



12th International FRUTIC Symposium

on

Innovations in Pre- and Postharvest Supply Chain of Fresh Produce

In cooperation with:



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Location



4-6 Sep 2019

Hall 3/5, Ground Level

Innovations in Pre- and Postharvest Supply Chain of Fresh Produce
The 12th international FRUTIC Symposium 2019
September 4, 2019 @ 09.00-18.00 hrs
RM204, Level 2
AsiaWorld-Expo, Hong Kong

AsiaWorld-Expo
亞洲國際博覽館



Oral Presentations

08:00 – 09:00 Registration: **Level 2, Room 204**, Asia World Expo, Hong Kong

09:00 – 09:30 Opening ceremony speech: **Wilfried Wollbold, Global Brand Manager, Fruit Logistica**
International fresh produce trade and emerging markets

Session 1 **Non-destructive Analysis of Fresh Produce**

Chair: Manuela Zude-Sasse, ATB, Germany

- 9:30 – 10:00 **Keynote by Prof. Kerry B. Walsh** (Central Queensland University, Australia)
Taking the packhouse into the field - Experiences with in-field fruit sizing, counting and quality evaluation.
- 10:00 – 10:15 Carbon consumption of developing sweet cherry fruits in relation to fruit quality
[Martin Penzel, ATB, Germany](#)
- 10:15 – 10:30 Non-destructive measurement of skin topography of kiwifruit from different growing conditions
[Andrew East, Massey University, New Zealand](#)
- 10:30 – 10:45 Digitization in horticulture: Examples on spatially resolved water balance & prediction of yield capacity informed by means of plant sensing
[Manuela Zude-Sasse, ATB, Germany](#)
- 10:45 – 11:00 Application of vis/NIR spectroscopy for the evaluation of vegetables quality directly at the stores of large-scale mass distribution channel
[Riccardo Guidetti, University of Milan, Italy](#)
- 11:00 – 11:15 Laser-based imaging for fruit quality detection
[Norhashila Hashim, University Putra, Malaysia](#)
- 11:15 – 11:30 Development biosensor for real-time and continuous monitoring of decay development in stored crops
[Evgeni Eltzov, ARO – The Volcani Center, Israel](#)
- 11:30 – 11:45 Evaluation of freshness of lettuce using multi-spectroscopic sensing and machine learning
[Akane Tsukahara, Mie University, Japan](#)
- 11:45 – 12:00 Application of laser-light backscattering imaging (LLBI) technique for non-destructive quality monitoring of sweet potatoes (*Ipomoea batatas* L.) during storage
[Philip Donald Sanchez, University Putra, Malaysia](#)
- 12:00 – 13:00 Lunch break

Session 2 **Innovations in Post-harvest Technologies – I**

Chair: Giancarlo Colelli, University Foggia, Italy

- 13:00 – 13:15 Performance of compostable biomaterial packaging for preservation of fresh fruits & vegetables
[Ron Porat, ARO - The Volcani Center, Israel](#)
- 13:15 – 13:30 Ethylene hotspots along the fresh produce supply chain: Pack-house case study
[Oluwafemi Caleb, Agricultural Research Council, South Africa](#)

- 13:30 – 13:45 Innovation technology in postharvest supply chain for snake fruit.
[Yohanes Aris Purwanto, Bogor Agricultural University, Indonesia](#)
- 13:45 – 14:00 New ethylene control and utilization product development for maintaining or achieving good quality of fresh fruits and vegetables
[Qingguo Wang, Shan Dong Agricultural University, China](#)
- 14:00 – 14:15 Discrimination of sesames cultivated in japan using multiband optical sensing methods
[Atsushi Hashimoto, Mie University, Japan](#)
- 14:15 – 14:30 Independent quantification of light absorption and scattering by Photon Density Wave spectroscopy, applied to fruit product analysis
[Thomas Schiewe, University of Potsdam, Germany](#)
- 14:30 – 14:45 Impact of natural eliciting compounds on postharvest loss reduction of avocados during the supply chain
[Karen Munhuweyi, Tshwane University of Technology, South Africa](#)
- 14:45 – 15:00 Influence of storage temperature on viability of sublethally injured coliform bacteria on fresh-cut cabbage during storage in a MAP
[Hidemi Izumi, Kindai University, Japan](#)
- 15:00 – 15:30 **Coffee break**
- 15:30 – 16:30 **Speed presentations** (2 slides in 2 minutes, see next page for schedule)

