Director's Update

Happy New 2016

As we prepare to say goodbye to 2015 and welcome the new year, we at the UC Davis Postharvest Technology Center would like to extend Season’s Greetings and best wishes for the new year to all. The Specialists and Staff at the Postharvest Technology Center wish you professional and personal success for 2016. We hope for a new year that continues to bring improvements in produce quality and safety, and increased consumption of fruits and vegetables for the economic viability of the produce industry and better health of consumers. The Postharvest Technology Center will be offering its annual courses, including Fruit Ripening and Ethylene Management, Postharvest Technology of Horticultural Crops, and Fresh Cut Products: Maintaining Quality & Safety. In addition, a few spots are still available for the semi-annual Methods of Measuring Fruit and Vegetable Flavor, Color & Texture Workshop which is right around the corner on January 20.

Applications are being accepted for the 2016 UC Davis Postharvest Technology of Horticultural Crops Short Course Scholarship. The scholarship provides the opportunity for an individual from a developing country to participate in the annual Postharvest Technology of Horticultural Crops Short Course and Field Tour June 13 – 24, 2016 to learn about postharvest biology and technology of horticultural crops.

Happy New Year!

– Beth Mitcham

Postharvest Education at UC Davis

Register Soon—Methods of Measuring Fruit and Vegetable Flavor, Color & Texture Workshop

Methods of Measuring Fruit and Vegetable Flavor, Color & Texture Workshop, organized by Dr. Diane Barrett, will be a one-day course on January 20, 2016 at the ARC Conference Center, UC Davis. This workshop features principles and applications of measuring produce color, flavor, and texture, and includes demonstrations of a variety of the latest equipment.

The attendee registration fee of $395 includes course materials, lunch, and morning and afternoon coffee breaks. Click here to learn more or to enroll.

March 1 & 2, 2016—Fruit Ripening & Ethylene Management Workshop

This workshop focuses on how to ripen fruit and fruit-vegetables for fresh cut processing and for wholesale and retail sales, and delivering ready-to-eat, delicious fruits to consumers.
Key topics include: importance of ripening programs; maturity and quality relationships; biology of ethylene production; tools to control ripening and senescence; designing a ripening program; controlling physiological disorders and commodity-specific ripening protocols.

The enrollment fee of $899 for this 2-day workshop on the UC Davis campus includes all classroom instruction, lab activities, course materials, morning and afternoon coffee breaks, lunches, and an evening mixer. **Enroll now.**

### 38th Annual Postharvest Technology of Horticultural Crops Short Course
Enrollments have also just been opened for the June 13-24, 2016 Postharvest Technology of Horticultural Crops Short Course. This course is a two-week intensive study of the biology and current technologies used for handling fruits, vegetables and ornamentals in California. The first week will be held at the UC Davis Activities and Recreation Center (ARC), 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. The enrollment fee is $2250 for the 1-week session, and $3150 (plus additional required lodging fees) for the 2-week session. To learn more please visit the course [web page](#) or contact our Enrollment Coordinator, Ms. Penny Stockdale.

### Scholarship Available for Postharvest Technology of Horticultural Crops Short Course
We are currently accepting applications for the 2016 UC Davis Postharvest Technology of Horticultural Crops Short Course Scholarship. The scholarship, available through support from the Leonard and Marsaille Morris Trust, provides the opportunity for an individual from a developing country to participate in the annual UC Davis Postharvest Technology of Horticultural Crops Short Course and Field Tour June 13 – 24, 2016 to learn about postharvest biology and technology of horticultural crops.

The goal of the scholarship is to educate an individual pursuing a career in horticultural science who otherwise would not have the opportunity to participate in postharvest training in a developed country and who will take the knowledge gained back to their home country to benefit others in the region.

Interested individuals who meet the criteria described above should apply through the Postharvest Technology Center [website](#) no later than 11:59 p.m. (PST) on January 31, 2016.

The selected recipient shall be responsible for air travel to Sacramento or San Francisco, Calif., personal expenses, passport, travel visa, and other related costs not described above. Applications will be reviewed by a panel of UC Davis Postharvest Specialists. The selected recipient will be notified no later than February 25, 2016.

### Featured Postharvest Bookstore Items

#### 25% Discount on Pear Production and Handling Manual
Through the end of January, we are offering a 25% discount on this helpful manual. Content includes introduction and pear industry overview, pear orchard and tree management, irrigation and fertilization, pest management, and postharvest handling of pears.

Regularly $25, this publication is now on sale for only $18.75. Please use [this link](#) for shipments to U.S. addresses. For international shipping addresses, please use our [PDF Order Form](#), and note 25%Pear.
2015 Kader Award in Postharvest Training

The Kader Award is given by the Board of Directors of The Postharvest Education Foundation to an outstanding graduate postharvest e-learner or a team of e-learners after the successful completion of a year of training on commodity systems assessment, small-scale postharvest handling practices, postharvest demonstration design, postharvest training program design and cost/benefit analysis.

