FRUTIC Symposium at Fruit Logistica

6th February 2018 held in Berlin

Theme: Optimizing Water Use in the Supply Chain of Fresh Produce

PROGRAM

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**Keynote: Merete Edelenbos**
Hot water treatment of fresh produce to prolong shelf-life and reduce losses and waste

Water in packaged fresh produce: Causes, effects, and control measures
_Grazielle Grossi Bovi, Cornelia Rauh, Pramod Mahajan_

Effect of Kelulut (_Trigona spp_) honey coatings on the physicochemical characteristics of _Carica papaya_ L.
_Bernard Maringgal, Norhashila Hashim, Mahmud Tengku Muda Mohamed, Intan Syafinaz Mohamed Amin Tawakkal_

How to analyse water loss in fresh produce?
_Rob Schouten, Pol Tijskens_

**Coffee & poster presentation**

Detection of ethylene from ripening bananas using gas chromatographic system
_Nayyer Abbas Zaidi_

Plasma treatment of freshly harvested apples - An alternative to the hot water immersion process?
_Christoph Weit, Uta Schnabel, Jörg Stachowiak, Jörg Ehlbeck_

Combined effects of postharvest ozone treatment and controlled atmosphere (CA) storage on storage life and quality of pomegranate
_Hakan Bolel, Mehmet Ali Koyuncu, Derya Erbas_

Chlorophyll-fluorescence imaging, and colour and spectral analyses for optimisation of processing parameters for short-term hot-water treatment of apples for fruit salad production
_Werner B. Herppich, Marco Maggioni, Susanne Huyskens-Keil, Tina Kabelitz, Karin Hassenberg_
Active pads for absorbing free water in fruit and vegetable packaging  
*Filip Tintchev*

Impuls: Context over Efficiency - Water Stewardship in Supply Chains of Fresh Produce  
*Johannes Schmiester*

### Afternoon Session  
**Fruit and vegetables production**

**Chair: Pramod Mahajan**

**Keynote: Juan José Alarcon**

Irrigation projects in H2020

Valencia orange (*Citrus sinensis* Osbeck) water footprint in a monsoon climate with high-tech drip irrigation management as supplemental irrigation  
*Alejandro Pannunzio, Eduardo A. Holzapfel, Pamela Texeira Soria, J. Tuma, F. Dufour, G. Demarco*

Shifting irrigation timing to improve water use efficiency in kiwifruit  
*Brunella Morandi, Luigi Manfrini, Stefano Anconelli, Giulio Demetrio Perulli, Alexandra Boini, Kushtrim Bresilla, Domenico Solimando, Luca Corelli Grappadelli*

Calculating the water deficit of apple orchard by means of spatially resolved approach  
*Nikolaos Tsoulias, Nicole Brandes, Manuela Zude-Sasse*

Land surface temperature retrieval from landsat 8 in miandarband plain using mono-window and SEBAL algorithms  
*Mohammad Zaré, Simone Kraatz, Judy Libra*

Microclimatic, physiological and productive effect of the overcanopy irrigation management in an apple orchard in the province of Ferrara  
*Manfrini Luigi*

Effect of deficit irrigation and continuous ethylene supplementation on the quality of cold stored onion bulbs  
*Ikenna Ohanenye, Carmen Alamar Gavidia, Andrew Thompson, Leon Terry*

### Late Afternoon Session  
**Upcoming sensor solutions**

**Chair: Merete Edelenbos**

Application of short-wave near infrared spectroscopy to predict moisture content of watermelon for maturity detection  
*Nazmi Mat Nawi*

Application of the bio speckle method for early detection of fungal disease of apple fruit
Artur Zdunek, Piotr Pieczywek, Andrzej Kurenda, Justyna Cybulska

Real time screening of water bodies heavy metal pollutants by nanostructured optical biosensors
Giorgi Shtenberg

Optical methods for non-destructive evaluation of lettuce quality
Takaharu Kameoka, Shinichi Kameoka, Akane Tsukahara, Ryoei Ito, Atsushi Hashimoto

Hyperspectral imaging and multivariate accelerated shelf life testing (MASLT) approach for determining shelf life of rocket leaves
Maria Luisa Amodio, Muhammad M. A. Chaudhry, Farahmand Babellahi, Giancarlo Colelli

Closing ceremony

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### Poster Presentations

**P01** Influence of packaging materials and storage environments on physicochemical, microbial and sensorial attributes of pomegranate juice
*Sangram Dhumal, Anil Karale, Kisan Lawande, Visnu Garande, Uttam Chavan, Amitkumar Patil, Anikumar Bhoite*

**P02** Investigation on the effect of drip irrigation methods and different water levels on qualitative and quantitative characteristic of peach CV."Sabz e Mashhad"
*Mohhamad Jolaini, Ebrahim Ganji moghadam, Shohreh Nikkhah,*

**P03** Application Advantage of subsurface drip (tape) irrigation of tomato in irrigation different managements
*Mohammad Joleini*

**P04** Washing water recirculation and disinfection using the example of lettuce-washer
*Teresa-Maria Schinabeck, Karin Hassenberg*

**P05** Washing and drying with non-thermal plasma processed media? – Synergistic effects of plasma processed water and air
*Uta Schnabel, Jörg Stachowiak, Oliver Handorf, Björn Zessin, Diana Sydow, Elke Zellmer, Mathias Andrasch, Harald Below, Jörg Ehlbeck*

**P06** Effects of pre-processing hot-water treatment on quality and shelf-life of fresh cut apple slices for fruit salad production
*Karin Hassenberg, Kimberley Bohne, Guido Rux, Susanne Huyskens-Keil, Werner B. Herppich*

**P07** Effect of organic agronomic techniques and modified atmosphere packaging on the quality of lamb’s lettuce
*Francesco Ceglie, Maria Luisa Amodio, Fabio Tittarelli, Giancarlo Colelli*

**P08** Effects of different deficit irrigation strategies on postharvest quality of apple cv. Braeburn
*Cemile Ebru Onursal, Cenk Kucukyumuk, Tuba Secmen, Atakan Güneyli, Derya Erbas, Seda Sevinc Uzumcu, Mehmet Ali Koyuncu*
P09  Postharvest salicylic acid treatment improve storage quality and life of cucumber
*Ebrar Altikardes, Mehmet Ali Koyuncu, Derya Erbas*

P10  The effects of cut of irrigation and Nano magnesium and Elicitor Chitosan foliar application on some traits of sesame (*Sesamum indicum* L.)
*Jaber Khordadi*

P11  Water status evaluation of grapevine leaf by means of NIR spectroscopy for a better irrigation scheduling
*Roberto Beghi, Valentina Giovenzana, Alessio Tugnolo, Lucio Brancadoro, Riccardo Guidetti*

P12  Effect of canopy density on reflectance sensing for crop drought stress detection in greenhouses
*Angeliki Elvanidi, Matthias Friedel, Johannes Max, Nikolaos Katsoulas, Jana Zinkernagel*

P13  Employing NIRS for non-destructively analysing soluble solids content and moisture of 'Hass' Avocado in postharvest
*Phillip Lutterodt, Nicole Brandes, Manfred Pülm, Manuela Zude-Sasse*

P14  Effects of regulated deficit irrigation on bioactive compounds of sweet cherry during shelf life
*Francisco Artés-Hernandez*

P15  Improved value of berries by active absorbing pads in packaging
*Filip Tintchev*

7th – 8th February Fair Trade FRUIT LOGISTICA