



VIII International Postharvest Symposium

21-24 June 2016. Cartagena, Spain

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Puerto de Cartagena
Sociedad de Ciencia y Tecnología

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VIII INTERNATIONAL POSTHARVEST SYMPOSIUM

CARTAGENA, MURCIA, SPAIN. 21-24 JUNE 2016

**ENHANCING SUPPLY CHAIN AND CONSUMER BENEFITS: ETHICAL AND TECHNOLOGICAL
ISSUES**

SCIENTIFIC PROGRAMME

ORAL PRESENTATIONS

Tuesday	June 21	
18:00-19:30	Registration at the Paraninfo of Universidad Politécnica de Cartagena, Campus Muralla del Mar. Calle Doctor Fleming, s/n. 30202 Cartagena	
19:30-19:50	Opening Ceremony by Official and Academic Authorities	
19:50-20:25	Keynote 1	Dr. Charles Wilson The World Food Preservation Center® LLC
20:30-22:00	Welcome Reception: Cocktail and get together. Campus Muralla del Mar	

Wednesday	June 22	
8:00-9:00	Registration at the El Batel Conference Center . Paseo Alfonso XII, s/n. 30202 Cartagena	
9:00-10:30	SESSION I	
	I.I. Preharvest and Harvesting Advances/1	Chairman Dr. John Golding
9:00-9:15	I.I.O1. The role of crop maturity and ethylene on postharvest browning in fresh-cut celery. Simone Rossi, Katherine Cools, Leon Terry	
9:15-9:30	I.I.O2. Preharvest application of oxalic acid improves antioxidant systems in plums. María Serrano, María J. Giménez, Alejandra Martínez-Esplá, Juan M. Valverde, Domingo Martínez-Romero, Salvador Castillo, Daniel Valero	

9:30-9:45	I.I.O3. Fertilization and susceptibility to fruit cracking in plums. Eivind Vangdal, Iren Lunde Knutsen, Kristin Kvamm-Lichtenfeld	
9:45-10:00	I.I.O4. Identification of preharvest variables affecting postharvest performance on Hass avocado (<i>Persea americana</i> Mill) under storage. Bruno Defilippi, Sebastián Rivera, Raúl Ferreyra, Paula Robledo, Gabriel Sellés	
10:00-10:15	I.I.O5. Preharvest calcium and postharvest carbon dioxide treatment delayed softening in 'Mihong' peach fruits. Jin Su Lee, Yoon Hee Choi, HeeJu Park, Byung Seon Lim, Ji Gang Kim, Young Soo Hwang	
10:15-10:30	I.I.O6. Quality of lettuce (<i>Lactuca sativa</i> L.) grown in aquaponics and hydroponic systems. Edgar Alcarraz, Mónica Flores, María L. Tapia, Andrés Bustamante, Jurij Wacyk, Víctor Escalona	
	I.II. Pathology	Chairman Dr. Lluís Palou
9:00-9:15	I.II.O7. Potential effector proteins in <i>Penicillium expansum</i> and their role in pathogenicity on apple fruit. Michael Wisniewski, Samir Droby, Elena Levin, Ginat Rafael, Doreen Shwartz, Oleg Feygenberg, Ana R. Ballester, Luis Gonzalez-Candelas, John Norelli	
9:15-9:30	I.II.O8. The development of the pear fruit cuticle in relation to pre-penetration of <i>Alternaria alternata</i>, the causal agent of Alternaria rot. Yongcai Li, Ying Tang, Yang Bi	
9:30- 9:45	I.II.O9. Essential oil vapors in hypobaric environment reduced postharvest gray mold of table grapes. Gianfranco Romanazzi, Andrea Servili, Erica Feliziani	
9:45-10:00	I.II.O10. Aquaporin8 plays a critical role in virulence of <i>Botrytis cinerea</i> via regulating cellular development and ROS production. Shiping Tian, Boqiang Li, Bang An, Hua Li, Zhanquan Zhang, Guozheng Qin	
10:00-10:15	I.II.O11. Postharvest metagenomic analysis of heat-treated organic and conventionally-grown apples. Michael Wisniewski, Ahmed Abdelfattah, Leonardo Schena, Samir Droby	
10:15-10:30	I.II.O12. Tebuconazole for <i>Penicillium</i> control during storage of citrus fruit in commercial conditions. Ernesto Conesa, Vicent Cortell, Daniel J. Tormo	
10:30-11:00	Coffee Break	
11:00-12:00	First Poster Session	
12:00-13:15	SESSION II	<i>Advances in Metabolism and harvest criteria</i>
12:00-12:30	Keynote 2 Room A	Dr. Bart Nicolaï Postharvest fluxomics and metabolic pathway modelling
	II.I. Omics in Quality	Chairman Dr. Antonio Ferrante
12:30-12:45	II.I.O13. Protein changes in redox and antioxidant systems in strawberry fruit at different ripening stages: A targeted quantitative proteomic investigation employing multiple reaction monitoring. Jun Song, Lina Du, Leslie Campbell Palmer, Sherry Fillmore, Zhaoqi Zhang	
12:45-13:00	II.I.O14. High throughput phenotyping of quality traits during storage to improve blueberry breeding. Brian Farneti, Marcella Grisenti, Iulia Khomenko, Paula Poncetta, Paolo Loretti, Matteo Ajelli, Franco Biasioli, Lara Giongo	
13:00-13:15	II.I.O15. Transcriptome analysis during ripening of table grape berry cv. Thompson Seedless. Reinaldo Campos-Vargas, Ivan Balic, Paula Vizoso, Claudio Meneses	

