

Scientific program

Monday, June 9, 2014 (Morpheus Ballroom)

13:00-19:00 **Attendee registration**

19:00-20:00 **Inaugural Lecture**

J.M. Labavitch

Cell wall metabolism: The Yin and Yang of fruit postharvest biology

20:00-22:00 **Welcome reception - Aphrodite Hills Resort**

Tuesday, June 10, 2014 (Morpheus Ballroom)

08:00-09:00 **Attendee registration**

09:00- 10:30 **Welcome-Opening Ceremony & Plenary Lectures**

09:00-09:30 Welcome Ceremony & Opening remarks

09:30-10:00 **B. Nicolai**

Tales from Tomographic Oceans: water transport in fruit and vegetables revisited (PLE-01)

10:00-10:30 **I. Ferguson**

Minor crop-major problems and how they inform postharvest understanding (PLE-02)

10:30-11:00 **Morning Tea/Coffee break**

11:00-12:30 **Plenary Lectures**

11:00-11:30 **M. Bouzayen**

Multi-hormonal control of transcriptional regulation associated with fruit development and ripening (PLE-03)

11:30-12:00 **C. Crisosto**

Emerging postharvest technologies (PLE-04)

12:00-12:30 **P. Tonutti**

The technical evolution of CA storage protocols and the advancements in elucidating the responses to low oxygen conditions (PLE-05)

12:30-14:30	Lunch
14:30-16:00	Poster session I (PP 1- 64, Morpheas Ballroom 4) Afternoon Tea/Coffee break
16:00-17:45	Session I: Understanding stress conditions and their implication in the incidence of physiological disorders (I)
16:00-16:15	K. Buts , D. Hatoum, S.Carpentier, <u>M. Hertog</u> , B. Nicolai Browning in apple: A proteomics approach (OP-01)
16:15-16:30	<u>A. Granell</u> Fruits coping with stressful postharvest conditions: antioxidants not only for health (OP-02)
16:30-16:45	<u>D.P.F. Almeida</u> , R. Carvalho, S. Carvalho, E. Dupille Mitigation of superficial scald and internal browning disorders during refrigerated storage of ‘Rocha’ pear (OP-03)
16:45-17:00	A.Tadiello, V.Ziosi, A.S. Negri, F. Spinelli, N. Busatto, L. Espen, E. Vendramin, I.Verde, G. Costa, <u>L. Trainotti</u> Auxin-ethylene relationship in peach ripening and abnormalities in a stony hard genotype (OP-04)
17:00-17:15	<u>E.J. Mitcham</u> , S.T. de Frietas, J.P. Silveira, A. Miqueloto, S. Escribano Calcium deficiency disorders in fruit (OP-05)
17:15-17:30	<u>E.M. Crouch</u> , M. Jooste, H. Bergman, I.J. Crouch, T.J. Majoni Post-harvest factors influencing flesh browning in South African ‘Cripps’ Pink’ apples (<i>Malus domestica</i> Borkh.) (OP-06)
17:30-17:45	S. Rosenwasser, N. Sela, R. Fluhr, <u>H. Friedman</u> ROSMETER: A bioinformatic tool to evaluate oxidative stress in postharvest (OP-07)
18:00-20:00	Session II: Postharvest physiology
18:00-18:15	<u>R. Schouten</u> , B. Farneti, L.M.M. Tijskens, E. Woltering Modelling of chlorophyll breakdown and lycopene biosynthesis during ripening in tomato(OP-08)
18:15-18:30	A. Jajo, Md. A. Rahim, S. Serra, S. Musacchi, L. Trainotti, <u>C. Bonghi</u> Effect of cool storage duration on ripening initiation of Angelys® pear fruit (OP-09)

