



PACKINGHOUSE NEWSLETTER

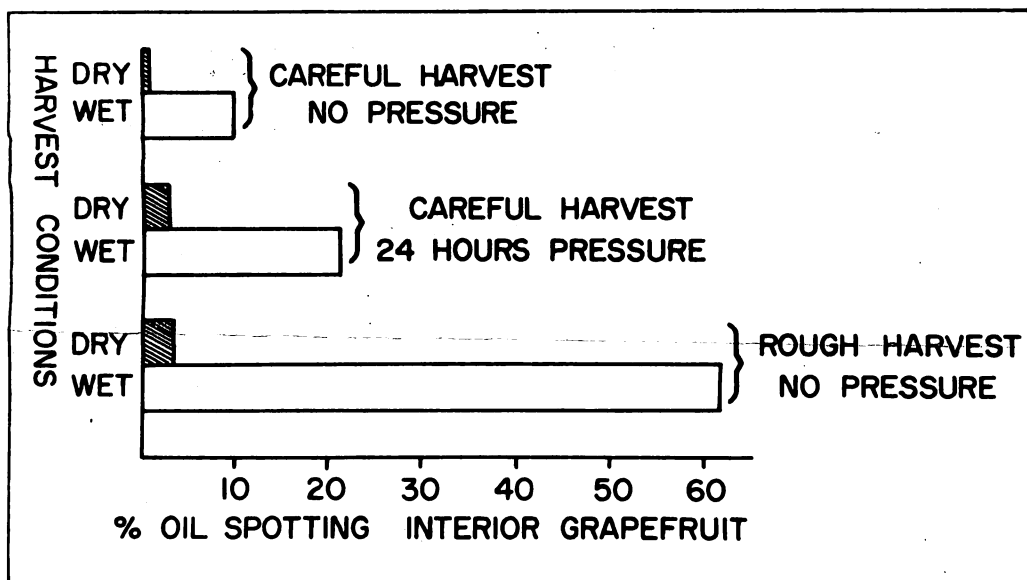
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Key Word Index General Handling, Grapefruit, Labeling Cartons, Oleocellosis (Oil Spotting), Overpacking, Peel Injury, Picking, Shape of Fruit

HARVESTING AND HANDLING: PEEL INJURY OF GRAPEFRUIT

Interior grown grapefruit were harvested monthly (9 harvests) during the 1978-79 season (1) with reasonable care and (2) roughly, by dropping to the ground from the tree followed by tossing into wooden boxes. The fruit received normal packinghouse treatments of degreening (early in the season) washing, waxing and packing in cartons. Half of the carefully picked fruit were packed in over-filled wooden tomato crates with another crate holding a 50-lb weight on them for 24 hours. All fruit were picked early in the morning. Four pickings were made during damp or wet conditions, and five during dry conditions. The graph below shows percentage of grapefruit blemished by oleocellosis (oil spotting) within a week following packing. There was little or no decay in any of this fruit which was stored for five weeks at 70°F (21°C) following packing.

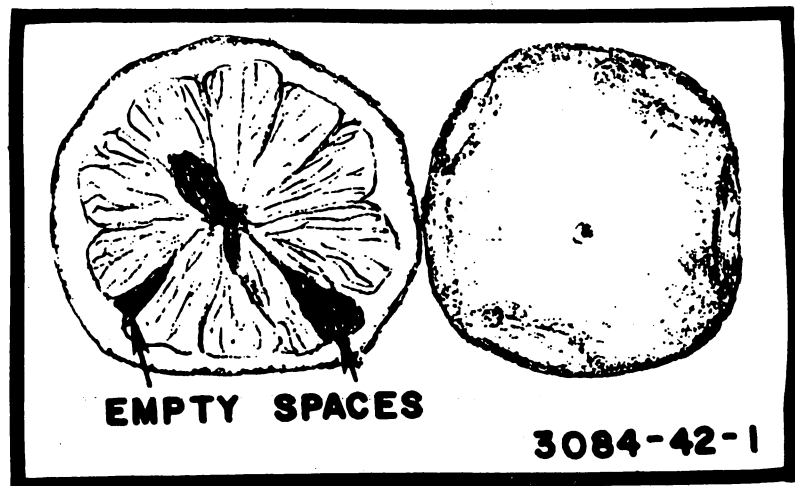


It is best to harvest citrus fruit when dry and to handle it carefully to avoid oil spotting. Pressure on grapefruit after harvest, such as is sometimes done by overfilling cartons, can also increase oil spotting.