	II.II. Preharvest and Harvesting Advances/2	Chairman Room B Dr. Victor Escalona
12:30-12:45	II.II.O16. Anthocyanins of asai fruits from <i>E. precatoria</i> of the northern Amazon during development and ripening. María S. Hernández, Danilo Revelo, Rafael Gutiérrez, J. Pablo Fernández-Trujillo	
12:45-13:00	II.II.O17. Changes in cell wall degrading enzyme activities at two separation sites of longkong (<i>Lansium domesticum</i>) fruit that behave differently during fruit coloration. Jingtair Siriphanich, Prapinporn Taesakul	
13:00-13:15	II.II.O18. Predicting the optimal harvest date for long-term storage of 'Spadona' pears with and without pre-storage exposure to 1-MCP. Dan Gamrasni, Ruth Ben- Arie, Martin Goldway	
13:15-15:00	Lunch	
15:00-17:00	SESSION III	<i>Advances in Postharvest Treatments</i>
15:00-15:30	Keynote 3 Room A	Dr. Daniel Valero Challenges and opportunities of postharvest research
	III.I. Modified Atmosphere Packaging/Coating	Chairman Room A Dr. Randy Beaudry
15:30-15:45	III.I.O19. MA-packages in simulated retail conditions improves sweet cherry fruit quality. Hanne Larsen, Jorunn Borve	
15:45-16:00	III.I.O20. Use of modified atmosphere packaging to extend storage life of blueberry fruits. Sebastián Rivera, Bruno Defilippi, Paula Robledo	
16:00-16:15	III.I.O21. Effect of perforation-mediated modified atmosphere packaging system on the quality of rucola. Martin Geyer, Guido Rux, Oluwafemi J. Caleb, Pramod Mahajan	
16:15-16:30	III.I.O22. Effect of <i>Ocimum basilicum</i> oil plus modified atmosphere packaging on quality of Embul banana. Krishanthi Abeywickrama, Harshani Siriwardana, Sagarika Kannangara, Bimali Jayawardena	
16:30-16:45	III.I.O23. Quality and shelf-life improvement of fresh strawberry using <i>Aloe vera</i> coating during storage in a tropical environment. Mohammad Affan, Putri Yuliastuti, Jumeri Jumeri, Nafis Khuriyati	
16:45-17:00	III.I.O24. Modified atmosphere packaging for keeping overall quality of dates. Monia Jemni, Juan Gabriel Ramírez, Mariano Otón, Francisco Artés-Hernández, Kalthoum Harbaoui, Ali Ferchichi, Francisco Artés	
	III.II. Innovative Techniques	Chairman Room B Dr. Domingos Almeida
15:30-15:45	III.II.O25. Quality attributes of 'Royal Rosa' plum as affected by postharvest treatment with oxalic acid. Salvador Castillo, Alejandra Martínez-Esplá, Daniel Valero, Pedro J. Zapata, Domingo Martínez-Romero, María Serrano	
15:45-16:00	III.II.O26. Combined treatments reduce chilling injury and maintain fruit quality in avocado fruit during cold quarantine. Noam Alkan, Velu Sivankalyani, Oleg Feygenberg, Dalia Maorer	
16:00-16:15	III.II.O27. Revisiting low pressure storage for perishable produce: Overcoming technical obstacles in a laboratory-scale chamber. Benjamin Pasku, Patrick Abeli, Randolph M. Beaudry	
16:15-16:30	III.II.O28. Overview of novel disinfestation treatments of horticultural crops in New Zealand. Allan Woolf, Asha Chagan Melissa Griffin, Natalie Page-Weir, Rod McDonald, Dave Rogers, Shane. Olsson, Simon Redpath, Ringo Jinquan Feng, Miriam Hall, Erin O'Donoghue, Jim Walker, Matthew Hall, Anne White, Lisa Jamieson	

