



October 2015

Quick Links

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

Director's Update



Produce Professional Certificate Awarded



We are pleased to announce that Taryn Pfalzgraf, Editor at Blue Book Services, Inc., was recently awarded Certified Produce Professional for completion of the **Postharvest Technology Center's Produce Professional Certificate course**.

Ms. Pfalzgraf comments, "Earning the Produce Professional Certificate helps me do my job better; as editor of a business journal covering the international fresh fruit and vegetable industry, the more I know, the better the content. Interesting features and department articles with participation from subject matter experts – many of whom were met at various UCD courses and gatherings – adds immeasurably to our publication's quality. In addition, the breadth of knowledge gained from the coursework is key to delivering critical, relevant information to Blue Book members, helping them do their jobs better – a win-win for everyone."

The Center's Produce Professional Certificate course is comprised of in-person workshops and online lectures from leading researchers and industry experts in the field of produce quality and safety. The program is self-paced with a four year timeframe for completion. Visit the [Postharvest Technology Center's website](#) to learn more about this educational program or contact Center staff at 530-752-6941.

Congratulations Taryn on your achievement! – Beth Mitcham

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

Postharvest Education at UC Davis



Welcoming our favorite Food Safety Experts to UC Davis for Produce Safety Workshop

Less than a week to go for the annual Produce Safety Workshop and the Postharvest Technology Center looks forward to welcoming leading experts in the field to the UC Davis campus. Topics and speakers include:

Building on your current GAP's and GHP's program – Dr. Trevor Suslow (UC Davis)

FSMA Produce Rule: Ag water Grower Tools – Dr. Linda Harris (UC Davis, WCFS)



Assessing risk in animal-based soil amendments – Dr. Michele Jay-Russell (WCFS)
Developing a Root-Cause Analysis and Implementation Plan (Dr. Michelle Danyluk, U of Florida)
Preparing for When Things Go Wrong (Dr. David Gombas, United Fresh Produce Association)
Cleaning and Sanitation (Dr. Elis Owens, Birko Corporation)
...and more

Interested? We still have a few seats left. [Enroll online](#) or contact Penny Stockdale, Registration Coordinator, at 530-752-7672 to register by phone. We are thankful for the generous support of the [Western Center for Food Safety](#) to enable reduced registration fees for 2015!

Reserve your Spot for Methods of Measuring Fruit and Vegetable Flavor, Color & Texture Workshop – January 20, 2016

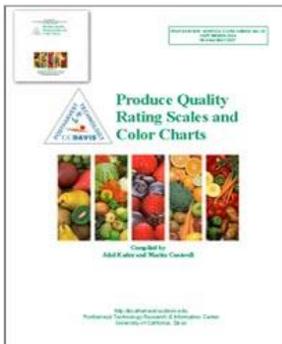
Methods of Measuring Fruit and Vegetable Flavor, Color & Texture Workshop organized by Dr. Diane Barrett will be held as a one-day workshop, January 20, 2016 at the ARC Conference Center.

The attendee registration fee of \$395 includes course materials, lunch, and morning and afternoon coffee breaks. This workshop features principles and applications of measuring produce color, flavor, and texture, and includes demonstrations of a variety of the latest equipment.

Click [here](#) to learn more and reserve your spot.

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

Featured Postharvest Bookstore Items



Receive 25% off this month's featured publication: Produce Quality Rating Scales & Color Charts, 2nd Edition (Binder + CD)

This month the Center is offering 25% off our popular Produce Quality Rating Scales & Color Charts, 2nd Edition (Binder + CD)

This publication, available in printed format and as a CD, is a compilation of rating scales (scoring systems) and color charts for maturity, ripeness, and quality of fruits, nuts, and vegetables for the benefit of those interested in produce quality evaluation.

[Click here](#) to order your copy.

[Back to Top\]](#)

Postharvest Specialists' Updates & Other News



Western Training, Education, Extension, Outreach, and Technical Assistance Center to Enhance Food Safety

The University of California, Davis will be collaborating with 13 western states and two territories in the newly established Western Training, Education, Extension, Outreach, and Technical Assistance Center to Enhance Food Safety at Oregon State University.

The initiative is a federal funded project to help growers and processors of fruits, vegetables and nuts comply with requirements established under the 2011 Food Safety Modernization Act (FSMA). The 1.2 million in funding will be used to develop a cadre of trainers to teach others how to conduct FSMA compliant workshops for small and midsized farms, beginning farmers, small-scale food processors and wholesale produce vendors.

Linda J. Harris, Department of Food Science and Technology, is the lead contact for the states of Arizona and California but Trevor Suslow and several additional faculty at UC Davis and the University of Arizona helped pull together materials for the grant application and will actively participate in the center.

NSF Center for Advanced Processing & Packaging

Dr. Diane Barrett attended a biannual meeting of the National Science Foundation's (NSF) Center for Advanced Processing & Packaging at North Carolina State University for three days in October. She serves as UC Davis Site Director and assists faculty in submitting proposals to carry out research on new methods of food preservation, including high pressure, pulsed electric field and microwave processing as well as development of improved methods of encapsulation, monitoring of food bioactives etc.