- 18:30-18:45** **N.T. Nham**, S.T. de Freitas, A.J. Macnish, K.M. Carr, T. Kietikul, S. Rust, C.Z. Jiang, E.J. Mitcham
Transcriptome analysis to understand European pear (*Pyrus communis* cv. Bartlett) ripening development and identify biomarker candidates to detect fruit ripening capacity (OP-10)
- 18:45-19:00** **J. Joas**, F. Lopez-Lauri, R. Rosalie, C. Deytieux-Belleau, M. Léchaudel
Exploiting the responses to abiotic constraints towards a better understanding of fruit physiology, ripening and quality (OP-11)
- 19:00-19:15** **C.F. Forney**, G.S. Bezanson, T.C. Ells, L. Fan, D.I. LeBlanc
Impact of heat sanitation of fresh whole cantaloupe on fruit quality and volatile metabolism (OP-12)
- 19:15-19:30** **M. Geyer**, G. Rux , S. Saengerlaub, A. Pant , M. Linke, P. Mahajan
Packaging of mushrooms in a humidity regulating plastic punnet for preventing water condensation(OP-13)
- 19:30-19:45** **M.T. Charles**, D. Rolland, D. Roussel, M.J. Merisier, E.-S.Yaganza, D. Charlebois, J. Arul
Assessment of UV-C hormesis induced changes in sugar and organic acid profiles of tomato fruit (OP-14)
- 19:45-20:00** **O.J. Caleb**, W.V. Aindongo, L. Mokwena, U.L. Opara
Effects of pre-treatment and modified atmosphere packaging on quality attributes and change in volatile composition of pomegranate arils (cv. Bhagwa) (OP-15)

Tuesday, June 10, 2014 (Adonis)

12:30-14:30 Lunch

14:30-16:00 **Poster session I (PP 1- 64, Morpheas Ballroom 4)**
Afternoon Tea/Coffee break

16:00-17:30 **Session III: Postharvest treatments to extend shelf life of horticultural commodities**

16:00-16:15 **F. Guillén**, P.J. Zapata, D. Martínez-Romero, S. Castillo, H.M. Díaz-Mula, J.M. Valverde, D. Valero, M. Serrano
Postharvest treatments with oxalic on quality of the early-season cultivar 'Early Lory' (OP-16)

- 16:15-16:30** **M. Glowacz, R. Colgan, D. Rees**
Ozone can extend the shelf-life and improve the quality of fresh produce (OP-17)
- 16:30-16:45** **T. de Beer**, E.M. Crouch
Efficacy of novel in-bag 1-MCP system versus traditional application for maintaining broccoli (*Brassica oleracea* cv. Parthenon) quality during mixed load marketing (OP-18)
- 16:45-17:00** **H. Larsen**, J. Børve, I. Måge, E.Vangdal
Plum fruit packed in flow packs with absorbent pads and stored at different temperatures (OP-19)
- 17:00-17:15** **S. Chaiwong**, C.F.H. Bishop
Alternative use of insulated bag for supermarket to maintain ‘Elsanta’ strawberry temperature (OP-20)
- 17:15-17:30** **N.Admane**, V. Verrastro, G. Altieri, F. Genovese, L. Tarricone, A. Ippolito, G.C. Di Renzo
Effect of postharvest pretreatments and MAP on organic late-season table grapes Scarlotta seedless® “Sugranineteen” assigned to medium and long term storage (OP-21)
- 18:00-19:45** **Session IV: Textural, biochemical and physiological aspects of postharvest ripening**
- 18:00-18:15** F. De Sanctis, J. Labatvich, J.A. Kennedy, C. Catelli, **F. Mencarelli**
Metabolic and structural effects of dehydration and ozone postharvest treatments on wine grapes (OP-22)
- 18:15-18:30** **D. Kenigsbuch**, D. Chalupowicz, D. Maurer, A. Sade, Y. Ivanova-Shachar and L. Ben-Shitrit
Storability characterization of a wild rocket (*Diplotaxis tenuifolia*) cultivar "Rock-Ad" with late flowering and delay in postharvest senescence (OP-23)
- 18:30-18:45** **M. Anastasiadi**, P.M. Mwangi, S. Redfern, M. Berry, L.A. Terry
Postharvest biochemical changes in gooseberry fruit (*Ribes uva crispa*) during storage (OP-24)
- 18:45-19:00** T. Peredo, I. Balic, J. Delgado, T. Ejsmentewicz, P. Olmedo, R. Barria, C. Silva-Sanzana, B. Defilippi, H. Prieto, **R. Campos-Vargas**
Effect of calcium applications on berry firmness during *in vitro* growth of table grapes cv.Thompson Seedless (OP-25)