16:30-16:45	III.II.O29. Use of a potassium permanganate ethylene absorbent to reduce postharvest rotting in pineapple. Mónica Sabater, Enric Suñe, Johanny Castro, Marco V. Sáenz	
16:45-17:00	III.II.O30. Commercial benefits achieved from the removal of ethylene in a long plum supply chain with new ethylene scrubbing technology. Malcolm Dodd, Christopher Bishop, Felix Lippert	
17:00-17:30	Coffee Break	
17:30-19:15	SESSION IV <i>Affordable Pre- and Postharvest Technologies in Developing Countries</i>	Room A Chairman Dr. Carmen Merodio
17:30-17:45	IV.I.O31. Effects of irrigation intervals on postharvest quality of daffodil (<i>Narcissus tazetta</i> L.) cut flowers. Asghar Ramezanian, Hassan Salehi, Kayhan Shirzadi	
17:45-18:00	IV.I.O32. Quality changes on holy basil after fumigation with a clove and cinnamon essential oil formula used to control insect pests. Jarongsak Pumnuan, Lampan Khurnpoon, Ammorn Insung	
18:00-18:15	IV.I.O33. Effect of storage temperature and modified atmosphere packaging on quality of fresh green 'Mazetto' almonds. Jameleddine Ben-Abda, Mouna Ben-Amara, Sabrine Abdelli.	
18:15-18:30	IV.I.O34. Controlling postharvest decay and maintaining antioxidant capacity of intact and extracted pomegranates arils by use of UV-C illumination. Mustafa Erkan, Isilay Yildirim, Gizem Sahin, Nurten Selcuk, Adem Dogan	
18:30-18:45	IV.I.O35. Efficiency of preharvest calcium-boron application in improving quality and reducing enzyme activity of pectin methylesterase and polygalacturonase in postharvest of mango cv. Mahachanok. Peerasak Chaiprasart, Ratthaphol Muengkaew, Kanda Whangchai	
18:45-19:15	General Discussion	
17:30-19:15	Challenges in postharvest research and development. Industry – Academia Discussion.	Room B Dr. Francisco Artés-Hernández
	Round Table	
19:15-19:45	ISHS Business Meeting	Room B
20:00-21:30	Guided visit to the Roman Theater	

Thursday	June 23	
8:45-9:00	Late Registration	
9:00-11:00	SESSION V <i>Postharvest physiology. Minimal Processing of Fruit and Vegetables</i>	
9:00-9:30	Keynote 4 Room A	Dr. Giancarlo Colelli Innovative approaches to improve quality and safety of fresh minimally-processed fruit and vegetables
	V.I. Physiology and Disorders/1 Room A	Chairman Dr. Jeffrey Brecht
9:30-9:45	V.I.O36. Ammonia accumulation in plant tissues: a potentially useful indicator of physiological stress. Maria L. Amodio, Giancarlo Colelli, Marita Cantwell	
9:45-10:00	V.I.O37. Carotenoids accumulation and chilling tolerance in grapefruits. Joanna Lado, Paul Cronje, M. Jesús Rodrigo, Lorenzo Zacarías	

