As we prepare to say goodbye to 2010 and welcome the new year, the Specialists and Staff at the UC Davis Postharvest Technology Center wish you professional and personal success for 2011. We hope for a new year that brings improvements in produce quality and safety, and increased consumption of fruits and vegetables for improved economic viability of the produce industry and improved health of consumers. Thanks for participating in the activities of the Postharvest Technology Center. We look forward to further interactions in 2011!!

--Elizabeth Mitcham

December Endowment Contributions Facilitate Website Update
We’re in the midst of a strong end-of-year effort to meet our 2010 Endowment Goal of $500,000, with just under $75,000 remaining in order to attain this milestone. To facilitate your contribution, the Dean’s office has recently made available an online secure donation site. We are very appreciative of the generous gifts from the following endowment contributors:

- Jong Kee Kim
- Adel & Aileen Kader
- Joan C. Rosen
- Maglio & Company
We are still accepting end-of-year, US tax deductible, contributions to our 2010 Endowment Campaign, or you can be among the first to contribute to our 2011 Endowment Campaign. If you prefer to donate by mail or fax, please use our handy form to send in your contribution. To view the complete list of our generous contributors visit: http://postharvest.ucdavis.edu/about/contributors.shtml

Fruit Ripening Workshop Now Open for Enrollments
We are pleased to announce the opening of enrollments for our April 26-27, 2011 “Fruit Ripening & Ethylene Management Workshop. Facilitated by Dr. Carlos Crisostomo, this workshop will be held on the UC Davis campus in the Buehler Alumni and Visitors Center. The workshop will provide useful information for shippers, fruit handlers (wholesale and retail) and produce managers involved in handling and ripening fruits and fruit-vegetables. The workshop focuses on how to increase profits by delivering ready-to-eat, delicious fruits and fruit-vegetables to the consumer. For complete information about this workshop, link to the web page: http://postharvest.ucdavis.edu/Announce/fruitripening.shtml

Postharvest Workshops
We hope you will join us for our 2011 UC Davis Postharvest Learning Opportunities

- **February 1-2, 2011 (California):** [Delivering More Flavorful Produce](http://postharvest.ucdavis.edu/Announce/deliveringmoreflavorful.shtml). This workshop is organized as part of a University of California/University of Florida project sponsored by a USDA Specialty Crops Research Initiative. A second session is also available in Florida on May 4-5, 2011. [Registration is now open](http://postharvest.ucdavis.edu/Announce/deliveringmoreflavorful.html).
- **February 15-18, 2011:** [Better Process Control School](http://postharvest.ucdavis.edu/Announce/betterprocesscontrol.shtml) – Activities & Recreation Center’s Ballroom on the UC Davis campus. [For more information](http://postharvest.ucdavis.edu/Announce/betterprocesscontrol.shtml).
- **March 1-3, 2011 (California):** [Advanced Topics in Microbial Safety of Fresh Produce](http://postharvest.ucdavis.edu/Announce/advancedtopics.shtml). This workshop is organized as part of a University of California/University of Florida project sponsored by a USDA Specialty Crops Research Initiative. A second session is also available in Florida on April 27-29, 2011. Use the workshop brochure to submit your application for enrollment.
- **April 26-27, 2011:** [Fruit Ripening & Ethylene Management Workshop](http://postharvest.ucdavis.edu/Announce/fruitripening.shtml) - 17th Annual will be held on the UC Davis campus. [Registration is now open](http://postharvest.ucdavis.edu/Announce/fruitripening.shtml).
- **June 13-24, 2011:** [Postharvest Technology Short Course](http://postharvest.ucdavis.edu/Announce/postharvestshortcourse.shtml) – 33rd Annual will be held on the UC Davis campus, with an optional field tour covering the San Joaquin Valley and Coastal California. [Registration is now open](http://postharvest.ucdavis.edu/Announce/postharvestshortcourse.shtml).
- **September 13-15, 2011:** [Fresh-cut Products: Maintaining Quality & Safety](http://postharvest.ucdavis.edu/Announce/freshcutproducts.shtml) – 16th Annual, at the UC Davis Buehler Alumni Center’s AGR Room.

Featured Postharvest Publications
Special Year-Ending/Year Beginning Offer on Rice Quality Handbook

We’re offering a 20% discount on the useful Rice Quality Handbook. Learn about producing high-quality rice. This excellent resource covers the entire spectrum, from planting to postharvest handling, in a methodical and step-by-step system. To order a copy for your library, please use our Order Form by January 15, 2011 and be sure to note “RQH20” to receive your discount. For a complete listing of all our publications see: http://postharvest.ucdavis.edu/Pubs/pub_list.shtml.

What’s New on Our Website this Month

Four Brief Book Reviews
“Advances in Fresh-cut Fruits and Vegetables Processing” edited by Martin-Belloso, Olga and Robert Soliva Fortuny (2010), was reviewed by Dr. Adel Kader. [Link to the review.]


“Controlled Atmosphere Storage of Fruits and Vegetables, Second Edition” by A.K. Thompson (2010) was reviewed by Dr. Adel Kader. [Link to the review.]

New Articles Added to Postharvest Publications Organized by Topic
Our datastore contains over 1,300 postharvest documents, organized by topic, and is searchable by title or author. It is one of the premiere sources of comprehensive postharvest information.


