EU CAP Network cross-visit ‘Use of agricultural and forestry residues for creating alternative resources of income for farmers and foresters’

26-27 June 2024 | **Vic, Spain**

Innovation and Knowledge exchange | EIP-AGRI

Funded by the European Union

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Support Facility for Innovation & Knowledge exchange
EIP-AGRI

EU CAP Network cross-visit

Use of agricultural and forestry residues for creating alternative sources of income for farmers and foresters

Practical information

26-27 June 2024 **| Vic, Spain**

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What will the EIP-AGRI Support Facility provide?

1. The EIP-AGRI Support Facility (SF) provides Travel and Accommodation for participants during the cross-visit. Participants were asked to communicate their travel needs, dietary preferences, and any other requirement via the registration form, based on which the EIP-AGRI SF provides Travel and Accommodation.
2. For participants who have to travel on the day before or after the meeting because of flight or train schedules, the EIP-AGRI SF will arrange for accommodation and breakfast for an extra night. No meals will be provided during additional days.
3. Once a ticket has been issued, it is final and cannot be changed.
4. If participants encounter any problem (delay, cancellation, strike, ...) during their travel, they should contact crossvisit.innovation@eucapnetwork.eu

What do participants have to pay for themselves?

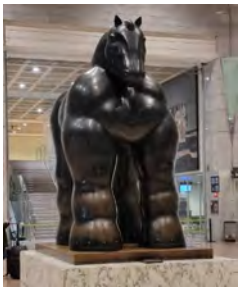
1. The EIP-AGRI SF provides transport to the event and meals and catering during the event. However, participants have to pay for additional meals and transport outside the event. Participants will also have to pay themselves any extra services they request from the hotel.
2. All other costs outside the event, such as taxis, tolls, use of private car, parking fees, etc., are not covered and cannot be reimbursed. For locations that do not have a public transport connection, the EIP-AGRI SF only covers the train tickets from the closest station from participants' hometown.
3. Costs of public transport from and to the airport to Vic can be refunded after the cross-visit. To do so, participants must send a filled in BIS template, Reimbursement form and Confirmation bank account form with a proof of all expenses (templates can be found on page 71) to the mail where this document was attached to. Only 1 reimbursement form per participating Operational Group is accepted, so reimbursements requests of all participants from one Operational Group should be group together in 1 request.

Access to Vic, Spain

Arrival to the hotel from Barcelona-El Prat airport (83 km)

Public transport (in group)
You can find the expected arrival times and contact information of everyone arriving at Barcelona airport in the annex of this document. In case you want to travel together, you can reach out to other travellers arriving around the same hour as you.

Several travellers will arrive at the airport around noon and could travel to Vic together. In case you want to join this group, go at 14:00 to the meeting point at the arrival hall of terminal T2 B (at floor 0, close to the statue of the black horse).



Public transport (individual)
From Barcelona-El Prat airport, you can reach Vic by public transport in about 2 hours through a combination of train, urban-bus/metro and bus (please see the 4 steps below).

1. The airport train station is located at terminal 2B. In case you arrive at terminal 1, you can take a free shuttle bus outside terminal 1 to go to terminal 2. The bus will take you to terminal 2 in 10-15 minutes. At the airport train station, go to a ticket vending machine and buy 2 single tickets per traveler. A single ticket will cost 2,55 €. Remember to validate your ticket at the beginning of each metro and bus ride.

2. At the airport train station, take train line R2 Nord (it goes in one direction only) with the first single ticket. The train leaves every 30 minutes, and you should get off the train at train station 'Barcelona-El Clot', which you will reach in about 30 minutes (5th stop).

3. At Barcelona-El Clot, you have two options:

- Option 1: Take bus 62 in the direction of 'Ciutat Meridiana' to Meridiana-Plaça dels Jardins d'Elx with the second single ticket. The bus leaves every 15 minutes, and you will reach 'Meridiana-Plaça dels Jardins d'Elx' in 7 minutes (5th stop).

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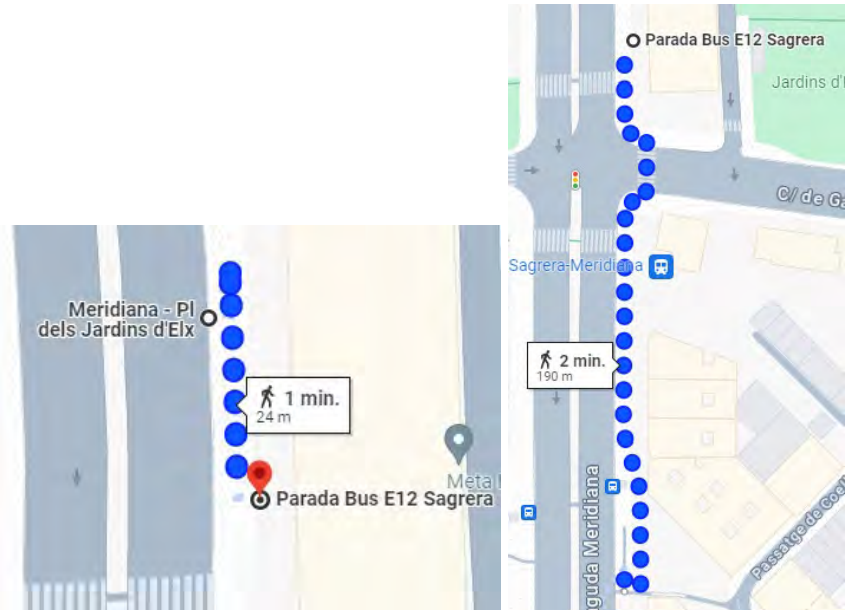
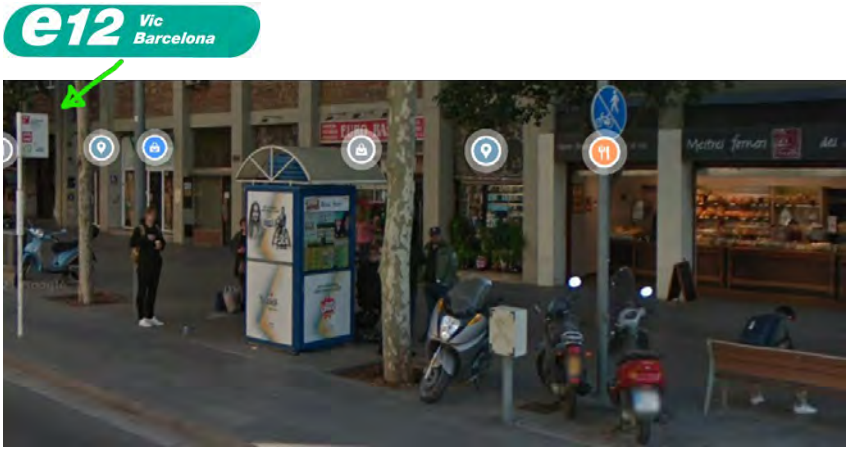
- Option 2: Take metro L1 (Red line) in direction “Fondo” with the second single ticket. The metro leaves every 3 to 5 minutes. After two stops, you will reach “La Sagrera”.

