



**July 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



### And Now U Know Features Marita Cantwell and the International Conference on Fresh-cut Produce

The Postharvest Technology Center is in its final month of preparation for the upcoming International Conference on Fresh-cut Produce, September 13 – 18, 2015 at UC Davis. We are excited to announce that Dr. Marita Cantwell, conference convener, was recently featured by And Now U Know, Fresh Produce Industry News organization, about the [upcoming conference](#).

With 16 Keynote presentations from global experts on fresh-cut processing, 7 cutting-edge oral sessions on new technologies and innovations, an academic-industry panel, oral and e-Poster abstract sessions, and a 2-day technical tour, this conference brings together a content rich program on the beautiful UC Davis campus that brings value for industry and academics alike.

Visit the Fresh-cut 2015 website to learn more and view the recently updated [Program](#).

[Register](#) by July 31 to receive the regular registration rate. We look forward to seeing you at the conference!

--[Beth Mitcham](#)

[Back to Top](#)

## Postharvest Education at UC Davis



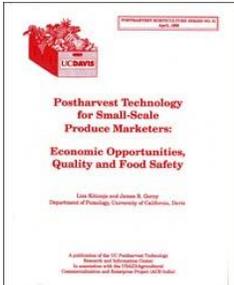
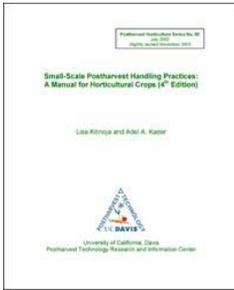
### Reduced Registration Fees for 2015 Produce Safety Workshop

We are pleased to announce reduced registration fees of \$750 for this year's Produce Safety Workshop, November 3 – 5 at the UC Davis Alumin Center. Reduced registration fees are made possible through the generous support of the [Western Center for Food Safety](#).

This workshop is coordinated by Dr. Trevor Suslow and features leading food safety experts on fresh produce. Key topics include: risk-based hazard assessment and preventive controls, monitoring and corrective action, agricultural water standards, animal-derived soil amendments, sanitation and environmental monitoring programs, microbiological indicators and pathogen testing, and case studies.

[Register now](#) as this workshop fills up early!

## Featured Postharvest Bookstore Items



### Receive 25% off this month's featured Small-Scale Postharvest Technology publications

This month the Center is offering 25% off all Small-Scale Postharvest Technology publications. Enjoy 25% off of:

- Small-Scale Postharvest Handling Practices: A Manual for Horticultural Crops (4<sup>th</sup> ed) in English, Spanish, French, and Arabic

AND

- Postharvest Technology for Small-Scale Produce Marketers: Economic Opportunities, Quality and Food Safety

While Small-Scale Postharvest Handling Practices is available for free [online](#), a bound hard copy may be purchased for only \$18.00 with this month's discount. Similarly, Postharvest Technology for Small-Scale Produce Marketers is also available for free [online](#), but may be purchased as a hard copy for only \$26.25.

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

[Back to Top](#)

## Postharvest Specialists' Updates & Other News



### Mitcham to be honored at upcoming ASHS Conference in New Orleans

Center Director, Dr. Elizabeth Mitcham was selected as this year's recipient of the ASHS Outstanding International Horticulturist Award. This award recognizes Dr. Mitcham's tireless efforts in postharvest research and extension in developing countries. Dr. Mitcham states, "I am honored to be selected for this award. My work in postharvest management in evolving economies is one of the most rewarding aspects of my career". [Click here](#) to learn about the upcoming conference and program.



### Barrett presented at the Innovation in Integrated & Organic Horticulture Conference, Avignon, France, June 8-12, 2015

Dr. Barrett made a presentation on "Qualitative and Nutritional Differences in Processing Tomatoes Grown Under Organic and Conventional Systems" at this conference organized by the International Society of Horticultural Sciences (ISHS).



### Postharvest Specialists presented at the Institute of Food Technologists Annual Meeting, Chicago, IL, July 10-14, 2015

Drs. Christine Bruhn, Linda Harris and Diane Barrett all attended this annual meeting, where they made presentations, judged graduate student posters and attended scientific and industrial talks as well as explored the Food Expo.

