

# INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

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FLORIDA COOPERATIVE EXTENSION SERVICE

# PACKINGHOUSE NEWSLETTER

W. Wardowski, Editor CREC 700 Experiment Station Road Lake Alfred, Florida 33850 Phone (813) 956-1151 Packinghouse Newsletter No. 152 March 15, 1988

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#### EXPORTING TO FINLAND

Being, for family reasons, in Finland last summer, I grabbed at an invitation to visit experiment stations and various laboratories. Finnish experiment stations may be remote from the interests of most Packinghouse Newsletter readers, but the Customs Laboratory greatly concerns anyone exporting either fresh or processed citrus to Finland or to North European dealers who may re-export to Finland.

But first a few words to put Finland in perspective. Various comments in the U.S. press (particularly when the term "Finlandization" is used) give the impression of a country cowering in the gloomy shadow of the Russian bear. Far from it; I found instead a very cheerful, incredibly industrious, markedly independent little country. The Finns delight in watching U.S. TV programs which Helsinki TV carries extensively and one hears gleeful comments that their TV, with its many American programs, is received in Leningrad and the little captive countries of Latvia, Estonia and Lithuania and there is nothing the Russians can do about it!

Finland, lying between 60 and 70 N is at almost exactly the same latitude as Alaska. It is a little bigger than New Mexico but smaller than Montana. Its population of a little below five million is approximately equal to that of Virginia. Finnish agriculture is very similar to that of Minnesota. Lumber and forest products have traditionally been Finland's major exports. However, since World War II thay have had a very successful industrialization program (the TV in our London hotel room was made in Finland!) which enables the Finns to import freely. I saw a far greater variety of tropical and subtropical fruits in Stockmann's department store in Helsinki than I am used to seeing here in Central Florida. Finland is thus a good market with considerable potential, but in my travels I have heard sad stories from Florida to Australia of exports of citrus to Finland being rejected for excessive pesticide residues. So I asked to visit the Customs Laboratories.

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When I remarked on the toughness of Finnish pesticide residue regulations to Hans Blomqvist, Head of the Pesticide Office, National Board of Agriculture, and Erkka Lindstrom, Head of the Bureau of Consumer Protection, I was firmly corrected. Finnish residue regulations are no stricter than for most European countries. "It is just that we enforce our regulations very strictly." Indeed they do! I was surprised to see soft plastic dolls on the laboratory shelves with the samples of fruits, vegetables and various food products. Babies chew on such toys, so they had been tested for any soluble poisonous materials on their surface that might hurt a child. None had been found but, nevertheless, these dolls had been rejected for importation into Finland.

Why? "We also sampled the air inside them and it was found to be very high in a toxic solvent. A child who's teeth penetrated one could breathe in a harmful dose." As I said, these people are thorough!

The table below summarized Finnish tolerances for postharvest fungicide residues for citrus fruits and also the equivalent U.S. and Codex Alimentarius tolerances.

Country	Tolerance as ppm					
	Benomyl (Benlate)	Biphenly (Diphenyl)	2,4-D	Imazalil	OPP/SOPP (Dow-hex)	TBZ
U. S. A.	10	110	5	10	10	10
Codex	10	110	2	5	10	10
Finland	5	70		3 <sup>y</sup>	10	6

Tolerances for Fungicides Applied to Citrus Postharvest<sup>2</sup>

<sup>2</sup>Extracted from Table 18.3 in <u>Fresh</u> <u>Citrus</u> <u>Fruits</u>. <sup>9</sup>Updated value.

The residue that has caused the most trouble has been diphenyl. Many countries (including Finland and Japan) allow only 70 ppm, rather than the 110 ppm allowed in Canada and the U.S. Exporters should keep in mind that very early grapefruit can take up excessive amounts of diphenyl, as will any mandarin type fruit (tangerines, Honey Tangerines (Murcotts), Temples, Ortaniques, etc). For such fruits use only one pad per carton. I was given several publications, photocopies of which can be obtained from the Editor, PHNL. (See Available Publicaitons).

> Bill Grierson Professor Emeritus CREC, Lake Alfred

#### CITRUS PACKINGHOUSE DAY

The Twenty-seventh annual Citrus Packinghouse Day is scheduled for Thursday, September 8, 1988 at the Citrus Research and Education Center, Lake Alfred. This meeting is usually attended by 250 to 300 people interested in citrus packinghouses. Talks and displays will be presented by scientists and citrus packers in the morning, followed by lunch and afternoon equipment displays. Commercial companies are encouraged to obtain a display registration form soon by contacting Dr. Bill Miller or me at 700 Experiment Station Road, Lake Alfred, Florida 33850, Phone (813) 956-1151.

> Will Wardowski Extension Service Lake Alfred

#### AVAILABLE PUBLICATIONS

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

New inspection and approval procedure for pesticides in Finland by Hans Blomqvist. Ann. Agri. Fenn. 25:37-42, 1986. (English with Finnish summary).

Facts about the Finnish Customs laboratory. (Three page mimeograph in English).

Decree on Food Contaminants. (From Paras 1 and 11 of the Food Act of 3 July 1941 (526/1941). Unofficial English translation, 15 pages.

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. J. Amer. Soc. Hort. Sci. 104(4):440-443. 1979.

Diphenyl absorption by honey tangerines: The effects of washing and waxing and time and temperature of storage, by Steven Nagy and Wilfred F. Wardowski. J. Agric. Food Chem 29:760-763. 1981.

Dipheny absorption and decay in 'Dancy' and 'Sunburst' tangerine fruit, by S. Nagy, W. F. Wardowski and C. J. Hearn. J. Amer. Soc. Hort. Sci. 107(1):154-157. 1982. Available from Larry Risse, USDA, 2120 Camden Road, Orlando, Florida 32803.

Tropical Products Transport Handbook, Agr. Handbook 668. 148pp. August 1987.

-4-

Protecting Perishable Foods During Transport by Truck, Agr. Handbook 669. 94pp. September 1987.

Available from <sup>t</sup>K. J. Gillespie, Department of Agriculture, Waikerie 5330, South Australia.

Controlled Ripening and Degreening of Fruit, by B. L. Tugwell and K. J. Gillespie. 14pp. Horticulture Notes 5/87. (Editor's note: includes avocados, citrus, honey dew melons, pears and tomatoes).

## Available from Dr. B. L. Wild, Gosford Horticultural Postharvest Laboratory, P. O. Box 355, Gosford, N.S.W. 2250, Australia.

Helping Hand for Fungicide Resistant Mould by B. L. Wild. Rural Newsletter 90:31-34. March 1984.

Citrus Green Mould Resistance to the Unrelated Fungicides Panoctine & Benlate by B. L. Wild. Rural Newsletter 88:26-28. September 1983.

This Article is about Navels, Buttons, Zippers and things that go bang in the night by B. L. Wild. Rural Newsletter :13-15. March 1986.

Available from Bob Freie, Florida Agricultural Statistics Service, 1222 Woodward Street, Orlando, FL 32803

Forecasting Florida's Citrus Production, 8p. folder. 1986. (Editor's note: revision expected in fall 1988).

W. Washing

W. Wardowski, Editor Professor Extension Horticulturist