

**Project: Innovative Bio-interventions and Risk Modelling Approaches for
Ensuring Microbial Safety and Quality of Mediterranean Artisanal
Fermented Foods**



PROGRAMME

Second year's meeting: 1 July 2021

Table 1: List of reached deliverables

Deliv #	Deliverable name	WP	Lead particip.	Type	Dissem level	Due	Status
D1.1	The “ArtiSaneFood Methods Pack”	WP1	IPB	DEM	CO	Jan 2020	Done
D2.1	Flow charts of the artisanal fermented products	WP2	UNIBO	R	CO	Sep 2019	Done
D4.1	MIC and MBC values of different natural antimicrobials against different indicator microorganisms	WP4	AUA	R	PU	May 2020	Done
D5.1	Standardisation of inoculum and optimisation of the inoculation procedure in the selected matrices	WP5	UCO	R	PU	Jun 2020	Done
D5.2	Definition of the prototype artisanal products	WP5	UCO	DEM	PU	Jul 2020	Done
D9.1	Planned communication activities	WP9	ISBST/UMA	R	PU	Aug 2019	Done
D9.2	Draft of Data Management Plan	WP9	IPB	R	CO	Oct 2019	Done
D9.3	First divulgation materials	WP9	ISBST/UMA	DEC	PU	Nov 2019	Done
D9.4	First version of the ArtiSaneFood website	WP9	ISBST/UMA	DEC	PU	Dec 2019	Done
D9.5	Intermediate PEDR	WP9	IPB	DEM	CO	Nov 2020	Done

Table 2: List of reached milestones

Milestone #	Milestone name	Related WP(s)	Means of verification	Due month	Status
M1.1	Kick-off meeting	WP1	Meeting’s signed list of presence	Jul 2019	Done
M2.1	Majority of the flow charts in place	WP2	Flow charts available	Aug 2019	Done
M4.1	Natural extracts selected to be assessed in the target artisanal foods	WP4	Compilation of data from the literature and <i>in-vitro</i> MIC and MBC from tests	Apr 2020	Done
M9.1	Project identity developed	WP9	Graphic elements in files	Oct 2019	Done
M9.2	First project’s scientific publication	WP9	Publication uploaded in website	Feb 2020	Done

Programme of the ArtiSaneFood's Second Year's Meeting

TIME: CET

9:30 – 10:30 **Partner IPB** (U. Gonzales-Barron)

- WP1 (Management and Coordination): ArtiSaneFood website, Methods Pack, PEDR
- WP2 (Tracking surveys): Progress, delays, new schedule
- WP3 (Biopreservation by lactic acid cultures): Progress, delays, new schedule
- WP4 (Biopreservation by natural extracts): Progress, delays, new schedule
- WP5 (Fate studies): Progress, experimental design of fate studies (treatments), types of data and models to be fitted, new schedule
- WP9 (Dissemination and communication): activities for next year, tentative physical meeting

10:30 – 11:00 **Partner UNIBO** (Gerardo Manfreda & Alessandra de Cesare)

- WP2 (Tracking surveys): Progress, delays, metagenomics
- WP4 (Biopreservation by natural extracts): Progress, delays
- WP5 (Fate studies): Experimental design of fate studies (treatments), types of data and models to be fitted
- WP9 (Dissemination and communication): Progress according to Communication Plan, activities for next year
- Proposed actions for delayed and upcoming milestones and deliverables under UNIBO leadership

11:15 – 12:00 **Partner ISBT/UMA** (Nourhene Mihoubi)

- WP2 (Tracking surveys): Progress, delays
- WP3 (Biopreservation by lactic acid cultures): Progress, delays
- WP4 (Biopreservation by natural extracts): Progress, delays
- WP5 (Fate studies): Experimental design of fate studies (treatments), types of data and models to be fitted
- WP9 (Dissemination and communication): Progress according to Communication Plan, activities for next year, exchange of student

12:00 – 12:45 **Partner UCO** (Antonio Valero)

- WP2 (Tracking surveys): Progress, delays
- WP3 (Biopreservation by lactic acid cultures): Progress, delays
- WP4 (Biopreservation by natural extracts): Progress, delays
- WP5 (Fate studies): Experimental design of fate studies (treatments), types of data and models to be fitted
- WP9 (Dissemination and communication): Progress according to Communication Plan, activities for next year
- Proposed actions for upcoming milestones and deliverables under UCO leadership

