

11:45 am LC/MS AND NMR IDENTIFICATION OF NEW  
GRAPEFRUIT FURANOCOUMARINS  
J. Yu<sup>3</sup>, B. Buslig<sup>3</sup>, C. Haun<sup>3</sup> and P.F. Cancalon<sup>3</sup>

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

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1:30 pm *IN VITRO* INHIBITION OF CYP3A4 ACTIVITY  
BY SOME NEWLY-ISOLATED MINOR-  
OCCURRING FURANOCOUMARINS IN  
GRAPEFRUIT JUICE  
K. Myung<sup>2</sup> and J.A. Manthey<sup>2</sup>

1:45 pm RESULTS OF SEVERAL *IN VIVO* STUDIES OF  
THE BIOLOGICAL ACTIONS OF 3,5,6,7,8,3',4'-  
HEPTAMETHOXYFLAVONE FROM ORANGE  
PEEL  
J.A. Manthey<sup>2</sup>

2:00 pm FLAVONOIDS IN SWEET ORANGE AND JUICE  
M. Azik<sup>3</sup>

2:15 pm ANALYSIS OF POLYMETHOXYLATED  
FLAVONES IN CITRUS PRODUCTS BY DIRECT  
INJECTION AND IN-LINE TRACE  
ENRICHMENT  
W.W. Widmer<sup>2</sup>

2:30 pm EVALUATION OF HOLD TIMES FOR CLEANED  
FOOD TRANSPORT TANKERS  
P. Winniczuk<sup>1</sup> and R. Goodrich<sup>1</sup>

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**2:45 - 3:00 BREAK**

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3:00 pm POTENTIAL BENEFITS OF CITRUS FOR  
ASTHMATICS  
S. Barros<sup>3</sup> and F. Valim<sup>3</sup>

3:15 pm INFLUENCE OF ORANGE JUICE  
CONSUMPTION ON THE BLOOD LIPID  
PROFILE OF MEN AND MIDDLE AGED  
WOMEN  
T.B. Cesar<sup>4</sup>, N.P. Bonifacio<sup>4</sup>, and A.C. Garcia<sup>4</sup>

3:30 pm HOW DOES THE *IN VITRO* ESTIMATION OF  
FOODS ANTIOXIDANT POTENTIALS  
REFLECT THEIR *IN VIVO* BENEFICIAL  
EFFECTS?  
P. Cancalon<sup>3</sup>

3:45 pm ORANGE JUICE CONSUMPTION AND  
POSSIBLE PROTECTIVE EFFECT AGAINST  
ARTHRITIS  
F. Valim<sup>3</sup> and S. Barros<sup>3</sup>

<sup>1</sup> University of Florida, IFAS, CREC

<sup>2</sup> Citrus and Subtropical Products Laboratory

<sup>3</sup> Florida Department of Citrus

<sup>4</sup> Sao Paulo State University, Brazil

# CITRUS PROCESSING AND TECHNOLOGY CONFERENCE



OCTOBER 18, 2006  
BEN HILL GRIFFIN, JR. CITRUS HALL  
CITRUS RESEARCH AND EDUCATION  
CENTER  
LAKE ALFRED, FLORIDA



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STATE OF FLORIDA, DEPARTMENT OF CITRUS

AND

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL RESEARCH SERVICE  
CITRUS AND SUBTROPICAL PRODUCTS  
LABORATORY  
WINTER HAVEN, FLORIDA

WEDNESDAY, OCTOBER 18, 2006  
57<sup>TH</sup> ANNUAL CITRUS PROCESSORS' AND  
SUBTROPICAL TECHNOLOGY  
CONFERENCE MEETING



*Introduction*

It gives us great pleasure to invite you to attend the 57<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 Wednesday, October 18, 2006. 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 9:15 a.m. There is no registration fee.

HAROLD W. BROWNING	WILLIAM STINSON
Center Director	Dir. of Scientific Research
Citrus Research and	State of Florida
Education Center	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 2006 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**

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| 8:15 am   | Registration and Coffee  |
| 8:45 am   | Announcements and Welcome  |
|   | Harold Browning, Director<br>Citrus Research and Education Center<br>Lake Alfred, FL   |
|   | William Stinson<br>Director of Scientific Research<br>Florida Department of Citrus   |
|   | Elizabeth Baldwin, Research Leader<br>Citrus & Subtropical Products Laboratory<br>Winter Haven, FL   |
| 9:15 am   | SULFUR VOLATILES IN HAND SQUEEZED, PASTEURIZED AND RECONSTITUTED GRAPEFRUIT JUICES<br>O. Gurbuz <sup>1</sup> , J.M. Smoot <sup>1</sup> , <u>J. Rouseff<sup>1</sup></u><br>and R. Rouseff <sup>1</sup>  |
| 9:30 am   | CHARACTERIZATION OF GRAPEFRUIT SEED SPROUT OFF-FLAVOR IN GRAPEFRUIT JUICE USING GC-O AND GC-MS<br><u>C. Emanuels<sup>1</sup></u> , J.M. Smoot <sup>1</sup> and R. Rouseff <sup>1</sup>   |
| 9:45 am   | ORANGE JUICE OFF-FLAVOR COMPOUND THRESHOLDS MEASURED IN A PUMPOUT MATRIX<br><u>A. Plotto<sup>2</sup></u> , K.L. Goodner <sup>2</sup> , J.A. Narciso <sup>2</sup> and E.A. Baldwin <sup>2</sup>   |
| 10:00 am  | CURRENT RESEARCH ON RAPID METHODS FOR ORANGE JUICE QUALITY<br><u>J. Reyes De Corcuera<sup>1</sup></u>  |
| <hr/> <b>10:15 - 10:45 ORANGE JUICE BREAK</b> <hr/> |  |
| 10:45 am  | COMPARISON OF SULFUR AROMA IMPACT COMPOUND FORMATION MECHANISMS IN WINE AND GRAPEFRUIT JUICE<br><u>R. Rouseff<sup>1</sup></u> and O. Gurbuz <sup>1</sup>   |
| 11:00 am  | QUANTIFICATION OF GUIACOL IN ORANGE JUICE USING GC-MS WITH SELECTED ION MONITORING<br><u>P.R. Perez-Cacho<sup>1</sup></u> and R. Rouseff <sup>1</sup>  |
| 11:15 am  | CITRUS SALT-INDEPENDENT PECTIN METHYLESTERASE DEMETHYLATION OF A MODEL HOMOGALACTURONAN: EFFECT OF PH ON DEMETHYLATED BLOCK SIZE AND DISTRIBUTION<br><u>R.G. Cameron<sup>2</sup></u> , K.L. Goodner <sup>2</sup> and G.A. Luzio <sup>2</sup> |
| 11:30 am  | FUNCTIONAL PROPERTIES OF PECTIN AFTER TREATMENT WITH AN ORANGE PECTIN METHYLESTERASE<br><u>G.A. Luzio<sup>2</sup></u> and R.G. Cameron <sup>2</sup>  |