



April 2012

News from UC Davis Postharvest Technology Center

Quick Links

- [Director's Update](#)
- [Postharvest Workshops @ UC Davis](#)
- [Specialists' Outreach Activities](#)
- [Featured Postharvest Publications](#)
- [What's New on our Website](#)
- [Postharvest Positions](#)
- [Postharvest Calendar](#)
- [Ask the Produce Docs](#)

Director's Update

Please Voice your Support for Critical Position!



The Postharvest Technology Center, like many other University of California entities, has been impacted in recent years by the retirement of Center members. While every retirement brings a loss of valuable knowledge, we have been particularly concerned about the deficit created by the retirement of Jim Thompson, an agricultural engineer specializing in postharvest issues. Jim's research and teaching in the areas of cooling, packaging, and energy have been invaluable to the produce industry.

Through May 18th, the University of California is considering a dozen or more Cooperative Extension Specialist positions, including a Cooperative Extension Specialist position in Postharvest Systems Engineering (#027) for possible recruitment.

It is unknown how many positions will be filled, but competition is expected to be strong for a small number of positions. The University is soliciting feedback from individuals or groups who would like to show their support for these positions. We'd particularly like to hear from members of the industry and other stakeholders who see a need for this expertise into the future.

We encourage you to take a moment to express your support for this critical position at:
[http://ucanr.org/sites/anrstaff/Divisionwide Planning/Program Planning and Evaluation/2012 Call for Supplemental Positions/index.cfm?propnum=1569](http://ucanr.org/sites/anrstaff/Divisionwide_Planning/Program_Planning_and_Evaluation/2012_Call_for_Supplemental_Positions/index.cfm?propnum=1569).

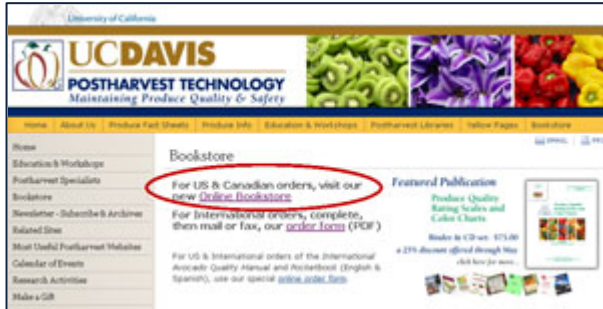
Highlights

Enroll
in a
Postharvest
Course

Produce
Fact Sheets:
Maintaining
Postharvest
Quality

Donate
to Support
Free
Postharvest
Information

Just Launched: Postharvest Technology Center's Online Bookstore



We are pleased to announce the availability of our new online Postharvest Bookstore Marketplace. All the great resources you were traditionally able to order only via fax or mail are now available at our new [Marketplace website](#).

Currently the Online Bookstore is only for US and Canadian orders, but we're working on options that will allow us to accommodate International Orders and the complexities of international shipping. In the meantime, we invite those with International Orders to continue to use our [Order Form](#) (PDF).

[\[Back to Top\]](#)

Postharvest Workshops @ UC Davis

80% Filled! Postharvest Technology of Horticultural Crops Short Course

With fewer than 20 spaces left, the 34th Annual Postharvest Technology of Horticultural Crops Short Course promises to be an excellent educational opportunity. The course will be held June 18-29, 2012 and is a comprehensive two-week intensive study of the biology and current technologies used for handling fruits, nuts, vegetables and ornamentals. It is designed for research and extension workers, quality control personnel, and other professionals interested in current advances in postharvest technology of horticultural crops. The fee for the lecture plus field tour option (2-weeks, limited to 55 participants) is \$2850; and the lecture-only option (1-week, open to 25 participants) is \$1850. This year we are also offering an all-inclusive package to include the course enrollment fee, airport transfers, hotel accommodations and a food allowance. For information about the all-inclusive package please contact [Penny Stockdale](#), our Registration Coordinator.

Course topics will include: maturity indices, measuring quality, packinghouse facilities and equipment, packaging, containers, unitization, cooling, storage, managing ethylene, transport, sanitation and other procedures related to decay and insect control, food safety assurance, standardization and inspection, energy use, and marketing, harvesting and postharvest handling systems for various commodity groups.