L1

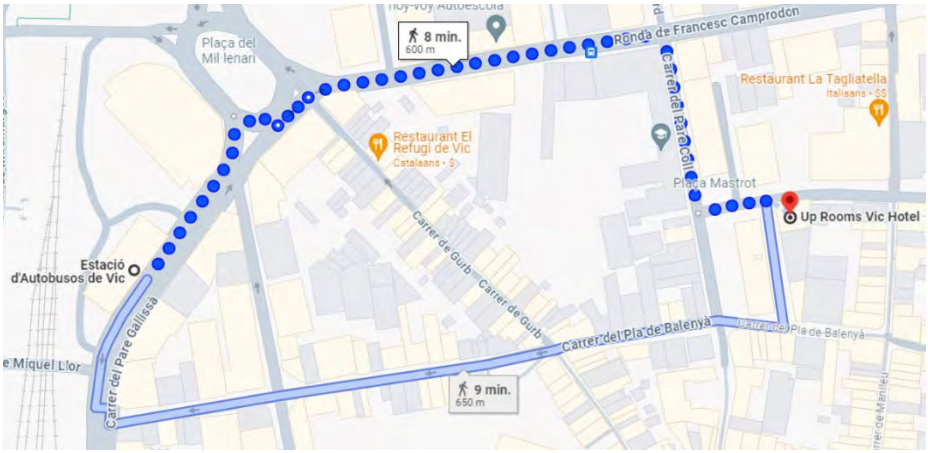
4. At bus stop Meridiana-Plaça dels Jardins d'Elx or metro station “La Sagrera”, walk to bus station 'Parada bus E12 La Sagrera' as shown on the maps below (map on the left: from bus stop Maridiana-Plaça, map on the right: from metro stop La Sagrera).



5. At the bus station you can take bus e12 in the direction of 'Vic'. Several buses leave per hour, you can find the timetable here. You will reach Vic (the end station of the bus) in about 1 hour. Bus tickets can be purchased from the bus driver and will cost approximately 10 € for a single ride.



6. From Vic bus station, you can walk to the hotel in 8 minutes as shown on the map below.



Taxi
You can take a taxi outside the airport. There are always taxis waiting at the arrival areas of terminal T1 and T2. Taxi prices in Catalonia are regulated, expect to pay 75-80 € for a single ride. A taxi ride to Vic will take 1h – 1h15.

Taxi costs will not be reimbursed by the EIP-AGRI SF and thus needs to be covered by yourself.

Hotel & venue

Hotel

You will be accommodated at Up Rooms Vic.
Address: Passatge Can Mastrot s/n

The organisers are covering your accommodation costs, including breakfast. All other personal expenses (mini-bar, parking, etc. should be paid directly by you and will not be refunded.

In case you arrive late in the evening on Tuesday 25 June, keep in mind that the restaurant of the hotel closes at 23:00. In case you arrive after this time, you can have dinner at El Celler d'en Miquel (open until 00:00) or Petit Bistro (open until 00:00), both restaurants are at walking distance from the hotel. Dinner on 25 June will be at own expense.

Venue

On both days, the meeting will start at 8.30 with registration at BETA Technological Centre.
Address: Futurlab – Can Baumann, Ctra de Roda 70, 08500 Vic

It takes approximately 15 minutes to reach BETA's facilities, so you can walk there individually or meet the group in the hotel lobby at 8:15 to go together. This is valid for both mornings.

Networking Dinner

Dinner will be provided on 26 June at 20.00 at XinVic Gastrobar.
Address: Carrer de la Riera 9, 08500 Vic

The restaurant is at walking distance from the hotel. The group will meet at 19:45 in the lobby of the hotel to walk to the restaurant.

Contact details

The cross-visit is organised by the Support Facility for Innovation and Knowledge exchange including EIP-AGRI. For additional information about the organisation of the events, please feel free to contact:

Marta Yonkova
Email: marta.yonkova@eucapnetwork.eu
Phone number: +359 888 462126

Ineke van Vliet
Email: ineke.vanvliet@eucapnetwork.eu
Phone number: +31 6 52401057

Margarida Ambar
Email: margarida.ambar@eucapnetwork.eu
Phone number: +31 6 46103143

Or
crossvisit.innovation@eucapnetwork.eu

In case of medical problems, local doctors and hospital facility are available.
Call 112 for emergency doctor service.

Annex: arrivals 25 July at Barcelona Airport

Participant	Contact information	Arrival time
Barbara Majoch	barbara.majoch@agrismart-poland.com	11:50
Rudi Van Ingelgom	tipper@skynet.be	11:50
Maria Teresa Dentinho	teresa.dentinho@iniav.pt	12:10
Olga Moreira	olga.moreira@iniav.pt	12:10
Agata Wierzbinska	agata.wierzbinska@ibprs.pl	12:30
Anna Szosland-Fałtyn	anna.szosland@ibprs.pl	12:30
Grzegorz Bełżecki	g.belzecki@ifzz.pl	12:30
Paweł Kowalczyk	p.kowalczyk@ifzz.pl	12:30
Vasiliki Tsioni	vtsioni@q-lab.gr	12:40
Ineke van Vliet	ineke.vanvliet@eucapnetwork.eu	12:50
Margarida Ambar	margarida.ambar@eucapnetwork.eu	12:50
Jelina Hilde M Terrijn	jelina.terrijn@vlaamsbrabant.be	14:20
Elin Johnsson	Elin.JOHNSSON@ec.europa.eu	14:20
Bart Vandecasteele	bart.vandecasteele@ilvo.vlaanderen.be	17:05
Hanne Denaeghel	hanne.denaeghel@viaverda.be	17:05
Simon Craeye	simon.craeye@inagro.be	17:05
Marlena Baranowska	marlena.baranowska@up.poznan.pl	18:50
TAMÁS SZOLNOKY	agrogeo@mail.opticon.hu	19:35

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AGENDA

26-27 June 2024 | **Vic, Spain**

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Agenda

Timing	Wednesday 26 June 2024 Day 1
8.30 – 9.00	Arrival at the meeting venue and registration
9.00 – 9.30	**Introduction and setting the scene** › *Elin Johnsson – Unit D.1 'Rural areas and networks', DG AGRI, European Commission* › *Marta Yonkova – EIP-AGRI Support Facility* › *Sergio Ponsá Salas – BETA Technological Centre*
9.30 – 9.45	**Get to know each other**
9.45 – 10.45	**Short presentations of the participating projects** › 'Bioferti +', Spain › 'ChicoryRePowered, Belgium › 'Circular bioeconomy of proximity', Spain › 'CoopVitiLoop', Spain › 'Development of a product and process innovation related to the technology of producing vegan thickets containing dehorned oak nut pulp', Poland › 'Entomoponics', Belgium › 'FERTIECO', Spain › 'GOEffluents', Portugal › 'GRANOFARM', Hungary › 'Polish Ginger', Poland › 'Process milk using the new method of organizing cooperation with farmers. Launch new dairy products and whey-based products into the market', Poland › 'Rapeseed meal in pig nutrition', Poland › 'RE-PEAT', Belgium › 'SubProMais', Portugal › 'SUSRICE', Greece **Q&A**
10.45 – 11.05	*Coffee break*
11.05 – 12.00	**Interactive session 1: Identifying challenges and opportunities in the participating OG projects**
12.00 – 12.15	**First reactions – what chances do we see for collaboration**
12.15 – 13.00	*Lunch break*
13.00 – 18.00	**Field visits**
20.00 – 22.00	*Networking dinner*