An additional 22 papers by Alley E. Watada, USDA-ARS Researcher, have been added this month.
Dr. Trevor Suslow will participate in a Food Safety Seminar on January 20, 2001 at the Kearney Agricultural Center. Dr. Devon Zagory will speak from 10-11 a.m. about “Produce Protection, HACCP – Role of Hazard Analysis, Trace/Recall, New/Pending FDA Regulations and Impact. Dr. Suslow will speak from 11-12 about “GAP, GMP, Research Results”. From 1-2 pm a Spanish Session of the material will be offered.

Postharvest Positions

AgroFresh Seeks Lab Manager
Located in Davis, Calif., this position with AgroFresh will include administration of activities crucial for the work of AgroFresh’s R&D and quality assurance laboratory, including routine quality evaluation of fruits, vegetables and ornamentals, and assisting with commercial sampling and field applications. The selected candidate will supervise a team of technicians and/or temporary employees in the lab, at commercial pack houses, and orchard field environments. They will interpret protocols, manage all quality assessments, maintain lab equipment and facilities, manage and analyze data, adjust procedures, assist with technical design of projects, and manage environment, health and safety requirements. A Bachelor or Master’s Degree in Postharvest Biology, Horticulture, Agriculture or related area is required, as well as quality assessment and lab management experience. For details: https://dow.taleo.net/careersection/10060/jobdetail.ftl?job=1006331

Food Scientist Position at Purfresh
Purfresh, Inc. is a fast growing AgTech startup and is recruiting for an experienced Food Scientist to work in its laboratory located in Fremont, Calif. Purfresh is making a difference in the industry and candidate must be able to work in an exciting, fast-paced environment. Applicants must have a degree in biological or agricultural sciences. Ideal candidate would have worked in industry with a variety of fresh produce commodities and a network of professionals to draw experience from. Position’s responsibilities include conducting/coordinating both lab and field trials extending existing commercial applications as well as developing new applications. Send your resume to asmith@purfresh.com.

Postharvest Calendar: Upcoming Conferences, Courses and Workshops

- February 1-2, 2011. Delivering More Flavorful Produce Workshop. (California Session on the UC Davis campus.)
- February 6-9, 2011. WFLO Institute. Atlanta, Georgia.
- March 1-3, 2011. Advanced Topics in Microbial Safety of Fresh Produce Workshop. (California Session on the UC Davis campus.)
- April 7-13, 2011. V International Course on Postharvest Technology and Minimal Processing of Fruit and Vegetables. Offered by the Postharvest and Refrigeration Group (GPR) of the Technical University of Cartagena, Spain.
- April 27-28, 2011. Advanced Topics in Microbial Safety of Fresh Produce Workshop. (Florida Session in Wimauma, Florida)


May 4-5, 2011. **Delivering More Flavorful Produce Workshop**. (Florida Session at the University of Florida - Gainesville campus.)


October 14-17, 2011. **Fresh Summit International Convention & Expo**, Atlanta, GA, USA; Produce Marketing Association.

December 3-6, 2011. **International Conference on Quality Management in Supply Chains of Ornamentals**. Radisson Hotel, Bangkok, Thailand. Contact Sirichai Kanlayanarat (66)2-470-7720 or qmsco@kmutt.ac.th.

December 3-6, 2011. **Southeast Asia Symposium on Quality Management in Postharvest Systems** (SEAsia2011). Bangkok, Thailand. Contact Sirichai Kanlayanarat (66)2-470-7720 or seasia@kmutt.ac.th.

December 3-6, 2011. **Asia Pacific Symposium on Postharvest Quality Management of Root and Tuber Crops**. Radisson Hotel, Bangkok, Thailand. Contact Sirichai Kanlayanarat (66)2-470-7720 or sirichai.kan@kmutt.ac.th.


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**Ask the Produce Docs**

**Q.** We are planning to do organic farming and are concerned about being able to preserve the freshness of the produce. An idea I had was to use shrink wrap on the produce as soon as possible after harvest. Does this work or are there other options that work better. I presume that different fruits vary as to what helps preserve the freshness. (L.I.)

**A.** Overwrapping can reduce water loss, but shrink wrapping could modify the atmosphere inside the package. This might occasionally provide benefits but may, depending on the product and its temperature, cause off-odors and/or damage. By far, the best way to preserve freshness of the product is to cool it immediately after harvest to the lowest safe temperature. That would be close to 32F for cool-temperate vegetables and fruits (lettuce, broccoli, apples, pears, and the like), or 50F for summer vegetables and subtropical and tropical fruits (squash, basil, tomatoes, avocados etc.). If storing for longer periods, overwrapping with perforated polyethylene can reduce water loss, and help extend freshness. –Michael Reid
Q. I'm a reporter working with an author on a book that will give readers a glimpse at the foods of the future, from test-kitchens to biotechnology labs. In short, the book looks at people, ideas, trends and technologies that could change what we eat in 25 years. We are looking for information about produce respiration rates — I've come across several introductory papers, but I just need a data table comparing respiration rates for different fruits and vegetables. Is there any table with this information? (C.B.)

A. The USDA provides a summary table of respiration rates of fruits and vegetables in the USDA Handbook 66 (http://www.ba.ars.usda.gov/hb66/010respiration.pdf). --Adel Kader

If you have a 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.

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.

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