



VIII International Postharvest Symposium
 21-24 June 2016. Cartagena. Spain
<http://www.postharvest2016.org>

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Universidad Politécnica de Cartagena

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Puerto de Cartagena
 Asesores de Comercio y Tecnología
 Asesores de Comercio y Tecnología

f SéNeCa^(*)

E-POSTERS

SESSION 1, Wednesday 22nd, 11:00-12:00

1.1. PREHARVEST

I.I.S1.1.P1. Rootstock effects on cold storage behavior of 'Maltaise' oranges. Jameleddine Ben Abda, Maha Maaoui, Rihab Mahroug

I.I.S1.1.P2. Increased anthocyanin and flavonoids in mango fruit peel are associated with cold and pathogen resistance. Noam Alkan, Velu Sivankalyani, Sonia Diskin, Oleg Feygenberg

I.I.S1.1.P3. Sweet potato quality as affected by doses and installment of nitrogen fertilization. Juan D. Solano Mendoza, Carla Correa, Aline Gouveia, Regina Evangelista, Antonio Cardoso, Lin Chau Ming

I.I.S1.1.P4. The use of biostimulants can mitigate the effect of high temperature on productivity and quality of tomato. Virginia Hernández, Pilar Hellín, José Fenoll, Juana Cava, Inmaculada Garrido, María Molina, Pilar Flores

I.I.S1.1.P5. Pre-harvest effects on postharvest quality of spring-planted, day-neutral strawberries in high tunnels. Kelly Gude, Cary L. Rivard, Helena Pontes Chiebao, Marianne Swaney-Stueve, Eleni Pliakoni

I.I.S1.1.P6. Impact of plant biostimulants on the production of glucosinolates in broccoli. Pilar Flores, Esther Novo-Uzal, M. Ángeles Pedreño, Juana Cava, Inmaculada Garrido, M. Virtudes Molina, José Fenoll, Pilar Hellín

I.I.S1.1.P7. Effect of preharvest aloe (*Aloe vera* L.) spray on physiological and quality attributes of strawberries stored at 1°C. Mina Kafkaletou, Georgia Ouzounidou, Eleni Tsantili

I.I.S1.1.P8. Pre-harvest treatments of apple trees with 1-MCP and AVG I: Effects on fruit maturation on the tree. Luiz Argenta, Andreia Sclaro, Cassandro Amarante

I.I.S1.1.P9. Effects of preharvest salicylate treatments on quality and antioxidant compounds of plums. María Serrano, Alejandra Martínez-Esplá, María J. Giménez, Daniel Valero, Pedro J. Zapata, Fabián Guillén, Salvador Castillo

I.I.S1.1.P10. Pre-harvest treatment of apple trees with 1-MCP and AVG II: effects on fruit quality after storage. Luiz Argenta, Andreia Scolaro, Cassandro Amarante, Marcelo Vieira, Simone Werner

I.I.S1.1.P11. Fruit quality survey techniques to optimize crop management in citrus orchards. Ana Margarida Cavaco, M. Dulce Antunes, Rui Guerra, Marcia Rosendo, Rosa Pires, Thomas Panagopoulos

I.I.S1.1.P12. Effects of harvest maturity stage and season on fruit quality of papaya cultivated in South-East Spain greenhouses. Virginia Pinillos, Ana López, Irene Salinas, Juan J. Hueso, Julián Cuevas

I.I.S1.1.13. Effect of the production system on biochemical and quality characterization of 'Flor de Invierno' pear. Inmaculada Recasens, W. Samuel Huanca, Gemma Echeverría, Ferrán Gatus, Yolanda Soria

I.I.S1.1.P14. Effects of phosphites on ripening in kiwifruit 'Hayward'. Alejandra Yommi, Cecilia Baeza, Victoria Quillehauquy, Gabriela Fasciglione, Mabel Casanovas, María Paula Borrajo, Adriana Andreu, Perla A. Gómez

I.I.S1.1.P15. Effect of climatic changes on shelf life and quality of 'Keitt' mango (*Mangifera indica* L.) fruit. Mostafa Sultan.

I.I.S1.1.P16. Growth and histological development of the rambutan fruit (*Nephelium lappaceum* Linn.). M. de Lourdes Arévalo Galarza, Juan F. Caballero-Pérez, Guadalupe Valdovinos-Ponce, Carlos H. Avendaño-Arrazate, Jorge Cadena-Iñiguez

I.I.S1.1.P17. Ozone applied to the nutrient solution and its impact on red chard baby leaves yield. Alejandra Machuca, Ana C. Silveira, Adrián Odio, María L. Tapia, Víctor H. Escalona

1.2. PATHOLOGY

I.II.S1.2.P1. Hot water treatments to control black rot caused by *Alternaria* sp. in yellow pitahaya. Rosa Vilaplana Ventura, Daisy Paéz, Wilson Vásquez, William Viera, Silvia Valencia-Chamorro

I.II.S1.2.P2. Silicon effects on postharvest apple rots in Brazil. Rosa Sanhueza, Vinicius R. Vargas, Jean Pereira, Guilherme H. Longhi, Natália Tochetto

I.II.S1.2.P3. Identification of pathogenicity factors in *Penicillium digitatum* by random transformation with T-DNA. Cristina Selma-Lázaro, Lourdes Carmona-López, Neus Teixidó, Beatriz de la Fuente, Inmaculada Viñas, Josep Usall, Ana Rosa Ballester, Luis González-Candelas

