FOREWARD

Oriented towards an audience of professional citrus growers, production managers and county agents with citrus responsibilities, this course in "Citrus Flowering, Fruit Set and Development" was designed to emphasize horticultural applications of basic concepts. Approximately 265 people from Florida, Arizona, California, Georgia, Texas, Argentina, Brazil, India and South Africa attended this course. The program was originally planned by a group of citrus growers and IFAS faculty and was developed by Drs. Al Krezdorn, Larry Jackson and Jim Ferguson. Other similar but international short courses have been planned and conducted by industry leaders and IFAS faculty in the past: a Short Course on Citrus Rootstocks in 1973, a Short Course on Citrus Water Relations in 1975 and a Tropical Fruit Short Course on Avocados in 1976.

We must deal with freezes that have destroyed over 100,000 acres of citrus, with canker that has resulted in the destruction of approximately 18 million nursery trees, seedlings and dooryard trees and with economic competition our industry faces from abroad, but we must continue to emphasize basic concepts, production practices and applications of current research that will increase our productivity and efficiency. This course and last year's program on citrus propagation and nursery management will, I hope, continue to fulfill that need.

> J. J. Ferguson Extension Horticulturist Fruit Crops Department, IFAS University of Florida Gainesville, FL 32601

INTRODUCTION

On behalf of the Lake Alfred Citrus Research and Education Center, Institute of Food and Agricultural Sciences (CREC, IFAS) I'd like to welcome you to this Citrus Short Course on "Flowering, Fruit Set and Development." An understanding of these critical stages in fruit production is fundamental to developing optimum production practices.

The Florida citrus industry is now facing serious challenges that will continue in the future. In recent years we have been confronted with a number of crises, including aldicarb contamination of groundwater, the banning of ethylene dibromide as a soil and fruit fumigant, outbreaks of root weevil and Medfly, tree-killing freezes and citrus canker, a new and exotic disease. In addition, our industry must deal with growing urbanization, a heightened awareness of environmental problems, increased governmental regulation and severe international competition. As production costs continue to increase, research is needed more than ever to develop efficient production practices to enable the grower, packer and processor to remain competitive.

Citrus production in this country remains a world-class industry because biological, chemical and mechanical technologies and the managerial skill of our growers far surpass those of any others in the world. The generation and strategic use of knowledge underpins our production efficiency, enabling us to expand our markets. In times of crisis it is this efficiency of production that gives us a competitive edge. It is therefore imperative that research be initiated and continued to sustain maximum production at the lowest possible cost.

Our research dilemma, however, is that federal funding has emphasized basic research and state funding has eroded for existing applied programs. What is the long-range funding picture for commodity oriented centers like the Lake Alfred Citrus Research and Education Center and the Fruit Crops Department? Our commitment is to provide answers to both short term and long range problems of an industry that produces a regional crop but yet is a major factor in the state's economy.

Future directions in citrus research will be governed by our ability to obtain adequate funding from a number of sources. A favorable development has been a recent recommendation by the Research Advisory Council of the Department of Citrus to establish a citrus research fund from a box tax to help support research programs growers feel are needed.

The Lake Alfred Citrus Research and Education Center can provide an unique opportunity for graduate student training and instructional programs in citrus horticulture. Formal courses are presently being offered at the CREC and a new M.S. program in citrus technology is being proposed. A small student dormitory has been constructed at Lake Alfred. Such a facility can promote the CREC as a center of excellence for graduate training and can expand the IFAS mission to serve the citrus industry. Again, I welcome you to the CREC and I hope you have a productive conference.

> Dr. W. J. Kender, Director IFAS Citrus Research and Education Center Lake Alfred, FL 33850