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Timing	Thursday 27 June 2024 Day 2
8.30 – 9.00	**Arrival at the meeting venue and registration**
9.00 – 10.00	**Get to know BETA facilities and projects**
10.00 – 10.40	**Interactive session 2: Highlights of the previous day and start planning the future**
10.40 – 11.00	*Coffee break*
11.00 – 12.00	**Interactive session 3: Ideas for future collaboration**
12.00 – 12.30	**Closing session** › *Elin Johnsson – Unit D.1 'Rural areas and networks', DG AGRI, European Commission* › *Marta Yonkova – EIP-AGRI Support Facility*
12.30 – 13.45	*Lunch*

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Field visits and BETA projects Information

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Day 1

1. Field visit 1: Visit Deseuras / Bioeconomy of proximity EIP AGRI Operational Group – learn more

What will we see and learn?

- Anaerobic digestor;
- Treatment of digestate to obtain pellet biofertiliser of solid fraction and liquid concentrated biofertiliser obtained of solid fraction;
- Recuperation of high quality water.

The project seeks to promote the circular bioeconomy in Catalonia by using livestock manure and other organic amendments from the agri-food industry to improve the soil and productivity of Catalan wine farms.

During the visit, we will be visiting a biogas plant that produces advanced biofertilisers used to fertilise Catalan wine farms. The plant was built and is operated by Selecció Deseuras SL, a company created by the union of a farmer and a waste management company. It has a train of technologies that is able to produce a pelletised fertiliser (with the possibility to balance NPK at will), a liquid fertiliser and clean water. We will be visiting the plant and learn from a Biogas Plant representative with the support of a Beta TC researcher. xx The plant islocated close to the farm. We will also enter into detail about how this OG gathered actors from different sectors (pig farmers and wineries).

2. Field visit 2: Visit els Campasos / Fertieco EIP-AGRI Operational Group – learn more

What will we see and learn?

- Pocked anaerobic digestor of slurry;
- Solid-liquid separation of the digestate;
- Explanation of the hypertermfilic compost and the reason of this treatment;
- Explanation of organisation of the farmers of a centralised slurry treatment plant.

The main objective of the FERTIECO project is to optimise composting technology to sanitise and stabilise the solid fraction of pork manure, as well as its digestate, under hyperthermophilic conditions and obtain a biofertiliser with low content of veterinary drugs and resistance genes, which has good agronomic quality and is suitable for application in organic crops.

We will visit the Campassos Farm where the digestate for hyperthermophilic composting is generated. This farm is integrated within the farmers' cooperative AGROCAT (https://agrocat.com/en), a cooperative with a great focus on innovation and sustainability. During the visit, an AGROCAT representative will explain how the

cooperative is organised, how the OG was created and show the farms facilities with this rural anaerobic digestor installed over the pig manure's lagoon. Finally, the hyper thermophilic composting pilot system will be explained by a BETA researcher. If the time allows, another relevant and successful cooperation between farmers, industry, local government representatives and BETA researchers will be presented.

3. Field visit 3 (optional): Experimental field of Beta Land

On our way back to the hotel and if time allows, we are going to see how biofertilisers are tested on the ground. These biofertilisers are obtained within the scope of two EU projects: Fertimanure (learn more) and Nutribudget (learn more).

Day 2

Visiting BETA Facilities and demonstration of Operational Groups' activities - 1 hour duration:

NUTRI-KNOW – learn more

NUTRI-KNOW aims at improving nutrient management practices in European agriculture. By consolidating knowledge from various EIP-AGRI Operational Groups across EU member states, it seeks to address urgent needs, challenges, and opportunities for farmers. Through a platform and thematic network, NUTRI-KNOW aims to facilitate the exchange of information, strengthen knowledge flows, and promote sustainable agricultural practices. Ultimately, the project aims to reduce reliance on imported mineral fertilisers, improve agricultural and environmental management, and enhance the overall efficiency and sustainability of the European agri-food sector.

What we are going to see: *Explanation of the Nutri-Know project and activities.*

CoopVitiLoop – learn more

The main objective of this Operational Group is to close the carbon cycle in the wine sector by optimising the co-composting of waste and by-products obtained from grape harvesting, wine processing and wastewater treatment for subsequent application as biofertiliser/organic amendment.

What we are going to see: *Pot tests in greenhouses to assess bio fertilisers in vineyards.*

SempreBio – learn more

The European research project SEMPRE-BIO, led by Cetaqua, water technology centre, will work to demonstrate new cost-effective biomethane production solutions. This initiative will seek to reduce the investment and operating costs of biomethane

production plants and extend the biomethane production potential through new waste valorisation routes. Likewise, SEMPRE-BIO will also propose alternative monetisation sources, such as the valorisation of biogenic CO_2 or the commercialisation of biochar. A BETA TC researcher will briefly explain the whole project, putting focus on the biogenic CO_2 valorisation by microalgae, while showing us the bioreactor located in BETA.

What we are going to see: *Algae bioreactor.*

Additionally: Lab visit focusing on projects of interest for the participants.

Instructions for the presentation of your poster

We got representatives of 15 operational groups working on the use of agricultural and forestry resources for creating alternative sources of income for farmers and foresters. The posters will be presented in 3 sessions of 5 operational groups. One hour in total is planned for this.

We got a broad variety of projects. We distinguished roughly 3 different themes:

1. OG's working on residues from vegetal origin
2. OG's working on residues from animal origin
3. OG's working on residues from agro-industry and other.

There will be 5 minutes between the sessions for questions and first impressions.

How will the presenting work?

- One representative per OG will do the presentation. The speakers of the first group will sit in the first row.
- Your poster will be shown on the screen.
- Your presentation is based on the poster but with a focus on challenges/opportunities/offers the project wants to discuss
- There will be **max 3 min per project** – with at least 1 min emphasis on the last point: the challenge/opportunity/collaboration you want to discuss.

At the moment of your last 10 seconds, the facilitator gives you a sign. At exactly 3 minutes, we start applauding and proceed to the next slide.

After the fifth speaker, we have 5 minutes for discussion and the facilitator will ask the next group of 5 speakers to prepare themselves.