I.II.S1.2.P4. The role of ethylene and phenolic compounds in the LED blue light-induced resistance against *Penicillium digitatum* in citrus fruit. Ana-Rosa Ballester, M. Teresa Lafuente

- I.II.S1.2.P5. Elicitors of disease resistance to control blue mold in 'Fuji' apples. Cristiano Steffens, Cassandro Amarante, João Silveira, Marcos Hendges, Angélica Heinzen
- I.II.S1.2.P6. Assessment of optimal postharvest treatment conditions to control green mold of oranges with sodium benzoate. Lluís Palou, Pedro A. Moscoso-Ramírez, Clara Montesinos-Herrero
- I.II.S1.2.P7. Inhibitory of citric acid effects against *Trichothecium roseum* are mediated by ROS. Yan Zhu, Yang Bi, Lu Yan
- I.II.S1.2.P8. Potential of a new strain of *Bacillus amyloliquefaciens* BUZ-14 to control *Monilinia fructicola* and *M. laxa* in peaches: preliminary studies. Rosa Oria, Héctor Calvo, Domingo Blanco, M. Eugenia Venturini
- I.II.S1.2.P9. Innovative and sustainable postharvest treatments to control physiological disorders and decay in lemon fruit during long transport and commercialization. Ginés B. Martínez-Hernández, Perla A. Gómez, Benito Orihuel-Iranzo, Jorge Bretó, Francisco Artés-Hernández, Francisco Artés
- I.II.S1.2.P10. Effect of polysaccharide-based edible coatings amended with sodium benzoate on the control of postharvest black spot of organic cherry tomatoes caused by *Alternaria alternate*. Pattrathip Rodsamran, Rungsinee Sothornvit, Lluís Palou, María B. Pérez-Gago
- I.II.S1.2.P11. New alternatives for postharvest control of rots in citrus fruit. Valentín Turegano Meneses, Laura Vila Bondía
- I.II.S1.2.P12. Inhibition of disease caused by *Monilinia fructicola* in peach fruit by hydrogen sulfide and hypotaurine. Jingying Shi, Chang Zhang, Guangjin Li, Lei Chen, Qingguo Wang
- I.II.S1.2.P13. Use of thermosonication for inactivation of *E. coli* O157:H7 in fruit juices and fruit juice/reconstituted skim milk beverages. Marta Sánchez-Rubio, Mohamed E.A. Alnakip, Mohamed Abouelnaga, Amaury Taboada-Rodríguez, Fulgencio Marín-Iniesta

1.3. MAP AND COATINGS

- III.I.S1.3.P1. Coatings based on chitosan and carnauba wax for postharvest use on 'Rocha' pears. Renar Joao Bender, Fernanda Varela Nascimento, Gustavo Klamer de Almeida, Sandra Nunes da Silva
- III.I.S1.3.P2. Modified atmosphere improves avocado fruit quality during long term storage. Sebastián Rivera, Bruno Defilippi, Paula Robledo
- III.I.S1.3.P3. Influence of solid lipid nanoparticles/xanthan gum coatings on the compositional and enzymatic changes in guava (*Psidium guajava* L.) during ripening. Claudia García, Moisés Galindo, Humberto Hernández, David Quintanar, M. de la Luz Zambrano
- III.I.S1.3.P4. Effect of chitosan and oxidized starch acetate coating on quality, physiological attributes and decay control of pear fruit during storage. Yang Bi

III.I.S1.3.P5. Effect of materials and LLDPE plastic bag on shelf life of *Melientha suavis* Pierre shoot. Prakaidao Yingsanga, Saknarin Suwannajan, Pornprapa Makhoon

III.I.S1.3.P6. Solid lipid nanoparticles based edible coating for ‘Saladette’ tomato preservation. Ricardo González, Verónica Miranda, Moisés Galindo, Alicia del Real, M. de la Luz Zambrano

III.I.S1.3.P7. Development of coatings based on whey protein concentrate and fennel essential oil for anthracnose controlling and improve papaya postharvest quality. Andreia Hansen Oster, Ebenezer Silva, Lucicléia Torres, Jorgiane Lima, Antonio Araújo

III.I.S1.3.P8. Improving postharvest quality retention of oranges during ambient storage using hot water immersion and fruit coating: The role of internal modified atmosphere. Ferdous Chowdhury, Jeffrey K. Brecht, Mark A. Ritenour, Charles A. Sims

III.I.S1.3.P9. Coatings from different sources for postharvest conservation of mango fruit cv. ‘Palmer’. Adriane Luciana Silva, Maria A. Coelho de Lima, João Borges Laurindo, Jéssica Santos Mendes da Silva

III.I.S1.3.P10. Rosehip oil added to Aloe vera gel as post-harvest coating of plums *Prunus salicina* cv. ‘Songría’ and *Prunus domestica* cv. ‘President’. Domingo Martínez-Romero, Diego Paladines, Juan Miguel Valverde, Fabián Guillén, Pedro J. Zapata, Daniel Valero

III.I.S1.3.P11. Application of microperforated films to maintain quality traits of sweet cherries from cv. ‘13S-3-13’. Ezulmara De Paiva, Alejandro Hernández, Santiago Ruiz-Moyano, M. del Carmen Villalobos, Manuel Joaquín Serradilla Sánchez, M. de Guía Córdoba

III.I.S1.3.P12. Effects of gellan-based coating application on litchi fruit quality traits. Giorgia Liguori, Carla Gentile, Giuseppe Sortino, Giuseppe Gianguzzi, Filippo Saletta, Giulio Piva, Paolo Inglese, Vittorio Farina

