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PACKINGHOUSE NEWSLETTER

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PEEL INJURY OF VALENCIA ORANGES

A type of peel injury called "stem-end rind breakdown (SERB)" is occurring on 'Valencia' oranges and may appear on any citrus variety. SERB is common on oranges with comparatively immature peel when there is low humidity in the air and any delay in the period between picking and waxing. Susceptible fruit commonly look normal when packed, but stem-end rind breakdown develops during transit and marketing. SERB symptoms usually appear as a collapse of the cells at the stem-end (button-end) of the fruit. A narrow ring of cells around the button generally remains normal in appearance. This ring of healthy tissue is useful for identification. The area of breakdown gradually increases in size and becomes darker in color. SERB results in increased decay and may cause a reduction in fruit size.

Cause: Loss of water from the fruit. Small-sized, thin-skinned fruit are most apt to develop these symptoms. Fruit left in the field under drying conditions a few hours after picking is likely to develop SERB. A deficient layer of natural wax could contribute to such water loss. (See Packinghouse Newsletter No. 42).

How to avoid stem-end rind breakdown:

In the grove

1. The time between picking and waxing should be as short as possible.
2. Keep fruit shaded after picking.
3. Cover loads of fruit with a canvas, especially when long hauls are involved. Do not use plastic as it traps heat.

At the packinghouse

1. If fruit must be held over 6 hours before packing, place fruit in a degreening room with high humidity (over 90%) with fans operating for air movement.
2. Do not use ethylene or heat unless degreening is necessary.

These holding conditions will keep the fruit as firm as when it was brought to the packinghouse. Waxed fruit may develop SERB if held too long under drying conditions, particularly in the period prior to waxing. Wash, wax, and pack the fruit as soon as possible after picking. Waxed fruit in cartons are additionally protected from drying conditions by the humidity level within the carton.

All varieties of oranges and mandarin-type fruit are subject to SERB to varying degrees. Grapefruit do not develop this type of peel injury unless they are exposed to extreme drying conditions.

Additional information may be obtained from Circular 286 which has a color picture of stem-end rind breakdown. This circular is listed in the Available Publications at the end of this newsletter.

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RECORDKEEPING REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT

On December 29, 1970, the President signed into law the Williams-Steiger Occupational Safety and Health Act of 1970, which became effective April 28, 1971. The purpose of this legislation is to assure safe and healthful working conditions for the nation's wage earners.

Beginning July 1, 1971, every employer engaged in any business affecting commerce who has one or more employees must keep occupational injury and illness records for his employees in the establishment at which his employees usually report to work.

Recordkeeping requirements under the Occupational Safety and Health Act may differ from your State workmen's compensation requirements.

Every employer must maintain in each establishment:

a log of recordable occupational injuries and illnesses, and
supplemental records of each occupational injury or illness.

Every employer must keep the records up to date, have them available to government representatives, and post a summary of all occupational injuries and illnesses at the conclusion of the calendar year. In addition, employers must report to the Secretary of Labor within 48 hours each accident or health hazard that results in one or more fatalities or hospitalization of five or more employees.

The forms necessary to keep these records are the:

Log of Occupational Injuries and Illnesses (OSHA Form 100)
Supplementary Record of Occupational Injuries and Illnesses (OSHA Form 101)
Summary of Occupational Injuries and Illnesses (OSHA Form 102)

Instructions for completing the forms are printed on the back of each form. The forms are available from regional offices of the Bureau of Labor Statistics located in Boston, New York, Philadelphia, Atlanta, Chicago, Dallas, Kansas City, Denver, San Francisco, and Seattle.

The law requires that employees be informed of job safety and health protection provided under the Act. A poster is available from any of the Regional offices listed above, and this poster must be posted in a prominent place in the establishment to which the employees usually report to work. The poster briefly states the intent and coverage of the Act and the responsibilities of employers and employees to maintain safe and healthful working conditions.

Log of Occupational Injuries and Illnesses

Each recordable occupational injury and occupational illness must be entered on a log of cases (OSHA Form No. 100) within two working days of receiving information that a recordable case has occurred. Logs must be kept current and retained for five (5) years following the end of the calendar year to which they relate.

Logs are to be maintained for three purposes:

1. Logs for the prior five (5) year period must be available in the establishment without delay and at reasonable times for examination by representatives of the Department of Labor or the Department of Health, Education, and Welfare, or States accorded jurisdiction under the Act.
2. The log will be used in preparing the annual summary of Occupational Injuries and Illnesses (OSHA Form No. 102) which must be posted in every establishment.
3. Those establishments selected to participate in a statistical program will be required to prepare a report based on entries in this log.

In addition, the log will aid in reviewing the occupational injury and illness experience of employees.

Supplementary Record of Occupational Injuries and Illnesses

To supplement the Log of Occupational Injuries and Illnesses (OSHA No. 100), each establishment must maintain a record of each recordable occupational injury or illness. Workmen's compensation, insurance, or other reports are acceptable as records if they contain all facts listed below or are supplemented to do so. If no suitable report is made for other purposes, this form (OSHA No. 101) may be used or the necessary facts can be listed on a separate plain sheet of paper. These records must also be available in the establishment without delay and at reasonable times for examination by representatives of the Department of Labor and the Department of Health, Education, and Welfare, and States accorded jurisdiction under the Act. The records must be maintained for a period of not less than five years following the end of the calendar year to which they relate.

Summary - Occupational Injuries and Illnesses

Every employer is required to prepare a summary of the occupational injury and illness experience of the employees in each of the establishments at the end of each year within one month following the end of that year. The summary must be posted in

in a place accessible to the employees. OSHA Form 102 is to be used for this summary.

Additional information concerning this law may be obtained by contacting the Acting Regional Administrator, Occupational Safety and Health Administration, U. S. Department of Labor, with appropriate jurisdiction, or you may contact the office of Information Services, Occupational Safety and Health Administration, U.S. Department of Labor, Washington, DC 20210.

PPMA Report
September 3, 1971

AVAILABLE PUBLICATIONS

Available from Dr. W. Wardowski, Harvesting & Handling Section, Agricultural Research and Education Center, P. O. Box 1088, Lake Alfred, Florida 33850.

"Abscission Chemical 'Woos' Stubborn Citrus Off Trees" by W. F. Wardowski, American Fruit Grower 92(2):24. February, 1972.

"Practical Measures for Control of Stem-end Rind Breakdown of Oranges" by A. A. McCornack and W. Grierson. Ext. Circ. 286. May, 1965.

Available from Florida Department of Agriculture & Consumer Services, Division of Marketing, Mayo Building, Tallahassee, Florida 32304.

"Packaging Florida Produce: What Merchandisers Want" Results of a survey of chain stores. Market Analysis Series MA 1-72. 38 pages, February, 1972.



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This newsletter is published at a cost of \$80.40 or 7¢ cents per copy, to give the latest news to the packinghouse industry.