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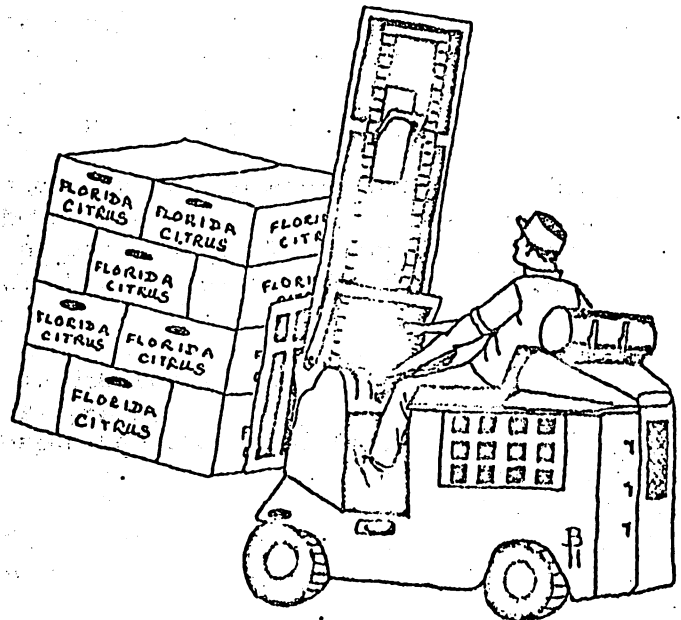
# Packinhouse Newsletter

UNIVERSITY OF FLORIDA INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

and

STATE OF FLORIDA, DEPARTMENT OF CITRUS

\*Anyone wishing to receive this newsletter may send a dozen stamped, preaddressed envelopes to the above address.



Harvesting and Handling Section

P A C K I N G H O U S E

N E W S L E T T E R

BENLATE (BENOMYL)--EXPERIMENTAL PERMIT APPROVED

The Environmental Protection Agency (EPA) has approved an experimental permit for the use of a limited amount of Benlate on citrus fruit, for experimental use only. Benlate used under this permit must be accounted for and a report of the results obtained given to the EPA.

The permit does not include the use of Benlate on fruit to be used in processing or for livestock feed. All eliminations and culls treated with Benlate must be destroyed to comply with the permit.

Benlate can be applied in the packinghouse, without loss of cannery fruit, by grading after washing, then applying Benlate only to the fruit to be packed for use as fresh fruit.

Labeling--All labeling requirements that apply to other postharvest fungicides are required for Benlate. When Benlate is used, packed cartons and bag-master cartons must be labeled to comply with the Food and Drug Administration regulations. A label might read: "Benomyl used as a fungicide." Benomyl is the generic name for Benlate.

Experimentally, Benlate applied to the tree before harvest or in the packinghouse has been a highly effective fungicide against our major postharvest diseases (stem-end rot and green mold). Benlate provides only slight control of sour rot and anthracnose, but essentially no control of black or brown rots. Benlate is chemically similar to thiabendazole (TBZ) and is active against the same decay organisms.

The following is a quotation from the experimental permit: "Du Pont 'Benlate' Benomyl Fungicide is recommended for use on citrus intended for the fresh fruit market only. Treatment controls certain diseases such as scab, greasy spot, and postharvest fruit decay caused by Penicillium sp., Diplodia, and Phomopsis."

We are interested in working with anyone planning to apply Benlate either sprayed on trees or applied in the packinghouse. Cooperators must realize that all treated fruit has to be marketed fresh or discarded. The purpose of this experimental permit is to obtain information that can be related directly to commercial application of this fungicide.

A. A. McCornack  
G. E. Brown  
Florida Department of Citrus

THIABENDAZOLE (TBZ) USAGE

Two years following Federal approval of the fungicide, thiabendazole (TBZ), a large number of our packinghouses are using it. Of the 105 Florida citrus packinghouses that packed over 100,000 cartons last season, 68 now have TBZ applicators. Based on last season's volume, 70% of the volume is now being treated with TBZ. "Recommendations for Commercial Use of TBZ" by John Smoot, USDA, and Andy McCornack, Florida Department of Citrus, may be found in Packinghouse Newsletter No. 31, May, 1970.

