

INSTITUTE OF FOOD AND  
AGRICULTURAL SCIENCES  
UNIVERSITY OF FLORIDA

FLORIDA  
COOPERATIVE  
EXTENSION SERVICE

## PACKINGHOUSE NEWSLETTER

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Key Word Index Benlate, Book Review, Decay Control, Grapefruit, Pallet Boxes, Pollution Control, Unusual Fruits, USDA, Water Regulations.

### DECAY CONTROL OF LATE SEASON SEEDLESS GRAPEFRUIT

Decay becomes more prevalent in Florida grapefruit following bloom. The major decays during this period are stem-end rot (Phomopsis citri) and green mold (Penicillium digitatum). Incidence of these decays will increase as the season progresses. During this period of high decay, special attention must be given to careful harvesting and handling. Critical grading and the use of decay control measures are essential to insure low decay levels. Since growers may be spraying Benlate at this time of the year for the control of scab and melanose on immature fruit, it should be remembered that such Benlate sprays will also reduce decay in the mature fruit. To combat high decay in grapefruit, you may want to encourage the use of a preharvest Benlate spray to compliment the regular postharvest fungicide applications. Directions for the use of Benlate are given in the 1978 Florida Citrus Spray Guide, Circular 393-D, Postharvest Decay Control Recommendations for Florida Citrus Fruit, Circular 393-A (see available publications) and in the EPA approved label on the spray material container. All instructions for use should be followed.

Remember, the regular postharvest fungicide applications should also be used to the extent that the particular markets allow.

Eldon Brown  
Andy McCornack  
Florida Department of Citrus

Will Wardowski  
Extension Service  
Lake Alfred

### PALLET BOX DAMAGE

With an increasing proportion of our fruit going export, often with inadequate fungicide protection, elimination of harvesting damage becomes increasingly important.

"Doing anything about harvesting labor" is increasingly regarded as an impossible task. However, there is something that can and must be attended to if losses are to be minimized, particularly for export shipments. This is eliminating unnecessary damage in pallet boxes; much of which comes from overfilling. Fruit should not rise above the side of the pallet box. Nearly all pallet boxes are made to recommendations from a 1966 IFAS-USDA committee that specified a size which would allow for 2 inches of clear headspace above the fruit

after the pallet box has been filled with a legal 10 boxes. Putting in more fruit than this inevitably results in damage and is exceedingly short-sighted.

Another obvious source of damage is from rough interiors to pallet boxes. This is particularly true for nailed boxes in which the nails work loose and each protruding nail head ruins a fruit and the damage is often not perceived at the grade table. Other sources of damage are splintered or broken boards, twigs jammed between slats and the dried remains of once rotten fruit.

It is much cheaper to pay labor to continually monitor and, if necessary, repair pallet boxes than to, one way or the other, bear the costs of excessive decay on arrival at destination.

W. Grierson  
AREC, IFAS  
Lake Alfred

#### CITRUS PACKERS WATER QUALITY MEETING

A meeting for Florida citrus packers and others interested in water quality standards and regulations is scheduled for 10 AM, Thursday, April 20, 1978 in the Agricultural Research and Education Center Auditorium, Lake Alfred. Several citrus packers expressed interest in such a meeting after each had been informed that their present waste water discharge system was inadequate, and that construction of alternate systems would have to be completed prior to the start of the 1978-79 season.

The April 20 meeting will include a presentation on the status of the new Florida Department of Citrus waste water treatment facility. Also, spokesmen for the Florida Department of Environmental Regulation (DER) will discuss the State Code relating to water quality, plus the requirement for a Federal Environmental Protection Agency (EPA) discharge permit.

Florida citrus packers and State certified engineers interested in water quality are encouraged to attend this meeting.

Will Wardowski  
Extension Service  
Lake Alfred

#### USDA, SEA

Those of us who are used to saying USDA, ARS (Agricultural Research Service) will have to change our habits. Part of the USDA has been reorganized into the Science and Education Administration (SEA). All of the old ARS is now a part of SEA. Several changes have been made within SEA, and undoubtedly more changes will be made as the new acronym becomes part of our vocabulary, just as "USDA", "ARS" etc. has done.

Editor

BOOK REVIEW

Citrus Science and Technology 2 volumes. Edited by Steven Nagy, Philip E. Shaw and Matthew K. Veldhuis. AVI Publishing Co., P. O. Box 831, Westport, CT 96880. Volume I \$32.00 domestic, \$33.00 foreign. Volume II \$38.00 domestic, \$39.00 foreign.

These two volumes basically deal with citrus processing, but refreshingly they include other related subjects. Volume I has 14 Chapters covering human nutrition, fruit anatomy, chemical composition and bioregulation. Volume II has 15 Chapters on subjects including fruit production, fresh fruit packing, processing practices, derived products and personnel management.

The chapter on fresh fruit packing, "Packinghouse Procedures Relating to Citrus Processing," by W. Grierson and W. Wardowski includes suggestions for an integrated fresh fruit and cannery operation with an efficient, profitable flow of oranges. The concepts in the proposed integrated packing-cannery plant have not been utilized as a unit, although each step and process is in use somewhere today.

The other chapters in these two volumes are informative and often innovative. A drawback to compiling chapters from an assortment of authors, each knowledgeable in his speciality, is a lack of continuity throughout the text. The usefulness of these volumes is enhanced by the standard AVI Publishing Co. style of including a bibliography for each chapter and an index in each volume.

Will Wardowski  
Extension Service  
Lake Alfred

UNUSUAL FRUITS WANTED

The operator of a gift fruit stand in central Polk County is looking for unusual fruits that might be attractive to the tourist trade. Anyone having such fruits as 'Ponderosa' lemons, etrogs, shaddocks, carambolas, etc. is invited to contact us and we will put you in touch with this potential customer.

Bill Grierson  
AREC, IFAS  
Lake Alfred

Available from Dr. W. Wardowski, AREC, P. O. Box 1088, Lake Alfred, FL 33850

"Postharvest decay control recommendations for Florida citrus fruit" by A. A. McCornack, W. F. Wardowski and G. E. Brown. Fla. Coop. Ext. Serv. Circ. 359-A. February, 1976.

"Florida Citrus Spray Guide, 1978". Fla. Coop. Ext. Serv. Circ. 393-D. January, 1978.


Available from News Bureau, Monsanto Co., 800 N. Lindbergh, St. Louis, MO 63166

"The chemical facts of life" written for someone who knows very little about chemistry. Recommended reading, especially for the noninformed and misinformed.

Editor

Available from Florida Fruit Digest Co., 333 Laura Street, Suite 360, Jacksonville, FL 32202

"The Florida Fruit and Vegetable Directory, 1978 Season" published by Florida Fruit Digest Co. Price: \$6.00. Add 50¢ postage domestic or \$1.00 postage foreign, and 24¢ sales tax for Florida residents.

  
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Associate Professor  
Extension Horticulturist

This newsletter is published at a cost of \$86.70 or 7.8 cents per copy, to give the latest news to the packinghouse industry.