

## Posters Postharvest Unlimited and Postharvest ornamentals

Posters are on display during the whole symposium

Can be viewed during all the breaks

At specific time slots authors are supposed to accompany their poster to give explanation to interested participants

## Posters Postharvest Unlimited

**Poster session 1** (Monday 15/5, 12.30 – 13.30)

Physiology and ripening, Quality measurements, pathogens and pests, chilling and storage disorders

### Physiology and ripening

1. Sorbitol accumulation as an adaption mechanism in pome fruit to low oxygen storage environments  
Felix Büchele
2. Transcriptional and metabolic investigation of the post-harvest performance of a red flesh type of apple  
Lorenzo Vittani
3. Candidate genes transcriptional study in 'Granny Smith' apples in response to prolonged storage at different conservation strategies  
Francesca Populin
4. ERF1 is involved in UV-C ripening signaling in peach fruit by regulating water loss  
Athanasios Molassiotis
5. Transcriptional and metabolomic changes during storage identify genes potentially involved in sucrose loss and carbohydrate impurity formation in postharvest sugarbeet roots  
Karen Fugate
6. Post-harvest physiology of lettuce  
Priscille Steensma

7. Meta-differentially expressed genes to provide an expanded transcriptomic view of strawberry ripening  
Eun Jin Lee
8. Metabolic and transcriptional exploration of the flesh fruit non-browning phenomenon in Majda' apple cultivar (*Malus domestica*)  
Francesca Populin
9. A wide transcriptome characterization of high and low dry matter kiwifruit  
Athanassios Molassiotis

## Quality measurements

10. Automated image-based assessment of starch pattern index in commercial apple cultivars: reliability and applicability  
Angelo Zanella
11. Internal browning severity is related to the percent of intercellular air spaces in apple fruit tissue as determined by X-ray CT  
Rachael Wood
12. Using Vis/NIR hyperspectral imaging and wavelength selection for accurate postharvest discrimination of similar loquat cultivars  
Salvador Castillo-Girones
13. A non-destructive approach of chlorophyll content estimation in fruits by means of LiDAR acquired backscattered intensity  
Manuela Zude-Sasse
14. Estimating mechanics of strawberry fruit using discrete element modeling considering the ripening stage analysed with non-contact laser scanning  
Manuela Zude-Sasse
15. A MULTI-PARAMETER TEXTURE CHARACTERIZATION OF 'ROJO BRILLANTE' PERSIMMON SUBJECT TO DIFFERENT STORAGE CONDITIONS  
Q. Vilhena Nariane

16. Preharvest application of 1-MCP (Harvista®) to control chilling injury of persimmon  
Q. Vilhena Nariane
17. Non-destructive measured firmness to define maturity in European plum fruit  
Ingunn Ovsthus

## Pathogens and Pests

18. Sprout suppressing 1,4-dimethylnaphthalene treatment delays dry rot infection in potato tubers  
Fernando Finger
19. Synergistic effect of salicylhydroxamic acid in quinone outside inhibitor fungicides and its sensitivity on fruit rot pathogens  
Kanchalar Keeratirawee
20. Fungicidal activity of some essential oils and zinc oxide nanoparticles on *Colletotrichum capsici* and *C. gloeosporioides* causing chili anthracnose  
Pornprapa Kongtragoul
21. Insecticidal properties of lemon grass, clove, and star anise essential oils and their main chemical compounds against maize weevil (*Sitophilus zeamais* Motschulsky)  
Jarongsak Pumnuan
22. Development of microbial biocontrol agents against *Thielaviopsis basicola* on carrots  
Fanny Louviot
23. Assessing the use of an alternative solution for the microbial decontamination of Cannabis production facilities  
Chika Ozongwu

## Chilling and other storage disorders

24. Metabolomic and transcriptomic profiling to elucidate 1-methylcyclopropene effect on alleviating chilling injury in bell peppers  
Si-Eun Byeon

25. Superficial scald incidence in 'Abate Fetel' pears in relation to maturity, ethylene production and antioxidant capacity  
Maristella Vanoli
26. Preharvest application of 1-MCP (Harvista®) to control chilling injury of persimmon  
Q. Vilhena Nariane
27. Delaying Quality Changes in 'Namdokmai Sithong' Mango during Low-Temperature Storage Using Trisodium Phosphate  
Somsak Kramchote
28. Biochemical compounds related to superficial scald in 'Abate Fetel' pears  
Marina Buccheri

## Poster Session 2 (Tuesday 16/6, 13.00-14.00)

Cultivation conditions, pre-harvest and postharvest treatments

### Effect pre-harvest conditions on postharvest quality

29. Factors affecting the development of physiological disorders in 'Gala' apple during long term storage  
Rachael Maree Wood
30. Are old onion landraces an option for organic farming? Yield and post-harvest quality of landraces vs. hybrids  
Maria Luisa Romo Perez
31. Pre-harvest factors affecting 'Gala' apples quality during long-term storage  
Claudia Sánchez
32. Effect of Rootstock on anthocyanins profile in blood oranges  
Almudena Bermejo
33. Influence of the position of the fruit in the tree on the coloration of blood oranges  
Pedro Javier Zapata Coll

34. Preharvest treatments of 'Colar de Albatera' fig fruit to promote harvest as an alternative of Ethrel  
Salvador Castillo
35. Far-red light during cultivation improves postharvest chilling tolerance in basil  
Leonie Geerdinck