- 12:00 – 12:30 Did not present: **Partner UO** (Guessas Mohamed)
- WP2 (Tracking surveys): Progress, delays
 - WP3 (Biopreservation by lactic acid cultures): Progress, delays
 - WP4 (Biopreservation by natural extracts): Progress, delays
 - WP5 (Fate studies): Experimental design of fate studies (treatments), types of data and models to be fitted
 - WP9 (Dissemination and communication): Progress according to Communication Plan, activities for next year

BREAK

- 14:15 – 15:15 **Partner AUA** (Panos Skandamis)
- WP2 (Tracking surveys): Progress, delays
 - WP4 (Biopreservation by natural extracts): Progress, delays
 - WP5 (Fate studies): Experimental design of fate studies (treatments), types of data and models to be fitted
 - WP9 (Dissemination and communication): Progress according to Communication Plan, activities for next year
 - Proposed actions for delayed and upcoming milestones and deliverables under AUA leadership

- 15:15 – 16:00 **Partners CNIEL & Anses** (Laurent Guillier & Fanny Tenenhaus)
- WP5 (Fate studies): Experimental design of fate studies (treatments), types of data and models to be fitted
 - WP8 (Safety decision support tool): Planned activities
 - WP9 (Dissemination and communication): Progress according to Communication Plan, activities for next year
 - Proposed actions for delayed and upcoming milestones and deliverables under CNIEL/Anses leadership

- 16:15 – 17:00 **Partner UIZ** (Fouad Achemchem)
- WP2 (Tracking surveys): Progress, delays, new schedule
 - WP3 (Biopreservation by lactic acid cultures): Progress, delays
 - WP4 (Biopreservation by natural extracts): Progress, delays
 - WP5 (Fate studies): Experimental design of fate studies (treatments), types of data and models to be fitted
 - WP9 (Dissemination and communication): Progress according to Communication Plan, activities for next year, exchange of student
 - Proposed actions for delayed and upcoming milestones and deliverables under UIZ leadership

- 17:00 – 17:30 **Final Discussion and Wrap-up** (U. Gonzales-Barron)
- Q&A
 - Synthesis of types of data and models from fate studies by all partners (with views to designing the decision-support tool)
 - Status of (planned) joint publications and exchange of students
 - Proposal for physical meeting
 - Final Actions List

Table 3: List of re-scheduled milestones. Milestones to be reached in the next 12 months are shaded

Milestone number	Milestone name	Related WP(s)	Means of verification	Due month	Now due on:
M2.2	Pathogenics' isolate collection in place	WP2	Isolates available	Jul 2020	Jun 2021
M2.3	Critical process variables identified	WP2	Regression model outputs from WP2 participants	Sep 2020	Jul 2021
M3.1	Antimicrobial activity of commercial starter cultures tested	WP3	Quantitative data resulting from <i>in-vitro</i> essays	Nov 2019	Apr 2021
M3.2	Indigenous LAB strains with bacteriocinogenic and acidogenic capacities	WP3	Data from in-vitro and PCR essays	May 2020	May 2021
M4.2	Mode of application and optimum doses of extracts in the artisanal foods	WP4	<i>In-situ</i> quantitative data on antimicrobial effectiveness of extracts	Aug 2020	Jun 2021
M5.1	Completion of the fate studies of pathogens in the artisanal products	WP5	Quantitative data on the effects of processing conditions and factors on the survival of pathogens	Jun 2021	Apr 2022
M6.1	Dynamic predictive microbiology models	WP6	Scripts running and validated by WP6 participants	Jul 2021	May 2022
M6.2	Optimised process variables	WP6, WP7	Process variables that produce safer products redefined by simulation	Jul 2021	Jul 2022
M7.1	Process risk models	WP7	Programmes/scripts running and validated by WP7 participants	Oct 2021	Aug 2022
M7.2	Impact of intervention strategies	WP7	Risk reductions computed for selected scenarios	Nov 2021	Oct 2022
M7.3	Derivation of standards and quality monitoring tools	WP7	1/Definition of product and process criteria 2/Design of statistical process control tools	Dec 2021	Nov 2022
M8.1	Capabilities and features of the decision-support tool	WP8	A list of the capabilities and features comprised by IT tool is consensually established	May 2021	May 2022
M8.2	Safety decision-support tool	WP8	One partner is able to assess the lethality of the processes of another partner's food product	Apr 2022	Apr 2023
M9.3	First exchange of a young researcher	WP9	Certificate available	Nov 2020	Nov 2021

