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PACKINGHOUSE NEWSLETTER

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U.S. POSTAL SERVICE MOVES GIFT FRUIT PARCELS

A few years ago commercial gift fruit citrus packers seldom, if ever, shipped via the U.S. Postal Service. This season, several shippers in Florida and other states successfully delivered about 70,000 parcels using the Simplified Postage program approved in July 1976. Donald Mumma, Parcel Post Sales Program Manager, Washington, DC is one of the key individuals who make the new system work.

Gene Mixon, Mixon Fruit Farms, Bradenton praised the Simplified Postage program as he pointed out the advantages for his gift fruit business. Normal postage rates were used, but in the future, lower ones may be available for certain weight categories in this program. A packer palletizes a minimum of 300 packages for a given area (near any of 15 postal drop oints) using post office supplied pallets. Mixon ships to Zones 1 and 2 for each drop point pecause these two parcel post rates are identical. More distant zones may be included, but must be separated within the truck (for which Kraft paper or cardboard partitions are suggested) and weighed separately. Parcels for each rate are counted and then weighed in bulk (an entire truck can be weighed) with postage fees calculated on the average parcel for each rate zone. Individual parcel weighing and metering is eliminated.

Delivery times were excellent with the first long leg being by shipper contracted truck and thereafter local delivery by the Postal Service. Mixon reported that the total delivery time from his Florida packinghouse to northern homes was nearly always within three to four days.

Donald Mumma pointed out specific benefits to shippers using this program:

"(1) Reduced Operating Costs.

Customers generally incurred lower labor costs by eliminating individual parcel weighing and metering. They also saved on meter rental fees and lower administrative costs.

(2) Increased Productivity

By coordinating their order fulfillment and parcel preparation operations, customers were able to expedite the parcel zone sort. The convenience of bulk weighing parcels using floor or truck scales saved valuable production time and minimized van waiting time. This was especially important this year because shippers experienced a shortage of available trucks. And finally, customers did not have to worry about shutting down or altering their production line because a meter ran out of postage unexpectedly and the local post office

Was not open to reset the meter. The Institute of Food and Agricultural Sciences is an Equal Employment Opportunity - Affirmative Action Employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, or national origin. COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, STATE OF FLORIDA, IFAS, UNIVERSITY OF FLORIDA, U.S. DEPARTMENT OF AGRICULTURE, AND BOARDS OF COUNTY COMMISSIONERS COOPERATING

"....the 'Simplified Postage' program has shown all customers that the Postal Service is being responsive to the citrus shipper's specific and unique operational needs and is flexible in developing procedures and regulations that make it easier for them to do business with the Postal Service."

> Will Wardowski Extension Service Lake Alfred

DIPHENYL ABSORPTION BY GRAPEFRUIT

In view of rumors reaching me of supposed 1,000 ppm residues in export grapefruit (a manifest impossibility) I have done the following simple calculations.

Weight of diphenyl in two new fresh pads

At 4 lbs/1,000 sq. ft. (the standard for about 20 years) maximum diphenyl per pad = 2.22 grams, at 2 pads per carton = 4.44 grams.

Weight of fruit per carton

At an estimated 35 pounds = approximately 16 kilograms.

If, by some miracle, ALL the diphenyl went into the fruit

4.44 grams in 16 kilograms = 277.5 ppm.

How much diphenyl can be expected to go into the fruit?

This varies with the type of fruit, the temperature, venting of the carton and sometimes the type of wax used. A long series of exhaustive studies of such factors under export conditions was carried out by the U.S.D.A., Pomona, CA. The following figures are taken from their publication Mktg. Res. Rept. No. 646, March, 1964, pages 20-23 by G. L. Rygg, A. W. Wells, Shirley M. Norman and E. P. Atrops.

For grapefruit in vented cartons with one pad at the top of the fruit and one at the bottom under export conditions at 56°F for one week:

Top pad lost 81% of its diphenyl Bottom pad lost <u>68%</u> of its diphenyl

Avg. 74.5% = 3.28 grams diphenyl lost in one week

During this period the grapefruit picked up 22 ppm = 0.352 grams of diphenyl or 10.7% of the diphenyl lost by the pads. i.e. In these very carefully controlled tests, grapefruit in vented cartons at 56°F (13.3°C) picked up 10.7% of the diphenyl lost by the pads.

Under non-refrigerated conditions, particularly in unvented cartons, grapefruit can pick up more than the allowable legal residue (110 ppm for the U.S. and Canada, 70 ppm for Japan and Europe) but under no conceivable condition could 100% of the diphenyl originally in the pads be picked up by the fruit.

> W. Grierson AREC, IFAS Lake Alfred

Packinghouse Newsletter No. 91

February 9, 1978

PACKINGHOUSE CONFERENCES

Conferences at Lake Alfred for individual citrus packers have traditionally been on fruit quality, mechanization, remodeling and building. Recently packinghouse conferences have been called in response to meeting government regulations such as pesticide regulations and pollution control. Florida citrus packers are invited to call us and request a conference on any problem. We will invite the appropriate research specialists and the packer may invite anyone he wishes.

Will Wardowski Extension Service Lake Alfred

CITRUS PACKINGHOUSE DAY

The Seventeenth Annual Citrus Packinghouse Day will be at the Agricultural Research & Education Center, Lake Alfred on Wednesday, September 6, 1978. Your suggestions for speakers are welcome and will be timely as a couple of potential speakers have already been contacted.

Will Wardowski Extension Service Lake Alfred

AVAILABLE PUBLICATIONS

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

"Degreening Florida citrus fruit: procedures and physiology" by A. A. McCornack and W. F. Wardowski. Proc. Int. Soc. Citriculture 1:211-215. 1977.

"Application of benzimidazole fungicides for citrus decay control" by G. E. Brown. Proc. Int. Soc. Citriculture 1:273-277. 1977.

"Solar energy utilization in citrus packinghouse operations" by W. M. Miller, W. F. Wardowski and C. D. Baird. Proc. Int. Soc. Citriculture 1:304-308. 1977.

Available from Mr. B. Abbitt, AREC, P. O. Box 1088, Lake Alfred, FL 33850

"A method for determining how much to pay for a citrus grove based upon its fruit production potential" by Ben Abbitt, John A. Otte and R. P. Muraro. Economic Information Rept. 81. December, 1977.

Available from Mr. W. Miller, USDA, 2120 Camden Road, Orlando, FL 32803

"Unitized vs. hand loading of van containers for exporting Florida grapefruit" by William R. Miller, Lawrence A. Risse, Ben M. Hillebrand, Thomas Moffitt and William R. Black. USDA MRR 1068. May 1977. 13 pages.

<u>Available from Florida Crop and Livestock Reporting Service, 1222 Woodward Street, Orlando,</u> L 32803

'Citrus Summary 1977" December 1977. 49 pages.

Packinghouse Newsletter No. 91

February 9, 1978

Available from Mr. K. Milne, Head, Technical Division, Saphir Sons & Co., Ltd., The London Fruit Exchange, London El 6HE, England

"The postharvest handling of citrus fruits" by K. Milne. Paper to the Society of Chemical Industry (Great Britain). November, 1974. 14 pages.

Available from Division of Fruit & Vegetable Inspection, P. O. Box 1072, Winter Haven, FL 33880

"1976-77 Season Annual Report." (This is a gold mine of statistics on fresh fruit shipments).

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

"Factors involved in storage of citrus fruits: a new evaluation" by W. Grierson and T. T. Hatton. Proc. Int. Soc. Citriculture 1:227-231. 1977.

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