

Programme

11th International Symposium on Plant Bioregulators in Fruit Production

Sunday, September 20th

17.00 **Registration**

17.30 **Opening ceremony**

18.00 - 19.30 **Opening Lecture:**

Greene D.W. The development and use of plant bioregulators in tree fruit production.

Giovannoni J.J. Molecular analysis of the developmental and hormonal signaling components regulating fruit ripening in tomato.

19.30 **Welcome Reception**

Monday, September 21st

08.00 Registration

8.30 - 9.00 Welcome

SESSION 1

Biological Aspects of Plant Bioregulators

Biosynthesis, Physiological and molecular aspect, Interactions among bioregulators

Chairmen: Cohen J.

9.00 - 9.30 **Ramina A.** Hormonal cross talk between fruit and seed throughout development and ripening in peach.

9.30 - 9.45 **Itai A., Kaneshiro K., Hisadomi T., Sengo T., Honda H.** Differential expression of gibberellin biosynthetic genes in fruit and seed during development and new method for promoting fruit growth in pear.

9.45 - 10.00 **Tadiello A., Trainotti L., Ziosi V., Costa G.** Genes involved in the control of ethylene biosynthesis during climacteric of *prunus persica* fruit.

10.00 - 10.15 **Dal Ri A., Pilati S., Boschetti A., Costa G., Velasco R., Moser C.** Ethylene production during Pinot Noir berry development and expression of genes involved in ethylene-biosynthesis and –response.

10.15 - 10.45 coffee break

Chairman : Giovannoni J.

10.45 - 11.15 **Rameau C., Fermas S., Pillot J.P., Dun L., Beveridge C.** Strigolactone effect in shoot branching.

11.15 - 11.30 **Jantasuriyarat C., Pana-Apichon S., Roongsattham P., Tranbarger T. J., Tregear J., Morcillo F., Verdeil J.L., Tragoonrung S., Omoro A., Cros D.** Transcriptome analysis during cell separation and fruit shedding in oil palm (*Elaeis guineensis*).

11.30 - 11.45 **Cohen J.D., Park S., Slovin J.P.** Strawberry fruit ATP-synthase with a novel indole-acyl modification

11.45 - 12.00 **Franco-Mora O., Pérez-Huerta O., González-Huerta A., Huerta-Lara M.** Total sugars and phenolic compounds evolution during fruit growing of ‘Oro Azteca’ peach treated with putrescine.

12.00 - 12.15 **Meyer M.D., Terry L.A.** Effect of ethylene suppression on heptose sugars metabolism and ripening in avocado ‘Hass’ fruit.

12.15 - 12.30 **Costa F., Alba R., Soglio V., Schouten H.J., Gianfranceschi L., Costa G., Sansavini S., Giovannoni J.** Comparative Apple-Tomato Genomics to Unravel the 1-MCP Effect on Apple Maturation and Ripening.

12.30 - 12.45 **Ruiz K. B., Bressanin D., Ziosi V., Tadiello D., Trainotti, L., Bonghi C., Costa G., Torrigiani P.** Early jasmonate application interferes with peach fruit development and ripening as revealed by the time course of several differentially expressed seed and mesocarp genes. As Related To The Fruit Ripening Stage.

12.45 - 14.30 lunch and poster

SESSION 2
Fruit Trees Developmental Processes
Propagation, Vegetative growth, Dormancy

Chairman: Robinson T.

14.30 - 15.00 Elfving D.C. Plant bioregulators in fruit-tree nursery development.

15.00 - 15.15 Aloni D.D., Hazon H., Pumeranc R., Karp C., Edom U., Sandelham D. Cohen Y. Use of growth retardants to control excessive trunk growth of palm trees

15.15 - 15.30 Garner L.C., Zheng Y., Lovatt C.J. Prohexadione-Ca affects shoot growth of evergreen subtropical woody perennials differently than deciduous temperate zone woody perennials - *Is it a case of apples and oranges?*

15.30 - 15.45 MacAntsaioir S., Mansfield J., Ward F., Archer J. A comparison of prohexadione calcium (Regalis) with paclobutrazol (Cultar) on Bramley's seedling apples (*Malus silvestris* x *Malus pumila* Mill.) in Ireland

15.45 - 16.00 Woolley D.J., Gali N.M.R., van Hooijdonk B.M., Hernández G. Hormonal control of vegetative vigour – A comparison between apple (*Malus x domestica*) and kiwifruit (*Actinidia deliciosa*).

16.00 - 16.30 coffee break

Dormancy, flowering and fruit set

Chairman: Wunsche J.

16.30 - 17.00 Flaishman M.A. Deciduous fruit trees in a warming world: flowering fruit set and

17.00 - 17.15 Glozer K., Grant J., Coates W.W. Rest-breaking and chill accumulation modeling in California sweet cherry.

17.15 - 17.30 Zanol G.C., Sekozawa Y., Sugaya S., Gemma H. Effect of the hydrogen cyanamide on dormancy release, bud-break and fruiting in Japanese pear.

17.30 - 17.45 Formolo R., Rufato L., Kretschmar A.A., Marcon Filho J.L., Brighenti A.F. Application of chemical products on overcoming the endodormancy in pear trees in regions of low cold unities.

