

## INNOVATIONS IN FOOD LOSS AND WASTE MANAGEMENT



# **CONFERENCE PROGRAMME**

## Ancona, 23-25 January 2024

Aula Magna Department of Agricultural Food and Environmental Sciences, Università Politecnica delle Marche

> Via Brecce Bianche, 10 – 60131 Ancona https://maps.app.goo.gl/NygL9Rbq2RRBVYci8











Dear Participants

thanks for joining and taking your valuable contribution the #PostharvestAncona2024 congress, in which we will have the final meeting of PRIMA project "Innovative Sustainable technologies TO extend the shelf-life of Perishable MEDiterranean fresh fruit, vegetables and aromatic plants and to reduce WASTE (StopMedWaste, <u>https://stopmedwaste.net/</u>)" and Meeting of COST CA22134 Action "Sustainable Network for agrofood loss and waste prevention, management, quantification and valorisation (FoodWaStop,

https://www.cost.eu/actions/CA22134/?fbclid=IwAR0cYjMCgVSWRByj4UenputYwc8Qa5NgDw qpomkpXAOiKaNA3GItoB7ZTbM#tabs+Name:Description)".

We are delighted to host you in Ancona for this important opportunity for networking and knowledge sharing. Speakers from over 30 Countries will present the latest innovations in terms of technologies, strategies, and approaches for reducing food loss and waste, that is a worldwide priority. We are confident that this conference will be a valuable experience for all participants. We wish you a pleasant stay in Ancona and a fruitful time.

*The Convener* Gianfranco Romanazzi

*The Organising Committee* Marwa Moumni Lucia Landi Annamaria Lucrezia D'Ortenzio Simone Piancatelli Sarah M. Makau Mehdiye Tunc

In cooperation with:



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### 23 January 2024

- 08:30-09:15 REGISTRATION AND SETTING UP OF STOPMEDWASTE POSTERS
- 09:15-09:30 WELCOME ADDRESS
- **09.30-09:45** Gianfranco Romanazzi, Marwa Moumni *Marche Polytechnic University, Ancona, Italy.* Presentation of the PRIMA StopMedWaste project
- 09:45-10:10 Gianfranco Romanazzi, Marwa Moumni, Lucia Landi, Annamaria Lucrezia D'Ortenzio, Sarah Makau, Samuel Alvarez Garcia, Deborah Pacetti - Marche Polytechnic University, Ancona, Italy. Chitosan, essential oils and ozone as tools to control decay causing fungi and control postharvest decay of fruits
- **10:10-10:35** Annamaria Mincuzzi, Antonio Ippolito University of Bari, Bari, Italy. Integrated alternative control means against postharvest diseases of pomegranates and citrus fruit
- **10:35-10:55** Mohamed Bechir Allagui, Mouna Ben Amara National Institute for Agronomic Research of Tunisia (INRAT), Tunisia. Essential oils and GRAS salts for preventing postharvest fruit rot and reducing the need for chemical fungicides
- 10:55-11:20 Coffee break and poster session
- **11:20-11:45 Davide Spadaro, Giulia Remolif** *University of Torino, Torino, Italy.* Effectiveness of antagonistic yeasts and essential oils in the control of postharvest diseases of fruit
- **11:45-12:10 Pervin Kinay** *UE, Turkey* and **Mahmut Kilic** *ICACHEM, Turkey*. Effect of postharvest UV-C applications on postharvest decays on strawberry fruits
- 12:10-12:35 María Bernardita Pérez-Gago, Verónica Taberner, Lluís Palou *IVIA*, *Spain* and Clara Montesinos *DECCO*, *Spain*. Antifungal edible coatings to reduce decay and maintain postharvest quality of citrus, plums, and pomegranates
- 12:35-13:00 General discussion
- 13:00-13:15 Feedback from International Advisory Board members
- 13:15-14:30 Light lunch and poster session
- 14:30-15:30THE EXPERIENCE OF OTHER PRIMA AGROFOOD PROJECTS<br/>Fernando Perez Rodriguez BioFreshCloud<br/>Laura Gasco ADVAGROMED<br/>Priscilla Farina, Barbara Conti FedKito<br/>Federico La Spada, Olga Cacciola OrangeBioPack15:30-16:00Coffee break and poster session
- 16:00-18:00 VISIT OF THE CITY OF ANCONA
  - **19:30** SOCIAL DINNER (*Ristorante L'Ascensore*, Piazza IV Novembre)





### 24 January 2024

#### 08:30-09:00 **REGISTRATION AND SETTING UP OF FOODWASTOP POSTERS**

09:00-09:15 WELCOME ADDRESS

**09.15-10:45** <u>**Presentations of WG1**</u> - Prevention of food loss and food waste (Moderators: *George Karaoglanidis* and *Fernando Perez-Rodriguez*)

**Barbara Blanco-Ulate**, *University of California, Davis, California, USA*. Improving shelf-life while ensuring fruit quality using gene editing

**David Gramaje**, *Instituto de Ciencias de la Vid y del Vino (ICVV), Spain*. Fungal trunk diseases: a global threat to grapevine health

**Florence Fontaine**, University of Reims Champagne-Ardenne, RIBP USC INRAE, France. Strategies studied for an ecofriendly management of grapevine trunk diseases

**Erzsebet Karaffa**, *Hungarian Chamber of Professionals and Doctors of Plant Protection, Hungary.* Endophytic *Trichoderma* strains increase preharvest quantity and quality of grapes

**Piotr Kulawik**, Department of Animal Products Processing, University of Agriculture in Krakow ul. Balicka, Poland. The use of multilayer chitosan/furcellaran mini/nanoemulsions with oregano essential oil for preservation of perishable food products

Annamaria Mincuzzi, Department of Soil, Plant, and Food Sciences, University of Bari Aldo Moro, Bari, Italy. Antifungal activity of Apulian macroalgal extracts

10:45-11:15 Coffee break and poster session

11:15-13:00

<u>Presentations of WG1</u> - Prevention of food loss and food waste (Moderators: *George Karaoglanidis* and *Fernando Perez-Rodriguez*)

**Paolo Guarnaccia, Fabio Gresta**, *Department of Agriculture, Food and Environment, University of Catania, Italy.* How can agroecology contribute to the reduction of food waste and loss?