### Harris serves on International Association for Food Protection (IAFP) Executive Board and participates in Annual Meeting, Portland, OR, July 25-28,



2015

Dr. Linda Harris currently serves as Vice President of IAFP's Executive Board and will step in as President of the Board beginning August 2016. Dr. Harris has been an IAFP Member since 1987 and has served on several committees, including both the Program and Nomination Committees, as chair of the Elmer Marth Educator Award Selection Committee, as co-chair of two Professional Development Groups, and as a judge for the Developing Scientist Awards.

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

## What's New on Our Website



### Featured this Month on the Postharvest Technology Center's Website: Online Bookstore

Did you know that you can easily order Postharvest Publications by UC Davis Specialists through the Postharvest Technology Center's online bookstore? Our online bookstore features 34 publications in multiple languages, posters on optimum temperatures in storage, and seven specialty Postharvest Technology Center Logo items. Visit our [online bookstore](#) to learn more.

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

## New in July 2015 in the "Postharvest Publications Organized by Topic" Library

### **Tomato**

M T Held, G E Anthon, D M Barrett. 2014. The effects of bruising and temperature on enzyme activity and textural qualities of tomato juice. J Sci. Food Agric.

### **Watermelon**

J.W. Shiu., D.C. Slaughter, L.E. Boyden, D.M. Barrett. 2015. Effect of the shear-to-compressive force ratio in puncture tests quantifying watermelon mechanical properties. Journal of Food Engineering. 150: 125-131.

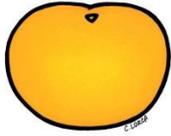
[\[Back to Top\]](#)

## Postharvest Calendar

- September 13-18, 2015. [III International Conference on Fresh-cut Products](#). ISHS. UC Davis campus
- October 13-16, 2015. [Postharvest Technology Course, Wageningen](#), The Netherlands
- October 23-25, 2015. [PMA Fresh Summit](#). Atlanta, GA
- November 3-5, 2015. [3rd 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. [22nd 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. [20th Annual Fresh-cut Products: Maintaining Quality & Safety Workshop](#). UC Davis campus

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

## Ask the Produce Docs



**Q.** We harvest Mandarin "Kinnow" in the months of Dec to March. Usually day temperature range from 10 to 22° C. Can you guide me to a chart showing storage and shelf life for unwaxed vs waxed fruit? Also, please guide me about field heat removal. To what extent is heat removal necessary after how much time of harvest given at the prevailing day temperatures. Please also mention the effective way of field heat removal from Kinnow fruit.

**A.** The Kinnow should be stored at 5 – 7°C under high relative humidity (ideally 90 – 95%). This would be very important especially if you washed the fruit but did not wax it prior to storage. The main consequence of not waxing is shriveling of the fruit and softening of the peel due to water loss. One of the purposes of waxing is to reduce water loss during storage.

Depending on the storage conditions (i.e., temperature, presence of ethylene, fruit waxed/unwaxed, relative humidity and fruit maturity) you could expect to get approximately 2 to 4 weeks storage of the fruit. If you wish to store the fruit, it will be of utmost importance to carefully handle the fruit at all stages of harvesting and handling to minimize injury to the fruit.

The biggest problem in storage of citrus is green mold which is caused by *Penicillium digitatum*, which is a wound pathogen. For this reason, packinghouse cleanliness is of utmost importance along with proper use of fungicides for control of sporulation.

The best way to remove field heat from the fruit is to use a forced air cooling system. Again, the air needs to be humidified so not to accelerate weight loss. If you are going to wax the fruit, it is important not to have any condensation on the fruit when it is waxed; otherwise, the wax can turn opaque. Most houses hold the fruit at about 15°C overnight prior to running it on the packline to remove field heat for this reason. They do this in large bulk rooms. Forced air cooling down to storage/shipping temperature occurs after packing.

Mary Lu Arpaia

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

## End Notes and Disclaimers

**Postharvest Questions.** If you have a perplexing postharvest question you'd like answered, please send it to [postharvest@ucdavis.edu](mailto: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, Mary Lu Arpaia



**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.*

