



INSTITUTE OF FOOD AND  
AGRICULTURAL SCIENCES  
UNIVERSITY OF FLORIDA

FLORIDA  
COOPERATIVE  
EXTENSION SERVICE

## PACKINGHOUSE NEWSLETTER

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### RELATION OF HANDLING TO DECAY OF FLORIDA ORANGES IN TRANSIT AND ON THE MARKET

H. J. Ramsey, U.S.D.A.

A U.S.D.A. study in California showed that care in picking, handling and packing is the major factor influencing decay on arrival and throughout marketing. Some Florida packers requested a similar study. In this six-year study, we compared shipments from packinghouses notable for careful handling with shipments from some of their less distinguished neighbors. We also had a trained, disciplined picking crew pick alongside the usual commercial crews and compared the difference in decay on the market. Since the commercial crews tended to learn by example, we were also able to measure the improvement in their performance.

Obviously, six years of such studies, involving nearly 40 packinghouses, resulted in a great mass of figures which it is hard to present in a few words and some severely condensed tables. One statement, however, summarizes these results: "Almost without exception, the decay occurring in transit and marketing is due to rough and more or less careless handling at time of picking and packing."

Before giving some of the tabulated results, let us note that:

- 1 - Decay was less when the foreman did not pick and was thus free to supervise the pickers full time.
- 2 - Decay was reduced by using 1/2-box picking bags.
- 3 - Decay was reduced when the foreman was free (and minded) to check an occasional bag from each picker, fruit by fruit.

Quality of picking

THREE INSPECTIONS OF ONE PICKING CREW, SHOWING GREAT IMPROVEMENT

Picker No.	Jan. 14		Jan. 20		Mar. 6	
	Clipper Cuts	Long Stems	Clipper Cuts	Long Stems	Clipper Cuts	Long Stems
	----- % -----					
1	5.2	3.6	0.0	5.4	1.1	0.5
2	1.1	6.1	0.0	3.6	0.5	0.5
3	9.5	4.1	1.0	9.2	0.5	2.0
4	1.1	15.4	4.8	4.8	6.4	2.8
5	--	--	1.0	4.5	0.6	0.6
6	--	--	0.6	3.5	1.2	1.8
7	--	--	0.6	3.4	0.5	0.5
Crew Average	5.4	9.9	0.9	5.1	1.0	0.6

(Note. We do not advise using clippers when the fruit will pull cleanly. They remain essential for fruit, such as early tangerines, that often will not pull cleanly. WG)

Quality of picking + packing

FLORIDA ORANGE SHIPPING EXPERIMENTS

	On Arrival	1 Week Later	2 Weeks Later	3 Weeks Later
<u>Season No. 1 - Average of 79 Shipments--% Decay</u>				
Careful Pick and Pack	0.6	1.1	1.6	1.9
Commercial Pick and Pack	7.0	10.8	13.2	14.2
<u>Season No. 2 - 65 Shipments from 37 Houses--% Decay</u>				
Careful Pick and Pack	0.6	0.9	1.4	2.2
Commercial Pick and Pack	4.0	6.8	10.4	14.2

Comparison among packinghousesCOMPARISON COMMERCIAL SHIPMENTS<sup>1</sup>

	On Arrival	1 Week Later	2 Weeks Later	3 Weeks Later
	----- % -----			
5 Careful	1.4	3.1	4.1	4.5
5 Careless	17.6	27.9	34.0	37.1

<sup>1</sup>From five packinghouses doing careful work and five packinghouses doing careless work: per cent decay.

Conclusion

Not yet are all our Florida packers following the advice implicit in the massive study (nearly 40 packinghouses over a period of six seasons). Anyone wishing to discuss these results with the author personally is referred to St. Peter, for Mr. H. J. Ramsey must assuredly have his little corner in Heaven. (It is not his fault that so many packers still do not heed his soundly documented advice.) This has been excerpted from:

H. J. Ramsey, Relation of handling to decay of Florida oranges in transit and on the market. Proc. Fla. State Hort. Soc. 25:28-42, 1912. (See Available Publications)

Bill Grierson  
Professor Emeritus  
CREC, Lake Alfred

FSHS CENTENNIAL, ASHS MEETING

The report above points out the value of our 100-year-old Florida State Horticultural Society. The Centennial meeting will be November 3-5, 1987 at Orlando. Membership fees are a modest \$15.00. Join the Society (see Available Publications) and join the celebration in November.

The week following the FSHS Centennial, we will hold the American Society for Horticultural Science annual meeting at the same Orlando location. This is your chance to meet national and international leaders in horticulture science.

Editor

PACKINGHOUSE SYMPOSIUM, FSHS CENTENNIAL

At the 1987 Centennial meeting of the Florida State Horticultural Society, a special symposium on "Packaging Developments for Florida Citrus and Vegetables" will be held as part of the Handling and Processing Section program. This meeting will be held at the Orlando Hyatt (U.S. 92 and I-4), November 3-5, 1987 with the packaging symposium scheduled for Thursday afternoon--November 5th. General sessions for the Handling and Processing Section are planned for both Wednesday and Thursday. Participants and topics for the packaging symposium include:

SPEAKER	TOPIC
Charles Barmore Cryovac Division, W. R. Grace & Co. Duncan, South Carolina	Shrink-film technology for fresh market produce
Bruce Harte Michigan State University East Lansing, Michigan	Evaluating packaging materials and their interaction with processed juice products
John Harvey Mead Packaging Atlanta, Georgia	Emerging packaging container options for Florida citrus processors
Pooman Mittal Florida Department of Citrus Lakeland, Florida	Marketing research in assessing packaging options of Florida citrus
Lawrence Risse USDA-ARS Orlando, Florida	Packaging developments in Florida fresh citrus and vegetable industries

Contact the FSHS, 800 Lake Jessie Drive, Winter Haven, FL 33881; phone (813) 967-0596 for meeting registration information.

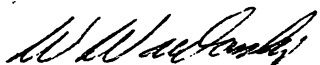
William Miller  
Section Vice President  
FSHS Handling & Processing Section

AVAILABLE PUBLICATIONS

Available from Dr. W. Wardowski, CREC, 700 Experiment Station Road, Lake Alfred, FL 33850

Relation of handling to decay of Florida oranges in transit and on the market by H. J. Ramsey. Proc. Fla. State Hort. Soc. 25:28-42. 1912.

Florida State Horticultural Society membership application.

  
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