III.I.S1.3.P13. Maintaining the quality of white asparagus by using packaging. Aurore Méry

III.I.S1.3.P14. Enhancing the post-harvest qualities of mango fruit by lactoperoxidase system incorporated in chitosan coating. Cissé Mohamed, Jessica Polidori, Didier Montet, Gérard Loiseau, M. Noëlle Ducam-Collin

1.4. OMICS AND MOLECULAR TECHNIQUES

II.I.S1.4.P1. Involvement of ubiquitin E2 enzymes in fruit ripening revealed by proteomic analysis. Guozheng Qin, Shiping Tian, Yuying Wang, Weihao Wang, Jianghua Cai, Yanrui Zhang

II.I.S1.4.P2. Breeding for postharvest cold tolerance in zucchini squash. Zoraida Megías, Susana Manzano, Cecilia Martínez, Alicia García, M. del Mar Reboloso, Dolores Garrido, Juan Luis Valenzuela, Manuel Jamilena

X.II.S1.4.P3. Aroma volatiles during non-climacteric melon ripening and potential association with flesh firmness. Antonio Escudero, Mohamed Zarid, María C. Bueso, J. Pablo Fernández-Trujillo

II.I.S1.4.P4. Use of mutant platforms to discover novel postharvest fruit-quality traits in *Cucurbita pepo*. A. García, S. Manzano, Z. Megías, E. Aguado, C. Martínez, D. Garrido, M.M. Reboloso, J.L. Valenzuela, M. Jamilena

II.I.S1.4.P5. Proteomic analysis of differentially expressed proteins involved in ethylene-induced chilling tolerance in harvested banana fruit. Ze Yun, Taotao Li, Hong Zhu, Xuewu Duan, Hongxia Qu, Yueming Jiang

II.I.S1.4.P6. Micro RNAs and targets in senescent litchi fruit during ambient storage and shelf life after cold storage. Hong Zhu, Furong Yao, Chun Yi, Hongxia Qu, Yueming Jiang

SESSION 2. Thursday 23rd, 11:30-12:15

2.1. PHYSIOLOGY AND DISORDERS

VI.I.S2.1.P1. The effects of hydrogen peroxide treatment on induction of ascorbate peroxidase and ascorbate metabolism in discs of sweet pepper fruit. Yoshihiro Imahori, Haruna Endo

VI.I.S2.1.P2. Effects of ethanol and acetaldehyde on gene expression of alcohol dehydrogenase and pyruvate decarboxylase in harvested tomato fruit. Yasuo Suzuki, Kenichiro Higashi

VI.I.S2.1.P3. UV-B accumulated anthocyanins in the peel tissue of 'Duke' blueberries by inducing the expressions of genes involved in anthocyanin biosynthesis after harvest. Chau T. Nguyen, Sooyeon Lim, Jeongyun Kim, Eun Jin Lee

VI.I.S2.1.P4. Changes in lipid composition and ATPase activity of zucchini fruit plasma membrane during cold storage. Francisco Palma, Fátima Carvajal, Amada Pulido, Manuel Jamilena, Dolores Garrido

VI.I.S2.1.P5. Changes in cuticle biosynthesis during postharvest cold storage of zucchini fruit (*Cucurbita pepo* L.). Fátima Carvajal, Francisco Palma, Amada Pulido, Manuel Jamilena, Dolores Garrido

VI.I.S2.1.P6. Influencing tomato fruit ripening by targeted arginine transferase (ATE) RNA silencing. Dubravka Cukrov, Francesco Licausi, Pietro Tonutti

VI.I.S2.1.P7. Invertase and oxidative enzymes activities during cold storage of carrots. Daniela Vieira Chaves, Juliane Karsten, Fernando L. Finger, Fabio L. Zanatta

VI.I.S2.1.P8. Relationship between α - and β -galactosidase activities and firmness loss during the development of *Vitis vinifera* grape berries. Schereheza de Fuentes, José Fenoll, Juana Cava, Inmaculada Garrido, María V. Molina, M. Pilar Flores, M. Pilar Hellín García

VI.I.S2.1.P9. Tissue-differential expression of thaumatin-like proteins in table grapes cv. 'Autumn Royal' in response to different postharvest conditions. María Vázquez-Hernández, Roberto Morellón, Carmen Merodio, Maite Sánchez-Ballesta, María Escribano

VI.I.S2.1.P10. Sucrolytic activity during cold and room temperature storage of carrots. Daniela Vieira Chaves, Juliane Karsten, Joleita Peruzzo Ferrareze, Fernando L. Finger

