

THURSDAY, OCTOBER 22, 2009  
60<sup>TH</sup> ANNUAL CITRUS PROCESSORS' AND  
SUBTROPICAL TECHNOLOGY  
CONFERENCE MEETING



*Introduction*

It gives us great pleasure to invite you to attend the 60<sup>th</sup> Annual Citrus Processors' Meeting at the Citrus Research and Education Center in Lake Alfred.

This conference is sponsored each year by the University of Florida, Institute of Food and Agricultural Sciences and the Florida Department of Citrus, and held jointly with the U.S. Citrus and Subtropical Products Laboratory. It presents the latest technical information on research and quality control for the citrus and subtropical processing industries of the United States.

The combined State, University, and Federal conference sessions are held at the Ben Hill Griffin, Jr. Citrus Hall on the grounds of the Citrus Research and Education Center in Lake Alfred located just off U.S. Highway 17 and 92. The Lake Alfred area is easily accessible via Interstate 4 from the Orlando and Tampa airports or by U.S. 27 or U.S. 17-92.

Persons interested in citrus processing technology and other subtropical horticultural science and technology are urged to attend and take part in the discussions beginning on Thursday, October 22, 2009. The registration desk will open at 8:15 a.m. and lunch tickets may be purchased at that time. Presentation of papers will begin at 9:30 a.m. There is no registration fee.

JACQUELINE BURNS  
Interim Center Director  
Citrus Research and  
Education Center

DAN KING  
Director of Scientific Research  
State of Florida  
Department of Citrus



*U.S. Department of Agriculture  
Agricultural Research Service  
South Atlantic Area  
Citrus and Subtropical Products Laboratory  
600 Avenue S, N.W.  
Winter Haven, Florida 33881*

**Foreword**

*We are pleased to invite you to attend the 2009 Subtropical Technology Conference. This Annual Conference is held to acquaint representatives of the subtropical food industries with research developments in the broad areas of processing, products, marketing and related subjects of current importance and interest. The Conference also provides for exchange of information which will benefit these industries and future research.*

**DARRELL COLE**  
Area Director

**ELIZABETH BALDWIN**  
Research Leader

**PROGRAM**

- 8:15 am Registration and Coffee
- 8:45 am Announcements and Welcome
- Jacqueline Burns, Interim Director  
Citrus Research and Education Center  
Lake Alfred, FL
- Dan King, Director of Scientific Research  
Florida Department of Citrus  
Lake Alfred, FL
- Elizabeth Baldwin, Research Leader  
Citrus & Subtropical Products Laboratory  
Winter Haven, FL
- 9:30 am FAST CENTRIFUGAL PARTITION CHROMATOGRAPHY AS A PREPARATIVE CHROMATOGRAPHIC TECHNIQUE FOR CITRUS NATURAL PRODUCTS  
J. Manthey<sup>1</sup>
- 9:45 am ISOTOPIC MARKERS FOR ORIGIN DETERMINATION OF ORANGE JUICES AND BLENDS  
M. Azik<sup>2</sup> and D. McLean<sup>2</sup>
- 10:00 am LACTONE RING OPENING OF 6', 7'-DIHYDROXYBERGAMOTTIN BY CITRUS-PATHOGENIC FUNGI DIMINISHES ITS CYTOCHROME P450 3A4 INHIBITORY ACTIVITY  
K. Myung<sup>1</sup>, J. Manthey<sup>1</sup> and J. Narciso<sup>1</sup>
- 10:15 am IMPROVED ANALYSIS OF SIMPLE SUGARS AND GALACTURONIC ACID IN HYDROLYZED CITRUS WASTE  
W. Widmer<sup>1</sup>
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- 10:30 – 11:00 ORANGE JUICE BREAK**
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- 11:00 am NANOSTRUCTURAL CHARACTERIZATION OF ENZYMATICALLY MODIFIED PECTIN  
R.G. Cameron<sup>1</sup>, G.A. Luzzio<sup>1</sup>, B.J. Savery<sup>3</sup>, P. Vasu<sup>4</sup> and M.A.K. Williams<sup>4</sup>
- 11:15 am FUNCTIONAL CHARACTERIZATION OF CITRUS PECTIN MODIFIED WITH A THERMALLY TOLERANT PECTIN METHYLESTERASE  
G.A. Luzzio<sup>1</sup>
- 11:30 am MECHANICAL HARVESTING OF FLORIDA CITRUS - PROGRAM OVERVIEW  
S. Barros<sup>2</sup> and D. King<sup>2</sup>
- 11:45 am EFFECT OF SEASONAL VARIATION ON QUALITY OF 'VALENCIA' ORANGE  
J. Bai<sup>1</sup>, E. A. Baldwin<sup>1</sup>, A. Plotto<sup>1</sup>, J.A. Manthey<sup>1</sup>, T.G. Mccollum<sup>5</sup>, M. Irely<sup>6</sup> and G. Luzzio<sup>1</sup>