To learn more about the course, or to enroll, please link to the [webpage](#).

Please note that lodging in Davis will be impacted by a large conference during the first week of the Postharvest Technology Short Course. We have reserved blocks of rooms at the *Hallmark Inn, Best Western University Lodge, and the Comfort Suites*. These blocks will only be held through May 14, and we encourage participants to make their lodging reservations as quickly as possible. Be sure to mention that you are with the "Postharvest Technology Short Course."





Fresh-Cut Products: Maintaining Quality & Safety



September 18-20, 2012

Now Accepting Enrollments: Fresh-cut Products Workshop

We are happy to announce the opening of enrollments for the September 18-20, 2012 Fresh-cut Products: Maintaining Quality & Safety Workshop. Organized by Dr. Marita Cantwell, this 3-day workshop will be held on the UC Davis campus, and will provide an overview of many aspects of the production, processing, packaging, distribution and quality assurance of fresh-cut products.

Participants will gain a working knowledge of established and new procedures for the fresh-cut product category through topic-related sessions and demonstrations. The 2012 workshop will feature discussions on microbial food safety and the effects of temperature and modified atmospheres, and the sensory quality of fresh-cut fruit and vegetable products. The registration fee is \$1150 this year, and participants may [register on-line](#), or contact Registration Coordinator, [Ms. Penny Stockdale](#), for more information.

[\[Back to Top\]](#)

Specialists' Outreach Activities

Mary Lu Arpaia Organized Citrus Postharvest Pest Control Meeting

Held in Santa Barbara, there were 48 participants at the 34th annual Citrus Postharvest Pest Control Meeting. They came from California, Florida, and from as far away as South America and Europe. The meeting was organized and moderated by Dr. Arpaia. Veronique Bikoba spoke about the Mitcham Lab's ongoing research on ethyl formate, a postharvest fumigant that is being examined as a possible replacement for some applications of methyl bromide. Dr. Jim Adaskaveg, another of the Center's associates, also spoke to the group regarding managing resistance development to postharvest fungicides. The 35th annual meeting is planned for April 2013.

Cook, Cantwell and Suslow Invited Speakers at April Seed Central Gathering

For their April gathering, Seed Central, an initiative of the Seed Biotechnology Center at UC Davis and SeedQuest, selected the topics of postharvest handling and food safety, and invited guest speakers Drs. Roberta Cook, Marita Cantwell and Trevor Suslow. The presentations were recorded and are available at the following links:

Dr. Roberta Cook "[Key Trends in the fresh produce industry: opportunities and challenges](#)"

Dr. Marita Cantwell "[Post-harvest quality and handling of fresh market vegetables](#)"

Dr. Trevor Suslow "[Food safety issues in pre and post-harvest of vegetables](#)"

Cook Participated in Panel at the Produce for Better Health Annual Meeting

Dr. Roberta Cook participated in a panel at the [Produce for Better Health's annual meeting](#) which was held in Monterey on March 30. She joined fellow panelists: Robert Post, USDA; Terry Murphy, Wakefern; Barbara Ruhs, Basha's; and Rich Dachman, Sysco as they presented an interactive panel discussion on "*Marketing to the Consumer: Successful Strategies.*" They shared effective marketing strategies used to increase fruit and vegetable sales that included interesting insights into various strategies to increase consumption of all fruits and vegetables, both fresh and processed (dried, canned and frozen) -- all forms count for better health.

Bruhn Invited Moderator at Phytosanitary Irradiation Workshop

Dr. Christine Bruhn was one of the invited moderators at the April 26-27, 2012 workshop on Opportunities in Phytosanitary Irradiation for Fresh Produce, held in Orange, California. She moderated a session on "Grocery Industry Success Stories."

