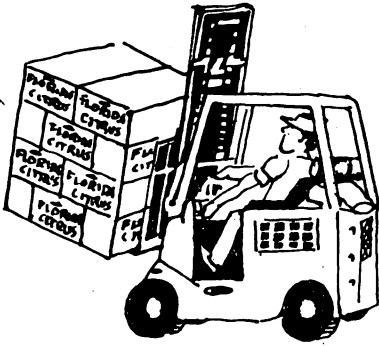


# Florida Cooperative Extension Service

## PACKINGHOUSE NEWSLETTER



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### MY UNCLE WHO LOVES GRAPEFRUIT

I have an 82-year old ex-sailor uncle in St. Louis who went to sea near the turn of the century when the tall ships still plied the seven seas. His tales range from a mutiny at sea and a brush with Chinese pirates to carrying Pavlova and the Ballet Russe across the Sea of Japan. (They put the mutineers in irons, chased off the pirates and he married the loveliest girl in the Ballet Russe.) But now his adventuring is limited to epicurean questing for the very finest Florida grapefruit that he can find in the stores of St. Louis. But late each spring his letters complain that he can only find puffy, thick-skinned Western grapefruit and I answer "Buy sections until the new Florida crop comes in."

I thought of Uncle Bobby this week as I hunted through the local supermarket looking for canned grapefruit sections. Admittedly, a "batching" husband shopping in a supermarket is not the epitome of efficiency, but I almost gave up. Then I met Nancy Gurnett Hardy, the Citrus Reporter herself, who gently led me to a miniscule handful of canned grapefruit sections squeezed in between the Santa Rosa plums and those ubiquitous pineapple rings.

But my uncle in St. Louis, who has no such capable guidance, is probably still seeking his grapefruit sections like an old hound on a cold trail. Wouldn't it be nice if we gave him some help, just when the grapefruit crop was running out. Even if it took the entire grapefruit sections advertising budget in one well-timed splurge, it could well be worth it. Advertisements and displays could spread the happy word: "YOU LUCKY PEOPLE! THE SEASON'S OVER, BUT YOU DON'T HAVE TO MISS YOUR FLORIDA GRAPEFRUIT. THERE ARE ENOUGH CANNED SECTIONS TO TIDE YOU OVER UNTIL THE NEW CROP COMES IN AND THEY ARE RIGHT ON THE MIDDLE SHELF OF AISLE 3." At least we wouldn't be competing with ourselves as we so often seem to do. The in-store directions should go, among other places, in the produce department where 82-year old uncles, absent minded professors, and the rest of the shoppers are accustomed to finding those delicious Florida grapefruit.

Bill Grierson  
AREC, Lake Alfred

CITRUS PACKINGHOUSE DAY - 1976

Mark your calendar now for this year's Packinghouse Day program at AREC, Lake Alfred, Wednesday, September 8, 1976. Registration starts at 9:00 A.M. As in the past, lunch tickets will be available at registration. Be sure to attend yourself and bring along those you know would benefit from this informative program. This annual meeting is jointly sponsored by IFAS Cooperative Extension Service, Florida Department of Citrus and Florida Citrus Packers. Equipment will be demonstrated during the lunch break.

Editor

## PACKER'S CORNER

PVC ROLLERS

One of the brighter recent innovations has been using PVC irrigation pipe for rollers in the packinghouse. They are cheap, so light they reduce wear on chains and take less power to haul them along the conveyor. If jammed they tend to pop out rather than breaking chains or sprockets.

Of late, we have had a number of enquiries as to whether PVC pipe can still be used. We know of no reason why not. The only explanation we can think of as to why there should be any uncertainty is because of the FDA action against potential food contamination from rigid PVC containers. We see no connection between that and the use of the polymerized material in rollers for fruit.

Packers' experience has shown that PVC rollers should not be used in the direct sun as they can get hot enough to warp. Also, we do not know anyone who has used them in the color-add tank where they would be subject to long runs, sometimes large loads and higher operating temperatures. Otherwise they are an easily fabricated, more durable, less expensive substitute for wooden rollers. These innovative rollers first came to our attention at Consolidated Packing, Lake Placid where W. D. McDaniel made them 3 years ago using schedule 40 white (claimed to be better than grey) PVC irrigation pipe and purchased bushings.

