



December 2013

News from the UC Davis Postharvest Technology Center

Quick Links

- [Director's Update](#)
- [Postharvest Workshops @ UC Davis](#)
- [Featured Postharvest Bookstore Item](#)
- [Postharvest Positions](#)
- [Postharvest Giving](#)
- [Postharvest Specialists' Updates](#)
- [What's New on Our Website](#)
- [Postharvest Calendar](#)
- [Ask the Produce Docs](#)

Director's Update

Produce Professional Certificate Winner

We are pleased to announce the winner from our Fall 2013 drawing for a complimentary registration for our new [Produce Professional Certificate Program](#). The prize, valued at \$2,500, was awarded to Michael Wiggs from Homegrown Organics. Michael wrote, "Thank you so much! I have never won anything. And I have been really interested in the program and in fact attended one of the core classes last year!" Congratulations, Michael!



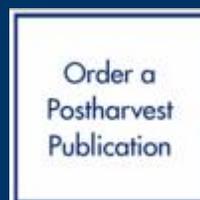
Opening Course Enrollments for 2014!

Our staff has been hard at work accomplishing all the necessary organizational details and we're pleased to announce that we are now accepting enrollments for three of our 2014 courses; see the details for each course in the section below. Make a commitment to your professional development or that of a deserving employee by enrolling today! And remember that every course can count towards a Produce Professional Certificate.



Countdown to Giving in 2013

I would like to encourage our friends and [supporters](#) to consider making a generous year-end gift during these last days of December to support the work of the UC Davis Postharvest Technology Center. Your gift may be designated according to your area of interest, including supporting student attendance at workshops, the Postharvest Endowment Fund which supports website maintenance and improvements, or special project through the Postharvest Technology Center. Thanks for taking a moment to [make a gift](#) today!



Best wishes for a joyous Holiday Season!

--[Beth Mitcham](#)

Postharvest Workshops at UC Davis



Register Soon – Limited Spaces Left for Methods of Measuring Fruit & Vegetable Color, Flavor & Texture Workshop

This 1-day workshop is scheduled for January 22, 2014, and will include lectures on the principles and applications of measuring produce color, flavor, and texture. The workshop will also include demonstrations of a variety of the latest equipment.

The discounted course enrollment fee of \$295 is made possible by a USDA Specialty Crops Research Initiative Grant. To learn more about the workshop or to enroll, please visit the [web page](#) or contact [Ms. Penny Stockdale](#).

20th Annual Fruit Ripening and Retail Handling Workshop Planned for March 25-26, 2014

We are pleased to announce that enrollments are now open for the March 25-26, 2014 "Fruit Ripening & Retail Handling" workshop which will be held at the UC Davis Conference Center. The enrollment fee for the workshop is \$795, and includes all instruction, demonstrations, course materials, coffee breaks, lunches and an evening network reception. Topics will include ripening facilities and equipment, temperature management, ethylene inhibition and control, tools to control ripening and senescence, and more. We hope that you will join us at this workshop! To learn more, or to enroll, we invite you to visit the [web page](#) or contact our Enrollment Coordinator, [Ms. Penny Stockdale](#).

36th Annual Postharvest Technology Short Course

Enrollments have also just been opened for the June 16-27, 2014 Postharvest Technology Short Course. The course provides a one or two-week intensive study of the biology and current technologies used for handling fruits, nuts, vegetables and ornamentals in California. The first week will be held at the UC Davis Conference Center, and will include lectures and demonstrations on a broad spectrum of Postharvest Topics. The second (optional) week is a field tour visiting a variety of postharvest operations throughout California. The enrollment fee for the 1-week session is \$1975 and the enrollment fee for the 2-week session is \$1995 (plus additional required lodging fees). To learn more, we invite you to visit the [web page](#) or contact our Enrollment Coordinator, [Ms. Penny Stockdale](#).

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

Featured Postharvest Bookstore Item

Extended 25% Discount on "International Avocado Quality" Manuals and Booklets

Through the end of December 2013, we are offering a 25% discount on our International Avocado Quality publications, available in both English and Spanish. The sale price for the manuals is \$33.75, and the sale price for the booklets is \$11.25!

Edited by Anne White, Allan Woolf, Peter Hofman, and Mary Lu Arpaia, these wonderful manuals and booklets include numerous photographs and provide information on avocado quality, ripening, cultivars (in the manual only), disorders, damage scenarios, and more. Link to [this page](#) for a complete table of contents and additional information about these beautiful publications.

We invite you to order a copy for your library today at our online bookstore using [this link](#) for shipments to U.S. addresses; for international shipping addresses, please use our [PDF Order Form](#), and note "25%Avo".