**Stela Todorova**, *University of Agriculture, Bulgaria*. Short food supply chains as drivers of sustainability in rural areas

<u>Presentations of WG2</u> - Agrofood loss and waste management (Moderators: *Slaven Zjalic* and *Lluís Palou*)

Lluís Palou, Centre de Tecnologia Postcollita (CTP), Institut Valencià d'Investigacions Agràries (IVIA), València, Spain. Antifungal edible coatings for postharvest disease control and quality maintenance of fresh fruits

Alessandra Di Francesco, Department of Agriculture, Food, Environmental and Animal Sciences, Udine University, Italy. Efficacy of wild Aureobasidium pullulans VOCs and application methods vs strawberry fungal pathogens

**Giulia Remolif**, Dipartimento di Scienze Agrarie, Forestali e Alimentari (DISAFA), Università di Torino, Largo Paolo Braccini 2, Grugliasco, Italy. Efficacy of antagonistic yeasts to control brown rot of nectarines and effect on the fruit microbiome



Selda Daler, Department of Horticulture, Faculty of Agriculture, Yozgat Bozok University, Turkey. The potential of smoke solutions from vineyard pruning wastes to mitigate heavy metal toxicity in grapevine saplings Kata Ludman-Mihaly, FruitVeB Hungarian Interprofessional Organization for Fruit and Vegetable, Hungary. Cold storage may elongate the fresh consumption period of sour cherry (Prunus cerasus L.) 13:00-14:15 Light lunch and poster session 14.15-15:45 Presentations of WG3 - QUANTIFICATION OF FOOD LOSS AND FOOD WASTE (Moderators: Natalia Falágan and Lise Korsten) Rosa Rolle, FAO. FAOs work to address food loss and waste Natalia Falagán, Plant Science Laboratory, Cranfield University, Cranfield, United Kingdom. Drivers of food loss and waste and the importance of quantification Lise Korsten, University of Pretoria. Produce waste and losses in the informal sector in South Africa Andrea Segré, University of Bologna. Waste watcher international observatory Viktoriya Voytsekhovska, Lviv Polytechnic National University, Ukraine. Modelling the scenarios of development for Ukraine in the context of EU circular economy using fuzzy set theory Miguel Elias, MED-Mediterranean Institute for Agriculture, Environment and Development, Portugal. Food waste quantification in Portuguese meat plants 15:45-16:15 Coffee break and poster session Presentations of WG4 - VALORISATION OF AGROFOOD WASTE AND A 16:15-17:45 CIRCULAR BIO-ECONOMY (Moderators: Jessica Girardi and Marwa Moumni) Sarah Milliken, University of Greenwich, United Kingdom. The valorisation of agri-food waste for a circular bioeconomy: highlighting policy incoherence through nexus thinking Ivo Safarik, Department of Nanobiotechnology, Biology Centre, ISBB, CAS, Na Sadkach, Ceske Budejovice, Czech Republic. Magnetically responsive waste biomaterials for environmental technology applications Arben Mehmeti, University of Prishtina, Faculty of Agriculture and Veterinary, Bill Clinton, Republic of Kosovo. Application of insect frass for the development of sustainable agriculture production in Kosovo Magdalena Joka Yildiz, Bialystok University of Technology, Poland. Biowaste-based pellets as a promising feedstock for biochar production **Ioannis Trougakos**, Department of Cell Biology and Biophysics, Faculty of Biology, National and Kapodistrian University of Athens, Greece. Natural products in the fight against ageing and age-related diseases



**Semanur Yildiz**, Sustainable Food Processing Laboratory (SuProLab), Sakarya University, Sakarya, Turkey. Optimization of ultrasound-assisted extraction of cold-pressed pistachio meal proteins

**19:30 SOCIAL DINNER** (*Ristorante Il Giardino*)

### 25 January 2024

09:00-10:15 <u>Presentations of WG4</u> - VALORISATION OF AGROFOOD WASTE AND A CIRCULAR BIO-ECONOMY (Moderators: Jessica Girardi and Marwa Moumni)

Luis C. Duarte, *Institution LNEG-UBB, Portugal*. The pros and cons of upgrading fruits & vegetables wastes in the biorefinery framework

Eduardo Espinosa, University of Cordoba, Spain. Sustainable packaging solutions based on the circular valorization of agro-industrial by-products

**Tulay Inan**, Sabanci University Nanotechnology Research and application Center (SUNUM), Turkey. Preparations of multifunctional composites for electromagnetic interference (EMI) shielding applications using tomatoes wastes

**Rajeev Bhat**, *ERA-Chair in VALORTECH*, *Estonian University of Life Sciences, Tartu, Estonia.* Realisation of sustainable food systems by valorisation of agri-food wastes and by-products in support of circular bioeconomy concepts

**Laszlo Abranko**, *MATE - Hungarian University of Agriculture and Life Sciences, Hungary.* Assessment of beneficial impacts of plant bioactives on macronutrient digestion by digestion simulation

**10:15-10:45** Coffee break and poster session

10:45-13:00 <u>Presentations of WG5</u> - CROSS-CUTTING STRATEGIES AND SMART SYSTEMS FOR FOOD MANAGEMENT (Moderators: *Sandro Frati* and *Zeynep Zerrin Turgay*)

Zeynep Zerrin Turgay, *MIGROS, Turkey*. Prevention of food waste in retail industry

**Dov Prusky**, *Department of Postharvest Science, Agricultural Research Organization, The Volcani Institute, Rishon LeZion, Israel.* Induced resistance in fruit and vegetables: the physiological effect

**Gonzalo Mejia**, *Universidad de La Sabana, Colombia*. Food loss and waste in central markets in Colombia perspectives from a comparative study

**Elena Battini Sonmez**, *Istanbul Bilgi University, Turkey*. Smart solutions for waste prevention with case study on fruit and vegetable

<u>Presentation of WG6</u> - NETWORKING AND DISSEMINATION, COMMUNICATION AND TRANSFER OF KNOWLEDGE (Moderators: *Kata Ludman-Mihály* and *Luca Falasconi*)

Magdalena Bielenia-Grajewska, Institute of English, University of Gdansk, Poland. Communicative side of food loss and waste management



	Achraf Ammar, Johannes-Gutenberg-University of Mainz, Germany.
	MEDIET4ALL Approach to support food waste prevention
	Bekir Ayyildiz, Yozgat Bozok University, Turkey. Scientific studies on food
	waste in Turkey
13:00-14:30	Light lunch and poster session
14.30-15:15	WG meetings in separate rooms
15:15-16:30	General plenary discussion
16:30-17:00	Coffee break and poster removal

17:00-18:00 COST Management Committee Meeting (hybrid)