**12:00 pm - 1:30 pm LUNCH**

- 1:30 pm CHARACTERIZATION OF AROMA VOLATILES IN SELECT TANGERINE HYBRIDS BY GAS CHROMATOGRAPHY-OLFACTOMETRY  
T. Miyazaki<sup>1</sup>, A. Plotto<sup>1</sup>, E.A. Baldwin<sup>1</sup>, J.I. Reyes De Corcuera<sup>7</sup> and F.G. Gmitter<sup>7</sup>
- 1:45 pm NATURAL FLAVOR SYNTHESIS ENHANCED BY UTILIZING HIGH PRESSURE AND "GREEN" SOLVENT TECHNOLOGIES  
M. Eisenmenger<sup>7</sup> and J.I. Reyes De Corcuera<sup>7</sup>
- 2:00 pm GRAPEFRUIT JUICE SULFUR VOLATILE PROCESSING PATTERNS AND PRECURSORS  
F. Jabalpurwala<sup>7</sup>, F. Valim<sup>2</sup> and R. Rouseff<sup>7</sup>
- 2:15 pm DEOXYGENATION OF FRUIT JUICES AND MODEL SOLUTIONS USING IMMOBILIZED ENZYME REACTOR  
N. Reddy Ponagandla<sup>7</sup> and J.I. Reyes De Corcuera<sup>7</sup>

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**2:30 - 2:45 BREAK**

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- 2:45 pm MICROBIOLOGICAL EVALUATION OF MECHANICALLY HARVESTED CITRUS FRUIT  
L.M. Friedrich<sup>7</sup>, T.M. Spann<sup>7</sup>, R.C. Ebel<sup>8</sup> and M.D. Danyluk<sup>7</sup>
- 3:00 pm COMPARISON BETWEEN GRAPEFRUIT JUICES FROM HLB INFECTED AND CONTROL TREES  
F. Valim<sup>2</sup>, F. Jabalpurwala<sup>7</sup>, P. Cancalon<sup>2</sup> and R. Rouseff<sup>7</sup>
- 3:15 pm FLAVOR ANALYSIS OF 'HAMLIN' AND 'VALENCIA' JUICE FROM GREENING (HUANGLONGBING) TREES IN 2009  
S. Dea<sup>1</sup>, A. Plotto<sup>1</sup>, F. Valim<sup>2</sup>, E. Baldwin<sup>1</sup>, T.G. Mccollum<sup>5</sup> and M. Irej<sup>6</sup>
- 3:30 pm USE OF ELECTRONIC TONGUE AND NOSE SENSORS TO DIFFERENTIATE BETWEEN JUICE FROM GREENING (HUANGLONGBING) AND HEALTHY FRUIT  
A. Plotto<sup>1</sup>, X. Bredzinski<sup>9</sup>, E. Baldwin<sup>1</sup>, T.G. Mccollum<sup>5</sup> and M. Irej<sup>6</sup>

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<sup>9</sup> Alpha-Mos, Toulouse, France

CITRUS PROCESSING  
 AND  
 TECHNOLOGY CONFERENCE



OCTOBER 22, 2009  
 BEN HILL GRIFFIN, JR. CITRUS HALL  
 CITRUS RESEARCH AND EDUCATION  
 CENTER  
 LAKE ALFRED, FLORIDA



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AND

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