2015 Winners: Mekbib Seife Hailegebrile (Ethiopia) and Olubukola Odeyemi (Nigeria)
Honorary mentions: Radegunda Kessy (Tanzania) and Mohmad Arief Zargar (India)


Olubukola Odeyemi (Nigeria): 2015 Kader Award for student/university-based training. Dr. Odeyemi works as a Lecturer II at the Federal University of Agriculture, Abeokuta, Nigeria, plus as a postharvest consultant and volunteer trainer for her local community. She has set up demonstrations of the Zero Energy Cool Chamber and taught her students to use postharvest tools and equipment. Among the many activities she participated in during 2015, she trained young student farmers on organic production and postharvest handling of vegetables from production to harvesting to marketing under the Work, Earn and Learn Programme. She was recently able to establish a link with the Agricultural Media Resources and Extension Centre (AMREC) within the university through which she will be training their smallholder farmers on postharvest handling of crops at different times within the year.

Dr. Adel A. Kader (1941-2012) spent the majority of his career at the University of California at Davis, where he was a world renowned researcher, author, extension specialist and teacher. In 2011 AAK was one of the founding members of the Board of Directors of The Postharvest Education Foundation. To learn more about the Kader Award, visit the web site here.

Frieda Caplan--New Documentary

A new documentary, 'Fear No Fruit' tells the story of Frieda Caplan, the founder of Frieda's Inc., who introduced many once-obscure produce items, including kiwifruit, to the U.S. market.
As reported by Larissa Zimberoff in Civil Eats, “Caplan—who, at 92, continues to go to the office every day—says she still welcomes the “next big thing” like the Stokes purple sweet potato, a Northern California variety she helped develop that has since become one of their top sellers.”

**Specialty Crops Research Results Published in Journal of Food Distribution Research**

“What Factors Do Retailers Value When Purchasing Fruits? Perceptions of Produce Industry Professionals” has been published by the Journal of Food Distribution Research and the full article is available online.

The goals of this study, led by Dr. David Diehl of the University of Florida, were to identify the retail-purchasing factors deemed most and least important by grower/packer/shippers (GPS) and retailers when purchasing fruits (melons, pears, peaches/nectarines, tomatoes, strawberries, and blueberries), and to identify factors rated significantly different by these two groups. A major survey revealed that both groups agreed that fruits being free of defects and of appropriate firmness were among the most important factors for retailers, and also that aroma was among the least important factors. Points of departure between GPS and retailer self-assessments occurred with GPS rating price and size of fruit as more important than retailers, and GPS rating essential quality characteristics as less important than retailers. Given the link between high-quality, flavorful fruits and increased consumer consumption of fruit, industry professionals will benefit from increased research as well as expanded dialogue to bridge the gap between perception and reality.

---

**Postharvest Calendar**

- **January 20, 2016.** Methods of Measuring Fruit and Vegetable Color, Flavor & Texture Workshop. UC Davis campus
- **March 1-2, 2016.** Fruit Ripening & Ethylene Management Workshop. UC Davis campus
- **April 12-13, 2016.** 37th Annual Citrus Postharvest Pest Control Meeting. Oxnard, CA
- **June 13-24, 2016.** 38th Postharvest Technology of Horticultural Crops Short Course. UC Davis campus
- **July 19-21, 2016.** IX Congreso Iberoamericano de Tecnología Postcosecha y Agroexportaciones. UC Davis campus
- **September 13-15, 2016.** Fresh-cut Products: Maintaining Quality & Safety Workshop. UC Davis campus
- **October 17-21, 2016.** III Symposium on Horticulture in Europe (SHE 2016). Chania Greece

---

**Postharvest Positions**

**Postdoctoral Position in Plant Physiology at Chapman University, Food Science Program, Orange, CA**

Chapman University invites applications for a postdoctoral position to investigate the effects of irradiation on plant cells. The project involves evaluation of the effects of low dose irradiation on the shelf-life and quality of temperate fruit destined for export markets. The postdoctoral researcher will investigate the effects of low dose irradiation on cell integrity, respiration rate, ripening processes and activities of various enzymes related to fruit quality, antioxidant capacity, nutrient content and analytes such as furans. The impact of commercial storage and distribution as well as the effects of combining irradiation with modified atmospheres or ethylene exposure on fruit quality will also be investigated. See the full position...
Postharvest Giving

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

- Gloria Lopez-Galvez
- Waine Aalto
- Joan Rosen
- TRJ Refrigeration

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.

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

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
The University of California does not discriminate in any of its policies, procedures, or practices. The University is an affirmative action/equal opportunity employer.