

AGRICULTURAL SCIENCES UNIVERSITY OF FLORIDA

FLORIDA COOPERATIVE EXTENSION SERVICE

PACKINGHOUSE NEWSLETTER

W. Wardowski, Editor AREC 700 Experiment Station Road Lake Alfred,FL 33850 Phone (813) 956-1151 Packinghouse Newsletter No. 132 May 5, 1983

<u>Key Word Index</u> 2,4-D, Gibberellic Acid, Greasy Spot, Growth Regulators, Melanose, Produce Workshop, Packer Short Course

GREASY SPOT AND MELANOSE

In an effort to produce high quality fresh fruit, the following article is presented as something that can be done in the grove to improve fruit appearance and packout.

Editor

GREASY SPOT - 1983

Greasy spot is historically more severe on grapefruit, Hamlin oranges, and Pineapple oranges due to their greater susceptibility. It is likewise less of a problem on Valencias.

- Growers wanting to decide now on greasy spot control
- A. If greasy spot was controlled satisfactorily in 1982-83 with a single summer spray then plan to follow the same program.
- B. If the grower is not satisfied with his 1982-83 greasy spot control and feels he followed the 1983 Florida Citrus Spray Guide, i.e., correct choice of material and proper rates, timing and coverage, then he can decide now to apply two sprays for greasy spot control, especially on the more susceptible varieties listed above. The first application should be made during June, followed by a second during August.
 - II. Growers wanting to wait until summer to decide on one or two sprays

Apply a single spray as recommended in June or July and observe the grove floor the latter part of July.

- A. If there is no visible leaf litter on the grove floor, there will be no spores to infect subsequent summer flush growth, and a second spray will not be required.
- B. If leaf litter is present and no significant summer flush has developed after spraying, second spray will not be required. Although inoculum will be present, there is no new leaf tissue present for the disease to attack.

C. If leaf litter is present and a new leaf flush not protected by the first spray is present, then a second spray may be applied in August to protect the new flush. This is especially true for the more susceptible varieties as noted above.

Other items to consider:

Young Groves- Summer flushes are heavier, more continuous and usually contribute more leaves than the spring growth flush. Air movement and sunlight tend to allow the leaf litter to dry between rain showers and/or irrigation, delaying decomposition. These factors tend to increase disease severity on the summer flushes of growth. Two sprays, as outlined above, could be necessary on young trees, particularly on the more susceptible varieties.

<u>Older Groves</u> - Summer flushes are generally less numerous and less important than spring growth. With more shading, the leaf litter decomposes more readily. Therefore, a second treatment may be less essential than on young trees.

Greasy Spot Rind Blotch (Pink Pitting) - Copper, as recommended in the Florida Citrus Spray Guide, is always required when a grower wishes to control this expression of greasy spot on fresh market grapefruit. A single summer spray in June or July is usually adequate to prevent fruit infection. Only consider two applications when prevention of leaf infection and subsequent defoliation are of primary concern.

MELANOSE - 1984

Spores are still being released from wood killed in the 1982 freeze. Therefore, two postbloom sprays should be considered for melanose control in 1983 on fruit grown for the fresh market. Materials and timing are given in the 1983 Florida Citrus Spray Guide.

Joe Knapp Extension Service Lake Alfred Adapted from Citrus IPM Newsletter Vol. II, April, 1983

DR. ISMAIL HONORED

Dr. Mohamed Ismail, Florida Department of Citrus, Lake Alfred is well known to the Florida fresh citrus industry and to the readers of this Newsletter for his work on ethylene dibromide (EDB), water pollution control and growth regulators. He is now better known throughout the United States because The Grower Magazine, a sister publication of The Packer has awarded Dr. Ismail the "1982 Excellence in Research Award"for his contribution to the citrus industry in the area of commodity treatment with EDB. The award was announced in an article featuring Dr. Ismail in Volume 16, No. 1, January 1983 issue of The Grower. Congratulations to Dr. Ismail and to The Grower for making an excellent selection.

Editor

CITRUS PACKERS SHORT COURSE - BACK TO BASICS

At the request of the Florida Citrus Packers, a one-day short course is being planned for 8:30 AM Registration, 9:30 AM Program on Thursday, September 8, 1983 at the Agricultural Research and Education Center, Lake Alfred. This meeting is scheduled the day following the Twenty-second Annual Citrus Packinghouse Day just before the start of the Florida citrus season and for the convenience of those traveling long distances for both meetings.