Will Wardowski  
Extension Service  
Lake Alfred

VAPOR BARRIERS IN DEGREENING-REFRIGERATION ROOMS

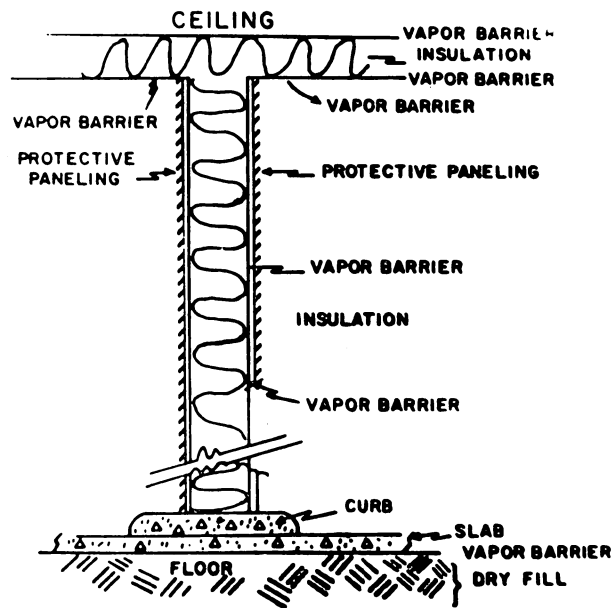
Vapor barriers are installed to minimize the rate of moisture transfer from an area of high vapor pressure to low vapor pressure. By retarding the moisture transmission, problems with wet insulation and structural damage such as corrosion and rot are reduced or completely eliminated. In addition, the thermal conductivity of the insulating material is increased when wet, resulting in excessive power consumption for refrigeration and heating.

Problems with moisture condensation can occur in applications where a differential in temperature or humidity exists between room and ambient conditions. If the air from the warmer side moves to an area below its dew point, condensation will result. In a degreening-refrigeration room such a differential can occur in either direction depending on the room's usage. Hence, a vapor barrier is needed on both external and internal walls. Vapor barrier placement is shown in the accompanying figure. The vapor barrier is placed on both sides of the ceiling and wall insulation. In addition,

a vapor barrier is placed below the concrete slab to retard soil moisture movement and the wall and ceiling vapor barriers must be sealed together.

The effectiveness of vapor barriers can be severely decreased by poor or careless workmanship. Punctured holes and improper seals at joints and edges must be eliminated for a long life installation.

With double vapor barriers, dry rot problems with wood can occur in the insulated section. Wood construction should therefore be avoided when it would be between vapor barriers.



Bill Miller  
AREC, Lake Alfred

#### PALLET BOX WOOD PRESERVATIVE

Continued response to the article on pallet boxes in Packinghouse Newsletter No. 71 warrants additional information on wood preservatives. Copper-8-quinolinolate (Cu-8-Q) is the only wood preservative known to us that has full FDA approval plus adequate testing from the USDA Forest Products Laboratory. If you buy the undiluted concentrate, it should be diluted according to the manufacturer's instructions, usually 2 parts solvent to 1 part Cu-8-Q. The solvent should be an organic solvent that leaves no residue and no odor. The dip should be for at least one minute. See Packers' Corner, this issue, for a simplified dip system.

Above reprinted from Packinghouse Newsletter No. 73, June 1975.

We have recently been informed that Cu-8-Q is now available as a water emulsion concentrate, which the manufacturer suggests be mixed as 1 part concentrate to 40 parts water. This formulation would eliminate the need for an expensive organic solvent and thus reduce or eliminate a fire hazard.

Will Wardowski  
Extension Service

Bill Grierson  
University of Florida  
AREC, Lake Alfred

SEMINAR ON THE PROPER USE OF ETHREL

An informal seminar will be held at the Agricultural Research and Education Center, Lake Alfred, Monday, September 13, 1976 at 1:30 P.M. on the proper use of ethephon (Ethrel). This chemical is registered for color development and abscission of tangerines and tangelos. There will be ample time for questions and discussion. This meeting is sponsored by the Florida Department of Citrus and the Amchem Co.

Bill Wilson  
Florida Department  
of Citrus  
Lake Alfred

AVAILABLE PUBLICATIONS

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

"Minimizing hazards from in-truck ethylene dibromide fumigation of carton-packed citrus fruit" by G. G. Norman, W. Grierson, T. A. Wheaton and J. D. Dennis. Fla. State Hort. Soc. 88:323-328. 1975.

"Vertical air distribution for cooling fruit in cartons" by W. Grierson and Bob Brown. Fla. State Hort. Soc. 88:329-332. 1975.

"New palletizing methods" by Geoff Wright, Australian Paper Manufacturers.

Available from Dr. T. T. Hatton, 2120 Camden Road, Orlando, FL 32803

"Effects of prestorage carbon dioxide treatments and delayed storage on chilling injury of 'Marsh' grapefruit" by T. T. Hatton, R. H. Cubbedge and W. Grierson. Fla. State Hort. Soc. 88:335-338.

Available from Agricultural Editor's Office, University of Delaware, Newark, DE 19711

"Management of pick-your-own marketing operations" by Roger Ginder and Harold Hoecker, a Northeast Extension Marketing Committee Publication. Make checks payable to: University of Delaware - Cost per copy \$2.50.



W. Wardowski, Editor  
Associate Professor-  
Extension Horticulturist

This newsletter is published at a cost of \$82.74, or 7.5 cents per copy, to give the latest news to the packinghouse industry