Featured Postharvest Publication



Special 25% Discount Offer

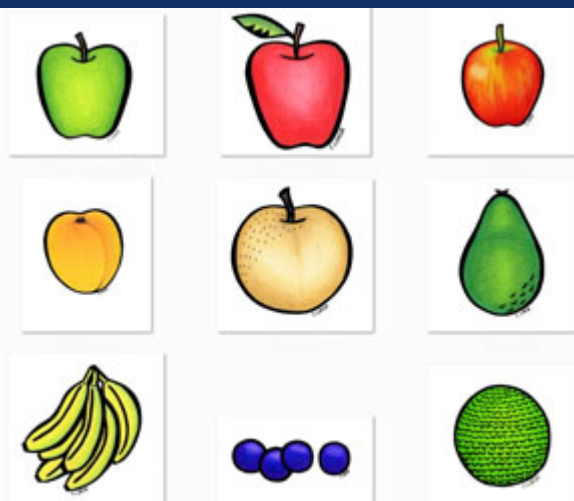
Through the end of May we are pleased to offer a special 25% discount when you purchase both the binder and CD of our excellent resource "Produce Quality Rating Scales and Color Charts." For a description and to view the complete table of contents for this publication please link to <http://postharvest.ucdavis.edu/files/93651.pdf>. To order a copy shipped to the US or Canada, please use our new Postharvest Technology Center's [Online Bookstore](#).

If you live outside of the United States or Canada, please use our (PDF) [order form](#) and fax or mail your order for this great resource. Be sure to note "25% Produce Quality Discount" on your order form.

What's New on Our Website

Colorful Artwork added to Produce Facts

Over the past month we have been adding the colorful artwork of our (now graduated) Student Assistant, Courtney Lorca, to each of the [Produce Fact Sheets](#). She created 132 separate pieces of artwork, one for each of the commodities we cover. To the right you can see examples of her artwork. There are 123 more images to be enjoyed on the website on the Produce Facts pages which are currently available in English, French, Spanish and Arabic.



Brief Book Review

"Dates Production, Processing, Food, and Medicinal Values" is the title of a new book recently reviewed by Dr. Adel Kader. Link below to read the entire brief review of this new 442 page comprehensive book about dates: <http://postharvest.ucdavis.edu/libraries/bookreviews/?uid=29&ds=277>

New Additions to Postharvest Publications Organized by Topic Library

This library currently contains more than 1,400 postharvest documents, organized by topic. It is searchable by title or author, and is one of the premiere sources of postharvest information.

Kiwifruit

Crisosto, Gayle M., Janine Hasey, Jorge A. Zegbe, and Carlos H. Crisosto. [New quality index based on dry matter and acidity proposed for Hayward kiwifruit](#). *California Agriculture* 66 (2012) 70-75.

Arabic Translations for Chile Pepper and Pitaya Added

With thanks to Dr. Awad Hussein, the Arabic translations for the Produce Fact Sheets for [Chile Pepper](#) and [Pitaya](#) (Dragon Fruit) were recently added to the website.

[\[Back to Top\]](#)

Postharvest Positions

Driscolls Offers a Molecular Biologist Position

Located in Watsonville, California, Driscolls is seeking a full time molecular biologist to apply the tools of molecular biology to accelerate breeding through finding markers associated with traits of interest and with application of marker assisted breeding. A PhD in molecular biology or plant breeding with a strong molecular emphasis, and three to five years' experience is required. Experience in bioinformatics is desired. For more information see their "Watsonville" positions on their webpage: <http://www.driscolls.com/about/job-postings.php>

[\[Back to Top\]](#)

Postharvest Calendar: Upcoming Conferences, Courses and Workshops

- May 1-3, 2012. **United Fresh Produce Association Convention**. Dallas, Texas.
- May 21-25, 2012. **Post-Harvest Management and Value-added Agriculture International Conference**. Jimma, Ethiopia.
- June 18-29, 2012. **34th Annual Postharvest Technology Short Course**. UC Davis Campus, optional field tour.
- June 25-29, 2012. **7th International Postharvest Symposium**. Kuala Lumpur, Malaysia.
- July 20-22, 2012. **PMA Food Service Conference and Exposition**. Monterey, California.
- September 18-20, 2012. **17th Annual Fresh-cut Products: Maintaining Quality & Safety Workshop**. UC Davis campus.
- September 18-20, 2012. **II Asia Pacific Symposium on Postharvest Research Education and Extension: APS2012**. Bogor, Indonesia
- October 15-19, 2012. **9th International Conference on Controlled Atmosphere and Fumigation in Stored Products**. (CAF 2012). Antalya, Turkey.
- October 16-19, 2012. **X International Symposium on Postharvest Quality of Ornamental Plants**. Porto de Galinhas, Pernambuco, Brazil. Contact Prof. Fernando Luiz Finger (55) 3138991128 or ffinger@ufv.br.
- October 26-29, 2012. **PMA Fresh Summit International Conference and Exposition**. Anaheim, California.
- November 5-6, 2012. **UC GAPs Practical Skill-Building for On-Farm Risk Assessments**. UC Davis campus.
- December 3-5, 2012. **Postharvest Africa 2012**: The 7th Technical Symposium of CIGR Section VI and 2nd International Conference on Postharvest Technology & Innovation. Stellenbosch, South Africa.
- June 23-27, 2013. **VII International Cherry Symposium**. Plasencia, Spain.