W. Wardowski  
Extension Service

TEMPERATURES FOR GRAPEFRUIT

Grapefruit is susceptible to chilling injury. Severe peel injury can occur as a result of storage or transportation at temperatures well above freezing but still in the chilling range. This is true of numerous other fruits and vegetables including bananas, tomatoes, and avocados. Grapefruit chilling is particularly treacherous as it does not occur consistently. When it does, the injury appears as pitting of the rind. Early grapefruit should be shipped at (but not below) 60°F, and the temperature may be reduced as the fruit becomes mature later in the season. However, grapefruit should never be shipped at temperatures below 50°F.

W. Wardowski  
Extension Service

NATURAL WAX PRODUCTION BY ROUND ORANGES LOW THIS YEAR

The high incidence of stem-end rind breakdown and other peel disorders this year may be related to the lower production of natural surface waxes. In December, fruit from 2 'Pineapple' groves in the Ridge district had only 82% as much surface wax as the previous year's fruit from those same groves. Fruit from 2 similar 'Valencia' groves had produced only 45% as much wax as the mature fruit did a year ago. It is doubtful if the 'Valencia' fruit will develop enough wax before harvest to make up this difference since in 1970-71, 'Valencias' did not produce more surface wax after February.

The total surface wax has been related to retardation of water loss by oranges. Artificial coatings before\* and/or after harvest have reduced the amounts of several pitting disorders. These coatings also reduce water loss. It may be possible to forecast years of high peel injury in the future after we learn more about the yearly pattern of wax production and if we can consistently relate years of low wax production to years of high peel injury.

L. Gene Albrigo  
Assistant Horticulturist  
University of Florida

\*A reprint on this newly available technique is listed under "Available Publications".

TEXAS AND CALIFORNIA SPEAKERS ON PROGRAM

The Citrus Department, Florida Southern College, Lakeland, is sponsoring a program on the Future of Fresh Citrus in conjunction with their Homecoming. The program scheduled Saturday, February 26, 1972, 10:30 AM to Noon, includes Harold Bryant, General Manager, Texas Citrus Exchange, Donna, Texas, and Don McMillen, Vice President, Sunkist, Ontario, California. The public is invited to this program and BBQ lunch (\$1.50). Reservations for lunch should be directed to Prof. Thomas B. Mack or Dr. Rubert Prevatt, Citrus Department, Florida Southern College, Lakeland, Florida 33801, (813) 683-5521; or Jim Ellis, Lake Garfield Citrus Cooperative, P. O. Box 782, Bartow, Florida 33830, (813) 537-1435.

Jim Ellis  
Citrus Alumni President  
Florida Southern College

SEMINAR ANNOUNCEMENTS

Two special seminars have been scheduled for presentation at the Agricultural Research and Education Center, Lake Alfred (the Citrus Experiment Station). The first will be given by a world renowned authority on plant and cell physiology, Dr. F. C. Steward of Cornell University. His talk is scheduled for 10:30 AM, Tuesday, February 1, 1972, in the Center Auditorium. It is entitled: "Physiology and Horticulture: The Control of Growth."

The second will be a short symposium-type presentation by a three-member panel consisting of Dr. W. Grierson, Dr. W. F. Wardowski, and Dr. R. Bullock. The topic is a hot one--"The Citrus Industry and Pesticide Clearances." Time: 11:00 AM, Thursday, February 10, 1972, in the Center Auditorium.

Be sure to attend and air your opinion or get some of your questions answered.

M. A. Ismail  
Florida Department of Citrus

AVAILABLE PUBLICATIONS

Available from Superintendent of Documents, U.S. Government Printing Office,  
Washington, D. C. 20402.

"Market Diseases of Citrus and Other Subtropical Fruits" by John J. Smoot, Laurie G. Houck, and Howard B. Johnson. Agr. Handbook No. 398. Revised, May, 1971, Price, \$.70.

Available from Dr. W. Wardowski, Harvesting & Handling Section, Agricultural  
Research and Education Center, P. O. Box 1088, Lake Alfred, Florida 33850.

"Orange Peel Topography as Affected by a Preharvest Plastic Spray" by L. Gene Albrigo and G. Eldon Brown. HortScience 5(6):470-472. December, 1970.