Recommendations are usually presented as "what," while the Back to Basics Short Course will include much more detail and "why" the recommendations are helpful. Anyone will be welcome to attend, but the short course will be designed for citrus packing-house managers and supervisory personnel for harvesting through marketing. The emphasis will be on fruit quality and packinghouse operations.

Participants must preregister with the Florida Citrus Packers, P. O. Box 1113, Lakeland, FL 33802. There will be a registration fee for lunch and materials.

Will Wardowski Extension Service Lake Alfred

1983 EASTERN POSTHARVEST PRODUCE WORKSHOP

The 1983 Eastern Postharvest Produce Workshop is being organized by a group of produce research and extension specialists. The workshop is to meet at the Continuing Education Center of Rutgers University, New Brunswick, New Jersey, from the evening of Sunday, December 11, through Thursday, December 15, 1983. The workshop with a maximum of 70 participants will be on produce condition and handling from harvest to retail market with the main emphasis on the wholesale level.

The Workshop purpose is to help get fruits, vegetables and ornamentals from the shipping point to wholesale and retail in the best possible condition, with a minimum of loss in appearance and usefulness, and to protect returns to all produce handlers from the growers to retailers.

Subjects to be covered include: fruit (non-citrus), citrus fruit, vegetables, ornamentals, wholesale and retail produce handling, wholesale marketing systems - design and operation and market and nutritional losses. Instructors will include Dr. Will Wardowski (citrus) and Dr. Mark Sherman (vegetables) from Florida and several from other states. This intensive program will include a one-day bus tour which will cover Sea-Land operations, supermarket distribution centers, ornamentals marketing and the New York City Hunts Point Produce Market.

Lodging and meal costs are to be arranged for and covered by participants through the conference center. The \$150.00 registration fee includes instruction, materials and the tour. This fee is due September 1, 1983 to Dr. George Mattus, 14 Food Science Building, Virginia Polytechnic Institute & State University, Blacksburg, VA 24061 (Telephone 703 961-6898).

Will Wardowski, Extension Service Lake Alfred

Editor's Note: This meeting was originally planned for December 1982 (see Packinghouse Newsletter No. 126), but delayed one year.

INCREASING THE ON-TREE LIFE OF CITRUS FRUITS

The use of 2,4-dichlorophenoxyacetic acid (2,4-D) is approved for use on several citrus cultivars to promote fruit retention on the tree. To reduce fruit drop of Temples, midseason oranges and grapefruit, 2,4-D is applied as a dilute spray during November and December at the rate of 20 ppm. Tolerance for 2,4-D residue ranges between 2 ppm in Canada and Europe to 5 ppm in the U.S., Australia and New Zealand.

The use of gibberellic acid (GA) is also approved for use on seedless grapefruit to delay color development, aging of the rind and softening. GA may be applied at 10 ppm during November and December in combination with 20 ppm 2,4-D to reduce preharvest fruit drop. This treatment was found to reduce fruit drop following the 1981 and 1982 freezes. The residue tolerance for GA is set at 0.15 ppm in the U.S.

Extending the season for mandarin-type fruits such as Honey tangerine, Minneola tangelo and Temples is also desirable due to their relatively short on-tree life following maturation.

In order to obtain best results from growth regulator sprays, optimum growing and handling conditions were to be provided. Trees must receive adequate nutrition and irrigation, proper weed, insect, mite and disease control. Fruit must be harvested and handled properly to improve its keeping quality. Degreening time must be reduced to the minimum under recommended temperature and relative humidity and fruit must receive adequate fungicide and wax application. Storage at recommended temperature and humidity is also important in prolonging postharvest life. Growth regulators can help citrus fruit quality when the conditions mentioned above are correct.

Mohamed Ismail Florida Department of Citrus Lake Alfred

AVAILABLE PUBLICATIONS

<u>Available from W. F. Wardowski, Agricultural Research and Education Center, 700 Experiment Station Road, Lake Alfred, FL 33850</u>

Packinghouse Newsletter Index for issues 1-132.

Available from Dr. D. W. Burger, Texas A & I University Citrus Center, P. O. Box 2000, Weslaco, TX 78596

"New fungicides for the postharvest control of stem-end-rot in Texas grapefruit" by D. W. Burger and R. M. Davis. HortScience 17(6):976-977. 1982.

This newsletter is published at a cost of \$85.60 or 6 cents per copy, to give the latest news to the packinghouse industry.

W. Wardowski, Editor

Professor

Extension Horticulturist