Here you find in which group you are

1. Plant residues

Plant residues
Entomoponics
CoopVitiLoop
Polish Ginger
Chichory repowered
Vegan thickets acorn

2. Animal residues

Animal residues
Bioferti+
Circular bioeconomy of proximity
Process whey into milk products – Actinata
GOEffluentes
FERTIEGO

3. Agroindustry and other residues

Agroindustry and other residues
SUPROmais
Rapeseed meal
RE-PEAT
GRANOFARM
SUSRICE

Studies from the EU CAP Network cross-visit

Use of agricultural and forestry residues for creating alternative resources of income for farmers and foresters

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1. Plant residues

EU CAP Network cross-visit
Use of agricultural and forestry residues for creating alternative resources of income for farmers and foresters

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OG Entomoponics

Simon Craeye (greenhouse) or Carl Coudron (insects)
+32 51 27 33 01 – +32 51 27 33 99
simon.craeye@inagro.be – carl.coudron@inagro.be

Website: https://inagro.be/projecten/entomoponics

LinkedIn: https://www.linkedin.com/company/inagro-vzw/

Testimonial: https://tinyurl.com/Entomoponics

GEOGRAPHICAL LOCATION

Demo @Agrotopia (Roeselare)

Pilot @ 5 Flemish greenhouses

TYPES OF PARTNERS INVOLVED:

Practical research station: Inagro

Five greenhouse growers:
- **Tomco (tomato)**
- **Husagro (tomato)**
- **Neegro (tomato)**
- **Gemapa (bell pepper)**
- **Agrokom (cucumber)**

PROJECT BUDGET:

€ 71.000

CHALLENGES:

1) Valorization of unused, climatized space in greenhouses and increasing energy efficiency
2) Valorization of organic rest streams from the vegetable cultivation and reducing waste cost
3) Contribute to the Green Deal protein shift
4) Create additional source of income for the grower

INNOVATIVE SOLUTION:

- Installation of insect rearing facility underneath cultivation gutters resulting in simultaneous production of mealworms and fruit vegetables.
- Feeding mealworms organic waste (leaf prunings, malformed fruits) as wet feed source.
- Mealworms produce heat and CO_2 while being a source of essential amino acids and rich in fat

MAIN ACTIVITIES:

- Organization of network-events bringing together insect and vegetable sector for co-creation
- Development, optimization and customization of pilots in professional greenhouses
- Supporting growers (internship, on-site coaching)
- Expanding knowledge: checking suitability of various feedstocks and analyzing effect of greenhouse climate on mealworm development
- Evaluation of technical and economical feasibility
- Dissemination of project results (magazine, demo)

MAIN OUTCOMES (so far):

- 6 customized pilots to co-produce
- Insights in operational requirements and technical limitations of Entomoponics
- Economical analysis for specific set-ups
- 2 testimonial video's
- A broadened network of vegetable growers, insect breeders, supply chain, market actors,… with interest to collaborate in the future
- Study document with all experiences bundled (to be finalized)

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

- Keen on discussing the challenges of evolving **from pilot to commercial scale**. How to convince entrepreneurs to invest in a young and dynamic sector?
- Eager to discover innovative ways to improve profitability of greenhouse farms by **high-quality valorization** of organic residues
- Interest in **collaboration** on the aspect of **closing nutrient cycles over companies** (e.g. fisheries, insect farms, greenhouses) aiming for a mutualistic relationship
- Open for **demonstration** of smart solutions @Agrotopia or @Inagro

This poster was presented at the European CAP Network cross-visit 'Use of agricultural and forestry resources for creating alternative sources of income for farmers and foresters' – 26 – 27 June 2024
More information: www.eucapnetwork.eu

CoopVitiLoop: Implementation of composting to close the cycle of organic matter in the cooperative wine sector (OG)

Laura Mejias, Maira Ros

https://betatechcenter.com/es/proyectos/coopvitiloop/

https://cooperativesagraries.cat/ca/innovacio/l/11038-go-coopvitiloop.html

GEOGRAPHICAL LOCATION

Sant Sadurní d'Anoia (Barcelona, Spain)

TYPES OF PARTNERS INVOLVED:

Federació de Cooperatives Agràries de Catalunya

COVIDES

CEVIPE Grup Cooperatiu

BETA Tech. Center

PROJECT BUDGET:

151.982,69€

CHALLENGE:

Promote the grape harvesting and wine processing organic wastes to be valorized in situ for producing biofertilizers, contributing to closing the carbon and nitrogen loop

INNOVATIVE SOLUTION:

Decentralized composting to produce high-quality biofertilizers beneficial for the vineyard.

MAIN ACTIVITIES:

- Characterization of the waste and by-products generated
- Optimization of the operational parameters that affect the composting process
- Characterization of the biofertilizing product obtained
- Pot test to evaluate the performance of the biofertilizers produced
- Techno-economical and environmental assessment

MAIN OUTCOMES (so far):

The sludge humidity and stability have a major impact on the composting process. Alternative input mixtures are being assessed, adding other agrifood waste and by-products as co-substrates in the process.

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

Nutrient management

Agro-industrial sewage sludge treatment and management

Low-cost decentralized solutions

Application of biofertilizers

Soil health

This poster was presented at the European CAP Network cross-visit 'Use of agricultural and forestry resources for creating alternative sources of income for farmers and foresters' – 26 – 27 June 2024
More information: www.eucapnetwork.eu

Polski Imbir Operational Group

Barbara Majoch

www.polskiimbir.pl

GEOGRAPHICAL LOCATION

Poland, Małopolska, Trzciana,

Poland, Wielkopolska, Szamotuły

Poland, Wilekopolska, Zlotniki

TYPES OF PARTNERS INVOLVED:

Agrismart

University of Life Sciences in Poznan,

Agriculture Advisory Centre in Brwinow, Poznan Branch,

Agricultural Farm in Szamotuły

CHALLENGE:

Adapting ginger cultivation techniques to the geographic and environmental conditions of Poland.

Refining the germination process for ginger rhizomes under controlled conditions.

Managing the processing costs and logistical challenges associated with new technology.

Ensuring the economic viability of ginger production.

Integrating ginger products into the supply chain and market.

INNOVATIVE SOLUTION:

Refining the germination process for ginger rhizomes to accelerate growth and maturation.

Developing innovative technology specifically tailored for producing ginger juice, aimed at functional beverages.

Creating biodegradable packaging and other products from ginger residues.

MAIN ACTIVITIES:

Conducting experiments and refining techniques for the germination and growth of ginger rhizomes under controlled conditions.

Developing and implementing new technology for extracting high-quality ginger juice.

Creating and testing new products such as biodegradable packaging and bioenergy sources.

Analyzing market potential and integrating these products into the supply chain.

MAIN OUTCOMES (so far):

Achieving promising growth rates for ginger in Polish climatic conditions.

Development of a new method for extracting high-quality ginger juice.

Creation of biodegradable packaging and bioenergy products from ginger residues.

Gathering valuable data on the adaptation of ginger rhizomes to local conditions.

Implementing improvements in planting and irrigation processes based on the first year's experiences.

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

Addressing the geographic and environmental adaptation of ginger cultivation.

Overcoming technological and logistical barriers in the production and processing of ginger.

Leveraging innovative solutions to create new income sources for farmers and foresters.

Exploring market opportunities for new ginger-based products.

Sharing best practices and research findings with other operational groups.

Forming partnerships for joint development and market integration of innovative agricultural products.