- VI.I.S2.1.P11. Fermentation and ethyl esters in strawberries treated with high CO₂ concentrations during low temperature storage. Carmen Merodio, María Blanch, M. Teresa Sánchez-Ballesta, María I. Escribano
- VI.I.S2.1.P12. Possible role of plasmatic membrane into softening process of 'Manila' mango (*Mangifera indica* L.). Dalia Vázquez-Celestino, Ana Paulina Barba de la Rosa, Luis E. González de la Vara, M. Estela Vázquez Barrios, Edmundo Mercado-Silva
- VI.I.S2.1.P13. Postharvest physiology of three red sand pear cultivars. Pingping Sun, XiaohuiJia, Zhihua Wang, Yanmin Du, Wang Wenhui
- VI.I.S2.1.P14. Over-expression of RiGH3.1 transcript during development and ripening transition of raspberry fruit (*Rubus idaeus* cv. 'Heritage'). Mónica Valdenegro, Maricarmen Bernales, Aníbal Ayala, Matías Gutiérrez, Juan P. Martínez, Bruno Defilippi, Mauricio González, Sam Cherian, Lida Fuentes
- VI.I.S2.1.P15. Biochemical and functional changes in pomegranate fruit (*Punica granatum*) during cold storage. M. Schele, C. Huidobro, L. Monsalve, R. Simpson, L. Fuentes, M. Valdenegro
- VI.II.S2.1.P16. Development of chilling injury in potted sweet basil cv. 'Genovese'. Fernando L. Finger, Débora M. Vitor
- VI.II.S2.1.P17. Relationship between α -farnesene, conjugated-trienes and superficial scald development on 'Granny Smith' stored apples. Yolanda Soria, Inmaculada Recasens
- VI.II.S2.1.P18. Heat treatment prevents the appearance of chilling symptoms in okra. Tania Pires da Silva, Fernanda C. Silva, Ludmilade M. Neves, Fernando L. Finger
- VI.II.S2.1.P19. Rachis browning in table grapes: dehydration and more. Amnon Lichter, Li Li, Tatiana Kaplanov, Victor Alchanatis, Askin Bahar
- VI.II.S2.1.P20. Mechanisms regulating fruit calcium content and susceptibility to bitter pit in cultivars of apple. Cassandro Amarante, Aquidauana Miqueloto, Cristiano Steffens, Roger Strauss, Tiago Miqueloto, Aline dos Santos, Angélica Heinzen, Fernando L. Finger, Edgard Picoli, Genaina de Souza
- VI.II.S2.1.P21. Ethanol treatment control internal breakdown and delay fruit ripening of cold stored 'Laetitia' plums. Cristiano Steffens, Cassandro Amarante, Bruno Espindola, Angélica Heinzen
- VI.II.S2.1.P22. Effect of UV-C irradiation on sprouting of potatoes in storage. Penta Pristijono, Christopher J. Scarlett, Michael C. Bowyer, Quan V. Vuong, Costas E. Stathopoulos, John B. Golding
- VI.II.S2.1.P23. Effect of cold storage time on chilling injury in two zucchini cultivars. Zoraida Megías, Cecilia Martínez, Susana Manzano, M. Mar Reboloso, Juan L. Valenzuela, Manuel Jamilena
- VI.II.S2.1.P24. Optimization of fruit tissue sampling method to quantify calcium, magnesium and potassium contents to predict bitter pit in apples. Cassandro Amarante, Aquidauana Miqueloto, Cristiano Steffens, Luiz C. Argenta, Taís Maciel, Vinicio Denardi, Sergio Freitas

VI.II.S2.1.P25. The ethylene is associated with internal breakdown in 'Laetitia' and 'Angeleno' plums. Bruno Pansera-Espíndola, Cristiano Steffens, Cassandro Amarante, Marcos Vinicius Hendges, Crizane Hackbarth

VI.II.S2.1.P26. Efficacy of Portuguese propolis in controlling superficial scald of 'Rocha' pear. Claudia Sánchez, Mário Santos, Paula Vasilenko, Ana Sofia Cruz, Marcella Loebler, Paula Duarte, Margarida Gonçalves

VI.II.S2.1.P27. Scald-like disorders in Abate pears are related to 6-methyl-5-hepten-2-one accumulation but also to lower total volatile compounds. Christian Larrigaudiere, Jordi Giné-Bordonaba, Gemma Echeverría, Dolors Ubach, M. Luisa López

VI.II.S2.1.P28. Calcium chloride combined with antioxidants increases keeping quality and limits postharvest decay of loquat fruit. Yehia S. Mostafa, Mostafa Z. Sultan

VI.I.S2.1.P29. Enzymatic-induced changes in cell wall mechanics and nanostructure of the sodium carbonate pectin fraction in pear. Arkadiusz Kozioł, Justyna Cybulska, Piotr M. Pieczywek, Artur Zdunek

2.2. MINIMAL PROCESSING/1

V.II.S2.2.P1. UV-C illumination maintains postharvest quality of fresh-cut broccoli florets under modified atmosphere packaging. Mustafa Erkan, Adem Dogan, Yasin Topcu

V.II.S2.2.P2. New technology for enhancement the food safety of minimally processed fruits and vegetables. Sonia Soto-Jover, María Ros-Chumillas, Antonio López-Gómez

V.II.S2.2.P3. Quality changes in fresh-cut mango cubes under different gas partial pressures of active MAPs. Giuseppe Sortino, Vittorio Farina, Carla Gentile, Giuseppe Gianguzzi, Filippo Saletta, Antonio D'Asaro, Paolo Inglese, Giorgia Liguori

V.II.S2.2.P5. Coatings of α -tocopherol nanocapsules/xanthan gum for fresh-cut apples: effect on firmness and its relation on pectinmetylerase activity. Claudia García, Moisés Galindo, Humberto Hernández, David Quintanar, M. de la Luz Zambrano

V.II.S2.2.P6. Effect of solid lipid nanoparticles coating on shelf life of fresh-cut guava packaged and refrigerated stored. Ricardo González, Maricela Pérez, Verónica Miranda, M. de la Luz Zambrano

V.II.S2.2.P7. Quality and nutritional properties of ready-to-eat blackberry from different cultivars and pedoclimatic conditions. Marina Buccheri, Patrizia De Vecchi, Virginia Ughini, Tommaso Eccher, Giuseppe Granelli, Roberto Lo Scalzo, Giovanna Cortellino

V.II.S2.2.P8. Effect of particle size based edible coating carboxymethylcellulose/starch; on the quality fresh-cut 'Ataulfo' mango (*Mangifera indica* L.). Edmundo Mercado-Silva, M. Estela Vázquez, Dulce Rivera, M. de la Luz Zambrano, Patricia Romero, Sofía Arvizu

V.II.S2.2.P9. Characterization and epiphytic microbial load changes of a fresh vegetables purple smoothie during shelf life. Gerardo González-Tejedor, Francisco Artés-Hernández, Pablo S. Fernández

2.3. AFFORDABLE TECHNOLOGIES AND INNOVATIVE TECHNIQUES

IV.I.S2.3.P1. Comparative study between two dates conservation methods of Ghars variety. Keltoum Benaissa.