### **POSTERS STOPMEDWASTE**

**P01.** ROMANAZZI G.<sup>1</sup>, TZORTZAKIS N.<sup>2</sup>, IPPOLITO A.<sup>3</sup>, ALLAGUI M.B.<sup>4</sup>, SPADARO D.<sup>5</sup>, KINAY TEKSUR P.<sup>6</sup>, PÉREZGAGO M.<sup>7</sup>, KILIC M.<sup>8</sup>, MONTESINOS C.<sup>9</sup>, XYLIA P.<sup>2</sup>, MINCUZZI A.<sup>3</sup>, GARELLO M.<sup>5</sup>, REMOLIF G.<sup>5</sup>, PALOU L.<sup>7</sup>, D'ORTENZIO A.L.<sup>1</sup>, LANDI L.<sup>1</sup>, MOUMNI M.<sup>1</sup>. <sup>1</sup>Marche Polytechnic University, Ancona, Italy; <sup>2</sup>Cyprus University of Technology, Limassol, Cyprus; <sup>3</sup>Università di Bari, Bari, Italy; <sup>4</sup>Institut National de la Recherche Agronomique de Tunisie, Tunis, Tunisia; <sup>5</sup>Università di Torino, Torino, Italy; <sup>6</sup>University of Ege, Izmir, Turkey; <sup>7</sup>Centre de Tecnologia Postcollita, Institut Valencià d'Investigacions Agràries, Valencia, Spain; <sup>8</sup>Icachem Agro Ilac San, Adana, Turkey; <sup>9</sup>Decco Iberia, Valencia, Spain. Innovative sustainable technologies to extend the shelf life of perishable mediterranean fresh fruit, vegetables, and aromatic plants and to reduce waste: the experience of Prima Stopmedwaste project

**P02. ROMANAZZI G. AND MOUMNI M.** Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Via Brecce Bianche, 60131 Ancona, Italy. Chitosan and other edible coatings to extend shelf life, manage postharvest decay, and reduce loss and waste of fresh fruits and vegetables

**P03.** FANESI B.<sup>1</sup>, D'ORTENZIO A.L.<sup>1</sup>, KUHALSKAYA A.<sup>1</sup>, NARTEA A.<sup>1</sup>, FIORINI D.<sup>2</sup>, MOUMNI M.<sup>1</sup>, LANDI L.<sup>1</sup>, LUCCI P.<sup>1</sup>, ROMANAZZI G.<sup>1</sup>, PACETTI D.<sup>1</sup> <sup>1</sup>Department of Agricultural, Food and Environmental Sciences, Università Politecnica delle Marche, 60131, Ancona, Italy; <sup>2</sup>School of Science and Technology, Chemistry Division, Università di Camerino, 62032, Camerino, Italy. Identification of volatile organic compounds as markers to detect Monilinia fructicola infection in fresh peaches

**P04. MOLINA-HERNANDEZ<sup>1</sup> J. B., LANDI<sup>2</sup> L., DE FLAVIIS<sup>1</sup> R., LAIKA<sup>1</sup> J., ROMANAZZI<sup>2</sup> G., CHAVES-LOPEZ<sup>1</sup> C.** <sup>1</sup>*Faculty of Bioscience and Technology for Food, Agriculture and Environment, University of Teramo, Via R. Balzarini 1, 64100 Teramo, Italy;* <sup>2</sup>*Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Via Brecce Bianche 10, 60131 Ancona, Italy.* **Understanding the mechanisms of action of atmospheric cold plasma towards the mitigation of the stress induced in molds: the case of** *Aspergillus chevalieri* 

**P05.** VISCHETTI C., FELIZIANI E., LANDI L., DE BERNARDI A., MARINI E., ROMANAZZI G. Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Via Brecce Bianche, 60131 Ancona, Italy. Effectiveness of four synthetic fungicides in the control of post-harvest gray mold of strawberry and analyses of residues on fruit

**P06. RAJESTARY R., LANDI L., ROMANAZZI G.** Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Italy. Effects of commercial natural compounds on postharvest decay of strawberry fruit

**P07.** LANDI L.<sup>1</sup>, PERALTA-RUIZ Y.<sup>2,3</sup>, CHAVES-LÓPEZ C.<sup>2</sup>, ROMANAZZI G.<sup>1</sup> <sup>1</sup>Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Italy; <sup>2</sup>Faculty of Bioscience and Technology for Food, Agriculture and Environment, University of Teramo, Teramo, Italy; <sup>3</sup>Facultad de Ingeniería, Programa de Ingeniería Agroindustrial, Universidad del Atlántico, Puerto Colombia, Colombia. Chitosan coating enriched with Ruta graveolens L. essential oil reduces postharvest anthracnose of papaya (Carica papaya L.) and modulates defense-related gene expression

In cooperation with:







**P08.** ÁLVAREZ-GARCÍA S.<sup>1,2</sup>, MOUMNI M.<sup>1</sup>, ROMANAZZI G.<sup>1</sup> Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Ancona, Italy, <sup>2</sup>Plant Physiology Area, Engineering and Agricultural Sciences Department, Universidad de León, León, Spain. Antifungal activity of volatile organic compounds from essential oils against the postharvest pathogens Botrytis cinerea, Monilinia fructicola, Monilinia fructigena, and Monilinia laxa

**P09.** MAKAU S.M.<sup>1</sup>, MOUMNI M.<sup>1</sup>, LANDI L.<sup>1</sup>, PIROZZI D.<sup>2</sup>, SANNINO F.<sup>3</sup>, ROMANAZZI G.<sup>1</sup> <sup>1</sup>Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Ancona, Italy; <sup>2</sup>Laboratory of Biochemical Engineering, Department of Chemical Engineering, Materials and Industrial Production (DICMaPI), University of Naples "Federico II", Piazzale Tecchio, Naples, Italy; <sup>3</sup>Department of Agricultural Sciences, University of Naples "Federico II", Italy. In vitro evaluation of Chitosan hydrochloride and COS (Chito-Oligosaccharides)-OGA (Oligo-Galacturonides) on phytopathogenic fungi and Escherichia coli

**P10.** ROMANAZZI G.<sup>1</sup>, YANN ORÇONNEAU Y.<sup>2</sup>, MOUMNI M.<sup>1</sup>, YANN DAVILLERD Y.<sup>2</sup>, MARCHAND P.A.<sup>2</sup> <sup>1</sup>Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Ancona, Italy; <sup>2</sup>Institut Technique de l'Agriculture et de l'Alimentation Biologiques (ITAB), Paris, France. Basic substances, a sustainable tool to complement and eventually replace synthetic pesticides in the management of pre and postharvest diseases: reviewed instructions for users

