



INSTITUTE OF FOOD AND  
AGRICULTURAL SCIENCES  
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FLORIDA  
COOPERATIVE  
EXTENSION SERVICE

## PACKINGHOUSE NEWSLETTER

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### EARLY SEASON EQUALS EARLY PROBLEMS

Will Wardowski  
CREC, Lake Alfred

At the start of every season we get numerous calls about problems associated with early season fruit. These problems include oil spotting (oleocellosis), peel injuries, anthracnose, red grapefruit sloughing and others. Last season started early and the hot weather persisted late in the season. The problems with anthracnose were greater than experienced previously in Florida.

The reasons for these peel disorders are often blamed on "immature peel", although we do not have standards for measuring peel maturity. In the Florida climate the internal maturity (which can be measured) seems to sometimes far exceed peel maturity. We do know that with a series of cool nights, the peel color improves and many of the early season peel problems become less severe.

In addition to early season maturity tests, packers should consider similar tests for harvesting, degreening, packing and simulated shipping. These precautions may seem time consuming and expensive, but they are far less expensive than losing the fruit in the market.

By several reports, the 1990-1991 season is predicted to be exceptionally early. Some very high fruit sugar contents for this time of year are being reported, fruit size is relatively large and other indications are for an early season crop. Although you may be harvesting, packing and shipping fruit before September, it might be valuable to attend the Citrus Packer Short Course and Citrus Packinghouse Day described on the following pages.

**CITRUS PACKINGHOUSE DAY**

Will Wardowski  
CREC, Lake Alfred

The Twenty-Ninth Annual Citrus Packinghouse Day is scheduled for Thursday, September 6, 1990, at the Citrus Research and Education Center, Lake Alfred. This meeting is expected to attract 250 to 300 people interested in fresh citrus handling and packing. Talks and displays will be presented by scientists and citrus packers on a variety of subjects including:

Status of Mediterranean Fruit Fly and Control  
Water Recycling in the Packinghouse  
Anthracnose on Early Season Fruit  
Degreening Room Air Exchange  
Cold Treatment of Grapefruit  
Alternative Quarantine Treatments  
Chilling Injury  
Fruit Section Drying  
Packing Costs  
Consumer Education

The talks will be presented in the morning, followed by a lunch and afternoon equipment displays. Registration will begin at 8:30 and the Program will start at 9:30. About 20 commercial companies have already reserved space for equipment displays. Others wishing to have display space should contact W. Miller or W. Wardowski at the address on the first page of this newsletter.

This program is jointly sponsored by the University of Florida, The Florida Department of Citrus and The Florida Citrus Packers. Those attending Citrus Packinghouse Day in recent years represented most of the fresh citrus fruit packed in Florida. Anyone is welcome to attend -- there is no advance registration and no meeting registration fee. Lunch tickets will be available at registration. We look forward to seeing you there.

\*\*\*\*\* BACK TO SCHOOL\*\*\*\*\*

CITRUS PACKER SHORT COURSE

Quality control assessment methods and instrument use are to be included in a one day short course to be held Wednesday, September 5, 1990 from 9:00 AM to 5:00 PM at the Citrus Research and Education Center, Lake Alfred. The program will feature applied topics on the methods and meanings of measurements which can be made in citrus packinghouses. Topics to be included are:

Temperature, Humidity

Ethylene, pH

Disinfectants, Fungicides, Fungicide Resistance

Fruit Condition, Weight Loss, Wax Application

Rind Oil Release Pressure, Dye Test

Instrumented Sphere, Computer Uses, Record Keeping

Join us at the Citrus Research & Education Center, Lake Alfred. Get your questions answered and go home with a notebook of papers written for this meeting, suggested record keeping forms, and reprints of related materials. The cost will be \$50.00 per person, which will include lunch and materials.

Register for this short course by July 31, 1990. Checks should be made payable to: Florida Citrus Packers.

REGISTRATION FORM

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Mail the registration form with payment to: W. Wardowski, Citrus Research and Education Center, 700 Experiment Station Road, Lake Alfred, FL 33850.

CITRUS PACKER SHORT COURSE, September 5, 1990, CREC, Lake Alfred  
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Name(s) \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City, State \_\_\_\_\_

Zip Code \_\_\_\_\_

Telephone \_\_\_\_\_

**AVAILABLE PUBLICATIONS**

Available from Dr. W. Wardowski, CREC, 700 Experiment Station Road, Lake Alfred, FL 33850

Comparison of Two Classification Approaches for Automatic Density Separation of Florida Citrus, by W.M. Miller. 1989. Computers and Electronics in Agriculture 4(1990):225-233.

Factors Affecting the Flavour of Citrus Fruit, by Steven Nagy and Philip E. Shaw. 1990. Food Flavours, Part C: The Flavour of Fruits.

Effectiveness of Aerosol Fungicide Applications in the Degreening Room for Control of Citrus Fruit Decay, by G. Eldon Brown and John O. Craig. 1989. Proc. Fla. State Hort. Soc. 102:181-185.

Host Defenses at the Wound Site on Harvested Crops, by G. Eldon Brown. 1989. Phytopathology 79:1381-1384.

Estimated Cost of Packing Florida Citrus, 1987-1988 Season, by Ronald P. Muraro and W. F. Wardowski. 1989. Staff Paper Series. Staff Paper 368.

An Overview of Florida (USA) and Sao Paulo (Brazil) Processed Orange Industries with Comparative Costs and Returns, 1979-80 through 1987-88 Seasons, by Ronald P. Muraro and Antonio Ambrosio Amaro. Economic Information Report 274.

Sugars Unrelated to Brix Changes in Stored Citrus Fruits, by Ed Echeverria and Mohamed Ismail. HortScience 25(6):710.

Available from David J. Hall, Agri-Chem, Inc., P. O. Box 607477, Orlando, FL 32860-7477

Peel Disorders of Florida Citrus as Related to Growing Area and Color-Add Formulations, by David J. Hall and Michael D. Bowers. 1989. Proc. Fla. State Hort. Soc. 102:243-246.

Available from Frederick S. Davies, Fruit Crops Department, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611

The Navel Orange, by Frederick S. Davies. 1990. Fruit Crops Fact Sheet. FC 83.