Frutic Italy 2025

15th International Symposium

MACFRUT 2025

FRUTIC 2025

at MACFRUT Fair Rimini

MAY 7-8, 2025

Chairs Prof. Riccardo Guidetti – Università degli Studi di Milano
Prof. Giancarlo Colelli - Università degli Studi di Foggia

- *Location & Welcome*
- *International Scientific Commmite*
- *Program*
- *FRUTIC 2025 Scientific Award*

Provider A&Q
Polo per la Qualificazione del Sistema Agro Industriale
Sede Legale VIALE ORTLES 22/4 20139 MILANO
Phone: + 02 70639224
mail: fromazione@poloaq.it
www.poloaq.it

7 - 8 May 2025
at Macfrut 2025
Rimini Fair, via Emilia 155,
Rimini Italy Sala Mimosa 2

WELCOME

Frutic2025 comes to Rimini, ltaly, as part of the prestigious Macfrut exhibition, providing an exceptional platfarm far a research network on emerging technologies and sustainable practices in the fresh produce industry. The conference will encompass a wide range of topics, facusing on technological advancements in production, harvest, postharvest, distribution, and quality contrai of fruit, nuts, and vegetables. By bringing together scientists, academics, and industry professionals, Frutic2024 aims to faster collaboration, disseminate knowledge, share practical experiences, and develop roadmaps to achieve common goals.

The presentation of high-quality research enables producers to meet consumer demands while ensuring a safe, affordable, and sustainable product. Over the years, the fruit and vegetable sector has witnessed significant advancements in both cultivation and transfarmation processes. Concepts such as digitalization and sustainability have prompted a re-evaluation of production methods, emphasizing environmental considerations and consumer well-being.

Against this backdrop, the conference aims to explore the latest technological developments in cultivation and postharvest processes. Precision farming continues to provide practical solutions far efficient orchard management. Automation and sensor technologies employed in transfarmation processes enhance product quality contrai, expand the range of offerings (including fresh-cut fruits and vegetables), reduce waste, and minimize costs.

Join us at Frutic2025 in Rimini, ltaly, where industry leaders, researchers, and practitioners will converge to shape the future of the fresh produce industry. Together, we will advance technologies, embrace sustainability, and drive innovation, aiming at a prosperous and resilient industry far years to come.

wrb site: www.frutic2025.com

INTERNATIONAL SCIENTIFIC COMMITTE

Amauri Rosenthal, (Embrapa Food Agroindustry, Brazil)
Aris Purwanto (Bogor Agricultural University, Indonesia)
Atsushi Hashimoto (Mie University Graduate School & Faculty of Bioresources, Japan)
Dazhou Zhu (Beijing Research Center for lnformation Technology in Agriculture, China)
Dharini Sivakumar (Tshwane University of Technology, South Africa)
Dong Sun (Kyungnam University, Republic of Korea)
Francisco Artes-Hernandez (Universidad de Cartagena, Spain)
Gavin Ross (Plant & Food Research, New Zealand)
Giancarlo Colelli (University of Foggia, ltaly)
Mustafa Erkan (Akdeniz Oniversitesi, Turkey)
Leon Terry (University of Cranfield, UK)
José Blasco (!VIA, Spain) Lorenzo Leon (INIA, Chile)
Maarten Hertog (K.U. Leuven, Belgium)
Manuela Zude-Sasse (ATB Potsdam, Germany)
Margarita Ruiz-Altisent (Universidad Politécnica de Madrid, Spain)
Maria Isabell Gill (CEBAS-CSIC, Spain)
Maria Luisa (Università degli Studi di Foggia) Martin Geyer (ATB Potsdam, Germany)
Merete Edelenbos (Aarhus University, Denmark)
Norhashila Binti Hashim (Universiti Putra Malaysia, Malaysia)
Paolo Gay (Università di Torino)
Pramod Mahajan (ATB Potsdam, Germany)
Reza Ehsani (University of California, Merced, USA)
Riccardo Guidetti (Università degli Studi di Milano, ltaly)
Roberto Beghi (Università degli Studi di Milano, ltaly)
Stanley Best (INIA, Chile)
Stavros Vougioukas (University of California, Davis, USA)
Takaharu Kameoka (Mie University Graduate School & Faculty of Bioresources, Japan)
Umezuruike Linus Opara (Africa lnstitute of Postharvest Technology, South Africa)
Valentina Giovenzana (Università degli Studi di Milano, ltaly)
Veronique Bellon-Maurel (INRAE, France)
Victor Rodov (ARO Volcani Center, lsrael)
Wiraya Krongyut (Ubon Ratchathani Rajabhat University, Thailand)
Ze'ev Schmilovitch, (ARO Volcani Center, lsrael)