P11. TOFFOLATTI S. L.<sup>1</sup>, DAVILLERD Y.<sup>2</sup>, D'ISITA I.<sup>3</sup>, FACCHINELLI C.<sup>4</sup>, GERMINARA G. S.<sup>3</sup>, IPPOLITO A.<sup>5</sup>, KHAMIS Y.<sup>6</sup>, KOWALSKA J.<sup>7</sup>, MADDALENA G.<sup>1</sup>, MARCHAND P.<sup>2</sup>, MARCIANÒ D.<sup>1</sup>, MIHÁLY K.<sup>8</sup>, MINCUZZI A.<sup>4</sup>, MORI N.<sup>4</sup>, PIANCATELLI S.<sup>9</sup>, SÁNDOR E.<sup>8</sup>, AND ROMANAZZI G.<sup>9</sup> <sup>1</sup>DiSAA, Università degli Studi di Milano, Italy. <sup>2</sup>ITAB, France. <sup>3</sup>DAFNE, University of Foggia, Italy. <sup>4</sup>Department of Biotechnology, University of Verona, Italy. <sup>5</sup>Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro, Bari, Italy. <sup>6</sup>Agricultural Research Center, Plant Pathology Research Institute, Egypt. <sup>7</sup>Department of Organic Agriculture and Environmental Protection, Institute of Plant Protection–National Research Institute, Poland. <sup>8</sup>Faculty of Agricultural and Food Science and Environmental Management, Institute of Food Science, University of Debrecen, Hungary. <sup>9</sup>Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Italy. Are basic substances a key to sustainable pest and disease management in agriculture? An open field perspective

**P12.** DE MICCOLIS ANGELINI R.M.<sup>1†</sup>, LANDI L.<sup>2†</sup>, RAGUSEO C., POLLASTRO S.<sup>1</sup>, FARETRA F.<sup>1</sup>, ROMANAZZI G.<sup>2 1</sup>Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro, Piazza Umberto I - 70121 Bari, Italy; <sup>2</sup>Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Via Brecce Bianche, 60131 Ancona, Italy. Tracking of diversity and evolution in the brown rot fungi Monilinia fructicola, Monilinia fructigena, and Monilinia laxa P13. MINCUZZI A.<sup>1</sup>, PICCIOTTI U. <sup>1,2</sup>, SANZANI S.M. <sup>1</sup>, GARGANESE F. <sup>1</sup>, PALOU L.<sup>3</sup>, ADDANTE R.<sup>1</sup>, MARCO RAGNI M.<sup>1</sup> AND IPPOLITO A.<sup>1 1</sup>Department of Soil, Plant, and Food Sciences, University of Bari Bari Aldo Moro, Italy; <sup>2</sup>Department of Marine Science and Applied Biology, University of Alicante, Spain; <sup>3</sup>Pathology Laboratory, Postharvest Technology Center (CTP), Spain. Postharvest diseases of pomegranate: alternative control means and a spiderweb effect

**P14.** MINCUZZI A.<sup>1</sup>, SANZANI S.M.<sup>1</sup>, PALOU L.<sup>2</sup>, RAGNI M.<sup>1</sup>, IPPOLITO A.<sup>1</sup> <sup>1</sup>Department of Soil, Plant, and Food Sciences, University of Bari Bari Aldo Moro, Italy; <sup>2</sup>Pathology Laboratory,





Postharvest Technology Center (CTP), Valencian Institute of Agrarian Research (IVIA), Spain. **Postharvest rot of pomegranate fruit in southern Italy: characterization of the main pathogens P15.** ALOI F.<sup>1,2</sup>, RIOLO M.<sup>1,3,4</sup>, SANZANI S.M.<sup>5</sup>, MINCUZZI A.<sup>5</sup>, IPPOLITO A<sup>5</sup>, SICILIANO I.<sup>6</sup>, PANE **A.<sup>1</sup>, GULLINO M.L.<sup>6</sup>, CACCIOLA S.O.<sup>1</sup>** <sup>1</sup>Department of Agriculture, Food and Environment, University of Catania, 95123 Catania, Italy; <sup>2</sup>Department of Agricultural, Food and Forest Sciences, University of Palermo, Italy; <sup>3</sup>Council for Agricultural Research and Agricultural Economy Analysis, Research Centre for Olive, CREA- OFA, Italy; <sup>4</sup>Department of Agricultural Science, Mediterranean University of Reggio Calabria, Italy; <sup>5</sup>Department of Soil, Plant, and Food Sciences, University of Bari Aldo Moro, Bari, Italy; <sup>6</sup>Agroinnova Centre of Competence for the Innovation in the Agro-Environmental Sector, University of Turin, Italy. **Characterization of Alternaria species associated with heart rot of pomegranate fruit** 

**P16.** ALLAGUI M.B.<sup>1</sup>, MOUMNI M.<sup>2</sup>, ROMANAZZI G.<sup>2</sup> <sup>1</sup>Laboratory of Plant Protection, National Institute for Agronomic Research of Tunisia (INRAT), Tunisia; <sup>2</sup>Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Italy. Antifungal activity of thirty essential oils to control pathogenic fungi of postharvest decay

**P17. REMOLIF G.<sup>1,2</sup>, GARELLO M. <sup>1,2</sup>, SPADARO D. <sup>1,2</sup>** <sup>1</sup>Dipartimento di Scienze Agrarie, Forestali e Alimentari (DISAFA), Università di Torino, Italy; <sup>2</sup>AGROINNOVA, Centro interdipartimentale per l'innovazione in campo agro-ambientale, Italy. Screening and evaluation of antagonistic yeasts to control postharvest rots of strawberries

**P18.** REMOLIF G.<sup>1,2</sup>, SCHIAVON G.<sup>1,2</sup>, GARELLO M.<sup>1,2</sup>, BUONSENSO F.<sup>1,2</sup>, SPADARO D.<sup>1,2</sup> <sup>1</sup>Dipartimento di Scienze Agrarie, Forestali e Alimentari (DISAFA), Università di Torino, Italy; <sup>2</sup>AGROINNOVA, Centro interdipartimentale per L'innovazione in campo agro-ambientale, Italy. Efficacy of essential oil vapours in reducing postharvest rots of nectarines and effect on the fruit microbiome