17.45 - 19.00 Poster

20.00 Social event

Tuesday, September 22nd

SESSION 2
Fruit Tree Developmental Processes
Fruit abscission and crop load control

Chairman: M. Fidelibus

- 8.30 - 9.00** **Fallahi E., Greene D.W.**. The impact of blossom and post-blossom thinners on fruit set and fruit quality in apples and stone fruit
- 9.00 - 9.15** **Hegele M., Schmid K., Wunsche J.** The Application of Black Food Colorants - a Possible Alternative to Chemical Thinning Agents in Apple?
- 9.15 - 9.30** **Bound S.A.** Alternative thinning chemicals for apples.
- 9.30 - 9.45** **Deckers T., Schoofs H., Verjans W.** Looking for solutions for chemical fruit thinning on apple.
- 9.45 - 10.00** **Giménez G., Sugar D., Reeb P., Dussi M.C., Siviero P., Elosegui F.** Optimizing benzyladenine application timing in 'Williams' pear.
- 10.00 - 10.15** **McArtney S.J., Obermiller J.D.** Evaluation of a model to predict the response of apples to chemical thinners
- 10.15 - 10.30** **Robinson T.** Performance of AVG and NAA in Controlling Pre-harvest Drop of 'McIntosh' Apples
- 10.30 - 10.45** **Meland M., Birken E.** Ethephon as a blossom and fruitlet thinner affects crop load, fruit weight and fruit quality of the European plum cultivar 'Jubileum'.
- 10.45 - 11.00** **Racsko J., Miller D.D., Dussi M.C.** Influential factors in king dominance of apple fruits.
- 11.00 - 11.15** **Sabbatini P., Bukovac M.J., Schwallier P.G., Zucconi F.** Native variation and chemical control of crop load in relation to flower initiation in apple.
- 11.15 - 11.30** **Maas F.M., Kanne H.J., van der Steeg P.A.H.** Chemical thinning of 'Conference' pears
- 11.30 - 11.45** **Stopar M.** Fruit set and return bloom of light, medium and high flowering apple trees after BA applications
- 11.45 - 12.15** **lunch**
- 12.15 - 19:30** **Technical visit to Ferrara area**

Wednesday, September 23rd

SESSION 2
Fruit Tree Developmental Processes
Ripening and Fruit quality

Chairman: Tonutti P.

- 8.30 - 9.00** Lurie S. Plant Growth regulators for improving post-harvest quality of fruits
- 9.00 - 9.30** Valero D. The role of polyamines on fruit ripening and quality during storage: what is new
- 9.30 - 9.45** Gholami M., Sedighi A., Ershadi A., Sarikhani H. Effect of pre- and post-harvest treatments of salicylic and gibberellic acid on ripening and some physicochemical properties of sweet cherry (*Prunus avium* l.) fruit, cv. Mashad.
- 9.45 - 10.00** Greenberg J., Holtzman S., Fainzack M., Egozi Y., Giladi B., Oren Y., Kaplan I. Effects of NAA and GA3 sprays on fruit size and the incidence of creasing of 'Washington' Navel orange.
- 10.00 - 10.15** Pantelidis G., Vasilakakis M., Manganaris G.A. Effect of 1-methylcyclopropene and ReTain on quality attributes of 'Kristali' pears after short or long term cold storage.
- 10.15 - 10.30** Basak A., Buczek M. The efficiency of 3,5,6-TPA used against pre-harvest fruit drop in apple.
- 10.30 - 11.00** coffee break

Chairman: Ramirez H.

- 11.00 - 11.15** Tonutti P. Postharvest elicitors and hormonal treatments on composition and metabolism of wine grape berries
- 11.15 - 11.30** Petri J.L., Leite G.B., Hawerth F.J. Effect of growth regulators on 'Gala' apple fructification.
- 11.30 - 11.45** Retamales J., Petracek P. AVG and fruit set: A tool for which novel applications are still being developed in various fruit crops.
- 11.45 - 12.00** Tiwari A., Vivian-Smith A., Ep Heuvelink E. Effect of gibberellins and emasculation on parthenocarpic fruit growth in sweet pepper (*Capsicum annuum* L.).
- 12.00 - 12.15** Vercammen J., Gomand A., Denruyter L. Improvement of the fruit set of 'Jonagold'
- 12.15 - 14.00** lunch

SESSION 3

Technical Environmental and Social Aspects of Plant Bioregulators

Naturally occurring Plant bioregulators, Novel Synthetic Plant bioregulators

Chairman: Ramina A.

- 14.00 - 14.30 Pienaar J., Venburg G.** New Plant Growth Regulator tools to optimize quality and production in horticulture,
- 14.30 - 15.00 Rademaker W.** Potentials and limitations for plant bioregulators in horticulture: an assessment from the industry
- 15.00 - 15.15 Pillitteri L.J., Chao C.T., Lovatt C.J.** Foliar-applied tryptophan increases total yield and fruit size of *Citrus reticulata* (Blanco) cv. Fina Sodea clementine mandarin
- 15.15 - 15.30 Verreyne J.S., Mupambi G.** Effects of 2,4-D on the size of the navel end opening and fruit quality of Navel oranges.
- 15.30 - 15.45 Rath A.C., Rick Hopkins R., Fritts R.** Impact of abscisic acid applications on harvest management of Crimson seedless table grapes in Australia and the USA.
- 15.45 - 16.15 coffee break**

Chairman: Webster A. D.

- 16.15 - 16.45 Kondo S.** Roles of jasmonates in fruit ripening and environmental stress
- 16.45 - 17.00 Fidelibus M., Cathline K.** Dose and time dependant effects of methyl jasmonate on Fruit Detachment Force of grape.
- 17.00 - 17.15 Rivera C.M., Salerno A., Trinchera A., Sequi P., Rea E.** Exploring biostimulant effect of a Brassicacea plant extract: use of maize seedling development as reference bioassay.
- 17.15 - 17.30 Ziosi V., Piccinini L., Fiori G., Costa G.** Effects Of Pre- And Post-Harvest Jasmonate Application On Phenols Accumulation And Ethylene Emission In Apple Fruit.

Round Table/Conclusions