### Postharvest treatments to improve quality

36. Increased shelf-life of raspberries (*Rubus idaeus* L.) after UV-C treatments  
Federica Alchera
37. Blueberry (*Vaccinium corymbosum* L.) post-harvest UV-B treatments induce changes in bioactive compounds and reduce weight losses during cold storage  
Alice Varaldo
38. Cranberry (*Vaccinium macrocarpon*) quality may be affected by different light spectra postharvest  
Dr. Pauliina Palonen
39. Inhibition of mango fruit ripening process using 1-methylcyclopropene (1-MCP) on preservation after irradiation  
Peerasak Chaiprasart
40. Reduce the post-harvest losses in organic beetroot production  
Alessio Bernasconi
41. 1-Methylcyclopropene treatment maintains the postharvest quality and delays softening of hardy kiwifruit by regulating cell wall metabolism and carbohydrate metabolism  
Aili Jiang
42. Improving suberization of wounded potato tubers with biological elicitor treatment  
Munever Dogramaci

43. Applications of LED lighting during post-harvest to improve strawberry quality  
Brian Farneti
44. Fruit quality parameters, ethylene production and development of physiological disorders after postharvest 1-MCP treatment of the apple cultivar Rubinstep harvested at different maturity stages  
Ingunn Ovsthus
45. Application of bioethylene in postharvest treatments  
Alejandra Salvador
46. Product and active substance registration for postharvest applications  
Mark Kwaaitaal

### Poster Session 3 ( Wednesday 17/5, 13.00 – 14.00)

Storage systems, Flavour, packaging

#### Storage systems & postharvest technologies

47. Effect of the Repeated Low Oxygen Stress on Dynamic Controlled Atmosphere storage of 'Elstar' and 'Nicoter' apples  
Daniel Alexandre Neuwald
48. Evaluation of storage potential of fresh pistachios under different forms of exposure to storage  
Miltiadis Christopoulos
49. Factors affecting 1-MCP release from various formulations and release systems  
Randolph M. Beaudry
50. Apple Ripening After DCA Storage: Assessing the Risk of Flavor Loss  
Randolph M. Beaudry
51. Influence of precooling on fruit cracking rate and quality of sweet cherry  
Jie Gang

52. Effects of deviations from the optimal storage temperature on the quality of grapes  
Amnon Lichter
53. Effects of plasma-activated water treated with helium on storage quality of fresh-cut apple  
Chenghui Liu
54. Monitoring approaches in Refrigerated Containers Loaded with Citrus and Apples  
Tarl Berry
55. A commercial tool for characterizing airflow resistance of fresh produce packaging  
Tarl Berry
56. Assessing the use of an alternative solution for the microbial decontamination of Cannabis production facilities  
Chika Ozongwu
57. Arduino-based control system for temperature-dependent gas modification in a fruit storage container Pramod Mahajan

## Flavour, Sensorial and nutritional quality

58. Preharvest potassium silicate sprays on consumer-perceived quality variables and antioxidant concentrations in cherries at harvest and after low-temperature storage  
Miltiadis Christopoulos
59. Investigating the impact on VOC's profile of 'Red Delicious' apples stored under ULO and DCA-CF technologies combined with 1-MCP  
Angelo Zanella
60. Volatile compounds as affected by storage conditions in different apple cultivars  
Kartik Khera
61. Differences in the volatile profile of seven onion varieties from two sites in Germany  
Lea Boeckstiegel

62. Terpenoid characterization of *Cannabis sativa* dried inflorescences in the postharvest environment  
Ana Maria Borda
63. Microbiome analysis of raw sugarbeet juice from sugar factories  
Shyam Kandel
64. Characterization of the quality of new varieties of loquat of commercial interest  
Almudena Bermejo
65. Flavonol rhamnoside turnover in postharvest radish  
Gale Bozzo
66. The effect of postharvest low oxygen treatments on sensory evaluation in some pear cultivars under different storage technologies  
Nurdan Gunes
67. Physicochemical quality of avocado cv. Lamb Hass from Mediterranean area during the commercial season  
Dr. Alejandra Salvador

## Packaging, coatings and processing

68. *Opuntia ficus indica* mucilage edible coating regulates cell wall softening enzymes and delays ripening of banana fruit at retail conditions  
Olaniyi Fawole
69. 1-MCP combine modified atmosphere packaging treatment delays the softening of *Actinidia arguta* by reducing cell wall degradation and sugar metabolism  
Aili Jiang
70. Effect of vacuum packaging combined with different storage temperature on the quality of fresh-cut carrots  
Chen Chen
71. From lab to packhouse: efficacy of gum arabic-based edible coatings for extended postharvest life of exported plums  
Olaniyi Fawole



72. Influence of hot air temperatures on drying kinetics of whole persimmon  
Lourdes Cervera-Chiner
73. Optimising citrus opentop cartons for efficient container cooling and minimal bottom sag  
Tarl Berry
74. Investigating the ethylene adsorption performance of scavenger films for potential application in fresh produce packaging  
Pramod Mahajan

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75. Chrysanthemum yield increased using targeted foliar fertilizer applications  
Dr. Jolyon Dodgson
76. Floral preservative improves the tolerance of Eustoma grandiflorum susceptible cultivars to methyl bromide fumigation  
Dr. Yen-Hua Chen
77. Initial headspace composition affects the respiration in Chrysanthemum but not in azalea cuttings  
Ms. Ellen Van de Velde