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More information: www.eucapnetwork.eu

EIP OG ChicoryRePowered

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Jelina Terrijn (jelina.terrijn@vlaamsbrabant.be)

https://inagro.be/projecten/chicoryrepowered

GEOGRAPHICAL LOCATION

Flanders, Belgium

TYPES OF PARTNERS INVOLVED:

Inagro vzw

Praktijkpunt Landbouw Vlaams-Brabant

Biogas-E vzw

PROJECT BUDGET:

€83 333

CHALLENGE:

- Chicory farms have high energy demands
- Chicory farms produce an almost year-round stable residual flow
- While roots from chicory farms can be used as cattle feed, there is currently no market for the leaves

INNOVATIVE SOLUTION:

- Invest in a pocket digester that converts chicory roots and leaves into biogas and digestate

MAIN ACTIVITIES:

- Determine the biogas potential for various input ratios
- Conduct ensiling tests to determine the retention period of residues
- Pilot scale anaerobic digestion tests
- Perform a feasibility study to perform an economic assessment on a company-specific level

MAIN OUTCOMES (so far):

- The biogas potential of leaves alone is insufficient for digester profitability.
- When ensiling the roots, a loss of 20% in biogas potential after 2 months can be expected
- Preferably, the roots and leaves are supplemented with another residual flow like corn

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

- The input for the digester is highly dependent on environmental factors
- Not all the heat produced by the digester may be utilized on the farm and an alternative market might be necessary for a sufficient valorization of the residual heat
- Excess digestate that can't be used as a fertilizer has a high treatment cost in Flanders

This poster was presented at the European CAP Network cross-visit 'Use of agricultural and forestry resources for creating alternative sources of income for farmers and foresters' – 26 – 27 June 2024
More information: www.eucapnetwork.eu

Development of a product and process innovation related to the technology of producing vegan thickets containing dehorned oak nut pulp with a product structure-stabilizing effect as a new direction for the management of forest natural resources

Paula Baumgart, Marlena Baranowska

https://www.orzechdebu.pl;

GEOGRAPHICAL LOCATION

Poland; kujawsko-pomorskie

Main location (NUTS3):

Bydgosko-toruński - PL613

Additional location (NUTS3):

Miasto Poznań - PL415

Bydgosko-toruński - PL613

TYPES OF PARTNERS INVOLVED:

Entrepreneur: Central Business Consulting Institute

Scientific and Research Unit: Poznań University of Life Sciences

Advisory entity: Agricultural Advisory Center in Brwinów, Branch in Poznań

Farmer: Waldemar Bloch

PROJECT BUDGET:

2 238 582,00 zł

CHALLENGE:

The main objective of the operation is to develop and implement a technology for obtaining and preserving an innovative vegan food ingredient based on oak nuts. The mass obtained from oak nuts will be bittered using the vacum infusion method. Thanks to the starch present in oak seeds, their crushed form will be a natural technological additive with stabilizing/thickening properties for the structure of vegan products and an ingredient that enriches the nutritional value and health-promoting properties.

INNOVATIVE SOLUTION:

- prototype acorn dryer (storage of acorns)
- innovative ways of debiting acorns using the vacuum infusion process and fixing the embittered mass of oak nuts
- designing a complete technological line for the production and preservation of pulp obtained from oak nuts, as well as verification, optimization and implementation of technological assumptions in industrial conditions.

MAIN ACTIVITIES:

Physicochemical and microbiological analysis of the raw material and the main technological innovation - development of a method of oak nut bitterness using vacuum infusion.

Selection of the parameters of the bitterness process in order to obtain favorable physicochemical properties of the mass of oak nuts.

Development of a method for preserving the bitter mass of oak nuts in laboratory conditions, and evaluation of its quality during storage.

Design and commissioning of an industrial line for the process of bitterness of oak nuts and preservation of biterrness mass.

Evaluation of the quality of the mass obtained industrially immediately after its receipt, preservation and during 6 months of storage.

MAIN OUTCOMES (so far):

- Floating alone does not eliminate all damaged nuts
- Pulp of deembittered acorns - the color of coffee with milk, aromatic, taste - with a slightly noticeable aftertaste of bitterness
- Liquid after decanting – aromatic, amber-tea color, tart taste. It has the potential for further use due to the content of valuable ingredients. Due to the chemical load and high costs of water/sewage utilities, the amount of fluid generated must be optimized during subsequent tests.
- In the 4th washing cycle, the starch is washed out

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

- Possibility of using other forest tree nuts to produce products, including vegan ones
- Improving the technologies used in the project and comparing solutions used in other projects

This poster was presented at the European CAP Network cross-visit 'Use of agricultural and forestry resources for creating alternative sources of income for farmers and foresters' – 26 – 27 June 2024
More information: www.eucapnetwork.eu

Discussion sheet

EU CAP Network cross-visit
Use of agricultural and forestry residues for creating alternative resources of income for farmers and foresters

26 – 27 June 2024 **| Vic, Spain**

Funded by the European Union

2. Animal residues

EU CAP Network cross-visit
Use of agricultural and forestry residues for creating alternative resources of income for farmers and foresters

26 – 27 June 2024 **| Vic, Spain**

Funded by the European Union

OG, BIOFERTI+

Production of a tailor-made pelletized bio-fertilizer for woody crops as a strategy for the valorization of composted manure and other organic by-products

Laura Diaz-Guerra, Marius Simon, Ricard Carreras

https://betatechcenter.com/projects/bioferti/

https://www.cooperativesagraries.cat/ca/innovacio//11039-go-bioferti.html

GEOGRAPHIC LOCATION:

- Osona, Alt Penedès, Gironès (Catalonia, Spain)

PARTNERS INVOLVED:

Leader: Coop Plana de Vic

Coordinator: Catalan federation of agricultural cooperatives (FCAC)

Other members:

- Grans del Lluçanes, SL
- Covides, SCCL
- BETA Technological Centre
- Girona Fruits, SCCL

BUDGET:

Own funding: 36,642.86 €

EU funding: 67,752.66 €

DACC funding: 89,811.66 €

Total budget: 194,207.18 €

CHALLENGE:

- **By-product valorization** from cattle manure and other organic waste.
- To create new business model based on the **circular bioeconomy.**
- To raise awareness in the livestock sector to **improve the management of animal manure** and in the agricultural sector to **use organic fertilizers as a substitute of mineral fertilizers or raw manure.**
- To promote an agriculture and livestock sector that is more **resilient to climate change.**

INNOVATIVE SOLUTION:

- **Modifications in the composting process have been developed** to prevent an excessive retention of moisture and to avoid the product's compaction.
- **Formulation of a tailor-made pelletized bio-based fertilizer** that meets the specific nutritional needs of the target crops.