IV.I.S2.3.P2. Research and development on postharvest management of the Royal Project flowers. Danai Boonyakiat, Pichaya Poonlarp, Chaipichit Chuamuangphan

IV.I.S2.3.P3. Improving postharvest handling of the Royal Project vegetables. Pichaya Poonlarp, Danai Boonyakiat, Chaipichit Chuamuangphan

IV.I.S2.3.P4. *Acrocomia aculeata* (macaúba): post-harvest and marketing. Rosana Rodrigues das Dores, Sarah Ferreira Guimarães, Fernando L. Finger

IV.I.S2.3.P6. Redesigning evaporatively cooled rooms to incorporate solar powered refrigeration in India. Sangeeta Chopra, Randolph M. Beaudry

III.II.S2.3.P7. Effect of blue light on ethylene biosynthesis, signalling and fruit ripening in postharvest peaches. Yang Zhenfeng

III.II.S2.3.P8. Apple fruit responses following exposure to nitric oxide during postharvest storage. Jim Mattheis, Dave Rudell

III.II.S2.3.P9. Novel exogenous calcium treatment strategies effectively mitigate physiological disorders in late season peach cultivars. Jesús Val, Sara del Río, Azahara Díaz

III.II.S2.3.P10. Design and optimization of fluidized bed photoreactor for ethylene reduction within cold storage room for fruits and vegetables using TiO_2 -based materials. Maria L. de Chiara, Luigina Spremulli, Antonio Licciulli, M. Luisa Amodio, Giancarlo Colelli

III.II.S2.3.P11. Can an optimized airflow save energy in apple storage? Dominikus Kitemann, Daniel Neuwald, Marc Spuhler, Rux Guido, Manfred Linke, Martin Geyer, Jens Wünsche

SESSION 3. Thursday 23rd, 17:15-17:45

3.1. CONTROLLED ATMOSPHERE AND 1-MCP

VII.I.S3.1.P1. Effect of low SO_2 postharvest treatment on quality parameters of Italia table grape during prolonged cold storage. Giuseppe Sortino, Giorgia Liguori, Alessio Allegra, Paolo Inglese

VII.I.S3.1.P2. Storage protocol modulates ripening behaviour and physiological disorders of 1-MCP treated 'Abate Fetel' pears. Anna Rizzolo, Maurizio Grassi, Maristella Vanoli

VII.I.S3.1.P3. Effect of destringency treatment on carotenoid compounds of persimmon fruit. Pedro Novillo, Cristina Besada, Almudena Bermejo, Pilar Navarro, Alejandra Salvador

VII.I.S3.1.P4. Oxygen deficiency in apple storage: time-dependent changes in ethanol concentration. Daniel A. Neuwald, Roy J. McCormick, Milena Reynaud

VII.I.S3.1.P5. Influence of 1-MCP treatment and controlled atmosphere on the quality of hardy kiwifruit. Séverine G. Rebeaud, Véronique Varone, Pierre-Yves Cotter, André Ançay, Danilo Christen

VII.I.S3.1.P6. Postharvest quality changes during elevated CO₂ storage of spearmint (*Mentha spiccata*). Sarana Sommano, M. Luisa Amodio, M. Lucia de Chiara, Leonarda Mastrandrea, Francesca Piazzolla, Giancarlo Colelli

VII.I.S3.1.P6. Effects of 1-methylcyclopropene on postharvest ripening and senescence of cowpea (*Vigna unguiculata* (L.) Walp.). Jiaoke Zeng, Z.T. Jiang, Y.Z. Shao, W. Li

3.2. NONDESTRUCTIVE TECHNIQUES/1

VII.II.S3.2.P1. In-situ prediction of internal quality parameters in intact bell peppers using NIRS technology. M. José De la Haba, Irina Torres, Ana Chamorro, Ana Garrido-Varo, Dolores Pérez-Marín, M. Teresa Sánchez

VII.II.S3.2.P2. Evaluating oxidation in macadamia nuts by means of near infrared spectroscopy (NIR). Gustavo Teixeira, Giovanna Canneddu, Luis C. Cunha Junior

VII.II.S3.2.P3. Non destructive technique to evaluate fruit quality. Guglielmo Costa, Alessandro Ceccarelli, Giovanni Fiori, Sebastien Besse, Jacques Rossier

VII.II.S3.2.P4. Optical, acoustic and textural attributes in cv. 'Braeburn' and cv. 'Nicoter'(Kanzi®) apple resulting from different pre- and postharvest conditions. Angelo Zanella, Nadja Sadar

VII.II.S3.2.P5. Image analysis of starch pattern as an objective procedure for apple maturity assesment. Angelo Zanella, Nadja Sadar, Ines Ebner, Oswald Rossi

