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Director's Note

Spring is upon us and here at the Postharvest Technology Center we are gearing up for the upcoming Fruit Ripening & Ethylene Management workshop. (There are a few spaces left—don't miss out!) Promptly following is our signature Postharvest Technology of Horticultural Crops short course in late June.

I have a great bit of news to share. The Produce Facts App is available for Android users again. Produce Fact Sheets have been available on our website for a long time and are widely used by the produce industry, service and affiliated industries, and researchers.

The trouble is, when you are out in the field, or not at your computer, they are a little difficult to access. With the App, you can search for information about recommendations for handling after harvest for Fruits, Vegetables, and Ornamentals, with subsections of information for each commodity such as Maturity & Quality, Disorders, and Optimal Temperature/Atmosphere for Storage just as though you are on line with the website.

You can access our **free** Produce Facts app [here for Apple users](#) and [here for Android users](#) or by searching UC Davis Postharvest Technology in your App Store. We hope you find it useful.

As past Director who is heavily invested in the Center, Trevor Suslow still provides quality and relevant information with us to share with all of you. He recently sent this information on Traceability/Blockchain.

*The need for improvements and broader adoption of existing and emerging traceability programs have been highlighted, once again, in response to recent outbreaks on leafy greens and the recall of stone fruit due to detection of *Listeria monocytogenes*. Digital ledger technologies (DLT; broadly referred to as "blockchain") have been suggested as an important solution for public health protection in emerging outbreaks and across the supply chain in quality and food safety systems. [A recent article in Food Quality and Safety](#) by Emeritus CE Trevor Suslow and members of the PMA Science and Technology team provides a general overview of DLT's and a touch of realism on how these digital records are likely to be helpful in the context of farm to fork management at diverse scales of production.*

Postharvest Technology of Horticultural Crops Short Course Scholarship Awardee

The review panel considered over 50 applicants for this year's scholarship opportunity. We received applicants from 24 countries competing for this scholarship. The review committee selected Samson Peter Okalebo from Makerere University in Uganda. Congratulations to Samson! We now hope that the other applicants can find another way to attend. We are excited to offer Samson this opportunity and hope that he will use the knowledge gained to improve postharvest practices throughout his country.



Center Director
Florence Zakharov

Space still Available!

Fruit Ripening & Ethylene Management Workshop!



This popular workshop focuses on how to increase profits by reducing losses at the receiving end, and delivering ready-to-eat, delicious fruits and fruit-vegetables to the consumer. Topics will include ripening facilities and equipment, maturity and quality relationships, biology of ethylene production, sensory quality, temperature management, retail, psychological disorders and other losses and much more including sensory, quality and environmental demonstrations. Please visit the [website](#) for more information and to enroll.

[Enroll Here!](#)

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 and vegetables in California. It is designed for research and extension workers, quality control personnel in the produce industry, and business, government or academic professionals interested in current advances in the postharvest technology of horticultural crops..The [website](#) has more information and the opportunity to enroll.

[Enroll Here!](#)

On Our Website

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



New Publications on our Website

Alexandra Mora, Umayr Sufi, Jedediah I. Roach, James F. Thompson, Irwin R. Donis-Gonzalez 2019. [Evaluation of a small-scale desiccant-based drying system to control corn dryness during storage](#). AIMS Agriculture and Food, 2019, 4(1): 136-148. doi: 10.3934/agrfood.2019.1.136.

Michael V. Mickelbart, Paul W. Robinson, Guy Witney, Mary Lu Arpaia. 2012. [‘Hass’ Avocado tree growth on four rootstocks in California. I. Yield and flowering](#). Scientia Horticulturae 143 (2012) 184–188

M. Cefola, B. Pace, G. Colelli and M. Cantwell 2015. [Compositional and Marketable Quality of Fresh-Cut Florets of Four Specialty Brassicas in Relation to Controlled Atmosphere Storages](#). Acta Hort. 1071, ISHS 2015

Postharvest Calendar

- April 24-25, 2019. [40th Annual Citrus Postharvest Pest Control Conference & Citrus Food Safety Forum](#). Santa Barbara, CA
- May 19-24, 2019. [V International Symposium on Postharvest Pathology 2019](#). Liège, Belgium
- June 4-6, 2019. [Breeding Crops for Enhanced Food Safety](#). Davis, CA
- June 17-28, 2019. [Postharvest Technology of Horticultural Crops Short Course](#). Davis, CA
- September 17-19, 2019. [Fresh-cut Products](#). Davis, CA
- November 9-13, 2020. [9th ISHS International Postharvest Symposium](#). Rotorua, New Zealand

Ask the Produce Docs



Q. We want to improve our logistics and packaging material; do you know where we can gather knowledge / research / data on packaging strength (cardboard material) that is required for packaging fruit and vegetables. Necessary strength of packaging material in relation to:

- Product Weight
- Transportation Distances
- Humidity

(A.B.)

A. Strength of a package is related to the strength of the packaging material and also the design of the package. In many situations a weaker material will produce acceptable strength in a package if the design incorporates more material in crucial weight bearing areas of the package. As you mention, humidity, product weight and time in the refrigerated handling chain are also factors affecting the strength of corrugated fiberboard. Because of all these interrelated factors it is not possible to specify a specific minimum material strength for produce packages. Packaging manufacturers often have experience with the performance of their packages in the cold chain and can develop an acceptable design for most situations. The best way to determine if a package design is adequate is to test it in a packaging laboratory. There are a number of accepted standard protocols for this type of testing.

Jim Thompson

Postharvest Questions. If you have a 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.

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