



## “Valorisation of thistle-curdled CHEESES in MEDiterranean marginal areas” Acronym VEGGIE-MED-CHEESES

<b>Deliverable title</b>	<b>D1.5 General Project meeting 3 report</b>
<b>Deliverable Lead:</b>	Università Politecnica delle Marche
<b>Related Work Package:</b>	<b>WP1 Project coordination and overall management</b>
<b>Related Task:</b>	T1.1 Organization of general Project meetings
<b>Author(s)</b>	Lucia Aquilanti
<b>Dissemination level</b>	Public
<b>Due Submission Date:</b>	<b>30.11.2020</b>
<b>Actual submission:</b>	<b>30.10.2020</b>
<b>Start date of project</b>	1.05.2019
<b>Duration</b>	36 months (after project end extension: 48 months)
<b>Abstract</b>	The Report corresponds to the minutes of the General project meeting 3 held after 18 months since the start of the project

### Versioning and Contribution History

Version	Date	Modified by	Modification reason
V1.0	29/10/2020	Lucia Aquilanti	First version
V2.0	30/10/2020	Lucia Aquilanti	Comments after peer review process

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**GENERAL PROJECT MEETING 3**  
**PRIMA FUNDED PROJECT UNDER THE 2018 CALL**  
**“Valorisation of thistle-curdled CHEESES in MEDiterranean marginal areas”**  
**Acronym VEGGIE-MED-CHEESES**

**29 OCTOBER 2020, web conference**

1. LOCATION

**TEAMS web conference**

On October 29th, 2020, at 13.30 am (Rome time), the Principal Investigators (PI) and the research Team Members of the Partners of the VEGGIE-MED-CHEESES Consortium met via TEAMS, regularly convened by the Coordinator of the Project, Prof. Lucia Aquilanti, with an email dated 16.10.20.

2. PARTICIPANTS

The attendance situation at the beginning of the meeting is shown in the following table:

Partner No.	Organisation	Participant (Permanent Staff)	Role	Attendance
<b>Coordinatore (Partner 1)</b>	Dipartimento di Scienze Agrarie, Alimentari e Ambientali, Università Politecnica delle Marche, Italy (short name: D3A-UNIVPM)	<b>Lucia Aquilanti</b>	<b>Project Coordinator PI of UNIVPM</b>	<b>P</b>
		Francesca Clementi	Team member	A
		Andrea Osimani	Team member	A
		Cristiana Garofalo	Team member	A
		Nadia Raffaelli	Team member	A
		Massimo Mozzon	Team member	A
		Silvia Zitti	Team member	A
		Simona Casavecchia	Team member	A
		Fabio Taffetani	Team member	A
		Roberto Orsini	Team member	A
		Raffaele Zanolì	Team member	A
		Cinzia Mannozi	Team member	A
		Roberta Foligni	Team member	A
		Stefano Zenobi	Team member	<b>P</b>
Federica Zamporlini	Team member	<b>P</b>		
<b>Partner (P2)</b>	Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria - Centro di ricerca Alimenti e Nutrizione (short name: CREA-AN)	<b>Pamela Manzi</b>	<b>PI of CREA-AN</b>	<b>P</b>
		Flavio Paoletti	Team member	A
		Antonio Raffo	Team member	<b>P</b>
		Fiorella Sinesio	Team member	A
		Mena Ritota	Team member	A
		Maria Gabriella Di Costanzo	Team member	A

			Elisabetta Moneta	Team member	A
			Nicoletta Nardo	Team member	A
			Marina Peparao	Team member	A
<b>Partner (P3)</b>	<b>3</b>	Departamento de Tecnología de Alimentos y Nutrición, Universidad Católica San Antonio De Murcia (short name: UCAM)	<b>Luis Tejada Portero</b>	<b>PI of UCAM</b>	<b>P</b>
			Jose María Cayuela	Team member	A
			Eva Salazar Serna	Team member	A
			Adela Abellán	Team member	P
			Estefania Bueno Gavila	Team member	P
			Cindy Maria Bande de Leon	Team member	P
<b>Partner (P4)</b>	<b>4</b>	Department of Food Hygiene and Technology, Veterinary Research Institute, Hellenic Agricultural Organization, DEMETER (short name: DEMETER)	<b>Akis Psomas</b>	<b>PI of DEMETER</b>	<b>P</b>
			Georgios Samouris	Team member	A
			Loukia Ekateriniadou	Team member	A
			Evridiki Boukouvala	Team member	A
			Maria Ioannidou	Team member	A
			George Vafeas	Team member	A
			Virginia Giantzi	Team member	A
<b>Partner (P5)</b>	<b>5</b>	High Institute of Agronomy of Chott-Mariem, Sousse University (ISA-CM)	<b>Bouthaina Al Mohandes Dridi</b>	<b>PI of ISA-CM</b>	<b>P</b>
			Rabiaa Haouala	Team member	A
			Ismahen Essaidi	Team member	P
			Najla Dhen	Team member	P