VII.II.S3.2.P6. Firmness prediction in 'Rojo Brillante' persimmon using hyperspectral imaging technology. Sandra Munera, Cristina Besada, José Blasco, Sergio Cubero, Alejandra Salvador, Pau Talens, Nuria Aleixos

3.3. POSTHARVEST TREATMENTS

VIII.II.S3.3.P1. Action of ethylene and 1-MCP on the quality of nasturtium flowers. Renata L. Ursine, Tania Pires da Silva, Fernanda Ferreira de Araujo, Fernando L. Finger

VIII.II.S3.3.P2. Impact of changing wax type during storage on mandarin flavor and quality attributes. David Obenland, Mary Lu Arpaia

VIII.II.S3.3.P3. Yellow bell pepper fruit response to postharvest UV-C radiation. Juan L. Valenzuela, Liliana Alfaro-Sifuentes, Catherine Jacquin, M. Antonia Elorrieta

VIII.II.S3.3.P4. Effect of cold storage and ethylene modulation on 'Hass' avocado flavor. Bruno Defilippi, Alejandra Morgan, Oriane Gudenschwager, M. Sofía Zamudio, Mauricio González-Agüero, Miguel García Rojas, Reinaldo Campos-Vargas

VIII.II.S3.3.P5. Effect of postharvest vacuum infiltration of calcium on firmness of guava fruit. Edmundo Mercado-Silva, Jimena Alba, Dulce Rivera, M. Estela Vázquez

VIII.II.S3.3.P6. Effect of lyophilization in the black truffle aroma: a comparison with other long-term preservation treatments (freezing and sterilization). Pedro Marco, Eva Campo, Rosa Oria, Domingo Blanco, M. Eugenia Venturini

- VIII.II.S3.3.P7. Effect of postharvest treatments with salicylates on 'Royal Rosa' plum quality attributes. Salvador Castillo, M. José Giménez, Daniel Valero, Juan M. Valverde, Fabián Guillen, María Serrano
- VIII.II.S3.3.P8. Effect of convective drying pretreatment on the physicochemical properties of black Garlic. Dulce M. Rivera Pastrana, Karina L. Ríos-Ríos, Marcela Gaytán-Martínez, Edmundo Mercado-Silva, Sonia Moreno-Mayorga, Estela Vázquez-Barrios
- VIII.II.S3.3.P9. Chilling and freezing storage for keeping overall quality of date. Monia Jemni, J. Gabriel Ramírez, Mariano Otón, Francisco Artés-Hernández, Kalthoum Harbaoui, Ali Ferchichi, Francisco Artés
- VIII.II.S3.3.P10. Evaluation of quality parameters of 'Italia' table grapes kept on the vine compared to storage in cold room. Giancarlo Colelli, Francesca Piazzolla, M. Luisa Amodio
- VIII.II.S3.3.P11. Postharvest application of 1-methylcyclopropene (1-MCP) for preservation of 'Albacor' figs. M. del Carmen Villalobos, Manuel J. Serradilla Sánchez, Santiago Ruiz-Moyano, Alberto Martín, Margarita López-Corrales, M. de Guía Córdoba
- VIII.II.S3.3.P12. Impact of UV-C pulsed light and modified atmosphere on quality properties of red table grapes during storage. Naouel Admane, Vincenzo Verrastro, Giovanni Di Renzi, Florence Charles
- VIII.II.S3.3.P13. The effect of different treatments of 1-methylcyclopropene (1-MCP) doses on the storage and vase life in the rose cultivar 'First Red'. Hatice Demircioglu, Omur Dundar, Okan Ozkaya.
- VIII.II.S3.3.P14. Physical treatment as alternative to chemical treatment to preserve the postharvest quality on 'Deglet Noor' palm. Ascensión Martínez-Sánchez, Rihab Ben-Amor, M. Dolores de Miguel-Gómez, Encarna Aguayo
- VIII.II.S3.3.P15. 'Tarocco' orange fruits influenced by different postharvest storage conditions. C. Pannitteri, A. Continella, L. Lo Cicero, P. Legua, S. D'Aquino, A. Palma, S. La Malfa
- VIII.II.S3.3.P16. Effects of thermal treatments on quality of 'Petrelli' figs during storage. Francesca Piazzolla, M. Luisa Amodio, Giancarlo Colelli
- VIII.II.S3.3.P17. Effects of UV-C on cassava fruit shelf-life and its post-harvest physiology mechanism. Yuanzhi. Shao, J.K. Zeng, W. Li

3.4. MINIMAL PROCESSING/2

- V.II.S3.4.P1. Effectiveness of green tea extract on the native microflora of ready-to-eat betroot: evaluation of different application methods. Lucila Martínez Melo, M. Verónica Fernández, Gabriel Finten, Rosa Juana Jagus, M. Victoria Agüero
- V.II.S3.4.P2. Effect of cutting stress on physiological and quality changes of strawberry fruits. Mulugheta T. Solomon, M. Luisa Amodio, M. Lucia V. de Chiara, Giancarlo Colelli
- V.II.S3.4.P3. Influence of packaging on storage life and quality of fresh broccoli florets. Feryal Varasteh

V.II.S3.4.P4. Effectiveness of citric acid to reduce pathogen surrogates in spinach leaves. Gabriel Finten, M. Verónica Fernández, M. Victoria Agüero, Rosa J. Jagus