Program

7 MAY 2025

- 10:30 **Opening - Registration Desk and welcome coffee**
- 11:00 Keynote - Improving Postharvest Handling of Pomegranate Fruit: Recent Results and Future Perspectives. Giancarlo Colelli, UNIFG
- 11:30 **SESSION 1 - Automation and Artificial Intelligence in Precision Fruit Farming - Chairman Jose Blasco**

Oral Presentation

- 11:30 - Monitoring Mealybug Progression in Valencian Citrus Trees Using Remote Sensing: Insights from the Co-Fruit AGROALNEXT Project - **ID 16** Della Bellver F. et al, Universitat de València (Paterna), Spain
- 11:45 Proximal Hyperspectral Imaging May Support Decisions on Irrigation Strategy on Tomatoes - **ID 14** Fatchurrahman D. et al, UNIFG, Italy
- 12.00 Stand-alone LED sensors for future field monitoring of grape (Vitis vinifera L.) ripeness - **ID 39** Tugnolo A. et al, UNIMI, Italy

Flash talk

- 12:20 Remote Sensing for Fruit Tree Monitoring: Angular Effect Correction in Orange Orchards - **ID 17** Guerrero Benavent C.J. et al, Universitat de Valencia, Spain (speaker : F. Della Bellver)
- 12:23 The Development of YOLOv8 Algorithm for a Real-Time Model of Grape Cutting Point Detection - **ID 12** Matloob M. et al, UNIFG, Italy (speaker : C. Perone)

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- 12:26 Hyperspectral Imaging to Assess Pulp Redness Level of Blood Oranges (cv. Tarocco Sant'Alfio) - **ID 9** Russo L. et all, UNIFG, Italy
- 12.29 Hyperspectral Analysis to Predict the Maturity Index of Fresh Strawberries - **ID 20** Cefola M. et all, ISPA-CNR Foggia, Italy
- 12:40- 14:15 *Lunch and free time to visit MACFRUT*
- 14.15 **SESSION 2 - Innovations for Postharvest Quality and Storage - Chairman Roberto Beghi**

Oral Presentation

- 14.15 Sensors and Modelling Applied to Fresh Fruit Packaging and Storage - **ID 10** Mahajan P. et all, ATB Potsdam, Germany
- 14:30 Extending the Marketing Period of Persimmon by a Little Reduction in Storage Temperature. The Role of Antioxidant Enzyme Modulation - **ID 25** Moreno Martínez A.P. et all, IVIA Valencia, Spain
- 14:45 Development of Non-Fermented Probiotic Beverages: Evaluation of Probiotic Viability and Assessment of Physicochemical and Sensory Properties During Cold Storage - **ID 5** Condurso C. et all, UNIME, Italy
- 15.00 Potential for a low-cost greenhouse technology to optimize drying conditions of fruits and vegetable in Senegal for storage - **ID 40** Diop M.B., UFR Saint-Louis, Senegal

Oral Presentation :
15 min (12 + 3 min Q&A)
Flash talk: 3 min
ID: Use for voting

Program

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Flash talk

- 15:15 Prediction of Acidity and Soluble Solid Content Changes In Loquat Fruit During Cold Storage through Non-Destructive Spectral Methods - **ID 26** López-Chuliá M. et al, IVIA Valencia, Spain
- 15:18 Active Pad in Pallet Bag: The Role of Essential Oils in Blueberry Storage Management - **ID 4** Ollani S. et al, UNITO, Italy
- 15:21 Non-destructive texture prediction of persimmon texture using hyperspectral imaging - **ID 30** Castillo-Girones S. et al, IVIA Valencia, Spain
- 15:30- 16:00 *Coffee Break*
- 16:00 **SESSION 3 - Functional and packaging Innovations in Fruit-Based Products - Chairman Pramod Mahajan**

Oral Presentation

- 16:00 Application of Biostimulants in Tomato Subjected to Water Deficit: Evaluation of Plant Productivity and Fruit Quality - **ID 6** Merlino M. et al, UNIME, Italy
- 16:15 Effect of Packaging Materials and Micro-Perforation on the VOCs Equilibrium of Packaged Broccoli Raab (Brassica rapa L.) - **ID 21** Pati S. et al, UNIFG, Italy

