



## August 2007 News from UC Davis Postharvest Technology

### Postharvest Notes

Postharvest Specialist [Adel Kader](#) retired on June 28<sup>th</sup>, after 35 years of service at the University of California, Davis. As a student, Dr. Kader became very interested in the “potential of increasing food availability by reducing postharvest losses” and focused on this issue as well as produce quality for much of his university career. In his retirement, he will continue to serve for a year as volunteer technical editor of the Postharvest Web site, and as an instructor for the classes offered through the Postharvest Technology Research & Information Center.

We gladly welcome [Dr. James R. Gorny](#) as Executive Director of the Postharvest Technology Research & Information Center. Dr. Gorny, former Senior Vice President of Food Safety and Technology for the United Fresh Produce Association, joined the Center on August 1<sup>st</sup>. He will work directly with Cooperative Extension specialists and advisors and faculty members, trade associations, and retail and food service companies to assist them in improving postharvest handling practices to maintain produce quality and safety throughout the distribution chain.

Only 15 spaces remain available for our September 25-27, 2007 [Fresh-cut Products: Maintaining Quality & Safety Workshop](#). The program for this workshop will be of interest to food scientists, food engineers, quality and safety assurance personnel and new product development staff, as well as representatives from research institutions, the restaurant and institutional food industries, and packaging and ingredient suppliers.

[Dr. Beth Mitcham](#) co-edited and authored two chapters in a recently published book about [Heat Treatments for Postharvest Pest Control](#). She also contributed a chapter to another recently published book about [Berry Fruit Value-added Products for Health Promotion](#).

### What's New on the Web

A big “thank you” to Shadi Atallah who has been hard at work this month on translating into French many of our [Produce Facts](#): Recommendations for Maintaining Postharvest Quality: The five new **French translations** posted to the web – with more to come, soon, include: [Cherimoya](#), [Papaye](#), [Fruit de la Passion](#), [Chou \(rond et chinois\)](#), and [Chou-Fleur](#).

The following new articles were added to the “[Postharvest Publications Organized by Topic](#)” database on our Web site:

“Review: [Nutritional comparison of fresh, frozen, and canned fruits and vegetables. Part 1](#). Vitamins C and B and phenolic compounds,” by Joy C. Ricman, Diane M. Barrett and Christine M. Bruhn. *Journal of the Science of Food and Agriculture*. 87:930-944 (2007)

“Review: [Nutritional comparison of fresh, frozen, and canned fruits and vegetables II](#). Vitamin A and carotenoids, vitamin E, minerals and fiber,” by Joy C. Rickman, Christine M. Bruhn and Diane M. Barrett. *Journal of the Science of Food and Agriculture*. 87:1185-1196 (2007)

“[Maximizing the Nutritional Value of Fruits & Vegetables](#),” by Diane M. Barrett. *Food Technology*. Vol. 61 No. 4:40-44 (2007)

“[Quality of Pink Lady Apples](#) in Relation to Maturity at Harvest, Prestorage Treatments, and Controlled

## Postharvest Publication Highlights

The UC Davis Postharvest Technology Research & Information Center is pleased to announce the availability of its best selling publication, “Postharvest Technology of Horticultural Crops” recently translated into Spanish and now available in a CD format. The English version was released in 2002, and was edited by Adel Kader and written by 22 authors, including UC researchers, specialists, and faculty along with leading industry experts. The new publication is entitled “[Tecnología Postcosecha de Cultivos Hortofrutícolas](#)” and 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 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 via the Postharvest Technology Research & Information Center’s web site (<http://postharvest.ucdavis.edu>) 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.

## Brief Book Reviews

Seven new [book reviews](#) have been posted:

- Heat Treatments for Postharvest Pest Control Theory and Practice
- Berry Fruit Value-added Products for Health Promotion
- Postharvest- An introduction to the physiology and handling of fruit, vegetables, and ornamentals. Fifth edition.
- Microbiology of Fruits and Vegetables
- Produce Degradation Pathways and Prevention
- Environmentally Friendly Technologies for Agricultural Produce Quality
- Postharvest Biology

## Postharvest Endowment

We continue to invite your 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. To contribute, please link to our [Postharvest Program Endowment](#) page.

## Postharvest Positions

A postdoctoral position for a research project on “Postharvest Factors to Improve the Safety of Fresh Produce” is available at the Center for Food Safety and Applied Nutrition (U.S. Food & Drug Administration). The appointment is for up to one year, and may be renewed for a second year. Funds for travel to scientific meetings are available. Participants do not become employees of CFSA, and no fringe benefits are paid. For more information or to be considered for this project, send a current resume to [Melissa.Goodman@oraus.gov](mailto:Melissa.Goodman@oraus.gov) and reference “Project #2007-05”.

Prima Bella Produce, Inc. in Tracy, Calif. Is looking for a Food Scientist to manage food safety, internal research, and quality assurance programs. A B.S. in Food Science or related discipline is required. Interested parties should contact [Mark Bacchetti](#).

Bounty Fresh, LLC is offering a “Post Harvest Manager – Mangos” position located in Long Beach, Calif. This position would oversee the updating of their fresh mango conditioning and handling process. B.S. or M.S. in post harvest, horticulture, plant science, ag economics or related field is required. Candidates must be bilingual in English and Spanish. To apply, email your resume to [Rick Durkin](#).

Recruiter [Topher Kissam](#) is searching for an individual with at least five years’ sales and/or technical service experience with a background in western horticultural crops, particularly fruits and vegetables, and a minimum

of 2 years' experience calling on distributors in the crop protection marketplace. His client is a leading provider of innovative clean technology solutions to improve the freshness and safety of food and water. They have incorporated an array of patented technologies that are highly reliable and cost-effective specific to fresh produce protection.

## Upcoming Conferences, Courses and Workshops

- September 5-7, 2007. [Asia Fruit Logistica 2007](#). Asiafruit Congress 2007. Bangkok, Thailand.
- September 10-12, 2007. [Australasian Postharvest Conference](#). Terrigal, Australia.
- 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. 14<sup>th</sup> 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.
- May 13, 2008. 14<sup>th</sup> Annual Management of Fruit Ripening Workshop. UC Davis campus.
- May 14-15, 2008. 3<sup>rd</sup> Annual Methods of Measuring Fruit & Vegetable Quality: Color & Texture Workshop. UC Davis campus.
- August 11-14, 2008. [9<sup>th</sup> International Symposium on Postharvest of Ornamentals](#). Odense Conference Center.

## Postharvest Question of the Month

**Q:** I am a student in Kenya and wanted to carry out research on wax coating on tomatoes. Is there a way you could manually apply beeswax (that is what I intend to use)? (L.G.)

**A:** Since most gas diffusion is through the stem scar of tomatoes, you can modify tomato ripening by blocking the stem scar with wax and therefore you should consider this in any waxing treatment of tomatoes. The difficult thing with waxing treatments will be to achieve uniform coating of the wax on the fruit surface. In commercial operations in California, our mature-green tomatoes are typically waxed with a paraffin-edible oil mix that is applied by soft brush rollers. In the lab we have done some application of FreshSeal on tomatoes and are using a small roller system. Although this system is electric, you could improvise a hand cranked roller system and would only need to 2 brushes so that the fruit are rolled between the 2 brushes for a defined period.

The wax can be applied to the brushes from a nozzle or if thick, can be dripped onto the brushes. --[Marita Cantwell](#)

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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