Table 4: List of re-scheduled deliverables. Deliverables to be reached in the next 12 months are shaded

Deliv #	Deliverable name	WP	Lead particip.	Type	Dissem level	Due	Now due on:
D1.2	The Full “ArtiSaneFood Methods Pack”	WP1	IPB	DEM	CO	Sep 2021	Sep 2022
D2.2	Microbiological parameters of raw materials, intermediate and final products, production environments, and genome analysis of pathogens	WP2	UNIBO	R	PU	Aug 2020	Jun 2021
D2.3	Risk factors leading to the growth and survival of pathogens in the artisanal food chains	WP2	UNIBO	R	PU	Sep 2020	Jul 2021
D3.1	Suitable starter cultures for enhancing safety and shelf-life of target artisanal foods	WP3	UIZ	R	CO	May 2020	May 2021
D3.2	Selected indigenous LAB with bacteriocinogenic and technological properties for use in the target artisanal foods	WP3	UIZ	R	CO	Nov 2020	May 2021
D3.3	Filing patent for a new functional LAB culture for target traditional foods	WP3	UIZ	DEC	CO	May 2021	Dec 2021
D4.2	Effective concentrations and modes of application of plant antimicrobials in target artisanal foods	WP4	AUA	R	CO	Nov 2020	Jun 2021
D5.3	Survival of pathogens in artisanal products elaborated using enhanced process variables	WP5	UCO	R	PU	Jan 2021	Mar 2022
D5.4	Biopreservation methods as inhibitors of pathogens in enhanced processes of artisanal foods	WP5	UCO	R	PU	Jun 2021	Apr 2022
D5.5	Database containing dynamic data for pathogen survival and accompanying microbiota for the different food processes and scenarios	WP5	UCO	OTHER	PU	Jun 2021	Apr 2022
D6.1	First predictive dynamic models of the viability of pathogens throughout the processing of 15 artisanal fermented foods	WP6	IPB	R	PU	Jul 2021	May 2022
D6.2	Optimised process variables enhancing the safety of the target artisanal fermented foods	WP6	IPB	R	PU	Aug 2021	Jul 2022
D7.1	Process risk models with R codes provided	WP7	ANSES	R	CO	Nov 2021	Aug 2022
D7.2	Impact and ranking of intervention strategies for the	WP7	ANSES	R	PU	Dec 2021	Oct 2022

	target artisanal fermented foods and recommendations for the producers						
D7.3	Technical diagrams of statistical process control tools dedicated to the monitoring critical food and process parameters in the target artisanal foods	WP7	ANSES	OTHER	PU	Jan 2022	Nov 2022
D8.1	Report from each partner on the utility of other risk assessment tools	WP8	CNIEL	R	PU	Jan 2021	Feb 2022
D8.2	Plan design of the decision support tool	WP8	CNIEL	DEM	CO	Sep 2021	May 2022
D8.3	Process risk models, sensitivity analysis and risk-based sampling schemes and control charts implemented in the decision-support tool	WP8	CNIEL	DEM	CO	Apr 2022	Mar 2023
D8.4	Safety decision-support tool tested by artisanal producers	WP8	CNIEL	OTHER	CO	May 2022	May 2023
D9.6	Final Data Management Plan	WP9	IPB	R	CO	Sep 2021	Mar 2022
D9.7	Plan for Exploitation and Dissemination of Results	WP9	IPB	DEM	CO	May 2022	May 2023
D9.8	The ArtiSaneFood Seminar	WP9	IPB	DEM	PU	May 2022	May 2023

Attendees:

Ursula Gonzales-Barron, Vasco Cadavez, Alessandra de Cesare, Gerardo Manfreda, Fouad Achemchem, Youssef Ezzaky, Mariem Zanzan, Panagiotis Skandamis, Antonia Gounadaki, Frederique Pasquali, Irene Mesimeri, Dimitra Bozinaki, Laurent Guillier, Mourad Halilou, Subhasish Basak, Nourhene Mihoubi, Wafa Mkadem, Georgia Moschopoulou, Spyridon Kintzios

Absent, no justification:

Guessas Mohamed

2nd YEAR VIRTUAL MEETING



ArtiSaneFood: Advances from IPB partner

Ursula Gonzales-Barron and Vasco Cadavez

Food Safety and Quality Analytics, CIMO Mountain Research Centre, School of Agriculture, Polytechnic Institute of Bragança, Portugal



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