**P19. DI MILLO B.<sup>1,2</sup>, MARTÍNEZ-BLAY V.<sup>1</sup>, PÉREZ-GAGO M.B.<sup>1</sup>, ARGENTE-SANCHIS M.<sup>1</sup>, GRIMAL A.<sup>1</sup>, BARALDI E.<sup>2</sup>, PALOU L.<sup>1</sup> Institut Valencià d'Investigacions Agràries (IVIA), Montcada, València, Spain.<sup>2</sup> Dipartimento di Scienze e Tecnologie Agro-Alimentari, Università de Bologna, Italy. Antifungal hydroxypropyl methylcellulose (HPMC)-lipid composite edible coatings and modified atmosphere packaging (MAP) to reduce postharvest decay and improve storability of 'Mollar de Elche' pomegranates** 

P20. ALVAREZ M.V.<sup>1,2</sup>, PALOU L.<sup>2</sup>, TABERNER V.<sup>2</sup>, FERNÁNDEZ-CATALÁN A.<sup>2</sup>, ARGENTE-SANCHIS M.<sup>2</sup>, PITTA E.<sup>2,3</sup>, PÉREZ-GAGO M.B.<sup>2</sup> <sup>1</sup>Grupo de Investigación en Ingeniería en Alimentos, Departamento de Ingeniería Química y en Alimentos, Facultad de Ingeniería, Universidad Nacional de Mar del Plata, CONICET, Mar del Plata 7600, Argentina; <sup>2</sup> Institut Valencià d'Investigacions Agràries (IVIA), 46113 València, Spain; <sup>3</sup> School of Agriculture, Faculty of Agriculture, Forestry and Natural Environment, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece. Natural pectin-based edible composite coatings with antifungal properties to control green mold and reduce losses of 'Valencia' oranges

**P21.** ASGARIAN Z.S.<sup>1,2</sup>, PALOU L.<sup>2</sup>, LIMA DE SOUZA R.F.<sup>2</sup>, QUINTANILLA P.G.<sup>2,3</sup>, TABERNER V.<sup>2</sup>, KARIMI R.<sup>1,4</sup>, PÉREZ-GAGO M.B.<sup>2</sup> <sup>1</sup>Grapevine Production and Genetic Improvement Department, Iranian Grape and Raisin Institute, Malayer University, Iran, <sup>2</sup> Institut Valencià d'Investigacions Agràries (IVIA), Spain, <sup>3</sup> Vicerrectorat d'Investigació, Universitat Politècnica de València (UPV), Spain, <sup>4</sup> Department of Landscape Engineering, Faculty of Agriculture, Malayer University, Iran. Hydroxypropyl methylcellulose and gum arabic composite edible coatings amended with geraniol to control postharvest brown rot and maintain quality of cold-stored plums

In cooperation with:







### **POSTERS FOODWASTOP**

WG1. PREVENTION OF FOOD LOSS AND FOOD WASTE

**P22. KARAOGLANIDIS G., TESTEMPASIS S.** Aristotle University of Thessaloniki, Faculty of Agriculture, Forestry and Natural Environment, Laboratory of Plant Pathology, Greece. Fungicide resistance in postharvest pathogens and its management as a tool to prevent food losses

**P23. SAR T., FERREIRA J.A., TAHERZADEH M. J.** Swedish Centre for Resource Recovery, University of Borås, 50190 Borås, Sweden. A study on the use of olive oil mill wastewater to produce protein rich fungal biomass

**P24. MINCUZZI A.<sup>1</sup>**, **PICCIOTTI U.<sup>1,2</sup>**, **SANZANI S. M.<sup>1</sup>**, **GARGANESE F.<sup>1</sup>**, **PALOU L.<sup>3</sup>**, **ADDANTE R.<sup>1</sup>**, **RAGNI M.<sup>1</sup>**, **IPPOLITO A.<sup>1</sup>** Department of Soil, Plant, and Food Sciences, University of Bari Aldo Moro, Bari, Italy; <sup>2</sup>Department of Marine Science and Applied Biology, University of Alicante, San Vicente del Raspeig, Alicante, Spain; <sup>3</sup>Postharvest Technology Center (CTP), Valencian Institute of Agrarian Research (IVIA), Montcada, Valencia, Spain. Spiderweb effect on pomegranate postharvest diseases

**P25.** EJUPI F.<sup>1,2</sup>, GECAJ R.<sup>1 1</sup>University of Pristina, Faculty of Agriculture and Veterinary, Pristina, Kosovo; <sup>2</sup>UBT Higher Education Institution, Pristina, Kosovo. Identification of food waste in supermarkets in several regions of Kosovo

**P26.** KLEIN M., APPRICH S. University of Applied Sciences Vienna. Austria. Influence of food waste through packaging design

**P27.** ROTONDO P. R.<sup>1</sup>, ACETO D.<sup>2</sup>, DISTANTE S.<sup>1</sup>, LAERA S.<sup>1</sup>, AMBRICO M.<sup>2</sup>, DILECCE G.<sup>2</sup>, DONGIOVANNI C.<sup>3</sup>, DI CAROLO M.<sup>3</sup>, AMBRICO P. F.<sup>2</sup>, FARETRA F.<sup>1</sup>, DE MICCOLIS ANGELINI R. M.<sup>1</sup> <sup>1</sup>Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro, Bari, Italy; <sup>2</sup>Institute for Plasma Science and Technology, National Research Council, Bari, Italy; <sup>3</sup>Centre of Research, Experimentation and Training in Agriculture (CRSFA) Basile Caramia, Italy. Decontaminant effects of plasma activated fog (PAF) against postharvest fungal pathogens and pesticide residues on table grape

**P28.** ĆUJIĆ NIKOLIĆ N., JANKOVIC T., ŠAVIKIN K., MILUTINOVIC M. Institute for Medicinal Plants Research Dr Josif Pancic, Serbia. Sustainable road from chokeberry fruit waste to microencapsulated powders for nutraceutical, pharamaceutical or food application

**P29.** DESOPO M.<sup>1</sup>, TERLIZZI N.<sup>1</sup>, INCERTI O.<sup>1</sup>, SCHLOSSEROVA N.<sup>1,2</sup>, MOSTACCI A.<sup>1</sup>, CONVERTINI L.<sup>1</sup>, FERRANTE P.<sup>1</sup>, PICCA R.A.<sup>3</sup>, SPORTELLI M.C.<sup>3</sup>, DIFONZO G.<sup>1</sup>, GENTILE L.<sup>3</sup>, PALAZZO G.<sup>3</sup>, CAPONIO F.<sup>1</sup>, IPPOLITO A.<sup>1</sup>, CIOFFI N.<sup>3</sup>, SANZANI S.M<sup>1</sup> <sup>1</sup>Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro, 70126 Bari, Italy; <sup>2</sup>Department of Chemistry and Biochemistry, Mendel University in Brno, 613 00 Brno, Czech Republic; <sup>3</sup>Department of Chemistry, University of Bari Aldo Moro, 70126 Bari, Italy. Active packaging to reduce losses and wastes of fresh fruits and vegetables