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- 16:30 Non-destructive and contactless estimation of polyphenol oxidase and peroxidase activities in packaged fresh-cut apples by a computer vision system - **ID 18** Palumbo M. et al, ISPA-CNR Italy

Flash Talk

- 16:45 Combined Immersion and Microwave Treatment to Extend the Shelf Life of Different Varieties of Artichokes - **ID 15** Fatchurrahman D. et al, UNIFG, Italy
- 16:48 Microbiomes, Edible Packaging, and Biocontrol Application in Fresh-Cut Fruit and Vegetables: a General Perspective - **ID 23** de Chiara M.L.V. et al, ISPA-CNR Foggia, Italy
- 16:51 Migration of Volatile Compounds from Packaging for Fresh Vegetables - **ID 22** Pati S. et al, UNIFG, Italy
- 16: 54 Effects of Storage at Different Temperatures on Postharvest Quality of Citrus medica L. (cv. Liscia-Diamante) - **ID 19** Quintieri L. et al, ISPA-CNR Bari, Italy
- 17:00 - 18:00 *Free Time to visit MACFRUT 2025*
- 20:00 *Social Dinner at* ***Hotel Imperiale****

****Hotel Imperiale Rimini & SPA, Viale Amerigo Vespucci, 16, 47921 - Rimini RN***

Oral Presentation :
15 min (12 + 3 min Q&A)
Flash talk: 3 min
ID: Use for voting

Program

8 MAY 2025

- 10:00 Opening
- 10:00 **SESSION 4 - Sustainable Strategies for Fruit Production - Chairman Valentina Giovenzana**

Oral Presentation

- 10:00 Hemp Seed Press-Cake Flour as a Sustainable Food Ingredient: Chemical Composition, Antioxidant Properties, and Functionality - **ID 7** Malvano F. et al, UNISA, Italy
- 10:15 How Smart Viticulture Technologies Can Enhance Sustainability and Reduce Environmental Impacts - **ID 29** Bacenetti J. et al, UNIMI, Italy
- 10:30 Detection of Pesticide Residues in Table Grapes by Means of Hyperspectral Imaging - **ID 11** Matloob M. et al, UNIFG, Italy (speaker: C. Perone)

Flash Talk

- 10:45 Comparison of Spectral-Optical Sensors for Whole Canopy and Fruit Analysis in Apple Production - **ID 8** Zude-Sasse M., ATB Potsdam, Germany (speaker: Pramod Mahajan)
- 10:48 Controlling Malaxation Atmosphere in Olive Oil Processing Plant - **ID 28** Vallone M. et al, UNIPA, Italy
- 10:51 Characterization of avocados cv. Lamb-Hass from the Mediterranean area in Spain and the relationship among quality attributes - **ID 24** Quintanilla P. et al, IVIA Valencia, Spain (speaker: José Blasco)

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- 10:54 Avoidable Food Waste in the Distribution Sector: Quantification and Valorisation - **ID 38** Cusmai A. et al, UNIMI, Italy
- 10:57 Sensor Application in Vineyard to Improve Grape Quality - **ID 36** Catania P. et al, UNIPA, Italy
- 11:00 A Digital Platform for Precision Olive Grove Protection - **ID 37** Orlando S. et all, UNIPA, Italy
- 11:10 *Coffee Break*
  (audience voting best ORAL and FLASH TALK)
- 11:30 **Frutic meets companies: "Innovation and Technology for the Fruit Sector: Advanced Solutions in a Changing Sector"**

  SORMA Group, O.P. Red. CO. P
- 12:30 **CLOSING CEREMONY, awarding Best Oral Presentation and Best Flash Talk**
- 13:00 Lunch and *MACFRUT technical tour*

See you next International Simposyum Frutic

FRUTIC 2025 SCIENTIFIC AWARD

We are pleased to announce the Scientist Award. All the participant at ORAL or Flash talk presentation will be assessed by the public of FRUTIC 2025 International Symposium.
Each scientist participant will be able to vote once for ORAL and once for Flash talk presentation. It will then be possible to draw up a ranking.
This award provides financial support for the winners to publish their research on an Open Access IF Journal, the Journal of Agricultural Engineering (https://www.agroengineering.org/index.php/jae).
The winners will be three awardees for ORAL presentations and three for Flash talk presentation. In case of withdrawals, the possibility will be given following the ranking.
The counting of votes, carried out during the Symposium, and the announcement of the winners of the ORAL and Flash Talk presentations will be announced at the end of the conference

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