- 19:00-19:15** A. Koziół, J. Cybulska, B. Kruk, D. Sysa, M. Lekka, **A. Zdunek**
Young's modulus of cell walls in pears during pre- and postharvest maturation (OP-26)
- 19:15-19:30** **J. Mierczyńska**, J. Cybulska, B. Kruk, A. Zdunek
Enzymatic degradation and changes in rheological properties of pectins in *Daucus carota* L. cv. 'Nerac' cell walls during postharvest storage (OP-27)
- 19:30-19:45** **T. Kabakeris**, A.G.Khozroughi, A. Keiser, S.Huyskens-Keil, M. Geyer
The role of chlorophyll derivatives in postharvest quality determination of broccoli (OP-28)
- 19:45-20:00** B.A.J.G. Jacobs, **B.E. Verlinden**, A., Decombel, P. Bleyaert, J. Van Lommel, I. Vandewelde, W. Saeys, B.M. Nicolai
Predicting stored period and shelf life potential of lamb's lettuce using Vis/NIR reflectance spectroscopy (OP-29)

Wednesday, June 11, 2014 (Morpheus Ballroom)

09:00-10:30 Session V: Effects of 1-MCP on postharvest quality

- 09:00-09:15 E.Zonin, M. Zermiani, M. Begheldo, A. Nonis, A. Vezzaro, L. Fadanelli, L. Quintieri, **B. Ruperti**
Regulation of the apple (*Malus domestica*) ROP-GAP rheostatic molecular machinery in response to postharvest storage and ethylene inhibition by 1-MCP treatment (OP-30)
- 09:15-09:30 A. Folchi, **P. Bertolini**, D. Mazzoni
Preventing ripening blockage in 1-MCP treated 'Abate Fetel' pears by temperature management (OP-31)
- 09:30-09:45 **E.A. Bekele**, W.F. Beshir, M.L.A.T.M. Hertog, B.M. Nicolai, A.H. Geeraerd
Metabolomics analysis of the effect of MCP and CA during ripening and storage in apples (OP-32)
- 09:45-10:00 **I.N. Tsakiris**
1-MCP (Smart Fresh™) application protocol to Granny Smith: The experience in Greece (OP-33)
- 10:00-10:15 **B. Farneti**, I. Khomenko, V. Ting, F. Spinelli, F. Biasioli, G. Costa, F. Costa
Effect of 1-MCP on apple volatile compound production assessed by PTR-ToF-MS (OP-34)

10:15-10:30	<u>D. Gamrasni</u> , H. Gadban, A. Tsvilling, T. Wolff, Y. Stern, T. Goldberg, O. Neria, R. Ben-Arie 1-MCP improves the quality of stored 'Wonderful' pomegranates (OP-35)
10:30-11:00	Morning Tea/Coffee break
11:00-13:00	Workshop FA1106 'An integrated systems approach to determine the developmental mechanisms controlling fleshy fruit quality in tomato and grapevine'
11:00- 11:30	<u>G. Seymour</u> Identification of genes controlling texture and shelf life in tomato (PLE-06)
11:30-12:00	<u>A. Bovy</u> Elucidating the genetic basis of fruit quality in tomato (PLE-07)
12:00-12:30	<u>S. Delrot</u> Pre- and post-harvest ripening of grape berry: the missing links (PLE-08)
12:30-13:00	<u>M. Pezzotti</u> Systems biology approach to interpret the "appassimento" technology in grapevine" (PLE-09)
13:00-15:00	Lunch
15:00-16:30	Poster session II (PP 65-132, Morpheas Ballroom 4) Afternoon Tea/Coffee Break
16:30-18:45	Workshop FA1104 'Sustainable production of high-quality cherries for the European market'
16:30-17:00	<u>E.J. Mitcham</u> Assuring the quality of cherries after harvest with special reference to sensorial attributes (PLE-10)
17:00-17:30	<u>P. Toivonen</u> Integrated analysis for improving export of sweet cherries and how a small industry can compete by focusing on premium quality (PLE-11)
17:30-18:00	<u>A. Vicente</u> Influence of initial differences in pectin branching and role of "well known" wall loosening proteins on fruit texture (PLE-12)

