



September 2007 News - UC Davis Postharvest Technology

Postharvest Notes

We appreciate the phenomenal response to our workshops this year! After last month's e-newsletter we not only filled up the 15 remaining spaces we had noted for our Fresh-cut Workshop; we had so many requests, we added an additional 25 spaces which have also filled. We currently have a wait list of six names which we also hope to accommodate. We have added a new focus area, Sensory and Consumer Quality, and our workshop publications have a whole new look. All in all, our September 25-27, 2007 [Fresh-cut Products: Maintaining Quality & Safety Workshop](#) promises to be a great workshop.

Postharvest Technology Research & Information Center's Executive Director, Jim Gorny has been hard at work signing up sponsors for our upcoming workshops, and also planning for a Produce Food Safety Workshop tentatively scheduled for this winter here at the UC Davis campus.

Postharvest Specialists' Activities

Postharvest Downunder APHC 2007. Dr. Jim Gorny, Executive Director of the Postharvest Technology Research Information Center, participated as an invited keynote speaker at the September 10-12, 2007 Australasian Postharvest Conference held in Terrigal, New South Wales Australia. On "industry day" of the conference, Dr. Gorny provided an overview of produce marketplace trends and how new and emerging innovative postharvest technologies can help produce companies meet market driven demands for product convenience, safety and sustainability. Other important topics discussed included the management of ripening, consumer perspectives on fresh produce quality and in-depth discussion of new postharvest technologies, products and practices. The Postharvest Center wishes to express a special thanks to Dr. Jenny Ekman at the NSW Department of Primary Industries, one of the conference organizers and hosts, for extending an invitation and supporting our participation in this important event. "This was an excellent opportunity to share information as well as see and learn about the cutting edge postharvest research and industry practices that are occurring downunder," said Jim Gorny. For more information about the conference visit: www.APHC2007.com.au

Dr. Linda Harris recently traveled to Norway where she studied food safety issues related to fish products.

In August, Dr. Marita Cantwell participated in a Cold Chain Management event in Singapore that was organized by the Asian Productivity Organization.

Dr. Beth Mitcham went to Vietnam in August, and participated in a panel that interviewed scholarship applicants on behalf of the Vietnamese Educational Foundation.

Lake Tahoe was the location of the successful September PRO Institute where Dr. Michael Reid assisted with course instruction for the 30 participants.

What's New on the Web

Thirteen new French Produce Facts translations were added to our Web site this month, including: [Broccoli](#), [Carambole](#), [Châtaigne](#), [Concombre](#), [Dourian](#), [Fruits et Noix Séchés](#), [Goyave](#), [Jackier](#), [Jujube \(Datte Chinoise\)](#), [Lime](#), [Pomelo](#), [Pomme: 'Granny Smith'](#), and [Pomme: 'Red Delicious'](#).

Our well-visited "[Postharvest Publications Organized by Topic](#)" data store now includes over 650 articles

with one or more of the UC Davis faculty among the authors. New additions this month include:

[“Food Safety Self-Reported Behaviors and Cognitions of Young Adults: Results of a National Study,”](#) by Carol Byrd-Bredbenner, Jaclyn Maurer, Virginia Wheatley, Donald Schaffner, Christine Bruhn, and Lydia Blalock. *Journal of Food Protection*. 70:1917-1926 (2007)

[“Isolation of *Salmonella* Enteritidis Phage Type 30 from a Single Almond Orchard over a 5-Year Period,”](#) by Aaron R. Uesugi, Michelle D. Danyluk, Robert E. Mandress, and Linda J. Harris. *Journal of Food Protection*. 70:1784-1789 (2007)

[“Relationship between Nondestructive Firmness Measurements and Commercially Important Ripening Fruit Stages for Peaches, Nectarines and Plums,”](#) by Constantino Valero, Carlos H. Crisosto, Davis Slaughter. *Postharvest Biology and Technology*. 44:248-253 (2007)

[“Temporal Sequence of Cell Wall Disassembly Events in Developing Fruits. 1. Analysis of Raspberry \(*Rubus idaeus*\),”](#) by Ariel R. Vicente, Claudia Ortungo, Ann L. T. Powell, L. Carl Greve, and John M. Labavitch. *Journal of Agricultural and Food Chemistry*. 55:4119-4124 (2007)

[“Temporal Sequence of Cell Wall Disassembly Events in Developing Fruits. 2. Analysis of Blueberry \(*Vaccinium* Species\),”](#) by Ariel R. Vicente, Claudia Ortungo, Hernán Rosli, Ann L. T. Powell, L. Carl Greve, and John M. Labavitch. *Journal of Agricultural and Food Safety*. 55:4125-4130 (2007)

[“Cell Wall Disassembly Events in Boysenberry \(*Rubus idaeus* L. x *Rubus ursinus* Cham. & Schldl.\) Fruit Development,”](#) by Ariel Roberto Vicens, Ann Powell, L. Carl Greve and John M. Labavitch. *Functional Plant Biology*. 34:614-623 (2007)

[“Review: The Linkage Between Cell Wall Metabolism and Fruit Softening: Looking to the Future,”](#) by Ariel R. Vicente, Montserrat Saladié, Jocelyn K.C. Rose, and John M. Labavitch. *Journal of the Science of Food and Agriculture*. 87:1435-1448 (2007)