10:00-10:15	V.I.O38. Methyl jasmonate can significantly inhibit the peel browning of Huangguan pear caused by rapid cooling. Qingguo Wang, Xuan Wang, Jingying Shi	
10:15-10:30	V.I.O39. Control of superficial scald and analysis of α-farnesene and conjugated trienols in Annurca apple. Marina Buccheri, Fabio Lovati, Milena Petriccione, Pietro Rega, Maurizio Grassi, Roberto Lo Scalzo	
10:30-10:45	V.I.O40. Cold-induced biochemical changes during postharvest storage of 'Granny Smith' apples: On the search of biochemical markers for superficial scald. Christian Larrigaudiere, Jordi Giné-Bordonaba, Lucia Plaza, Gemma Echeverria, Yolanda Soria	
10:45-11:00	V.I.O41. Evaluation of mango fruit response to low temperature storage by transcriptomic and metabolomic analysis. Noam Alkan, Velu Sivankalyani, Oleg Feygenberg, Itay Maoz, Noa Sela, Dalia Maorer	
	V.II. Minimal Processing Room B	Chairman Dr. Hidemi Izumi
9:30-9:45	V.II.O42. Bactericidal effect of four types of electrolyzed water on fresh-cut vegetables. Hidemi Izumi, Ayano Inoue	
9:45-10:00	V.II.O43. Effect of temperature and cut size on postharvest quality indexes and gene expression in fresh-cut melon. Antonio Ferrante, Giacomo Cocetta, Marina Cavaiuolo, Roberta Bulgari, Anna Spinardi	
10:00-10:15	V.II.O44. UV-C and hot water treatments for improved microbiology of whole and fresh-cut fruits. Allan Woolf, R. Wibisono, Shane Olsson, Graeme Summers, Cecilia Requejo-Jackman, Graham Fletcher	
10:15-10:30	V.II.O45.	
10:30-10:45	V.II.O46. Potentials of Thai tropical edible flowers as fresh cut salad mix. Sarana Sommano, Pasuthorn Ounamornmas, Ratchuporn Suksthan, Giancarlo Colelli, W. Kumpuan	
10:45-11:00	V.II.O47. Microwave treatments and storage conditions affect quality of an orange color smoothie. Mitra Arjmandi, Mariano Otón, Francisco Artés-Hernández, Perla A. Gómez, Encarna Aguayo, Francisco Artés	
11:00-11:30	Coffee Break	
11:30-12:15	Second Poster Session	
12:15-13:30	SESSION VI	<i>Physiological and Biochemical Issues</i>
12:15-12:45	Keynote 5 Room A	Dr. Jean-Claude Pech The epic of postharvest biology and technology: Lessons and challenges for the future
	VI.I. Physiology and Biochemistry Room A	Chairman Dr. María Serrano
12:45-13:00	VI.I.O48. Metabolic response of isolated lamb's lettuce (<i>Valerianella locusta</i>, L.) cells to sugar starvation. Victor Baiye Mfortaw Mbong, Maarten Hertog, Annemie Geeraerd, Bart Nicolai	
13:00-13:15	VI.I.O49. Mapping the gradients of adenylate nucleotides and energy charge within Rocha pear fruit. Domingos Almeida, Adriano Saquet	
13:15-13:30	VI.I.O50. Physiological changes of 'Brigitta' and 'Duke' blueberries during fruit development and postharvest implications. Isabel Lara, Claudia Moggia, Carla González, Gustavo A. Lobos, Carolina Bravo, Jordi Graell	