18:00-18:30	<u>D.Valero</u> Recent developments to maintain overall sweet cherry quality during postharvest storage (PLE-13)
18:30-18:45	<u>L. Montanari</u> New technologies to improve efficiency on cherry sorting and packing lines (OP-36)
20:00-00:00	Gala dinner

Wednesday, June 11, 2014 (Adonis)

09:00-10:30 Session VI: Understanding storage stress and its implication in the incidence of physiological disorders (II)

09:00-09:15	<u>D.J. Bishop</u> A high sensitivity oxygen sensor for use with Dynamic Controlled Atmospheres (OP-37)
09:15-09:30	<u>M. Mirzaee</u> , D. Rees, M. Tully, R.J. Colgan Diagnosing bitter pit in apple during storage by chlorophyll fluorescence as a non-destructive tool (OP-38)
09:30-09:45	<u>W. Imsabai</u> , <u>K.Saiyawan</u> , <u>J. Siriphanich</u> Ethylene pretreatment induced ripening-associated gene(s) expression and alleviates chilling injury of bananas during cold storage (OP-39)
09:45-10:00	<u>J. Lado</u> , M.J. Rodrigo, P. Cronje, L. Zacarías Resistance to chilling injury in red, lycopene-accumulating, tissue of cold-stored grapefruits (OP-40)
10:00-10:15	<u>K. Luengwilai</u> , P. Pitukwong, J. Siriphanich Factors affecting susceptibility to chilling injury of commercial 'Queen' pineapple cultivars in Thailand(OP-41)
10:15-10:30	S.Y. Shin, <u>M.H. Park</u> , J.W. Choi, Y.P. Hong, J.G. Kim Gene network underlying response of pepper (<i>Capsicum annuum</i>) to chilling stress (OP-42)
10:30-11:00	Morning Tea/Coffee break

Thursday, June 12, 2014 (Morpheas Ballroom)

09:00-10:00 Session VII: Keynote talks on Supply Chain Management

09:00-09:30 S. Lurie

The use of nondestructive measurements and molecular techniques to determine commodity quality and supply chain management (PLE-14)

09:30-10:00 L. Terry

Reducing waste: synergies between biology and supply chain management (PLE-15)

10:30-19:30 Excursion (Paphos & Lemesos District)

Friday, June 13, 2014 (Morpheas Ballroom)

09:00-11:00 Session VIII: Current trends in postharvest physiology and technology

09:00-09:15 G. Costa, S. Vidoni, L. Rocchi

Use of non-destructive devices for an appropriate management of fruit in post-harvest (OP-43)

09:15-09:30 R. Porat

Implementation of sensory analysis studies for postharvest research (OP-44)

09:30-09:45 E.J. Woltering, I.M. Witkowska, R.E. Schouten, J. Harbinson

Light levels below the light compensation point stimulate an alternative sugar generation mechanism and prolong the shelf life of fresh-cut butterhead lettuce (OP-45)

09:45-10:00 A.C.R. Van Schaik, J.A. Verschoor, E. Otma, F.G. Van de Geijn

Product response of apples (cv. Elstar) on a new storage system: Dynamic Control of Respiration (OP-46)

10:00-10:15 D. Kitemann, Daniel Neuwald, Roy McCormick, Josef Streif

Potential energy savings using modern storage technologies in combination with increased storage temperatures (OP-47)

10:15-10:30 A. Lichter, E. Raban, T. Kaplunov, Y. Zutahy, A. Daus, D. Beno-Mualem, A. Bahar, H. Weksler, S. Lurie