[“A Reevaluation of the Key Factors that Influence Tomato Fruit Softening and Integrity,”](#) by Montserrat Saladié, Antonio J. Matas, Tal Isaacson, Matthew A. Jenks, S. Mark Goodwin, Karl J. Niklas, Ren Xiaolin, John M. Labavitch, Kenneth A. Shackel, Alisdair R. Fernie, Anna Lytovchenko, Malcolm A. O’Neill, Chris B. Watkins, and Jocelyn K.C. Rose. *Plant Physiology*. 144:1012-1028 (2007)

[“Effect of Dips in a 1-Methylcyclopropene-Generating Solution of ‘Harrow Sun’ Plums Stored under Different Temperature Regimes,”](#) by George A. Manganaris, Ariel R. Vicente, Carlos H. Crisosto, and John M. Labavitch. *Journal of Agricultural and Food Chemistry*. 55:7015-7020 (2007)

[“Ethyl Fomate as a Postharvest Fumigant for Selected Pests of Table Grapes,”](#) by T. Simpson, V. Bikoba, C. Tipping, and E.J. Mitcham. *Journal of Economic Entomology*. 100:1084-1090 (2007)

Postharvest Publication Highlights

This month we are continuing to feature our new Spanish translation of our best-selling “Postharvest Technology of Horticultural Crops” publication: [“Tecnología Postcosecha de Cultivos Hortofrutícolas”](#). The translation was coordinated by Clara Pelayo Zaldívar, Ph.D., who was assisted by 18 translators from Mexico, Argentina, Nicaragua, and California. This 580 page publication, available only as a CD, covers such topics as preharvest factors affecting fruit and vegetable quality, waste management and cull utilization, optimal handling specifications, identification of defects, safety factors and processing methods. It is available for \$65.00 per CD/copy. To order a copy for your library, please use our [Order Form](#). There is a 20% discount on orders of 10 or more copies.

Postharvest Endowment

We welcome your year-end tax-deductible (U.S.) donations to our Postharvest Program Endowment fund. The interest from this endowment is used to support work on the Web site that is now over 3000 pages of useful Postharvest information. To contribute, please link to our [Postharvest Program Endowment](#) page.

Postharvest Positions

Driscoll's is looking for a Post Harvest Analyst to conduct research on post harvest handling and impact of cultural practices on product quality, including the application of scientific and engineering principles in research, development, production technology, quality control, packaging, eating quality and cold chain optimization of raspberries, blackberries and blueberries. Contact [Margie Way](#) for more information.

AgroFresh is looking for a Lab Manager in Davis, Calif. to manage the laboratory and office activities of the AgroFresh facility. This position is an administrative and technical support position and will include some research. A BS degree with lab experience is required. Specific experience in a postharvest lab is desirable but not required. The position is temporary full time. For more information or to apply please contact [Deirdre Holcroft](#).

Upcoming Conferences, Courses and Workshops

- September 25-27, 2007. [Fresh Cut Workshop](#). Buehler Alumni Center, UC Davis campus. Link to the [2007 Brochure](#) or the [On-Line Registration Form](#).
- October 12-15, 2007. [Produce Marketing Association Fresh Summit](#). Houston, Texas.
- October 21-26, 2007. [14th International Symposium on Botrytis](#). Cape Town, South Africa.
- October 23-24, 2007. [Principles of Freezing & Frozen Foods Processing Course](#). UC Davis campus.
- November 13, 2007. Launch Event. Center for Excellence in Fruit & Vegetable Quality. UC Davis campus.
- December 3-6, 2007. [International Conference on Quality Management in Supply Chains of Ornamentals \(QMSCO 2007\)](#). Bangkok, Thailand.
- January 6-9, 2008. [International Symposium on the Application of Precision Agriculture for Fruits & Vegetables](#). Orlando, Florida.
- February 24-26, 2008. [California Small Farm Conference](#). Visalia, California.
- May 5-7, 2008. [Fresh Marketplace](#). Las Vegas, Nevada.
- May 13, 2008. 14th Annual Management of Fruit Ripening Workshop. UC Davis campus.
- May 14-15, 2008. 3rd Annual Methods of Measuring Fruit & Vegetable Quality: Color & Texture Workshop. UC Davis campus.
- June 16-27, 2008. 30th Annual Postharvest Technology Short Course. UC Davis campus.
- June 21, 2008. Postharvest Technology Update (Colloquium) and Short Course 30th Reunion. UC Davis campus.
- August 11-14, 2008. [9th International Symposium on Postharvest of Ornamentals](#). Odense Conference Center.

Postharvest Question of the Month

Q: I would like to know the mango heat load per ton of mango for evaporative cooling ripening chamber. The mango variety will vary from Alphanso, Totapuri, local, etc. Also, who are the suppliers of evaporative cooling chambers for mangoes? (S.J.)

A: Proper ripening of various mango cultivars requires cooling fruit temperature to 20-22°C, which can best be achieved by forced air cooling with 10-12°C and 90-95% air in a cooling room with the appropriate refrigeration capacity. There is a list of US suppliers of [cooling and storage facilities](#) on our website (Postharvest Yellowpages), but I suggest that you consult with a local refrigeration equipment company in your area to help you with your needs. – Adel Kader

This publication is produced monthly by the UC Davis Postharvest Technology Research & Information Center. For more information visit our [website](#) or [e-mail](#) us. If you or an associate wish to receive this free monthly E-Newsletter, click [here](#) to subscribe. If you do not wish to receive this publication, please click on “reply” to this e-mail and type “unsubscribe” in the subject line.

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