



Advances in the microbiology of table olives

September 1-2, 2025

Aula Magna, Università degli Studi della Basilicata,

Campus, Via Lanera

Matera, Italy

https://web.unibas.it/parente/?page_id=2088

Table olives are among the most ancient fermented foods. Although their production is concentrated around the Mediterranean basin, climatic change may lead to a significant growth in other continents, like the Americas.

The study of the ecology of this fermentation process, of the functionality of the microorganisms involved (lactic acid bacteria, yeasts, other halophiles) and the development of control strategies is challenging for several reasons:

- as for many other vegetable fermentations, no heat treatment is used
- the variety of raw materials (in terms of olive cultivars and ripeness of the fruit) and the variety of trade preparations strongly affects the initial contamination and the ecological factors affecting the dynamics of the fermentation
- development and use of starters and functional cultures is difficult and the choice is limited

The use of -omics approaches is providing and increasing body of knowledge which, however, is poorly integrated.

We therefore feel that, in the era of open data and open science, it is the right time for a meeting of the scientists involved in research in this area in order to:

- share state of the art knowledge on the microbiology of the process
- share data
- foster the development of standardized protocols
- foster the creation of collaboration networks

The meeting will be organized as part of the communication activity of the [METAOlive project](#), co-funded by the Italian Ministry of Education, and by the European Union Next GenerationEU program.

Scientific Committee

Prof. Eugenio Parente, Prof. Giuseppe Montanaro, Università degli Studi della Basilicata

Prof.ssa Francesca De Filippis, Università degli Studi di Napoli "Federico II"

Dr. Francisco Noé Arroyo López, CSIC, Sevilla, Spain

Prof. Efstathios Panagou, Agricultural University Athens, Greece

Organizing Committee

Prof. Eugenio Parente, Prof.ssa Annamaria Ricciardi, Dott.ssa Rocchina Pietrafesa, Università degli Studi della Basilicata

Program.

	Session	time slot	Subject/title	Speaker	Speaker organization
September 1, 2025	Welcome	10:00 - 10:30	Welcome addresses: Prof. Michele Perniola, Deputy Head Dept. Agricultural, Forestry, Food and Environmental Sciences. Prof. Eugenio Parente		
	S1 Facing the challenges of climate change. Chairperson: Prof. E. Benítez-Cabello	10:30 - 10:50	The challenges of olive grove cultivation in the Anthropocene	Prof. Giuseppe Montanaro	Università degli Studi della Basilicata, Italy
		10:50 - 11:10	Climatic changes and its influence on table olive fermentations.	Dr. Antonio Benítez Cabello	Instituto de la grasa - CSIC, Spain
		11:10 - 11:40	Coffee break, poster viewing		
	S2 Table olives: diversity and microbiology. Chairperson: Dr. A. Benítez-Cabello	11:40 - 12:00	An overview of microbial communities of table olive varieties produced in Italy: the METAolive project	Prof. Eugenio Parente	Università degli Studi della Basilicata, Italy
		12:00 - 12:20	Spanish-style table olive fermentations and its microbiology: general aspects	Dr. Eduardo Medina Pradas	Instituto de la grasa - CSIC, Spain
		12:20 - 12:40	Greek natural black olive processing: Perspectives and challenges	Prof. Efstathios Panagou	Agricultural University of Athens, Greece
		12:40 - 13:00	Table olive ferments with probiotic potential.	Dr. Francisco Noé Arroyo López	Instituto de la grasa - CSIC, Spain
		13:00 - 13:30	Closing remarks, session 1-2		
		13:30 - 15:00	Buffet lunch, poster viewing		
	S3 Microbiome, flavour, aroma, functionality of table olives. Chairperson: Prof. E. Panagou	15:00 - 15:20	Metagenome and volatilome unveil the functional potential of table olive microbiome	Dr. Vincenzo Valentino, Dr. Andrea Balivo	Università degli Studi di Napoli "Federico II", Italy
		15:20 - 15:40	Sensory evaluation and spoilage of table olives	Dr Konstantinos Tertivanidis	Region of Central Macedonia, Greece
		15:40 - 16:00	Table olives: from fermentation to taste	Mr. Kostas Zoukas	Panhellenic Association of Table Olive Processors, Packers and Exporters, Greece
		16:00 - 16:20	An integrated metagenomic and volatilomic approach to advance research in Spanish-style cv. Chalkidiki green table olives	Prof. Fani Mantzouridou	Aristotle University of Thessaloniki, Greece
		16:20 - 17:00	Coffee break, poster viewing		
	S4 Advances in research on table olives. Chairperson: Dr. F. N. Arroyo López	17:00 - 17:20	Innovative Strategies for Enhancing the Shelf Life and Safety of Naturally Fermented Table Olives	Prof. Hayriye Ünal	Sabancı University SUNUM Nanotechnology Research Center, Turkey
		17:20 - 17:40	Microorganisms drive a virtuous way to ferment table olives with improved safety, nutritional and sensorial traits. A story born in lab, moved to producing context and reaching the consumer's table	Dr. Gianluca Blevé	Consiglio Nazionale delle Ricerche - Istituto di Scienze delle Produzioni Alimentari, Italy
		17:40 - 18:00	How machine learning and microbial metataxonomic data can help to classify table olives.	Dr. Elio López-García	Instituto de la Grasa (CSIC), Spain
September 2, 2025	S5 Advances in research on table olives. Chairperson: Dr. E. Medina	9:00 - 9:15	Opening remarks, Session 5	Prof. Eugenio Parente	Università degli Studi della Basilicata, Italy
		9:15 - 9:30	Functional table Olives: Fortification with probiotic <i>Lactiplantibacillus pentosus</i>	Prof. Hayriye Sebnem Harsa	Izmir Institute of Technology, Turkey
		9:30 - 9:45	Phenolic compounds content in cv. Chalkidiki olives as a critical factor for Spanish style processing conditions	Prof. Maria Z. Tsimidou	Aristotle University of Thessaloniki, School of Chemistry, Greece
		9:45 - 10:00	A new fermentation system for the production of Spanish-style green table olives	Mr. Lekocaj Gjergj Marko	Oleica start-up Spain