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

Postharvest Positions

Post Harvest Specialist – Selma, CA

Syngenta, one of the world's leading companies with 27,000 employees in 90 countries, is searching for a Post Harvest Specialist at their Selma, Calif. location. The position will: maximize Syngenta's Postharvest sales including resource management and product stewardship; directly influence packers; directly influence postharvest COIs;

communicate and coordinate sales activities with the Syngenta integrated sales team when appropriate; accurately forecast product demand to ensure product availability; and act as a steward for Syngenta postharvest products. Applicants should have a minimum of a BS degree in Horticulture/Agriculture Sciences, A broad technical knowledge base of postharvest handling and products is preferred. Minimum of 4 years' experience in sales or a technical sales role, with a preference for postharvest experience in sales to large key accounts. Submit your resume to [Lori Miller](#) at Yoh.

Research Horticulturist - Citrus Research International

Citrus Research International (CRI) has a vacancy for a research horticulturist to conduct innovative pre-harvest scientific research with a view to optimizing citrus fruit production and quality. CRI aims to maximize the long-term global competitiveness of the southern African citrus growers through the development, support, coordination and provision of research and technical services. The ideal candidate should have a (minimum) MSc or PhD degree in Horticultural Science, a publication record, excellent inter-personal profile, strong communication skills and experience in working with growers. The incumbent must be capable of both independent scientific research and developing a local and international network of research collaborators. Submit application and CV by January 24, 2014 to [Ms. Jean de Gasperi](#).

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

Postharvest Giving



With Sincere Thanks

We extend our grateful thanks during this Holiday Season to the following individuals who have recently contributed to the Postharvest Technology Center:

- Elizabeth Baldwin
- Joan Rosen
- Jeanie W. Sherwood
- Steve West & Elizabeth Mitcham

See a complete listing of our [contributors](#), or make an [online gift](#) as an individual or on behalf of your company. All contributions are tax deductible within the U.S.

Postharvest Specialists' Updates & Other News



Cantwell Lectures at University of Foggia

Dr. Marita Cantwell was invited to the University of Foggia to give lectures to the students of the Master program "Advanced Professional Skills in Convenience Products" on the postharvest technology of vegetables. She gave several lectures over a 3-day period during December 9-11, 2013. See the [Facebook posting](#).

Bruhn Addresses Session at Academy of Nutrition and Dietetics' Annual Meeting

In October Christine Bruhn addressed "Advanced Food Production and Processing Technologies" at the annual meeting of the Academy of Nutrition and Dietetics. She described the potential advantages of high pressure processing, pulsed electric field and irradiation in providing safe high quality and nutritious foods. The session was attended by over 250 dietitians and health educators.



2013 Kader Award in Postharvest Training

The Postharvest Education Foundation's (PEF) Board of Directors awarded Noel Valentin MULINDA the 2013 Kader Award in Postharvest Training. MULINDA was selected as an outstanding graduate postharvest e-learner after successful completion of a one year PEF sponsored training on commodity systems assessment, small-scale postharvest handling practices, postharvest demonstration design, postharvest training program design and cost/benefit analysis. The award was developed in honor of Dr. Adel A. Kader, who was one of the founders of the UC Davis Postharvest Technology Center, and a worldwide



leader in the postharvest technology of horticultural crops.

Postharvest Education Foundation 2014 Global E-Learning Program

The Postharvest Education Foundation (PEF) 2014 Global E-Learning program is now open for applications. The program allows participants to learn at their own pace, select their own crops of interest and conduct their assignments on the topics they want most to learn about. Deadline for applications is 12/31/13. Since 2011, trainers who have completed PEF training have been able to reach more than 30,000 farmers around the world. For information about the 2014 Global E-learning Program see:

http://postharvest.org/AGENDA%202014Training_materials_Postharvest_E-learning%20PEF.pdf

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

What's New on Our Website

New this month in the "Postharvest Publications Organized by Topic" Library

This extensive [free postharvest resource library](#) currently offers more than 1,900 articles on a wide variety of topics.