Opening of the Horticulture Innovation Lab Demonstration Center

Dr. Beth Mitcham, Director of the [Horticulture Innovation Lab](#), welcomed the opening of its new Demonstration Center displaying African and Asian vegetables along with technologies the Center team uses in its outreach around the world to help smallholder farmers improve their postharvest handling practices. The opening of the new Demonstration Center was held on [World Food Day 2015](#), a day of action against hunger, celebrating the creation of the Food and Agriculture Organization of the United Nations (FAO). To learn more about the new Demonstration Center, visit the Horticulture Innovation Lab's [blog](#).

Welcoming Dr. Irwin Donis-Gonzalez as Postharvest Systems Engineering Specialist

Just recently, Dr. Donis joined UC Davis as Assistant Postharvest Systems Engineering Specialist in Cooperative Extension, in the Department of Biological and Agricultural Engineering. At UC Davis, he will focus his work in postharvest engineering, handling (storage, drying, etc.), traceability, and processing of agricultural commodities with a goal of reducing energy consumption while ensuring food quality and safety. These are critical issues for the fresh market fruit and vegetable, dried fruit, tree nut, and rice industries in California and we welcome Dr. Donis to UC Davis and the Postharvest Technology Center.

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

What's New on Our Website



Featured this Month on the Postharvest Technology Center's Website: Donate a Gift

Did you know that you can easily donate to support postharvest research and outreach through the UC Davis Gift Giving Website? Visit the Postharvest Technology Center's [Gift Giving](#) website to make your tax free donation.

Stay up-to-date with the Postharvest Technology Center by joining our [LinkedIn](#)

New Article

What Makes a Flavorful Fruit?

Mitcham, Elizabeth. "What Makes a Flavorful Fruit?" *American/ Western Fruit Grower*. Sept. 2015: 12-13.

Job Openings

Enza Zaden in San Juan Bautista, CA seeks Post-Harvest Researcher

This position utilizes innovation and entrepreneurship to establish and conduct research in the post-harvest field (shelf life, fresh cut quality, and flavor) by developing and implementing tools, protocols and measuring parameters for testing, evaluation and improvement of breeding material on post-harvest traits. Click [here](#) to learn more about this position and apply.

University of Florida, Indian River Research and Education Center seeks Assistant Professor in Citrus Horticulture

This is a 12-month tenure-accruing position that will be 70% research (Florida Agricultural Experiment Station) and 30% extension (Florida Cooperative Extension Service), available in the Indian River Research and Education Center, Institute of Food and Agricultural Sciences, at the University of Florida. The research portion of this assignment should address the issues confronting citrus (especially fresh grapefruit) production on the flatwood soils in the Indian River area. Specific extension responsibilities include developing recommendations and programs to accomplish positive changes, and assisting county extension faculty in their citrus production-related extension programs.

Click [here](#) to learn more about this position and apply.

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

Postharvest Calendar

- November 3-5, 2015. [Produce Safety: A Science-based Framework Workshop](#). UC Davis campus
- January 20, 2016. [Methods of Measuring Fruit and Vegetable Color, Flavor & Texture Workshop](#). UC Davis campus
- March 15-16, 2016. [Fruit Ripening & Ethylene Management Workshop](#). UC Davis campus
- June 13-24, 2016. [38th Postharvest Technology of Horticultural Crops Short Course](#). UC Davis campus
- June 21-24, 2016. [VIII International Postharvest Symposium](#). Cartagena, Spain
- 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

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

Ask the Produce Docs



Q. Are modified/controlled atmospheres useful for pumpkins and winter squash? We want to store pumpkins longer than we can achieve currently with just ambient temperature storage.

A. First there are many factors that affect the postharvest storage potential of pumpkins and winter squash. Production conditions, variety, careful harvest to avoid injury to the stem end and fruit surface, and adequate curing all contribute to obtaining good storage life. For short periods (1-2 months), pumpkins and winter squash can be stored in the range of 10-25°C (50-77°F), but after this initial period, chilling symptoms may appear on those stored as low as 10°C and excessive water loss and surface drying will appear on those stored at 20-25°C. The recommended storage temperature is 15°C (59°F) as noted in the updated Produce Facts on Pumpkins and Winter Squash on our website (<http://postharvest.ucdavis.edu/pfvegetable/PumpkinWinterSquash/>).

Long before exploring the use of a more costly technology such as controlled atmospheres, you should work on optimizing the storage temperature of the pumpkins—15°C is a good target storage temperature. After doing that, the focus should be on managing relative humidity. Generally about 70% RH will provide a good balance between minimizing weight loss and favoring decay organisms. To my knowledge, controlled or modified atmospheres are not used on winter squash and pumpkins. There is limited research in this area. A recent study at the University of Georgia

compared CA (3%O₂ + 5%CO₂) stored fruit with ambient conditions (air) and found the former to yield more marketable fruit after 2-3 months. However, the CA was conducted at 10°C, so the positive effect was a combination of temperature and CA. In other tests on winter squash, atmospheres with about 7% CO₂ helped reduced degreening, but this would be of little benefit to pumpkins harvested at full color.

--Marita Cantwell, Ph.D. Postharvest Vegetable Specialist

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

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. Lori Carlson, Beth Mitcham, and Marita Cantwell



Layout & Design. Lori Carlson



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