MAIN ACTIVITIES:

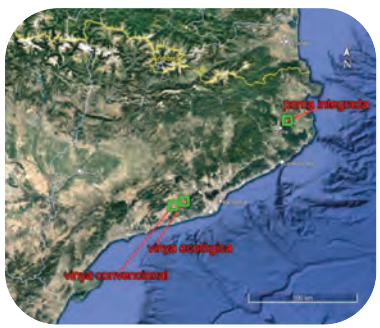
- **Optimization of the composting process** to obtain a product with a great fertilizing capabilities.
- **Formulation and production of tailor-made bio-based fertilizers** (TMF) for vineyards and apple orchards.
- **Agronomic trials to test the TMFs** in vineyards and apple orchards, and incubation assays to study the nutrient release of the product.
- **Technical, economic and environmental feasibility study** of the developed system.

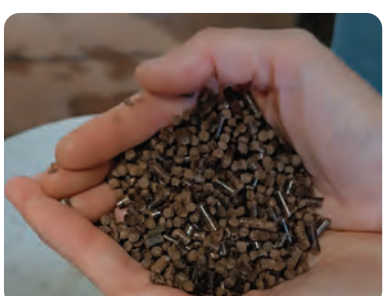
MAIN OUTCOMES (so far):

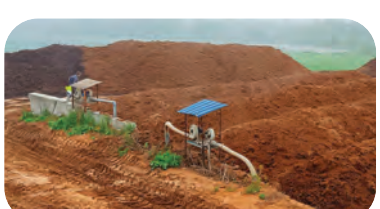
- The **excess of moisture** in the composting piles **hampering the process, was solved** by the operative modifications applied
- The **composting process has been improved** monitoring temperature and humidity, to obtain a final product with relevant nutritional characteristics .
- **The TMFs for vineyard and apple orchard were formulated** using the compost produced with the addition of a nitrogen supplement (biochar), based on the nutritional composition of the soil and the nutritional requirements of the crops.

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

- How to **improve composting** processes with simple operative modifications.
- How to **scale up this technology** and achieve a **sustainable business model** to promote the circularity and development of rural areas.







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More information: www.eucapnetwork.eu

Circular bioeconomy of proximity: organic fertilisation in organic and conventional vineyards (OG)

diana.jimenez@uvic.cat

Beta Tech Center — Circular Bioeconomy of Proximity

Innovi | Bioeconomia Circular

GEOGRAPHICAL LOCATION

Catalonia, Spain (see the image above)

TYPES OF PARTNERS INVOLVED:

Organic livestock and Vineyard Farmers (OVF):

- L'Agraria de Torelló, coop.
- Betara coop.
- Juvé & camps (OVF)

Conventional livestock and vineyard farmers (CVF):

- Selecció Deseuras s.l.
- Granges Terragrisa
- ADV Sant Martí (CVF)

Research Institutions:

- BETA Technological Centre
- Catalan Institute of wine and vineyard

Advisors:

- Catalan wine cluster

PROJECT BUDGET:

185 871,74 €

CHALLENGE:

Enhance the circular bioeconomy of livestock and vineyard farmers in Catalonia.

Develop new technologies to produce new fertilisers derived from manure, such as a solar biodrier from the solid fraction of the pig slurry.

Evaluate the agronomic application of different organic fertilisers in commercial vineyard plots.

Analyse the technical needs on advice about organic fertilization .

INNOVATIVE SOLUTION:

A solar biodrier for the solid fraction of the pig slurry.

MAIN ACTIVITIES:

Biodried fertiliser from solid fraction of pig slurry: Evaluation and monitoring.

Fertilisers characterisation from conventional and organic livestock manure and other organic by-products.

Agronomic evaluation of in-situ fertilisation with conventional and organic products in vineyards.

Technical and economic analysis of the creation of a pilot technical advice service on organic fertilisation in Catalonia.

Technical, economic and environmental feasibility study of the project.

MAIN OUTCOMES (so far):

Five different organic fertilisers are already applied in the field (3 for conventional, 2 for organic agriculture).

Given the drought conditions affecting the Mediterranean region, no significant differences are observed in soils and plant productivity. No matter the fertiliser type (organic and conventional) and the control treatment (no fertiliser added).

There exist soil physic-chemical differences among the conventional and the organic management .

Fertilisers' physic-chemical characterisation is associated to the original materials.

A solar biodrier for the solid fraction of the pig slurry is already set in the farm.

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

The development of technologies to revalorize far residues into fertilizer products.

The use of manure-derived fertilisers under Mediterranean conditions.

Organic fertilization in vineyards.

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More information: www.eucapnetwork.eu

Actinata Operational Group

Paweł Kowalczyk

www.actinata.pl

GEOGRAPHICAL LOCATION

Poland, Malopolska, Stare Bystre

Poland, Malopolska, Krakow

TYPES OF PARTNERS INVOLVED:

Actinata

University of Agriculture in Krakow

Farmers

CHALLENGE:

Developing and refining new methods for processing milk and whey products.

Overcoming the logistical challenges associated with the transportation and collection of milk to ensure quality and efficiency.

Ensuring the economic viability of new dairy products and integrating them into the market.

Addressing environmental impacts through efficient resource management and promotion of local sales to reduce CO_2 emissions.

INNOVATIVE SOLUTION:

Researching the use of slurry for biogas production as an innovative approach to utilizing agricultural waste.

Converting whey from waste into a valuable resource, demonstrating a novel approach to waste management.

Using heat from hot whey to improve energy efficiency and resource management.

MAIN ACTIVITIES:

Conducting advanced research on the use of agricultural waste for biogas production and the transformation of whey into a resource.

Developing new food products utilizing whey, such as protein-rich drinks, healthy desserts, and high-nutritional-value cheeses.

Providing education and training on sustainable waste management and production methods to local communities and other Operational Group members.

Promoting local sales and optimizing digital marketing tools to integrate new dairy products into the market.

Improving methods of milk transportation to ensure better quality and freshness through optimization of the cold chain and reduction of delivery times.

MAIN OUTCOMES (so far):

Creation of a new range of whey-based food products that have gained popularity for their taste and health benefits.

Successful utilization of heat generated in the whey processing process for energy efficiency.

High interest and demand for products both in direct sales and online, supported by the region's tourism potential.

Significant interest from individuals and institutions in joining and collaborating with the project.

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

Addressing the technological and logistical challenges of new dairy product development and market integration.

Ensuring the economic viability and investment support for innovative solutions.

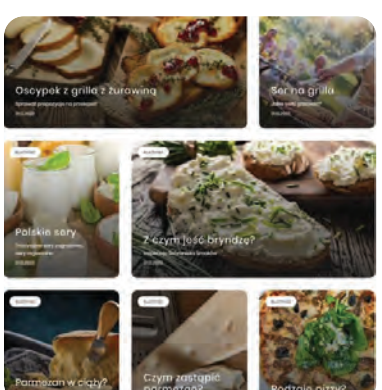
Exploring the potential of biogas production from slurry and the transformation of whey into valuable resources.

Leveraging local sales to promote environmental protection and reduce CO_2 emissions.

Sharing best practices and innovative solutions with other Operational Groups.

Forming partnerships to enhance educational initiatives and knowledge transfer on sustainable waste management and production.

Discussing new methods of natural resource management, including water conservation and efficient soil use, to benefit agricultural communities.