Legend: P Present; A Absent

### 3. AGENDA FOR THE MEETING

**13 h 30 – 13 h 45 (Rome time)**

**Connection and Greetings**

**13h 45– 14h 30**

**Presentations of the main results achieved by Research partners involved in WP2, WP3, WP4**

**14h 30 - 15h 00**

**Planning of WP5 activities** (including packaging, delivery, analyses, etc.)

**15h 00 – 15h 15**

**Discussion and issues from the Partners**

**15h 15**

**Closure of the meeting**

### 4. MEETING MINUTES AND CONCLUSIONS

The Project Coordinator opens the meeting at 13.30 am (Rome time) with the following agenda:

1. Connection and Greetings
2. Presentations of the main results achieved by Research partners involved in WP2, WP3 and WP4
3. Planning of WP5 activities
4. Discussion and issues from the Partners

### 1. Connection and Greetings

The Project Coordinator, Prof. Lucia Aquilanti, welcomes the participants and opens the meeting with the following three communications.

- On 22 October 2020 the Coordinator has met via ZOOM the PRIMA Project Officer Dr Mohamed Wageih for a one-2-one meeting aimed at presenting to PRIMA coordinators the new tool to be used for the continuous monitoring and reporting of PRIMA funded projects. This new tool replaces the SMART SHEET (temporarily available since may 2020); all the deliverables and data that have been uploaded/inserted by the coordinators in the SMART SHEET will be automatically integrated in the new tool (to avoid waste of time/work). Soon a tutorial video will be sent to all coordinators for support.
- On 11 October an email from Dr Mohamed Wegeih from PRIMA secretariat has been sent to all coordinators with a Smartsheet link to collect the communication and dissemination information about all PRIMA projects; all the collected information will be used by the new PRIMA Communication Officer to build the Strategic Communication and Visibility guidelines and to decide how the PRIMA Secretariate can support and promote the projects outcomes and different activities. The deadline to receive this data was Thursday 15 October.  
(SMARTSHEET Link: <https://app.smartsheet.com/b/form/a551ea7cc1784cd29a8630da296a3b76>)
- During the one-2-one meeting Prof Lucia Aquilanti has asked to Dr Mohamed Wageih how to request an extension of the project duration; an official letter to be sent to Dr Mohamed Wageih has to be drafted by the coordinator to explain the reasons for the request of extension.
- The coordinator reminds the need to complete, as soon as possible, the drafting of the first deliverables sent in the previous weeks, in view of the submission to PRIMA secretariat of the mid-term Report (deadline 1 November 2020).
- Since most partners are preparing abstracts/papers, the Coordinators kindly reminds to give visibility of PRIMA FUNDING by reporting the following statement in the acknowledgements/abstract:  
*"This research is supported by the [NATIONAL FUNDING AGENCY] under grant agreement No [.....], project "Valorisation of thistle-curdled CHEESEs in MEDiterranean marginal areas" (<https://veggiemedcheeses.com/>) and part of the PRIMA program supported by the European Union."*

### 2. Presentations of the main results achieved by Research partners involved in WP2, WP3 and WP4

The coordinator reads the list of contributions for WP2, WP3 and WP4 and leaves the floor to **Prof. Bouthaina Dridi Al Mohandes (ISA-CM)**, **Prof. Simona Casavecchia (UNIVPM)**, **Dr Stefano Zenobi (UNIVPM)**, **Dr**

**Federica Zamporlini (UNIVPM), Dr Akis Psomas (DEMETER), Dr Cindy Maria Bande de Leon (UCAM)** for their presentation, according to the following list.

- Presentation of ISA-CM Principal Investigator, Prof. **Bouthaina Dridi Al Mohandes** (Agronomist) about (i) completed tasks; (ii) main results and deliverables achieved; and (iii) tasks in progress for WP2-3 at ISA-CM, dealing with the sampling and morphological characterization of *Onopordum platylepis* as well as the cultivation of *O. platylepis*, *O. tauricum*, *Cynara humilis* and *C. cardunculus* at the Tunisian site.
- Presentation of D3A-UNIVPM Team Member, Prof. **Simona Casavecchia** (Botanist) about (i) completed tasks; (ii) main results and deliverables achieved; and (iii) tasks in progress for WP2 at D3A-UNIVPM and seedbank of Majella, dealing with the morphological characterization of *Onopordum tauricum* and *Cynara humilis* as well as seed germination of *O. platylepis*.
- Presentation of D3A-UNIVPM Team Member, Dr. **Stefano Zenobi** (Agronomist), about (i) completed tasks; (ii) main results and deliverables achieved; and (iii) tasks in progress for WP3 at D3A-UNIVPM, dealing with the cultivation of *O. platylepis*, *O. tauricum*, *Cynara humilis* and *C. cardunculus* at Didactic/Experimental farm Pasquale Rosati (AN, Italy).
- Presentation of D3A-UNIVPM Team Member, Dr. **Federica Zamporlini** (Botanist), about (i) completed tasks; (ii) main results and deliverables achieved; and (iii) tasks in progress for WP4 at D3A-UNIVPM, dealing with the analysis of vitamins in the extracts from spontaneous thistles
- Presentation of UCAM Team Member, Dr. **Cindy Maria Bande de Leon** (Food technologist), about (i) completed tasks; (ii) main results and deliverables achieved; and (iii) tasks in progress for WP4 at UCAM, dealing with the technological characterization of extracts from spontaneous thistles

### 3. Planning of WP5 activities

The Coordinator first reminds that the cheese-making trials with both the crude extracts from wild and cultivated thistles have been planned for November 2020 – May 2021.

