

THURSDAY, OCTOBER 18, 2007
58TH ANNUAL CITRUS PROCESSORS' AND
SUBTROPICAL TECHNOLOGY
CONFERENCE MEETING



*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*

Introduction

It gives us great pleasure to invite you to attend the 58th 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 18, 2007. 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
Center Director
Citrus Research and
Education Center

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

DARRELL COLE
Area Director

ELIZABETH BALDWIN
Research Leader

PROGRAM

- 8:15 am Registration and Coffee
- 8:45 am Announcements and Welcome
- Harold Browning, 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
- 9:15 am CURRENT RESEARCH IN RAPID METHODS FOR CITRUS QUALITY
J.I. Reyes-De-Corcuera¹
- 9:30 am KINETICS OF DISSOLVED OXYGEN AND VITAMIN C CONSUMPTION IN ORANGE JUICE: AN UPDATE
R. Gracia-Torres¹ and J.I. Reyes-De-Corcuera¹
- 9:45 am QUALITY EVALUATION OF TANGERINES FROM THE CREC BREEDING PROGRAM
P. Kerbriou¹, A. Plotto², K.L. Goodner², E.A. Baldwin² and F. Gmitter¹
- 10:00 am HYDROLYSIS OF GRAPEFRUIT FURANOCOUMARINS BY ETHERASE-LIKE ENZYME IN *ASPERGILLUS NIGER*
K. Myung², J.A. Manthey² and J.A. Narciso²
-
- 10:15 - 10:45 ORANGE JUICE BREAK**
-
- 10:45 am ECONOMIC ANALYSIS OF ETHANOL PRODUCTION FROM CITRUS PEEL WASTE
W. Zhou² and W.W. Widmer²
- 11:00 am SOME THOUGHTS ABOUT AN UNUSUAL SET OF PHENOLS IN CALAMONDIN LEAVES AND ORANGE JUICE
J.A. Manthey²
- 11:15 am ION BINDING CAPACITY OF ENZYME MODIFIED CITRUS PEEL AND PECTIN
R.G. Cameron², G.A. Luzio², W. W. Widmer² and M. Iqbal³
- 11:30 am SUSPENSION PROPERTIES OF PECTINS DEESTERIFIED USING PECTIN METHYLESTERASE
G.A. Luzio² and R.G. Cameron²

Foreword

We are pleased to invite you to attend the 2007 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.

11:45 am BIOLOGICAL CHARACTERIZATION AND HEALTH
BENEFITS OF CITRUS FRUIT DIETARY FIBERS
J. Zhang⁴

12:00 pm - 1:30 pm LUNCH

1:30 pm NOVEL OFF-FLAVORS PRODUCED FROM THE
THERMOPHILIC BACTERIA, *ALICYCLOBACILLUS*
ACIDOTERRESTRIS, IN PINEAPPLE JUICE
C. Bousquet¹, M. Danyluk¹ and R. Rouseff¹

1:45 pm ANALYTICAL CONSIDERATIONS IN THE DETERMINATION
OF SULFUR VOLATILES IN GRAPEFRUIT JUICE USING
HEADSPACE SPME
F. Jabalpurwala¹ and R. Rouseff¹

2:00 pm ROASTING EFFECTS ON SULFUR VOLATILES AND AROMA
ACTIVE COMPOUNDS IN ARABICA COFFEE
K. Mahattanatawee⁵, M. P. Ruiz Perez-Cacho⁶, N.
Rattanapanone⁷ and R. Rouseff¹

2:15 pm HYDRATION, EXERCISE AND ORANGE JUICE
F. Valim⁴

2:30 - 2:45 BREAK

2:45 pm BENEFICIAL ROLE OF CITRUS IN BONE HEALTH
P. Cancelon⁴

3:00 pm ORANGE JUICE DECREASES THE INSULIN RESISTANCE
INDEX (HOMA-R) IN NORMAL SUBJECTS
T.B. Cesar², L.U. Rodrigues⁸, M.S. Perez⁸ and N.A.P.
Bonifacio⁸

3:15 pm HEALTH AND NUTRITIONAL BENEFITS OF CITRUS JUICES
S. Barros⁴

¹ Citrus Research and Education Center, UF/IFAS, Lake Alfred, FL

² USDA-ARS Citrus & Subtropical Products Laboratory, Winter Haven, FL

³ Water and Environmental Research Center, Institute of Northern Engineering,
University of Alaska, Fairbanks, AK

⁴ Florida Department of Citrus, Lake Alfred, FL

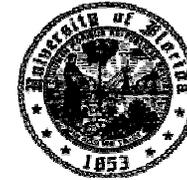
⁵ Siam University, Dept. Food Technology, Bangkok, Thailand

⁶ Institute of Fishery and Agrarian Res. and Biolog. Agric., CIFA, Cordoba,
Spain

⁷ Chiang Mai University, Chiang Mai, Thailand

⁸ Faculty of Pharmaceutical Sciences, Sao Paulo State University - UNESP,
Araraquara, SP, Brazil

CITRUS PROCESSING
AND
TECHNOLOGY CONFERENCE



OCTOBER 18, 2007
BEN HILL GRIFFIN, JR. CITRUS HALL
CITRUS RESEARCH AND EDUCATION
CENTER
LAKE ALFRED, FLORIDA



SPONSORED BY:

CITRUS RESEARCH AND EDUCATION CENTER
COOPERATIVE EXTENSION SERVICE, IFAS
UNIVERSITY OF FLORIDA
LAKE ALFRED, FLORIDA

STATE OF FLORIDA, DEPARTMENT OF CITRUS

AND

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