Session 3 Innovations in Post-harvest Technologies – II

Chair: Pramod Mahajan, ATB, Germany

- 16:30 – 17:00 **Dr. George Manganaris** ([Cyprus University of Technology, Cyprus](#))
Advancements in post-harvest protocols of fresh produce, commercially adopted by the fruit industry
- 17:00 – 17:15 Active packaging: Innovation and challenges of antifungal packaging for extending shelf life of fresh produce.
[Vanee Chonhenchob, Kasetsart University, Thailand](#)
- 17:15 – 17:30 Innovations in packaging technologies applied to fresh produce: An Engineering perspective
[Graziele Grossi Bovi, ATB, Germany](#)
- 17:30 – 17:45 CA-technology & recent developments in ripening technology for fresh bananas and other fruits
[Roland Wirth, Frigotec, Germany](#)
- 17:45 – 18:00 Intelligent modified atmosphere container of fresh produce responding to real-time respiration
[Dong Sun Lee, Kyungnam University, South Korea](#)
- 18:00 – 18:15 Sensors, technical innovations and modelling to improve storage conditions of perishables
[Pramod Mahajan, ATB, Germany](#)
- 18:15 – 18:30 Nano-material and ultraviolet radiation based photo-catalytic/photolytic system to remove ethylene in storage and transport of fresh produce
[Namrata Pathak, ATB, Germany](#)
- 18:30 – 18:45 Control of papaya anthracnose disease caused by *Colletotrichum brevisporum* by antifungal properties of Malaysian stingless bee honey
[Bernard Maringgal, University Putra, Malaysia](#)
- 18:45 – 19:00 Closing ceremony

Speed Presentations (2 slides in 2 minutes)

Chair: Namrata Pathak, ATB, Potsdam

- 15:30 – 15:32 Effect of Microstructure and Morphology of Starch Granules on Performance of PLA/Starch Composites
[Saud Khalid](#)
- 15:34 – 15:36 Nutritional quality of crown pear in Liangzhou district of Wuwei City in China
[Dazhou Zhu](#)
- 15:38 – 15:40 Storage of lettuce using a low frequency electric field
[Takaharu Kameoka](#), [Atsushi Hashimoto](#), [Ryoei Ito](#), [Masafumi Hayashi](#)
- 15:42 – 15:44 Quantitative analysis of composition of Satsuma mandarin using mid-infrared spectroscopy and the analysis of mandarin fruit quality during growing process
[Takashi Okano](#), [Haruyuki Mukai](#), [Shuhei Isoda](#), [Ryoei Ito](#), [Shinichi Kameoka](#), [Atsushi Hashimoto](#), [Takaharu Kameoka](#)
- 15:46 – 15:48 Metabolite and gene expression profile during husk scald development of pomegranate fruit
[Zinash Belay](#), [Oluwafemi Caleb](#), [Alvera Vorster](#), [Van Heerden Carel](#), [Lucky Mokwena](#), [Linus Opara](#)
- 15:50 – 15:52 Impacts of harvest dates and growing locations on the quality attributes of dried clingstone nectarines
[Nomawethu Mhlahlo](#), [Feroza October](#), [Ester Lotz](#), [Oluwafemi Caleb](#)
- 15:54 – 15:56 Effect of packaging types and post-harvest treatment on fresh-cut pineapple quality
[Asive Dyani](#), [Thulile Ndlovu](#), [Feroza October](#), [Zinash A Belay](#), [Oluwafemi Caleb](#)
- 15:58 – 16:00 Post-harvest pathogen suppression using various Essential Oils
[Itumeleng Kgang](#), [Oluwafemi Caleb](#), [Ashwil Klein](#), [Patricia Mathabe](#)
- 16:02 – 16:04 Effects of rapidase (pectinases) enzyme and mannoproteins on the quality of guava (*Psidium guajava* L.) nectar juices
[Akhona S. Manana](#), [Zinash A. Belay](#), [Thulile Ndlovu](#), [Feroza October](#), [Patricia K. Mathabe](#), [Oluwafemi Caleb](#)
- 16:06 – 16:08 Impacts of harvest dates and growing locations on the quality attributes of dried clingstone nectarines
[Nomawethu Mhlahlo](#), [Feroza October](#), [Ester Lotz](#), [Oluwafemi James Caleb](#)
- 16:10 – 16:12 Evaluation of precooling temperature and 1-MCP treatment on quality of Golden Delicious apple
[László Baranyai](#), [Le Phuong Lien Nguyen](#), [Tamás Zsom](#), [Géza Hitka](#)
- 16:14 – 16:16 Comparison of 1-MCP treatment on four melon cultivars using different temperatures
[Le Phuong Lien Nguyen](#), [Tamás Zsom](#), [Mai Sao Dam](#), [László Baranyai](#), [Géza Hitka](#)
- 16:18 – 16:20 Study on the resistance of *Botrytis cinerea* using biofilm of alginate and *Origanum vulgare* essential oil on Da Lat strawberries
[Yen Thi Ngoc Tran](#), [Uyen Thai Ngoc Nguyen](#), [Nhan Thi Truong Vo](#)
- 16:22 – 16:24 Long-term storage of organic table grapes in high CO₂ controlled atmosphere
[Maria Lucia V. de Chiara](#), [Maria Luisa Amodio](#), [Alessia Incardona](#), [Giancarlo Colelli](#)
- 16:26 – 16:28 In vivo testing of ozone generating equipment to reduce ethylene during postharvest storage of fresh produce
[Maria Lucia V. de Chiara](#), [Maria Luisa Amodio](#), [Daniele Simonelli](#), [Giancarlo Colelli](#)
- 16:28 – 16:30 A new edible film for fruit and vegetable preservation made from *Ocimum gratissimum* L. seed gum incorporated with different types of plasticizers
[Ai Quynh Ngo](#), [Ngoc Lieu Le](#)

For more information on speed presentations, please refer to posters screened on LCD monitor.

Notes