Image analysis and auto-fluorescence as tools to evaluate the quality of table

grapes before harvest and after storage (OP-48)

10:30-10:45 **N. Tzortzakis**

Gaseous ozone-enrichment for the preservation of fresh produce (OP-49)

10:45-11:00 G. Gwanpua, V. Dakwa, **B.E. Verlinden**, S. Christiaens, M. Hendrickx, B.M. Nicolai, P. Verboven, A. Geeraerd

Relationship between texture analysis and texture attributes during postharvest softening of 'Jonagold' and 'Kanzi' apples (OP-50)

11:00-11:30 Morning Tea/Coffee break

11:30-13:00 Session IX: Effects of pre- and postharvest strategies on nutritional and functional components in horticultural commodities

11:30-12:00 **M.I. Gil**

Pre and postharvest strategies to enhance bioactive constituents of fruit and vegetables (PLE-16)

12:00-12:15 **F.A. Tomás-Barberán**

Polyphenols in harvested fruits and vegetables. Estimation of the content of bioactives and evaluation of health effects. The case of pomegranate (OP-51)

12:15-12:30 **O.A. Fawole**, L. Chan, U.L. Opara

Bioavailability of total phenolic content and antioxidant capacity of pomegranate fruit juice and marc after in vitro digestion (OP-52)

12:30-12:45 **M. Buccheri**, D. Croce, M. Grassi, G. Bianchi, F. Lovati, M. Vanoli, A. Rizzolo

Postharvest physiology and nutritional quality of 'Tarocco' orange fruit [*Citrus sinensis* (L.) Osbeck] (OP-53)

12:45-13:00 **N. Ntagkas**, E. Woltering, C. Labrie, C.C.S. Nicole, L.F.M. Marcelis

Light enhances L-ascorbate in fruits and leaves: a well-orchestrated mechanism (OP-54)

13:00-14:30 Lunch

14:30-16:00 Official Closure/ ISHS business meeting to determine the next Symposium Venue

16:00-16:30 Departure for the post-symposium tour (Nicosia) or Larnaca

Friday, June 13, 2014 (Adonis)

09:00-11:00 Session X: Postharvest pathology

- 09:00-09:15 **N. Alkan**, G. Friedlander, D. Ment, D. Prusky, R. Fluhr
Simultaneous transcriptome analysis of *Colletotrichum gloeosporioides* and tomato fruits response at different stages of pathogenicity reveal postharvest fruit-fungal arms and defense strategies (OP-55)
- 09:15-09:30 **J.E. Adaskaveg**, H. Förster
New postharvest decay control treatments that are exempt from residue tolerances in the United States (OP-56)
- 09:30-09:45 **D. Prusky**, S. Barad, D. Ment
Modulation of pathogenicity by pH regulation in postharvest pathogen interactions: a global analysis for postharvest pathogens (OP-57)
- 09:45-10:00 **H. Förster**, W. Hao, J. E. Adaskaveg
Evaluation of postharvest heat treatments to mitigate export quarantines of California citrus fruit due to *Phytophthora* brown rot (OP-58)
- 10:00-10:15 **M.G. Lobo**, R. Cabrera, S. Perera
Guatemalan moth (*Tecia solanivora*): a serious problem during potatoes cultivation and storage (OP-59)
- 10:15-10:30 **J. Børve**, A. Stensvand
Factors affecting postharvest fungal fruit decay in sweet cherry in a cool, wet climate (OP-60)
- 10:30-10:45 **J.M. Zhao**, J.E. Bronlund, A.R. East
Effect of cooling rates on kiwifruit firmness and rot incidence in subsequent storage (OP-61)
- 10:45-11:00 **A.T Aborisade**
Heat treatment against the green mould on sweet orange (*Citrus sinensis* Osbeck) fruits at tropical ambient storage (OP-62)

11:00-11:30 Morning Tea/Coffee break

11:30-13:15 Session XI: Quality monitoring and postharvest treatments to extend shelf/vase life of horticultural commodities