	VI.II. Physiology and Disorders/2	Chairman Dr. Qingguo Wang
12:45-13:00	VI.II.O51. Postharvest enlargement of cucumber fruit associated with water movement and cell wall degradation. Takashi Nishizawa, Takako Okada, Yoshiko Suzuki, Yoshie Motomura, Toshiyuki Aikawa	Room B
13:00-13:15	VI.II.O52. Characterization and control of "Bottom Box Water Spot" a new citrus rind disorder in Spain. Benito Orihuel Iranzo, Inma Navarro Jorge Bretó, Martin Mottura	
13:15-13:30	VI.II.O53. Approaches to control chilling injury in cucumbers. Victor Rodov, Haya Friedman, Paakwesi Bordoh, Mitiku Mihiret Seoyum, Yakov Vinokur, Batya Horev, Anton Fennec	
13:30-15:00	Lunch Time	
15:00-17:00	SESSION VII	<i>Controlled Atmospheres and Non-Destructive Tools</i>
15:00-15:30	Keynote 6 Room A	Dr. Chris Watkins New technologies for storage of horticultural products. More than availability!
	VII.I. Controlled Atmospheres	Chairman Dr. Mustafa Erkan
15:30-15:45	VII.I.O54. Involvement of CBFs (C-repeat Binding Factors) in maintaining the quality of table grapes treated with high levels of CO₂ during storage at low temperature. Maite Sánchez-Ballesta, Irene Romero, María Vázquez-Hernández, María Escribano, Carmen Merodio	
15:45-16:00	VII.I.O55. Excellence in dynamic controlled atmosphere storage based on the respiratory quotient: leak correction. Niels Bessemans, Pieter Verboven, Bert Verlinden, Bart Nicolaï	
16:00-16:15	VII.I.O56. Variable controlled atmosphere retains fruit quality and extends marketability of new UK-grown red raspberry cultivars. María del Carmen Alamar, Leon A. Terry, Aikaterini Xynogaloum	
16:15-16:30	VII.I.O57. A metabolomics approach to compare apple cv 'Granny Smith' vs 'Red Delicious' responses to dynamic and static controlled atmosphere storage. Stefano Brizzolara, Stefan Stürz, Angelo Zanella, Pietro Tonutti	
16:30-16:45	VII.I.O58. Physiological and biochemical dynamics of sweet potato as affected by controlled atmosphere storage treatments. Sulaiman Sowe, Sandra Landahl, Roberta Tosetti, Leon Terry	
	VII.II. Non-Destructive Quality Evaluation	Chairman Dr. Belén Diezma
15:30-15:45	VII.II.O59. In-situ determination of external quality parameters in intact summer squash using Near-infrared Reflectance Spectroscopy. María-Teresa Sánchez, Irina Torres, Belén Gil, Dolores Pérez-Marín, Ana Garrido-Varo, María José de la Haba	
15:45-16:00	VII.II.O60. Discrete ex-situ and continuous in-situ real-time respiration rate measurements of fresh produce using a novel automated dynamic approach. Emma R. Collings, María del Carmen Alamar, Katherine Cools, José J. Ordaz-Ortiz, Leon A. Terry	
16:00-16:15	VII.II.O61. Time-resolved reflectance spectroscopy reveals different texture characteristics in 'Braeburn', 'Gala' and 'Kanzi®' apples. Maristella Vanoli, Maurizio Grassi, Marina Buccieri, Fabio Lovati, Nadja Sadar, Angelo Zanella, Alessandro Torricelli, Anna Rizzolo, Lorenzo Spinelli	