	10:00 - 10:15	Microbial innovation in table olive fermentation: a decade of research on <i>Lactiplantibacillus pentosus</i> OM13	Prof. Nicola Francesca	University of Palermo, Italy
	10:15 - 10:30	A new generation of biological debittered olive patè enriched with beneficial <i>Lactiplantibacillus plantarum</i>	Dr. Roberta Prete	University of Teramo, Teramo, Italy
	10:30 - 10:45	Characterization of Lactic Acid Bacteria isolated from spontaneous fermentation brines of Green Olives for their potential use as starter cultures	Dr. Marisa S. Garro	Centro de Referencia para Lactobacilos (CERELA) – CONICET – FML – FECIC, Argentina.
	10:45 - 11:00	Development and validation of fast blue bb assay for the time-/cost-effective determination of phenolic compounds in extra virgin olive oil	Dr. Gianluca Picariello	Istituto di Scienze dell'Alimentazione, Consiglio Nazionale delle Ricerche, Avellino, Italy
	11:00 - 12:00	Poster viewing, light lunch		
	12:00 - 13:00	Concluding remarks: developing a collaboration network for research in table olives microbiology		

Contacts.

For all questions related to the workshop please email to metaolive_workshop@unibas.it. Note that this account will be active only until 31/12/2025.

Deadlines.

1/4/2025 Registration and submission of abstracts opens

15/6/2025 Submission of abstracts

15/7/2025 Communication of acceptance of abstracts for contributed talks

31/7/2025 Deadline for registration for attendance in presence (subject to availability); deadline for registration for remote attendance

Registration.

Follow this link for registration: <https://form.jotform.com/250823368969068>

There is no registration fee. However, only the first 50 participants who will complete their registration and who will submit an abstract for a talk or an e-poster will be able to attend in person. All the others will be given access to videoconference or streaming links. Coffee and lunch breaks are included.

Submission of abstracts.

Participants can submit abstracts for e-posters (500 words), contributed talks (1000 words), invited talks (2000 words, only if invited by the Scientific Committee). Abstract templates will be made available on the workshop webpage. Speakers will have the opportunity to submit a paper for a special issue of *Grasas y aceites*.

Abstract book.

The abstract book will be made available on the Workshop webpage in .pdf format.

Practical information.

The venue.

The meeting will take place at the [University of Basilicata](#), in historical city of Matera. [Matera is part of the UNESCO world heritage list](#) and its cityscape and lively gastronomic scene will contribute to a pleasant stay and unique experience. Matera can be reached from [Bari International Airport](#): the organizing committee will organize transportation to and from the airport. Further information on how

to reach Matera by car, train or bus is available [here](#). More information on visiting Matera can be found at: <https://www.materawelcome.it/it/>.

Hotels.

The participants with the exception of invited speakers will have to make their own hotel reservations. Matera is a relatively small town so we encourage to reserve as soon as possible. A list of hotels and other accommodation solutions is available at: <https://www.materawelcome.it/en/dormire-mangiare-e-bere/dormire/>

Sponsors and supporting organizations.

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The organization of the workshop is under the patronage of:

- Società Italiana di Microbiologia Agroalimentare ed ambientale
- Dipartimento di Agraria, Università degli Studi di Napoli “Federico II”
- Agricultural University Athens, Athens, Greece
- International Olive Council, Madrid, Spain

Logistics and some aspects of the organization were covered by [Allmeetings srl](#), Matera