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Operational Group - GOEffluents – Livestock effluents: strategic approach to the agronomic/enrgetic valorisation oh the flows generated in agricultural activity

Olga Moreira

https://projects.iniav.pt/goefluentes/

CHALLENGE:

Livestock production is concentrated in certain regions, some without enough area for land spreading valorisation of effluents.

INNOVATIVE SOLUTION:

Valorise livestock effluents as a resource, focusing on the production and integrated management of the different flows generated.

Using a cross-cutting strategy and a multi-actor approach, partners participated in the proposed actions according to each area of activity. Therefore, it was possible to answer three key areas, namely: characterization of the sector, mitigation of GGE and valorisation of livestock effluents.

MAIN ACTIVITIES:

Optimise effluents use as secondary raw materials, recovering energy and nutrients, improving farm nutrient balances and promoting sustainable management.

MAIN OUTCOMES (so far):

Two new processes were developed:

- Biorremediation by insect larvae via an effluent recovery system;
- The use of biochar in livestock manure storage pits to reduce methane emissions.

Biorremediation allows the reintroduction of nutrients into the value chain, closes nutrient cycles, and origins two product lines: larvae for biorefinery and frass - a new organic fertiliser.

The value of biochar in reducing emissions in septic tanks in intensive production units was successfully demonstrated.

The new products answer to the sector, as a solution in the valorisation of effluents and as a new economic resource.

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

- Share the objectives of the OG involved in the visit
- Discussion of the used methodologies for the studied/ processes and products and the associated innovation
- To observe the impacts of those OG and understand the scalability at farm or industrial level

GEOGRAPHICAL LOCATION

Portugal

TYPES OF PARTNERS INVOLVED:

- 4 Research institutes and Universities
- 3 Agri Associations
- 6 Agri enterprises.

PROJECT BUDGET:

€ 509 980

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More information: www.eucapnetwork.eu

OG, FERTIECO
Implementation of the hiperthermophilic for the production of organic crop fertiliser from the solid fraction of pig manure

Esther Vega, Pol Griful

https://betatechcenter.com/projects/fertieco/

GEOGRAPHICAL LOCATION

Osona, Bages, La Garrotxa, Vallès Oriental (Catalunya, Spain)

TYPES OF PARTNERS INVOLVED:

Leader: Agropecuària Catalana SCCL (Agrocat)

Coordinator: INNOVACC

Other members:

- **Grup Gepork**
- **Selecció Batallé**
- **Embotits Salgot**
- Agrària Plana de Vic i Secció de Crèdit SCCL
- BETA Technological Centre
- Catalan **Water Research** Institute (**ICRA**

PROJECT BUDGET:

199.996,18€

CHALLENGE:

- **Valorisation** from cattle manure for use on organic crops
- **Demonstrate** that biofertilisers obtained from pig slurry have equivalent veterinary medicines and resistance gen content to fertilizers currently suitable for fertilizing organic farming
- To **promote the circular bioeconomy** using livestock manure to obtain high quality and proximity biofertilizers to improve the soil and the productivity of organic crops in Catalonia.

INNOVATIVE SOLUTION:

- **Hipertermophilic composting process** to obtain organic fertilizers from intensive livestock farming with a low content of veterinary medicines, which has a good agronomic quality and is suitable for application on organic crops

MAIN ACTIVITIES:

- **Optimization of the composting process** to obtain products with fertilizing capabilities for organic farming.
- **Comparative** study of manure and compost suitable and unsuitable for organic farming
- **Technical, economic and environmental feasibility study** of the developed system.

MAIN OUTCOMES (so far):

- Production of **nutrient-rich fertilizer** products
- High degradation efficiencies of veterinary pharmaceuticals and even **complete degradation** of some at the end of the hyperthermophilic composting process.

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

- How to improve the **solid-liquid separation** of some livestock manures and digestates.
- To understand the **degradation kinetics** of some pharmacological compounds present in solid fractions

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Discussion sheet

EU CAP Network cross-visit
Use of agricultural and forestry residues for creating alternative resources of income for farmers and foresters

26 – 27 June 2024 **| Vic, Spain**

Funded by the European Union

3. Agroindustry and other residues

EU CAP Network cross-visit
Use of agricultural and forestry residues for creating alternative resources of income for farmers and foresters

26 – 27 June 2024 **| Vic, Spain**

Funded by the European Union

SubProMais – Use of agro-industrial by-products in animal feed: PDR2020-101

teresa.dentinho@iniav.pt

www.subpromais.pt

CHALLENGE:

The use of agro-industrial by-products as animal feed is an alternative to reduce imports, food waste, promote a clean and circular economy, turning worthless raw materials into high-quality and low-cost animal feeds, which does not compete with human food.

INNOVATIVE SOLUTION:

- The first Portuguese database of the chemical and nutritional composition of feedstuffs was produced. The database is open-access and provides information on the chemical and nutritional composition of 314 raw materials.
- Diets with silage based on by-products were defined to replace concentrated feed for use in feeding in lambs and lactating ewes.

MAIN ACTIVITIES:

- Collect information on agro-industrial by-products available for use in animal feed.
- Characterize the by-products chemically and nutritionally and study methods of conservation and integration into animal feed.
- Evaluate their impact on the productive performance of animals and the quality of the end product;
- Produce a computer database of the chemical and nutritional composition of by-products;
- Disseminate the results obtained to the entire community.

MAIN OUTCOMES (so far):

The by-products produced in Ribatejo and Alentejo, the quantities produced and the place and time of production were identified.

The by-products were analyzed for chemical and nutritional characteristics.

Methods for preserving the most perishable by-products by dehydration and ensiling have been established.

Diets with silages based on by-products to replace concentrated feed were defined for use in the feeding of lambs and lactating ewes

A database (www.subpromais.pt) with all the information obtained was created and made available online, free of charge.

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

- Conservation methods
- Bioactive compounds of the by-products, extraction and application due to their properties:
  - Anti-parasitic
  - Anti methanogenic.
  - Antioxidant.

GEOGRAPHICAL LOCATION

Ribatejo and Alentejo regions in Portugl

TYPES OF PARTNERS INVOLVED:

- Instituto Nacional de Investigação Agrária e Veterinária IP (INIAV) - PDR2020-101-030988
- Carlos & Helder Alves Agro-Pecuária Lda - PDR2020-101-030997
- Centro de Biotecnologia Agrícola e Agro-alimentar do Alentejo - PDR2020-101-030993
- Tagus Valley - PDR2020-101-030991
- Ruralbit Lda - PDR2020-101-030990

PROJECT BUDGET:

122 032.16 €

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More information: www.eucapnetwork.eu

EU CAP NETWORK

Operational Group

RAPESEED MEAL IN PIG NUTRITION

Rural Development Program me 2014-2020

https://srutarzepakowa.odr.net.pl

GEOGRAPHICAL LOCATION:
POLAND

TYPES OF PARTNERS INVOLVED:

Silesian Agricultural Advisory Centre (leader)

Silesian Chamber of Agriculture (partner)

Farmer involved in primary production of agricultural products (partner)