16:15-16:30	VII.II.O62. Nondestructive analysis to predict soluble solids in grapes through fluorescence spectral images. Bárbara Teruel, Rodolpho Tinini, Luis Marcassa, Danilo Figueiredo, João V. Santos		
16:30-16:45	VII.II.O63. Grading banana by VNIR hyperspectral imaging spectroscopy. Belén Diezma, Lourdes Lleó, Samantha Franco, Tea Presečki, Pilar Barreiro		
16:45-17:15	Coffee Break		
17:15-17:45	Third Poster Session		
17:45-19:30	SESSION VIII	<i>Packaging, Transport, Distribution and Postharvest treatments</i>	
17:45-18:15	Keynote7 Room A	Dr. Peter Toivonen Ethical and technical issues for transport, distribution and retail sale of fresh horticultural crops	
	VIII.I. Packaging, Transport and Distribution		Chairman Room A Dr. Bárbara Teruel
18:15-18:30	VIII. O64. Tracking quality changes through the supply chain for rocket salad using changes in the profiles of volatile organic compounds. Hilary Rogers, Natasha Spadafora, Laura Cammarisano, Simone Dimitrova, Carsten Müller, Marina Cavaiuolo, Antonio Ferrante, Ana Amaro, Manuela Pintado		
18:30-18:45	VIII.I.O65. A multi-parameter approach to vent hole design for cartons packed with internal packaging. Tarl Berry, Tobi S. Fadiji, Thijs Defraeye, Corné Coetzee, Umezuruike Linus Opara		
18:45-19:00	VIII.I.O66. Monitoring vibration forces in the course of banana transport from a packinghouse up to a central supply market. Renar J. Bender, Ivan Müller, Stefan da S. Bender		
19:00-19:15	VIII.I.O67. Wind tunnel airflow measurements on plastic apple storage bins. Holger Scaar, Ulrike Praeger, Marc Spuhler, Daniel A. Neuwald, Ingo Truppel, Manfred Linke, Klaus Gottschalk, Marcel König, Jens Wünsche, Martin Geyer		
19:15-19:30	VIII.I.O68. Effect of the transport vibration on the color reversion in blackberry fruit. Edmundo Mercado-Silva, Dulce Rivera, M. Estela Vázquez, Manuel Fabela, Georgina Pérez, Víctor Escalona		
	VIII.II. Postharvest Treatments		Chairman Room B Dr. Edmundo Mercado
18:15-18:30	VIII.II.O69. Use of bud sports to understand the complexity of fruit ripening behaviors. Macarena Farcuh, Prasenjit Saha, Eduardo Blumwald		
18:30-18:45	VIII.II.O70. Effect of light wavelength and TiO₂ on photocatalytic removal of ethylene under low oxygen and high humidity storage conditions. Namrata Pathak, Guido Rux, Martin Geyer, Werner B. Herppich, Cornelia Rauh, Pramod Mahajan		
18:45-19:00	VIII.II.O71. Postharvest treatments to improve quality and safety of locally-grown vegetables stored at non-optimum temperatures. Helena P. Chiebao, Jacob R. Jenott, Daniel A. Unruh, Sara E. Gragg, Cary L. Rivard, Eleni Pliakoni		
19:00-19:15	VIII.II.O72. The use of ozone to improve storability of chilli peppers. Marcin Glowacz, Deborah Rees		
19:15-19:30	VIII.II.O73. Elicitor BTH promoted wound healing on potato tubers. Yang Bi, Yi Wang, Yongcai Li, Changjian Li, Hong Jiang		
20:30	Buses at the Symposium venue to the Gala dinner		
21:15-23:00	Gala Dinner		