Before opening the discussion, the Coordinator also reminds that:

- Due to the COVID emergence, the collection of flower heads from *Cynara humilis* in Spain (performed by Dr Elena Ordiales Rei, through a collaboration In kind) started with a delay so the number of collected flowers is not enough to guarantee the production of all the four cheese varieties; for the next summer (June – July 2021) there will be (hopefully!) no problem to collect a higher amount of flower heads from this species.
- Regarding *O. tauricum*, a sufficiently high number of flower heads (~670) have been collected from both the wild and the Italian experimental plot in July 2020; food technologists from UNIVPM are now completing the freeze-drying of the aqueous extract produced from tubular flowers collected from these flower heads. Once that the two extracts are ready (CE-st and CE-ct) - hopefully by the end of **November 2020**- they might be exploited in the cheese-making trials.
- Regarding *O. platylepis*, again the amount of aqueous extract produced from the flower heads collected by ISA-CM in Tunisia in July 2020 is not enough for the production of the four cheese varieties in November 2020- May 2021; no problems are envisaged for the collection of a higher number of flowers in July 2021 for a further cheese-making trial in November 2021-May 2022 (given the 1-year project extension).

- More than one cardoon species might be potentially selected for the cheese-making trials; due to the COVID emergence, the end of the project might be postponed from April 2022 to April 2023; this means that the Consortium has the possibility to postpone all the cheese-making trials (or part of them) to November 2021, however the Coordinator expresses her own preference towards the realization of preliminary cheese-making tests as soon as possible.

Given these premises, the Coordinator opens the discussion and leaves the floor to the Consortium partners. After an ample discussion, the attendants at the meeting agree that:

- the extracts from **spontaneous** and **cultivated** *O. tauricum* will be used for production of Caciofiore (UNIVPM) and – if there is enough extract – for production of Queso de Murcia (**November 2020-May 2021**)
- the extract from spontaneous *O. platylepis* will be used for production of Queso de Murcia (**November 2020-May 2021**)
- Two batches will be produced with each extract and for each cheese variety. For each cheese variety **control cheeses** will also be produced with the sole commercial vegetal rennet (CACIOFIORE) or with both commercial and vegetable rennet (QUESO DE MURCIA).
- All the cheese-making trials will be performed at two local dairy plants; for CACIOFIORE, at the dairy farm: DELIZIE DEI FRATELLI ANGELI <http://www.aziendaangeli.it/>; for QUESO DE MURCIA, at a local dairy farm to be identified.
- A commercial vegetal rennet (D3013 COAGULANTE VEGETALE DAIREN) has been purchased by UNIVPM from DAIRYANDFOOD; it is a liquid rennet prepared from *Cynara cardunculus*; according to the manufacturer's instructions, 35 mL of this rennet are recommended for coagulation of 100 L of milk. Aliquots of this commercial rennet will be sent by UNIPM to UCAM for the manufacture of the control cheeses.
- PIs from UNIVPM and UCAM confirm that they have already contacted the two local dairies and there are no problems for starting the cheese-making trials in November 2020.
- The experimental and control CACIOFIORE and QUESO DE MURCIA cheeses will be analysed by UNIVPM and UCAM, respectively, for the main microbiological, compositional, and nutritional traits. For CACIOFIORE, CREA-AN will also perform sensory analyses. All the cheeses will be analysed at the end of the ripening period (**approximately 2 months since manufacture, for both cheeses**). Cheese ripening will be performed directly at the local dairies.
- Next year (November 2021-May 2022) further cheese-making trials will be performed using the extracts from *Cynara humilis* and/or *Onopordum platylepis* to produce all the four varieties (the decision about the species will be postponed, later on).

#### 4. Discussion and issues from the Partners

Dr Antonio Raffo, from CREA-AN, suggests scheduling a meeting, destined for all the partners involved in the sensory analyses (CREA-AN, DEMETER, UCAM), aimed at sharing procedures and criteria to be adopted for the sensory analysis (panel test) of the control and experimental cheeses. The Coordinator encourages Dr Antonio Raffo to coordinate such a nice initiative.

As there is nothing else to discuss, the project Coordinator declares the session closed at 15.15.



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VEGGIE-MED-CHEESES Project Coordinator

Prof. Lucia Aquilanti PhD

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