V.II.S3.4.P5. Use of cysteine or putrescine as antibrowning agents on fresh-cut artichokes: a preliminary study. Pedro J. Zapata, Fabián Guillén, María Serrano, Alejandra Martínez-Esplá, Juan M. Valverde, Salvador Castillo, Daniel Valero

V.II.S3.4.P6. Influence of ripening temperature on quality attributes of fresh cherimoya purees. Ana B. Cabezas-Serrano, Mulugheta T. Solomon, Giancarlo Colelli, M. Carmen Galera-Quiles

V.II.S3.4.P7. Role of reactive oxygen species and ethylene as signaling molecules for the wound-induced biosynthesis of glucosinolates in broccoli (*Brassica oleracea* L. cv. 'Italica'). Daniel A. Jacobo-Velázquez, Ana M. Torres-Contreras, Mauricio González-Agüero, Luis Cisneros-Zevallos

V.II.S3.4.P8. Microbiological and qualitative aspects of minimally processed pomegranate seeds. A. Continella, C. Restuccia, S. Brighina, C. Pannitteri, A. Gentile, S. La Malfa

SESSION 4. Friday 24th, 11:15-11:45

4.1. NUTRITION

IX.I.S4.1.P1. Evaluation of antioxidant activity and phenolic content of mature *Syzygium jambos* fruit. Rosana Rodrigues das Dores, Fernando L. Finger, Viviane Flores Xavier, Sarah Ferreira Guimarães, Beatriz Gonçalves Brasileiro

IX.I.S4.1.P2. Chemical characteristics of three accessions of sweet potato cultivated by traditional growers of Vale do Ribeira, Sao Paulo State, Brazil. Juan D. Solano Mendoza, Regina M. Evangelista, Pablo Forlán Vargas, M. Marcia P. Sartori, Lin Chau Ming

IX.I.S4.1.P3. Postharvest storage influence on the content of phenolic compounds in basil. Rosana Rodrigues das Dores, Sarah Guimarães, Fernando L. Finger, Paulo Cecon

IX.I.S4.1.P4. Postharvest storage of two accessions of uvaia (*Eugenia pyriformis*) at room temperature. Aline Gomes da Silva, Izabela Couto Espindola, Ana C. Almeida Miguel, Poliana Spricigo, Angelo P. Jacomino

IX.I.S4.1.P5. Evolution of sugars and acids during the maturation of two mutations of 'Algerí' loquat. Rebeca Gil, Alejandra Salvador, Almudena Bermejo, Pilar Navarro, Cristina Besada

IX.I.S4.1.P6. Thinned fruits as a source of phenolic compounds. M. Eugenia Venturini, Esther Arias, Rosa Oria, Diego Redondo

IX.I.S4.1.P7. Rambutan peel as a source of food antioxidant extracts. M. Eugenia Venturini, David Gimeno, Katherine Franco, Diego Redondo, Rosa Oria

IX.I.S4.1.P8. Evaluation of traditional genotypes of pepper (*Capsicum annuum*) for vitamin C content. Elena Sánchez, Pilar Hellín, Adrián Rodríguez-Burruezo, José Fenoll, Josefa Gomáriz, Inmaculada Garrido, Virtudes Molina, Juana Cava, Pilar Flores

- IX.I.S4.1.P9. Impact of high temperature stress on ascorbic acid concentration in tomato. Virginia Hernández, Pilar Hellín, José Fenoll, Juana Cava, Inmaculada Garrido, María Molina, Pilar Flores
- IX.I.S4.1.P10. Fructans extraction and characterization from non-differentiated garlic (*Allium sativum* L.) and their potential prebiotic effect. Dulce M. Rivera Pastrana, Francisco Carrillo-Navarrete, Edmundo Mercado-Silva, Rosalía Reynoso-Camacho, Gerardo Nava-Morales, M. Estela Vázquez-Barrios, Eduardo Castaño-Tostado
- IX.I.S4.1.P11. Bioactive compounds and antioxidant activity on custard apple and atemoya fruits cultivated in sub-middle of São Francisco River Valley, Brazil. Patrício Batista, Maria A.Coelho de Lima, Ricardo Alves, Rafaela Vieira Façanha
- IX.I.S4.1.P12. Pungency and volatile compounds in some Spanish onion. Montserrat Collado Fernández, Inmaculada Penagos
- IX.I.S4.1.P13. Variation in the fatty acid profile of Hass avocados preserved under stress conditions. Ricardo Salcedo, Yolanda Quiñones, Luz Marina Melgarejo, M. Soledad Hernández, J. Pablo Fernández-Trujillo
- IX.I.S4.1.P14. Antioxidant capacity and total phenolic compounds changes in the Pero of Cehegín apple stored in air and controlled atmosphere. José G. Abril, Lizzete L. Rodríguez-Verástegui, Francisco Artes
- IX.I.S4.1.P15. Comparative study of bioactive components and hormonal metabolism of different Clementine mandarin varieties affected by galls. Almudena Bermejo, José L. Pardo, Belén Martínez-Alcántara, Mary-Rus Martínez-Cuenca, Domingo J. Iglesias
- IX.I.S4.1.P16. Determination of bioactive compounds in ten varieties onions from Aragon and Castilla y León. Montserrat Collado Fernández, Miriam López
- IX.I.S4.1.P17. Changes in fruit quality and health-related compounds of red guava in relation to harvest maturity and storage atmosphere. Christian Larrigaudiere, M. Ángeles Chiriboga, Jordi Giné-Bordonaba, Gemma Echeverria
- IX.I.S4.1.P18. Changes in organic acid and sugars at ripening and after storage of three local plums (*Prunus*). M. Concepción Martínez Madrid, M. Teresa Pretel, E. López, Paloma Sánchez-Bel, Isabel Egea, Manuel F. García-Legaz
- IX.I.S4.1.P19. Nutritional diversity of 15 traditional orange varieties (*Citrus sinensis* (L.) Osbeck) from Southeastern Spain. M. Ángeles Botella, Pilar Valdés, Ana Romojaro, M. Teresa Pretel
- IX.I.S4.1.P20. Wild edible plants (WEP) as antioxidant supplements for oils and juices. Ana Romojaro, María Serrano, M. Teresa Pretel
- IX.I.S4.1.P21. In vitro bioaccessibility for some nutrients in cooked pulp of sweet potatoes varieties during traditional storage. Fernanda I. Zaccari, Cristina Cabrera, Ali Saadoun
- IX.I.S4.1.P22. Influence of preharvest treatments with naturally-occurring compounds on yield, quality properties and phytochemical compounds in artichoke. Daniel Valero, Amadeo Gironés Vilaplana, Fabián Guillén, Alejandra Martínez-Esplá, M. Emma García Pastor, Domingo Martínez Romero, Pedro J Zapata