[\[Back to Top\]](#)

Ask the Produce Docs

Q. We are struggling with eggplant damage in transport and handling. We have problems with two things: ethylene damage (we think the calyxes are falling and flesh is browning; the produce is on mixed loads with apples, etc. on trucks) and chilling injury. We advise 14-16°C for fruit quality but I have read recommendations for quick cooling to 10°C after harvest with forced air cooling. What air temperature is best for cooling? How are the eggplants packed? Don't you have chilling injury with this quick cooling after harvest?



A. A good reading of our Eggplant Produce Fact Sheet should be helpful to you. (<http://postharvest.ucdavis.edu/pfvegetable/Eggplant/>) At a temperature of 14-16°C, dehydration will likely lead to

browning of the calyxes and the impact of ethylene will be higher at the warmer temperatures. Ethylene, dehydration and chilling injury will all cause discoloration of the calyx; see examples in the photo album with the Eggplant Produce Facts. In a study on 3 types of eggplant grown in California we did not find chilling damage at 10°C. The days required to achieve visible symptoms of chilling injury at different temperatures below 10°C are summarized in the Eggplant Produce Facts. Eggplants are often wrapped in tissue paper to minimize scuffing and then packed in a carton box for forced air cooling; alternatively they are hydrocooled and packed in waxed cartons or containers with plastic liners. There is no evidence that I am aware of for chill damage when eggplants (or any product for that matter) are forced air cooled (air temperatures are typically 7-10°C). It takes a long time to achieve chilling symptoms, much longer than the few hours needed to cool the eggplants. It is important, however, that the product not be left on the forced air cooler too long or excessive dehydration will occur (calyx drying and loss of gloss). For more information about forced-air cooling of fresh produce, consult the Cooling Manual by Jim Thompson and colleagues (<http://postharvest.ucdavis.edu/files/93530.pdf>).

--Marita Cantwell



Q. Do you have any idea where can I find the most updated database of prices for fresh cut flowers in the U.S. market? (J.V.)

A. The USDA compiles ongoing reports on market prices for cut flowers in Miami and Boston. You can navigate to the text files from this page:

<http://afsic.nal.usda.gov/alternative-crops-and-plants/ornamental-and-nursery-crops>

This page is the prices for Miami crops, updated every two weeks,

http://www.ams.usda.gov/mnreports/mh_fv221.txt

And this page is for Boston, updated every week.

http://www.ams.usda.gov/mnreports/bh_fv201.txt

--Michael Reid

- *If you have a perplexing postharvest question that you'd like answered, please send it to postharvest@ucdavis.edu.*
- *Link to a [data store](#) of all our previous "Ask the Produce Docs" questions and answers, or link to [archived copies](#) of our monthly E-Newsletter as PDF documents.*

[\[Back to Top\]](#)

This publication is produced monthly by the UC Davis Postharvest Technology Center. For more information visit our [website](#) or [e-mail](#) us. If you, or a colleague, wish to receive this free monthly E-Newsletter, click [here](#) to subscribe. If you no longer wish to receive this publication, please click on "reply" to this e-mail and type "unsubscribe" in the subject line.

Editorial Review: Beth Mitcham

Writing: Mary Reed, Marita Cantwell, Mary Lu Arpaia, Diane Nelson, Michael Reid

Layout & Design: Mary Reed

The University of California does not discriminate in any of its policies, procedures



or practices. The university is an affirmative action/equal opportunity employer.

