFAS, University of Florida 3245 College Ave. Davie, FL 33314

JOSEPH SCHAEFER Wildlife and Range Sciences Dept. IFAS, University of Florida Gainesville, FL 32611-0304

Abstract. Since its inception in 1990, the Florida Wildlife Habitat Program has involved more than 2,000 households statewide in landscaping practices to benefit wildlife. Participants are sent a packet of publications designed to increase their understanding of wildlife and an application form to be completed and returned once their landscape has a wildlife garden at least 10 square yards in size and composed of 50% plants native to Florida. Completed applications are evaluated, and satisfactory landscapes are certified. An evaluation mailed to nearly 700 participants who had not yet returned their certificate applications indicated that the educational materials had helped to improve wildlife habitat conditions in most landscapes, but that the certification procedure needed to be refined.

Florida's population is undergoing major changes both in terms of overall density and demographics. This changing population presents many challenges in terms of environmental education, among which is the need to educate an urbanizing public about the relationship between wildlife and habitat. Based on an in-depth analysis of the Florida situation, Duda (1987) reached the conclusion that, "of all demographic variables, it appear's as though the level of education is the most sensitive indicator of appreciation, concern, affection, knowledge and respect for animals and the natural environment." Nearly 85% of Florida's population resides in urban areas. This condition presents an eduTable 3. New host records found through the Plant Disease Clinic in 1990-1991.

Crops	Number of new host records			
Ornamentals	38			
Tropical Fruits	7			
Vegetables	4			

laboratory work so as to determine which diseases and insects appear more frequently and at what time of the year. Through coordination of this information, an integrated pest management system can be applied.

cational dilemma in that urban residents are the group least likely to sacrifice environmental and wildlife values for economics, but also they are the least knowledgeable about wildlife and their needs (Duda, 1987). Teaching the importance of habitat to the conservation of wildlife is a great challenge. Urban residents think largely in terms of individual animals, not in terms of populations (Kellert, 1976). Therefore, a program that broadens the public's concept of wildlife is necessary, and an effective approach would be one that permits the public to visualize the benefits of habitat management to individual animals residing near their home.

Wildlife gardening has received much media coverage nationally in recent years and has drawn the attention of the public. Often, however, there is little distinction between attracting these wildlife and creating the habitat necessary to support them. Additionally, it often is difficult for the public to transpose general gardening information to correspond with Florida's unique wildlife and gardening conditions.

Because of these considerations, the Florida Wildlife Habitat Program (FWHP) was developed in 1990 through the efforts of the Cooperative Urban Wildlife Program, a cooperative effort of the Institute of Food and Agricultural Sciences (IFAS), University of Florida, and the Nongame Section of the Florida Game and Fresh Water Fish Commission. FWHP was modelled similarly to the Backyard Wildlife Program of the National Wildlife Federation, but was designed to provide information specific to Florida. The objectives of the FWHP are to: (1) educate the public about wildlife and their habitat needs, and (2) improve wildlife habitat in developed areas.

The FWHP is intended to be an educational program that involves participants in activities that increase awareness and produce visible habitat enhancement results. To achieve this, program design had to permit participation by a large segment of the public while being capable of producing results consistent with the public's expectations.

## **Material and Methods**

Guidelines for FWHP were developed by the authors after consultation with staff involved with the National Wildlife Federation's Backyard Wildlife Habitat Program