IX.I.S4.1.P23. Bioactive compounds and antioxidant properties of 4 *Hedychium* flowers for flavoured tea. Ratchuporn Suksathan, Ratchadawan Puangpradab, Nittaya Saratan, Daungsamorn Boonvun

IX.I.S4.1.P24. Effects of Huyou (*Citrus changshanensis*) fruit extract on glucose consumption in human HepG2 cells. Sheng Jia, Jiukai Zhang, Youyou Yan, Haoshu Wu, Chongde Sun, Kunsong Chen, Xian Li

4.2 MODELLING /TRANSPORT/POSTHARVEST CHAIN

VIII.I.S4.2.P1. Survey of the types of stowage used in refrigerated containers for the transport of export fresh fruits. Luis Luchsinger, Víctor Escalona, Juan Montenegro, Antonio Lizana

VIII.I.S4.2.P2. Competitive peruvian and chilean avocado export profile. Marco Schwartz, Yohany Maldonado, Luis Luchsinger, Antonio Lizana, Werther Kern

VIII.I.S4.2.P3. Effect of thermosonication and cinnamon leaf essential oil on total phenols and anthocyanins content of natural pomegranate juice using response surface methodology. Marta Sánchez-Rubio, Amaury Taboada-Rodríguez, Mohamed E.A. Alnakip, Mohamed Abouelnaga, Fulgencio Marín-Iniesta

4.3. NONDESTRUCTIVE TECHNIQUES/2

VII.II.S4.3.P1. Non-destructive determination of the optimum harvest time of the 'Cashmere' sweet cherry cultivar throughout CIELab color coordinates and the principal component analysis (PCA). Jesús Val, Ángel Ignacio Negueruela, Victoria Lafuente

VII.II.S4.3.P2. Optimizing the methodology to measure firmness loss of grape berries (*Vitis vinifera* L.) during ripening. Scherehezade Fuentes, Angela Manso, Juana Cava, Inmaculada Garrido, María V. Molina, José Fenoll, M. Pilar Flores, M. Pilar Hellín García

VII.II.S4.3.P3. Rapid FT-NIR methods predict soluble solids, pH, titratable acidity and phenols of clingstone peaches. M. Luisa Amodio, Francesca Piazzolla, Fedele Colantuono, Giancarlo Colelli

VII.II.S4.3.P4. Application of Vis/NIR spectroscopy for predicting sweetness and flavour parameters of 'Valencia' orange (*Citrus sinensis*) and 'Star Ruby' grapefruit (*Citrus x paradise* Macfad). Khayelihle Ncama, Samson Tesfay, Umezuruike Linus Opara, Olaniyi Fawole, Lembe Magwaza

VII.II.S4.3.P5. Evaluation of textural properties of peach and nectarine through acoustic evaluation. Paulina Shinya, Loreto Contador, Rodrigo Infante

4.4. CONSUMERS PREFERENCES AND AROMA

X.I.S4.4.P1. Quality parameters to predict consumer preferences for 'Royal Gala' and 'Golden Smoothee' apples. Inmaculada Recasens, Simo Alegre, Diana Molina-Delgado

X.I.S4.4.P2. Influence of harvest date on sensory quality attributes of avocado 'Hass'. M. Luisa Cañete, Rosa Pérez de los Cobos, Juan José Hueso

X.I.S4.4.P3. Aroma composition of commercial truffle flavoured oils: does it really smell like truffle? Pedro Marco, Eva Campo, Sofía Guillen, Rosa Oria, Cristina Sánchez, Alicia Antolín, Domingo Blanco

X.I.S4.4.P4. LIFE Zero Residues: Influence of the ripening degree on the odour composition of 'Early Bigi' cherries. Study of their aroma potential as ingredient for the juice industry. Rosa Oria, Eva Campo, Mirian Sanz, Sofía Guillen, M. Eugenia Venturini, Esther Arias, Sara Remon

X.I.S4.4.P5. Consumer acceptance and primary drivers of liking for small fruit. MarziaIngrassia, Simona Bacarella, Luca Altamore, Giuseppe Sortino, StefaniaChironi

X.I.S4.4.P6. Sensory changes and microbial growth on minimally processed lettuce throughout shelf life. Juan A. Martínez, María A. Parra, Juan A. Fernández, Francisco Artés