#### WG2. AGROFOOD LOSS AND WASTE MANAGEMENT

**P30. ZJALIC S., LONCAR J., KOS T.** Department of ecology, agronomy and aquaculture, University o Zadar, Crotia. Occurrence of conidia of mycotoxigenic fungi in an experimental corn field in the Slavonia region

**P31.** MATIN A.<sup>1</sup>, ZJALIĆ S.<sup>2</sup>, STANKOVIĆ D.<sup>1</sup>, JURIŠIĆ V.<sup>1</sup>, GRUBOR M.<sup>1</sup>, MATIN B.<sup>3</sup>, KRIČKA T.<sup>1</sup> <sup>1</sup>University of Zagreb Faculty of Agriculture, Croatia; <sup>2</sup>Univrsity of Zadar Department of Ecology, Agronomy and Aquaculture, Croatia; <sup>3</sup>University of Zagreb, Faculty of Forestry and Wood Technology, Croatia. Waste management after processing and storage of peanuts in a circular bioeconomy

**P32.** STOJANOVSKI S.<sup>1</sup>, RAUNIK V.<sup>2</sup> <sup>1</sup>Hydrobiological Institute Ohrid, N. Macedonia; <sup>2</sup>Head of the waste management and regional landfills department at Municipality of Ohrid, N. Macedonia. Present state and future of management of organic waste in lake Ohrid region (N. Macedonia) - importance for the protection of the lake

**P33. BEN AMARA M., ALLAGUI M.B.** National Institute of Agronomic Research of Tunisia (INRAT), Carthage University, Tunisia. Analysis of the quality of apples and oranges treated with sodium metabisulphite during cold storage

**P34.** ALLAGUI M.B., BEN AMARA M. National Institute of Agronomic Research of Tunisia (INRAT), Carthage University, Tunisia. Efficacy of Pythium oligandrum and sodium metabisulphite in controlling postharvest fungal diseases of oranges, tomatoes and nectarines

**P35.** ŠPETÍK M., EICHMEIER A. Mendel University in Brno - Mendel niversity in Brno, Czech Republic. Lignans extract from waste knotwood of norway spruce as a potential treatment against grapevine trunk diseases

**P36.** INCERTI O., CELANO G., DE MICCOLIS ANGELINI R.M., POLLASTRO S., GERIN D., ROTONDO P.R., BILEN C., AGNUSDEI A., ABI SAAD C., FERRANTE P., CONVERTINI L., NIGRO F., IPPOLITO A., FARETRA F., DE ANGELIS M., SANZANI S.M. Department of Soil, Plant, and Food Sciences, University of Bari Aldo Moro, 70126 Bari, Italy. ONFOODS: New and re-emerging risks in the food system and sustainable mitigation strategies

**P37.** ROMANAZZI G<sup>1</sup>, LANDI L<sup>1</sup>, MOUMNI M.<sup>1</sup>, D'ORTENZIO A.L.<sup>1</sup>, MAKAU S.M.<sup>1</sup>, TUNC M<sup>1</sup>, TIAN S.<sup>2</sup>, LI B.<sup>2</sup> Marche Polytechnic University, Ancona, Italy; <sup>2</sup>Institute of Botany, the Chinese Academy of Sciences, China. Biosynthesis regulation of metabolic markers and correlation with quality safety during fruit decay (BioQuaSa)

WG4. VALORISATION OF AGROFOOD WASTE AND A CIRCULAR BIO-ECONOMY

**P38.** TATJANA TRTIĆ-PETROVIĆ T., JELENA JOVANOVIĆ J., LAZAREVIĆ D. Laboratory of Physics, Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia. Valorization of agree-food waste through the extraction of ellagic acid

P39. MASI A.<sup>1</sup>, A. ANTONACCI A.<sup>1</sup>, SOBOLEV A.<sup>2</sup>, MOCCIA M.<sup>1</sup>, PASCUCCI B.<sup>1</sup>, F. PETRONELLA1, SCOGNAMIGLIO V.<sup>1</sup>, CAPITELLI F.<sup>1</sup>, CAPELLI D.<sup>1</sup>, CAMPI G.<sup>1</sup>, MONTANARI R.<sup>1</sup>, BARTOLUCCI C.<sup>1</sup>, SIBILLANO T.<sup>1</sup>, GIANNINI C.<sup>1</sup>, REA G<sup>1</sup>. <sup>1</sup>Institute of Crystallography, CNR, Italy; <sup>2</sup>Institute for





*Biological Systems, CNR, Italy.* Green technologies supporting the development of nutraceutics and agrochemicals from agrifood by-products

**P40. GASCO L., BELLEZZA ODDON S., BIASATO I.** University of Torino, Largo Paolo Braccini, 2, 10095 Grugliasco (TO), Italy. Food Waste, insects and alternative proteins: a sustainable trio for a full circular economy

**P41.** ASSUNÇÃO R.<sup>1</sup>, QUINTEIRO P.<sup>2 1</sup>Egas Moniz Center for Interdisciplinary Research (CiiEM); Egas Moniz School of Health & Science, Caparica, Almada, Portugal; <sup>2</sup>Centre for Environmental and Marine Studies (CESAM), Department of Environment and Planning, University of Aveiro, Campus Universitario de Santiago, Aveiro, Portugal. The health and sustainability impact assessment in the context of a new bioindustry: the One Health concept in InsectERA

**P42. GRAMAJE D.<sup>1</sup>, LEAL C.<sup>1</sup>, BUJANDA R.<sup>1</sup>, FACORRO R.<sup>2</sup>, RUBIO L.<sup>2</sup>, CASTILLO A.<sup>2</sup>, LORES M.<sup>3</sup>, DÍAZ-LOSADA E.<sup>4</sup>, PÉREZ-ÁLVAREZ E.<sup>1</sup>, GARDE-CERDÀN T.<sup>1</sup> Instituto de Ciencias de la Vid y del Vino (CSIC, Gobierno de La Rioja, Universidad de La Rioja). Logroño, La Rioja, Spain; <sup>2</sup>i-Grape Laboratory S.L., Santiago de Compostela, Spain; <sup>3</sup>LIDSA, Departamento de Química Analítica, Nutrición y Bromatología, Universidad de Santiago de Compostela, Santiago de Compostela, Spain; <sup>4</sup>Estación de Viticultura y Enología de Galicia (AGACAL-EVEGA), Leiro, Ourense,Spain.** 