Andy Mccornack Will Wardowski
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OVERPACKING: A WORLDWIDE, EXPENSIVE BUT UNNECESSARY PROBLEM

The accompanying drawing is made from a photograph of an Indian River grapefruit distorted during packing. After four weeks in storage, large hollow spaces had developed due to injury to internal membranes. This occurs with all types of citrus fruits and is a common, but unnecessary, problem all over the world. It is usually attributable to packers trying to please buyers who unwisely insist on a "good, heavy pack." We just received an Australian report describing the same thing in some of their 'Ellendales' examined on arrival in Europe. "...growers and sheds do themselves a great disservice by over filling...trying to please weight-conscious importers...square fruit is puffy and dry...and contributes largely to 'waste' on survey reports." It all sounds very familiar---and so unnecessary.



Bill Grierson
AREC, Lake Alfred

In Memoriam

Twenty-seven years ago, in the fall of 1952, I had the great good fortune to meet John R. Winston, even then the USDA's "grand old man" of postharvest research. Like Paul at the feet of Gamaliel, I learned much of the practicalities of Florida citrus packinghouse research from him. "J.R." had been around a long time, having published his first paper in the Proceedings of the Florida State Horticultural Society in 1920, two years before I entered grade school. From then until his retirement in 1960, he provided clear-headed, practical solutions in every aspect of citrus handling. Harvesting, degreening, decay control, packing, long-distance transportation, all benefited from his always practical research. He died on September 11, 1979 aged 89. Goodbye "J.R.", it is a privilege to have known you.

Bill Grierson
AREC, Lake Alfred

FURTHER NOTE ON FRENCH LABELING

On reading our item on labeling in French for the Canadian market, our alert librarian, Pam Hearon, promptly sent over xeroxed examples to show that French journals were commonly using "pomelo" for grapefruit instead of "pampelmousse." As with the use of "citron" to variously mean lemon, lime or citron, this has the makings of confusion. "Pomelo" was previously used in English for what we now call grapefruit. (Hence tangerine x grapefruit (pomelo) = tangelo). But

this was too easily confused with the pummelo or shaddock (Citrus maxima), so the name "grapefruit" (referring to the bunch-like fruiting habit) came into use.

Presumably either "pampelmousse" or "pomelo" could be used for grapefruit labeling.

Bill Grierson
AREC, Lake Alfred

AVAILABLE PUBLICATIONS

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

"Resistance of 'Marsh' grapefruit to deformation as affected by picking and handling methods" by L. G. Rivero, W. Grierson, and J. Soule. Journal Amer. Soc. Hort. Sci. 104(4):551-554. 1979. (Also see Packinghouse Newsletter No. 98, page 1. Want to see a photo of the "Grierson Creep Tester"? Then request the above article. Editor).

"Physico-chemical treatment of citrus packinghouse wastewater: chemical coagulation" by M. A. Ismail. Proc. Fla. State Hort. Soc. 91:142-144. 1978.

"Diphenyl residues in Florida grapefruit and oranges following actual and simulated long export shipments" by W. F. Wardowski, S. V. Ting, J. J. Smoot, P. L. Davis and J. O. Craig. Journal Amer. Soc. Hort. Sci. 104(4): 440-443. 1979.

"Eighteenth Annual Citrus Packinghouse Day Program and Abstracts." This includes 19 abstracts for the September 5, 1979 meeting.

Available from John Owen-Turner, Editor, Queensland Citrus Bulletin, Queensland Department of Primary Industries, P. O. Box 48, Gayndah, Queensland 4625 AUSTRALIA

"Queensland Citrus Bulletin" including six articles in 18 pages. March. 1979.

Available from David Hall, Pennwalt Corporation, Decco Division, 1728 W. Olye Street, Lakeland, FL 33801

"Fungicide combinations as a replacement for biphenyl on citrus" by D. J. Hall, J. R. Bice and P. J. Lewis. Proc. Fla. State Hort. Soc. 91:159-161.

Available from Dr. E. George Stern, Wood Research Laboratory, College of Agriculture, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061

"Standard wooden pallets" by E. G. Stern, VPI & SU Bulletin 164. March 1979, 14 pages. Price \$3.00. (This Bulletin includes a complete list of 164 Bulletins from the above laboratory. Editor).

Available from American Society of Agricultural Engineers, 2950 Niles Rd.,
Saint Joseph, MI 49085

"Manufacturers of fruit and vegetable packinghouse equipment. 1979 ASAE bibliography" compiled by ASAE Committee for Fruit and Vegetable Packinghouse Operations. ASAE Special Publication SP-3-79. 12 pages. Price: ASAE members \$2.00, non-members \$4.00 (This 21 member committee was chaired by our own Dr. Bill Miller. Editor).

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This newsletter is published at a cost of \$77.70 or 6 cents per copy, to give the latest news to the packinghouse industry.