- 11:30-11:45 T.M. Mutui, H. Mibus, **M. Serek**
Cytokinins inhibit leaf senescence in *Pelargonium* cuttings (OP-63)

11:45-12:00	<u>G.F. Tsanakas</u> , M.E. Manioudaki, A.S. Economou, S. Kintzios, P. Kalaitzis Transcriptomic study of cut flower senescence in <i>Gardenia jasminoides</i> using Illumina Hi-Seq technology (OP-64)
12:00-12:15	<u>M.M. Jowkar</u> Application of nano silver as 'Cherry Brandy' rose vase solution preservative improves free radical scavengers' activity and reduces oxidative damage biomarkers (OP-65)
12:15-12:30	<u>E. Sanchís</u> , S. González, C. Ghidelli, C. Sheth, M. Mateos, L.I. Palou, <u>M.B. Pérez-Gago</u> Browning inhibition and microbial control in fresh-cut persimmon (<i>Diospyros kaki</i> Thunb. cv. Rojo Brillante) by apple pectin-based edible coatings (OP-66)
12:30-12:45	Rizzolo, M. Buccheri, <u>G. Bianchi</u> , M. Grassi, M. Vanoli Quality of 'Conference' pears as affected by initial low oxygen stress, dynamically controlled atmosphere and 1-MCP treatment (OP-67)
12:45-13:00	I. Ben-Tzur, H. Sharshevsky, S. Mangut-Leiba, <u>A. Dagar</u> Xsense® technology: Innovative real time system approach in monitoring quality, freshness and food safety in perishables supply chain (OP-68)
13:00-13:15	A. Machuca, O. Santibáñez, A. Hinojosa, D. Vanegas, L. Luchsinger, <u>V. Escalona</u> Use of ozonized water on microbiological and sensory quality of red chard (<i>Beta vulgaris</i> L. var. cicla) baby leaves (OP-69)
13:15-14:30	Lunch
16:00-16:30	Departure for the post-symposium tour (Nicosia) or Larnaca

Plenary Lectures, PLE

Code	Author(s)- Title
Inagural Lecture	<u>J.M. Labavitch</u> Cell wall metabolism: The Yin and Yang of fruit postharvest biology
PLE-01	<u>B.Nicolai</u> Tales from Tomographic Oceans: water transport in fruit and vegetables revisited
PLE-02	<u>I. Ferguson</u> Minor crops – major problems and how they inform postharvest understanding
PLE-03	<u>M.Bouzayen</u> Multi-hormonal control of transcriptional regulation associated with fruit development and ripening
PLE-04	<u>C. Crisosto</u> Emerging postharvest technologies
PLE-05	<u>P.Tonutti</u> The technical evolution of CA storage protocols and the advancements in elucidating the responses to low oxygen conditions
PLE-06	<u>G. Seymour</u> Identification of genes controlling texture and shelf life in tomato
PLE-07	<u>A. Bovy</u> Elucidating the genetic basis of fruit quality in tomato
PLE-08	<u>S. Delrot</u> Pre- and post-harvest ripening of grape berry: the missing links
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PLE-11	<u>P. Toivonen</u> Integrated analysis for improving export of sweet cherries and how a small industry can compete by focusing on premium quality
PLE-12	<u>D.Valero</u> Recent developments to maintain overall sweet cherry quality during postharvest storage
PLE-13	<u>A.Vicente</u>

Influence of initial differences in pectin branching and role of “well known” wall loosening proteins on fruit texture

PLE-14 **S. Lurie**

The use of nondestructive measurements and molecular techniques to determine commodity quality and supply chain management

PLE-15 **L.A. Terry**

Reducing waste: synergies between biology and supply chain management

PLE-16 **M.I. Gil**

Pre and postharvest strategies to enhance bioactive constituents of fruit and vegetables

Oral Presentations, (OP)