**GREENVITISV:** natural bioactive extracts from agrifood byproducts as circular green solutions for a zero waste approach in the agricultural sector

**P43.** DINU L.D.<sup>1</sup>, COJOCARU G.<sup>2</sup>, VAMANU E.<sup>1</sup>, ANTOCE A.O<sup>2</sup> <sup>1</sup>Faculty of Biotechnologies, Bucharest, Romania; <sup>2</sup>Faculty of Horticulture, Bucharest, Romania. An improved method to extract polyphenols from viticulture waste

**P44.** ENE N., STEFANIU A., VAMANU E. University of Agriculture and Veterinary Medicine, Romania. Production of biodegradable polymers polyhydroxyalkanoates from renewable carbon sources using *Pseudomonas putida* strain for potential biomedical applications

**P45.** STEFANIU A., PIRVU L.C., ENE N. National Institute for Chemical-Pharmaceutical Research and Development-ICCF, Bucharest, Romania. Computational screening of valuable chemicals from food waste to assess their health benefits

**P46.** VETTRAINO A.N., VINCIGUERRA V., GARZOLI S., ANTONELLI C., ALICANDRI E., CIAFFI M. Department for the Innovation in Biological, Agrofood and Forestal Systems, Tuscia University, Italy. In vitro evidences of the globe artichoke extracts efficacy against Alternaria alternata

**P47. PASCUCCI F., BARTOLONI S.** Università Politecnica delle Marche, Italy. How to design customer-centric circular business model to tackle food waste?

**P48.** GROB-WEEGE J.G., LEGLER A., ESATBEYOGLU T. Institute of Food Science and Human Nutrition, Leibniz University Hannover, Germany. Apple pomace as a new substrate for the preparation of water kefir after enzymatic degradation

**P49.** CHRISTAKI S.<sup>1</sup>, KYRIAKOUDI A.<sup>1</sup>, STRATAKOS A.<sup>2</sup>, MOURTZINOS I.<sup>1</sup> <sup>1</sup>Department of Food Science and Technology, School of Agriculture, Aristotle University of Thessaloniki, Greece; <sup>2</sup>College of Health, Science and Society, School of Applied Sciences, University of the West of England, Coldharbour Ln, UK. Recovery of bioactive compounds from peach peels employing green extraction processes and their encapsulation in chitosan-based nanoparticles

**P50.** DANIELA **R.** *CNR-IOM*, *France*. Utilizing agricultural waste-derived bioactive compounds for innovative drug delivery systems: towards a sustainable circular economy

**P51. ZABULIONE A., INGA STASIULAITIENE I., ŠALAŠEVIČIENĖ A.** Kaunas University of Technology, Lithuania. Exploring causes and potential solutions for food waste among young consumers

In cooperation with:







**P52. HASALLIU R.** *Agricultural University of Tirana, Albania.* **Waste management in food industry using microorganisms** 

#### WG6. NETWORKING AND DISSEMINATION, COMMUNICATION AND TRANSFER OF KNOWLEDGE

**P53.** SIMONOVIC V. University of Belgrade, Faculty of Mechanical engineering, Department of Agriculture Engineering, Serbia. Design of site-specific postharvest draft force measurement system and tractor platform for crop scouting

**P54.** ZACHARIS T. *Greek Scientists Society, Greece.* Sustainable solutions: revolutionizing food systems through innovative communication strategies

**P55.** AYDIN A., LUZHA PULA E. *Istanbul University- Cerrahpasa, Turkey.* Investigation of Listeria monocytogenes in Traditional Sharri cheese and its evaluation in terms of food safety

**P56. PRUSKY D.<sup>1</sup> AND ROMANAZZI G.<sup>21</sup>** Department of Postharvest Science, Agricultural Research Organization, The Volcani Institute, Rishon LeZion, Israel; <sup>2</sup>Department of Agricultural, Food and Environmental Sciences, Marche Polytechnic University, Ancona, Italy.

Induced resistance in fruit and vegetables: a host physiological response limiting postharvest disease development

#### **POSITION OF EVENTS**

#### 23-25 January

*Aula Magna di Agraria*, Department of Agricultural Food and Environmental Sciences, Università Politecnica delle Marche, Ancona <u>https://maps.app.goo.gl/NygL9Rbq2RRBVYci8</u>

#### **23 January**

**Social dinner: Ristorante L'Ascensore,** *Piazza IV Novembre (on the left on the seaside)* https://maps.app.goo.gl/9GZRQ2N7zVXchx7n9

You can walk along Viale della Vittoria to reach Piazza IV Novembre (around 20 min from most Hotels), or take the bus 1/4

#### 24 January

Social dinner: Ristorante Il Giardino, Via Fabio Filzi, 2 https://maps.app.goo.gl/UVv8frPafvNZHZYq5

You can walk along Viale della Vittoria (around 15 min from most Hotels), or take the bus 1/4

#### **PRACTICAL INFORMATION**

From the Ancona Airport Raffaello Sanzio (*Aeroporto di Ancona Raffaello Sanzio*) to downtown, there is bus AEROBUS RAFFAELLO <u>https://www.conerobus.it/servizi-tpl/aerobus-raffaello/</u>





### Ancona 苯 Ancona International Airport

Meeting location: University *Polo Montedago* (Via Brecce Bianche n. 10 - Department of Agricultural, Food and Environmental Sciences - *Agraria*) where the conference will take place, it is located a few kilometers from downtown and can be reached by public transport or by taxi (or by car, if available).