Orange

Kallsen, C.E., B. Sanden, M.L. Arpaia, [Early navel orange fruit yield, quality, and maturity in response to late-season water stress](#). HortScience 46 (2011) 1163-1169

Slaughter, D.C., D.M. Obenland, J.F. Thompson, M.L. Arpaia, D.A. Margosan, [Non-destructive freeze damage detection in oranges using machine vision and ultraviolet fluorescence](#). Postharvest Biology and Technology 48 (2008) 341-346

Pear

Agar, I.T., W.V. Biasi, E.J. Mitcham, [Cold storage duration influences ethylene biosynthesis and ripening of 'Bartlett' pears](#). HortScience 35 (2000) 687-690

Agar, I.T., W.V. Biasi, E.J. Mitcham, [Temperature and exposure time during ethylene conditioning affect ripening of Bartlett pears](#). Journal of Agriculture and Food Chemistry 48 (2000) 165-170

Ekman, J.H., M. Clayton, W.V. Biasi, E.J. Mitcham, [Interactions between 1-MCP concentration, treatment interval and storage time for 'Bartlett' pears](#). Postharvest Biology and Technology 31 (2004) 127-136

Feng, X., B. Biasi, E.J. Mitcham, [Effects of various coatings and antioxidants on peel browning of 'Bartlett' pears](#). Journal of the Science of Food and Agriculture 84 (2004) 595-600

Whitaker, B.D., M. Villalobos-Acuña, E.J. Mitcham, J.P. Mattheis, [Superficial scald susceptibility and \$\alpha\$ -farnesene metabolism in 'Bartlett' pears grown in California and Washington](#). Postharvest Biology and Technology 53 (2009) 43-50

Plum

Martínez-García, P.J., J. Fresnedo-Ramírez, D.E. Parfitt, T.M. Gradziel, C.H. Crisosto. [Effect prediction of identified SNPs linked to fruit quality and chilling injury in peach \[*Prunus persica* \(L.\) Batsch\]](#). Plant Mol. Biol. 81 (2013) 161-174

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

Postharvest Calendar

- January 22, 2014. [Methods of Measuring Fruit & Vegetable Color, Flavor and Texture](#). UC Davis campus
- February 5-7, 2014. [Fruit Logistica](#). Berlin, Germany
- February 11-14, 2014. [Better Process Control School](#). UC Davis
- February 18, 2014. [Tomato Processing School](#). Sacramento, CA
- March 25-26, 2014. [20th Annual Fruit Ripening & Retail Handling Workshop](#). UC Davis campus
- May 5-6, 2014. [Juice Processing Course](#). UC Davis Campus
- May 26-29, 2014. [The International Food Congress: Novel Approaches in Food Industry](#). Kusadasi, Turkey
- June 10-13, 2014. [V International Conference Postharvest Unlimited](#). Lemesos, Cyprus
- June 16-27, 2014. [36th Postharvest Technology Short Course](#). UC Davis

- August 17-22, 2014. [XXIX International Horticultural Congress](#). Brisbane, Australia
- August 25-29, 2014. [Small-Scale Postharvest Horticultural Technologies Short Course & Study Tour](#). Bali, Indonesia
- September 16-18, 2014. [19th Fresh-cut Products: Maintaining Quality & Safety](#). UC Davis campus
- November 4-6, 2014. [2nd Annual Produce Safety Workshop](#). UC Davis campus

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

Ask the Produce Docs

Q. Our company is interested in knowing ideal storage conditions of dried fruit. Specifically, we would like to store dried fruit in freezer conditions. This is dehydrated, not freeze dried, fruit. Could you direct me to any resources on the subject, do you have any recommendations? (C.W.)



A. I have some reliable data for dates and I suspect it is similar for other dried fruits.

Semi-soft dates (Deglet noor, Halawy, & Zahidi) can be stored for one year at 32°F and 75% relative humidity; and over a year, sorry this is not more specific, at -18°F and 75% relative humidity. Soft dates (Medjool, Barhee, Khadrawry, Maktoom & Dayri) storage times are 6 months at 32°F and more than 6 mo. at -18°F and again the relative humidity must be less than 75%.

If you are not able to achieve low enough relative humidity you can store properly dried fruit in sealed plastic liners or bags. However be sure and check the fruit for quality every 1 to 2 months. Bring samples out of storage, let them warm and equilibrate with room conditions for several days. Keep the fruit in a sealed bag while it is warming so excess moisture does not condense in it. Then evaluate for quality using your standard procedures.

-[Jim Thompson](#)

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

End Notes and Disclaimers

Postharvest Questions. If you have a perplexing postharvest question you'd like answered, please send it to postharvest@ucdavis.edu, and we'll see if one of our specialists can help.

Archived Items. Link to a data store of all our previous "[Ask the Produce Docs](#)" questions, or link to [archived copies](#) of our monthly e-newsletter as PDF documents.

Frequency of Distribution. This publication is produced monthly by the UC Davis Postharvest Technology Center. For more information, we invite you to [visit our website](#) or email us.

Subscribe/Unsubscribe. 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 email and type "unsubscribe" in the subject line.

Copyright/Legal Notices. Kindly observe all [copyright and legal notices](#).

Editorial Review. Beth Mitcham

Writing. Mary Reed, Beth Mitcham, Jim Thompson, Christine Bruhn

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.