June	Friday 24	
8:45-9:00	Late Registration	
9:00-10:45	SESSION IX	<i>Nutritional and Health Promoting Compounds</i>
9:00-9:30	Keynote 8 Room A	Dr. Luis Cisneros Elucidating the wound signal mechanism in fresh-cut produce: Scientific implications and opportunities for practical applications and novel technologies
	IX.I. Nutritional Compounds and Health Issues Room A	Chairman Dr. M. Soledad Hernández
9:30-9:45	IX.I.O74. Influence of ripening stage on phytochemicals and antioxidant activity of prickly pear <i>O. megacantha</i> var. Liria. D.M. Rivera Pastrana, Estephany Ríos-Alegria, Edmundo Mercado-Silva, Candelario Mondragón-Jacobo, M. Estela Vázquez-Barrios	
9:45-10:00	IX.I.O75. The interaction between cultivation and postharvest led lighting treatments on ascorbic acid content in strawberries. P. Leo F. M. Marcelis, Rob Schouten, Olivier Francescangeli, Nikolaos Ntagkas, Celine Nicole, Wouter Verkerke, Maike Hanenberg, Julian Verdonk	
10:00-10:15	IX.I.O76. Chemical characterization, bioactive compounds, centesimal composition and mineral contents in abiurana, a native fruit from the Brazilian Atlantic Forest. Aline Gomes da Silva, Ana C. Miguel, Angelo P. Jacomino	
10:15-10:30	IX.I.O77. Anthocyanins, total antioxidants and phenolics correlated to polyphenoloxidase, phenylalanine ammonia lyase and peroxidase activity in minimally processed pomegranate arils exposed to abiotic stresses. Mahshad Maghoumi, Francisco Artés-Hernández, Francisco Artés, Younes Mostofi, Zabihollah Zamani, Perla A. Gómez	
10:00-10:45	IX.I.O78. Processing of moringa (<i>Moringa oleifera</i> Lam) leaves for nutrition and health in developing countries. Navin Chandra, Priti Pant. Kanchan Nainwal	
	IX.II. Modelling Room B	Chairman Dr. Allan Woolf
9:30-9:50	IX.II.O79. Techniques to assess biological variation in destructive data. Rob Schouten, L.M.M. Tijskens, Geurt Jongbloed, Pawel Konapacki	
9:50-10:05	IX.II.O80. Optimizing air flow distribution in maritime refrigerated containers. Leo Lukasse, Marcel Staal	
10:05-10:20	IX.II.O81. Understanding the regulation of texture degradation during apple softening. A kinetic modelling approach? Bert Verlinden, Sunny George Gwanpua, Maarten L.A.T.M. Hertog, Bart Nicolaï	
10:20-10:35	IX.II.O82. Respiratory parameters of Huitlacoche (<i>Ustilagomaydis</i>) under modified atmosphere conditions. Salvador Valle-Guadarrama, Teodoro Espinosa-Solares, Irineo L. López-Cruz, Rafael Sánchez-Flores	
10:35-10:45	IX.II.O83. Apples from Monalisa: Biological variation of firmness behaviour in storage and shelf life. Rob Schouten, L.M.M. Tijskens, A. Zanella, N. Sadar.	
10:45-11:15	Coffee Break	
11:15-11:45	Fourth Poster Session	

11:45-13:00	SESSION X	<i>Postharvest Strategies and Education. Consumers.</i>
11:45-12:15	Keynote 9 Room A	Dr. Ian Ferguson Consumer demands and postharvest innovation: the new generation
	X.I. Consumer Preferences Room A	Chairman Dr. Leon Terry
12:15-12:30	X.I.O84. Linking cell structure and composition to perception of taste in kiwifruit. Anne White, Ian Hallett, Denise Hunter, Ken Marsh, Chris Clark, Jason Johnston, Roger Harker	
12:30-12:45	X.I.O85. More ripe, higher the quality: is it true also for 'AbbéFétel' pear fruit? Brian Farneti, Iulia Khomenko, Nicola Busatto, Alice Tadiello, Guglielmo Costa, Francesco Spinelli, Franco Biasioli, Fabrizio Costa	
12:45-13:00	X.I.O86. Impact of low temperature storage on sensory quality and metabolite content of six tomato cultivars. Raquel Rosales, YuryTikunov, Maika Hanenberg, Wouter Verberke, Arnaud Bovy	
	X.II. OMICs and Flavour Room B	Chairman Dr. Jun Song
12:15-12:30	X.II.O87. Pre-and post-harvest treatments and their effect on table grapes flavor. Amnon Lichten, Itay Maoz, Tatiana Kaplunov, Efraim Lewinsohn	
12:30-12:45	X.II.O88. Is the physiological maturity at harvest influencing nectarine flavor after cold storage? Alessandro Ceccarelli, Brian Farneti, Nicola Busatto, Fabrizio Costa, Franco Biasioli, Guglielmo Costa	
12:45-13:00	X.II.O89. Comparative analysis of fruit flavour and proteomic patterns of <i>Fragaria ananassa</i> in response to superatmospheric oxygen, low-oxygen and passive modified atmospheres. Zisheng Luo, Fangfang Zeng, Li Li, Dongdong Li, Hongyan Lu	
13:00-13:30	Keynote 10 Room A	Dr. Umezuruik L. Opara International cooperation in education, research and technology transference
13:30-14:00	Closing Ceremony and Awards	Room A
14:00-15:00	Lunch Time	
15:00-19:30	Technical Visits	