#### If you move from the downtown to the University:

- bus number 46 from piazza Cavour to "Tavernelle"

- bus number 1/4 from Piazza Cavour, Piazza Roma, or train station, direction "Tavernelle"

Once reached the stop of "Tavernelle" with both 46 or 1/4, walk for 5 minutes to the Faculty of Agriculture (*Agraria*)

-take taxi

#### If you move from the port to University:

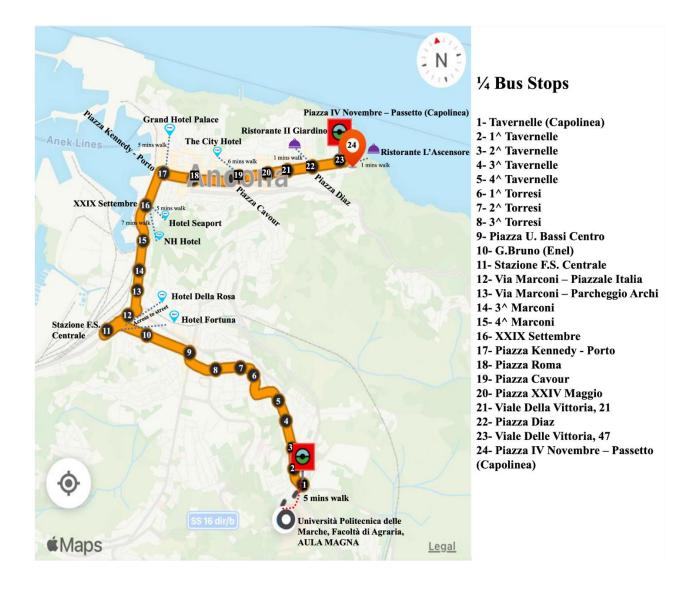
-take bus number: 1/4 at piazza Kennedy -take taxi

#### If you move from train station to University:

-take bus number 1/4 in front of railway station -take taxi







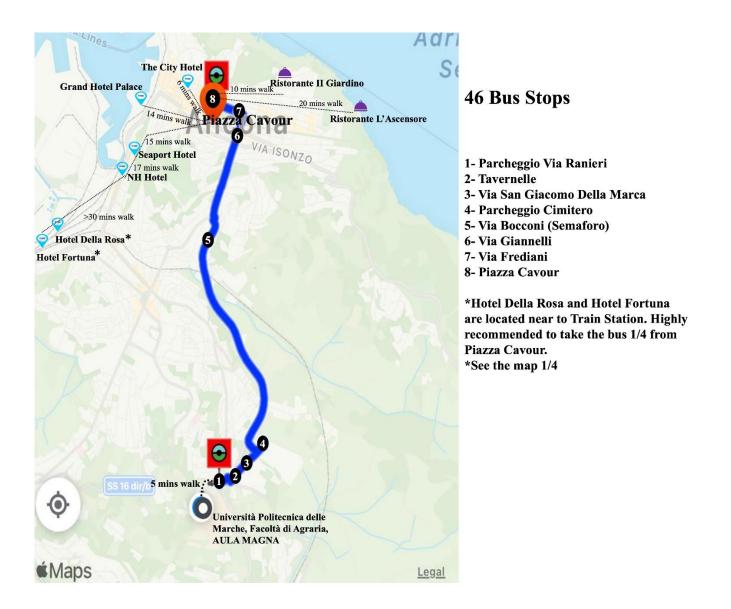
In cooperation with:











In cooperation with:









#### TO SEE IN ANCONA

Cattedrale di San Ciriaco (Cathedral of San Ciriaco, optimal to see at sunset)

https://www.google.it/maps/place/Cattedrale+di+San+Ciriaco/@43.6093225,13.5077037,15z/data= !4m6!3m5!1s0x132d7fb00e11869b:0x1247f0959a6537d4!8m2!3d43.6252393!4d13.5101703!16s% 2Fm%2F0h66wkm?entry=ttu

#### Mole Vanvitelliana

https://www.google.it/maps/place/Mole+Vanvitelliana/@43.6143875,13.5010719,17z/data=!4m14! 1m7!3m6!1s0x132d7fa261c936bf:0x7850900304af8c98!2sMole+Vanvitelliana!8m2!3d43.6143875 !4d13.5036468!16s%2Fm%2F0ll1mym!3m5!1s0x132d7fa261c936bf:0x7850900304af8c98!8m2!3 d43.6143875!4d13.5036468!16s%2Fm%2F0ll1mym?entry=ttu

Passetto

 $\frac{https://www.google.it/maps/place/Passetto/@43.614387,13.4933471,15z/data=!4m10!1m2!2m1!1s}{passetto!3m6!1s0x132d7fdb5d27f1fd:0x28f831e24d52f4c9!8m2!3d43.6169002!4d13.5337454!15s}CghwYXNzZXR0b1oKIghwYXNzZXR0b5IBBGxpZG-}$ 

<u>aASNDaFpEU1VoTk1HOW5TMFZKUTBGblNVUndjV1ZmU2xsbkVBReABAA!16s%2Fg%2F1</u> 21vxbrw?entry=ttu

#### TO SEE AROUND ANCONA

Santa Casa di Loreto (Sanctuary of the Holy House of Loreto, 30 min)

https://www.google.it/maps/place/Sanctuary+of+the+Holy+House+of+Loreto/@43.4410478,13.607 74,17z/data=!3m1!4b1!4m6!3m5!1s0x133279dc8195f243:0x747da27aa79af76b!8m2!3d43.441047 8!4d13.6103149!16zL20vMDY5X2xn?entry=ttu

Grotte di Frasassi (Frasassi Caves, 1 hour)

https://www.google.it/maps/place/Frasassi+Caves/@43.4029678,12.9741236,17z/data=!3m1!4b1!4 m6!3m5!1s0x132db70c13e8f7f5:0xba2ee4b692c14246!8m2!3d43.4029678!4d12.9766985!16s%2F m%2F06\_v7hp?entry=ttu

Portonovo (beach, 30 min, best for summer)

 $\frac{https://www.google.it/maps/place/60129+Portonovo+Province+of+Ancona/@43.5627446,13.59306}{62,17z/data=!3m1!4b1!4m6!3m5!1s0x13327e4be56442ad:0xb29ca525e4546b6b!8m2!3d43.56119}{08!4d13.599937!16s\%2Fg\%2F11dyjq_xg?entry=ttu}$ 

#### FIRST CIRCULAR with general information and hotel

https://stopmedwaste.net/wp-content/uploads/2024/01/Innovations-in-Food-Loss-and-Waste-Management-Ancona-23-25-January-2024-I-Circular-1.pdf

In case you want to join the meeting, you can register at the link https://univpm.pagoatenei.cineca.it/frontoffice/modellopagamento?id=1346&lang=it (for English speakers, please click on top right corner to change the language) and send receipt to COSTFoodWaStop@gmail.com

If you want to **follow the meeting online**, you can register at the link <u>https://us06web.zoom.us/meeting/register/tZwoc-2pqDIoGdw4qSJFCFQb8BSyJCVPQvkH</u>