Code	Author(s) - Title
OP-01	K. Buts , D. Hatoum, S.Carpentier, <u>M. Hertog</u>, B. Nicolai Browning in apple: A proteomics approach
OP-02	<u>A. Granell</u> Fruits coping with stressful postharvest conditions: antioxidants not only for health
OP-03	<u>D.P.F. Almeida</u>, R. Carvalho, S. Carvalho, E. Dupille Mitigation of superficial scald and internal browning disorders during refrigerated storage of 'Rocha' pear
OP-04	A.Tadiello, V.Ziosi, A.S. Negri, F. Spinelli, N. Busatto, L. Espen, E. Vendramin, I.Verde, G. Costa, <u>L. Trainotti</u> Auxin-ethylene relationship in peach ripening and abnormalities in a stony hard genotype
OP-05	<u>E.J. Mitcham</u>, S.T. de Frietas, J.P. Silveira, A. Miqueloto, S. Escribano Calcium deficiency disorders in fruit
OP-06	<u>E.M. Crouch</u>, M. Jooste, H. Bergman, I.J. Crouch, T.J. Majoni Post-harvest factors influencing flesh browning in South African 'Cripps' Pink' apples (<i>Malus domestica</i> Borkh.)
OP-07	S. Rosenwasser, N. Sela, R. Fluhr, <u>H. Friedman</u> ROSMETER: A bioinformatic tool to evaluate oxidative stress in postharvest
OP-08	<u>R. Schouten</u>, B. Farneti, L.M.M. Tijskens, E. Woltering Modelling of chlorophyll breakdown and lycopene biosynthesis during ripening in tomato
OP-09	A. Jajo, Md. A. Rahim, S. Serra, S. Musacchi, L. Trainotti, <u>C. Bonghi</u> Effect of cool storage duration on ripening initiation of Angelys® pear fruit (OP-09)
OP-10	<u>N.T. Nham</u>, S.T. de Freitas, A.J. Macnish, K.M. Carr, T. Kietikul, S. Rust, C.Z. Jiang, E.J. Mitcham Transcriptome analysis to understand European pear (<i>Pyrus communis</i> cv. Bartlett) ripening development and identify biomarker candidates to detect fruit ripening capacity
OP-11	<u>J. Joas</u>, F. Lopez-Lauri, R. Rosalie, C. Deytieux-Belleau, M. Léchaudel Exploiting the responses to abiotic constraints towards a better understanding of fruit physiology, ripening and quality
OP-12	<u>C.F. Forney</u>, G.S. Bezanson, T.C. Ells, L. Fan, D.I. LeBlanc Impact of heat sanitation of fresh whole cantaloupe on fruit quality and volatile metabolism
OP-13	<u>M. Geyer</u>, G. Rux , S. Saengerlaub, A. Pant , M. Linke, P. Mahajan Packaging of mushrooms in a humidity regulating plastic punnet for preventing water

condensation

- OP-14** **M.T. Charles, D. Rolland, D. Roussel, M.J. Merisier, E.-S.Yaganza, D. Charlebois, J. Arul**
Assessment of UV-C hormesis induced changes in sugar and organic acid profiles of tomato fruit
- OP-15** **O.J. Caleb, W.V. Aindongo, L. Mokwena, U.L. Opara**
Effects of pre-treatment and modified atmosphere packaging on quality attributes and change in volatile composition of pomegranate arils (cv. Bhagwa)
- OP-16** **F. Guillén, P.J. Zapata, D. Martínez-Romero, S. Castillo, H.M. Díaz-Mula, J.M. Valverde, D. Valero, M. Serrano**
Postharvest treatments with oxalic on quality of the early-season cultivar 'Early Lory'
- OP-17** **M. Glowacz, R. Colgan, D. Rees**
Ozone can extend the shelf-life and improve the quality of fresh produce
- OP-18** **T. de Beer, E.M. Crouch**
Efficacy of novel in-bag 1-MCP system versus traditional application for maintaining broccoli (*Brassica oleracea* cv. Parthenon) quality during mixed load marketing
- OP-19** **H. Larsen, J. Børve, I. Måge, E.Vangdal**
Plum fruit packed in flow packs with absorbent pads and stored at different temperatures
- OP-20** **S. Chaiwong, C.F.H. Bishop**
Alternative use of insulated bag for supermarket to maintain 'Elsanta' strawberry temperature
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- OP-53** **M. Buccheri, D. Croce, M. Grassi, G. Bianchi, F. Lovati, M. Vanoli, A. Rizzolo**
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- OP-66** **E. Sanchís, S. González, C. Ghidelli, C. Sheth, M. Mateos, L.I. Palou, M.B. Pérez-Gago**
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Xsense® technology: Innovative real time system approach in monitoring quality, freshness and food safety in perishables supply chain
- OP-69** **A. Machuca, O. Santibáñez, A. Hinojosa, D. Vanegas, L. Luchsinger, V. Escalona**
Use of ozonized water on microbiological and sensory quality of red chard (*Beta vulgaris* L. var. cicla) baby leaves

Poster Presentations (PP)

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PP-01	<u>C.V.T. do Amarante</u>, C.A. Steffens, S.T. de Freitas, A.Miqueloto, A. dos Santos, V. Denardi Methods of fruit tissue sampling to quantify calcium and magnesium contents to segregate apples for bitter pit incidence
PP-02	R. Leisso, <u>I. Hanrahan</u>, D. Buchanan, J. Lee, D. Rudell, J. Mattheis, C.Watkins A metabolic profile for 'Honeycrisp' apple soggy breakdown, a chilling induced physiological disorder
PP-03	<u>B. Farneti</u>, N. Busatto, I. Khomenko, F. Spinelli, F. Biasioli, G. Costa, F. Costa Detection of volatile compounds involved in the development of apple superficial scald by PTR-ToF-MS
PP-04	<u>J.J. Ornelas-Paz</u>, E.M. Yahia, E. Ochoa-Reyes, J.D. Pérez-Martínez, V. Ibarra-Junquera, P. Escalante-Minakata, S. Ruiz-Cruz Physiochemical changes of 'Golden Delicious' apples and their relationship with softening during on-tree development and ripening
PP-05	<u>A. Zanella</u>, S. Stuerz, A. Panarese, O. Rossi The potential of alternative methods for determining the optimum harvest date of apple fruit
PP-06	M. Vanoli, A. Rizzolo, <u>A. Zanella</u>, M. Grassi, A. Torricelli, L. Spinelli Characterizing apple texture during storage through mechanical, sensory and optical properties
PP-07	<u>K. Juhneviča-Radenkova</u>, L. Skudra, M. Skrīvele, V. Radenkovs, D. Segliņa Apple cell size effect on fruit quality
PP-08	<u>F. Gasser</u>, C. Good, A. Naef Hot water treatment of selected organic apple and pear cultivars
PP-09	<u>A. Matejček</u>, I. Pistekova, F. Paprstein, J.Matejickova Evaluation of fruit quality of tested apple cultivars stored in different ULO atmospheres
PP-10	<u>D.A. Neuwald</u>, D. Kitemann, J. Streif, M. Spuhler, G. Rux, M. Linke, M.Geyer Effects of an optimized air flow in apple storage rooms
PP-11	<u>D. Kitemann</u>, D. Neuwald, J. Streif Internal browning in 'Kanzi'® apples – Reasons and possibilities to reduce the disorder
PP-12	M.Zermiani, M.Begheldo, E. Zonin, M. Mercadini, P.Tonutti, <u>B.Ruperti</u> Molecular and biochemical responses of apple fruit to initial low oxygen stress (ILOS) regimes

- PP-13** **C.A.Torres, L.Leon, F. Sazo, O. Hernandez**
Flesh browning assessment in Cripp's Pink apples using Vis-NIR spectroscopy
- PP-14** **O. Hernandez, C.A. Torres**
Superficial scald assessment on Granny Smith apples stored under dynamic controlled atmosphere in commercial operations in Chile
- PP-15** **P. Maletsika, I. Papoulia, G.D. Nanos, M. Vasilakakis**
Postharvest application of O₃ and 1-MCP effects on 'Red Chief' apple quality during prolonged air cold storage
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- PP-17** **W. Imsabai, W. Somsuan, S. Ketsa**
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