Institute of Agricultural and Food Biotechnology – State Research Institute (partner)

PROJECT BUDGET:

780 000 EUR

CHALLENGE:

Reduction of anti-nutritional factors and improvement of nutritional value of rapeseed meal

Impact of fibers status on nutrient digestibility by animals

Impact of rapeseed meal feeding on animal's gut microbiota

INNOVATIVE SOLUTION:

Development of innovative technology for fermentation of rapeseed meal as feed for pigs by applying isolated starter culture

MAIN ACTIVITIES:

Development of starter culture for meal fermentation

Analysis of weight gain in animals fed with fermented meal compared with control group fed with traditional feed

Metagenomic analysis of microbiome of both groups of animals

Qualitative and quantitative assessment of obtained pork meat

Production of meat products, and their qualitative evaluation as well as storage durability tests

MAIN OUTCOMES (so far):

Development of innovative feed alternative for pigs to replace genetically modified soybean meal

Reduction of feed costs with no impact on performance and meat quality

Reduction of carbon footprint

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

Building trust and fostering more active collaboration among members of consortium (farmer, scientific institution, advisory center)

Ensuring clear communication among consortium members

Setting up of long-term vision and clear objectives of consortium accomplishments.

Contact person:

Ms. Anna Szosland-Fałtyn

anna.szosland@ibprs.pl

INSTITUTE OF AGRICULTURAL AND FOOD BIOTECHNOLOGY STATE RESEARCH INSTITUTE

OG RE-PEAT
reuse of growing media for a circular horticulture

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https://inagro.be/projecten/re-peat-hergebruik-van-teeltsubstraten-voor-een-circulaire-tuinbouw

GEOGRAPHICAL LOCATION
Flanders, Belgium

TYPES OF PARTNERS INVOLVED:

- **Research centers and institutes**
- **Ornamental and strawberry growers**
- **Growers' association**

PROJECT BUDGET:

€ 83 000

CHALLENGE:

- How can we reuse growing media derived from strawberry, vegetable and ornamental crops?
- How can we increase the adoption in practice of these recycling loops?

INNOVATIVE SOLUTION:

- Provide database with characteristics of spent growing media from different crops
- Demonstrate the reuse of growing media from strawberries, vegetables and ornamental crops
- Take advantage of residual nutrient levels in the spent growing media during reuse

MAIN ACTIVITIES:

- Physical and chemical analysis of spent growing media
- Demonstration trials in strawberries and ornamentals at trial stations and in practice at growers' locations
- Feedback from reuse to improve quality for reuse purposes
- Cooperation with Public Waste Agency of Flanders

MAIN OUTCOMES (so far):

- Growing media can be reused several times, making horticulture more circular and sustainable
- General raw material declaration from Public Waste Agency to make reuse possible
- Dissemination and demonstration towards growers, increasing the knowledge and interest for reuse

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

- Grower to grower, or via growing media producers?
- Hygienization against pests and diseases
- …

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More information: www.eucapnetwork.eu

Implementation of innovative organic fertilization adapted to precision farming

Tamás Szolnoky (AGROGEO)

www.agrogeo.hu

https://www.facebook.com/agrogeokft/

GEOGRAPHICAL LOCATION

Kecskemét, Hungary

TYPES OF PARTNERS INVOLVED:

Agricultural consultant

University

Farmers

PROJECT BUDGET:

471 433 EUR

CHALLENGE:

- The EU target is to replace up to 30% of chemical fertilizers using bio-based fertilisers.
- There is no current standard for mechanical stability of granulated or pelletized fertilizers however standards of biomass-based fuel pellet exist in the European Union.
- Precision agriculture requires value-added organic fertilizers and their economical use in arable crop farming.

INNOVATIVE SOLUTION:

GRANOFARM Group developed the GRANOPRES integrated solution that includes both a procedure for production formulated organic and organo-mineral fertilizers and their use in precision farming:

- new fertilizers prepared from biogas digestate,
- optimising characteristics of pelletized and granulated organic fertilizers are available on the global market,
- application of fertilizers at the same pass of sowing.

MAIN ACTIVITIES:

Organic and organo–mineral fertilizer development

Precision fertilization in arable crop farming

MAIN OUTCOMES (so far):

- ✓ New know-how: precision application of organic fertilizers
- ✓ Value chain related to renewable energy production: using agricultural biogas digestate for fertilizer development
- ✓ Value-added product: procedure to produce precision organic fertilizers that includes coating of organic and organo-mineral fertilizers with bio-based components

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

How to integrate more biomass-based input materials into precision farming in solid and liquid form:

- arable land,
- grassland,
- forest and forest nursery management.

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SUSRICE OG (2022GR06RDEI0072)

Dr. Dimitrios Katsantonis, Themistoklis Sfetsas, Vasiliki Tsioni

www.susrice.gr

https://www.linkedin.com/company/susrice

GEOGRAPHICAL LOCATION

AGIOS ATHANASIOS,

REGION OF CENTRAL MACEDONIA,

GREECE

TYPES OF PARTNERS INVOLVED:

LABORATORY QLAB G.P.

INSTITUTE ELGO DEMETER

PRODUCERS' GROUP "AGROTIKES EPICHIRISEIS AGIOU ATHANASIOU A' PC"

FARMER PANAGIOTIS GOUTAS

PROJECT BUDGET:

150.000,00 €

CHALLENGE:

The SUSRICE project addresses the challenge of managing rice cultivation residues, aiming to reduce environmental impact, prevent air pollution from burning residues, and enhance soil health through innovative composting techniques and biofertilizer application, promoting sustainable agricultural practices.

INNOVATIVE SOLUTION:

The SUSRICE project implements an innovative method for managing rice cultivation residues by developing biofertilizers and compost from rice bran and other by-products, using beneficial microorganisms to improve soil health and reduce environmental impact

MAIN ACTIVITIES:

The SUSRICE project includes activities such as developing and applying biofertilizers from rice bran, implementing composting techniques with beneficial microorganisms, training farmers in innovative residue management practices, and conducting field trials to compare the effectiveness of these methods against traditional practices

MAIN OUTCOMES (so far):

The SUSRICE project has successfully developed biofertilizers from rice bran. The biofertilizers has been tested in pilot plants and test samples has been taken for analysis.

A first stage presentation of the project has been made during the 17th International Conference of the Hellenic Association of Agricultural Economists ETAGRO 2023.

TOPIC TO DISCUSS IN THE MCV IN TERMS OF CHALLENGES, OPPORTUNITIES AND COLLABORATION:

Challenges:

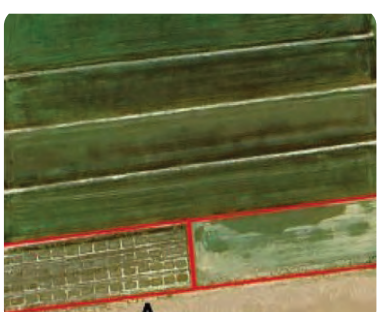
- Managing the decomposition of rice cultivation residues without environmental harm.
- Addressing soil health issues while maintaining crop productivity.

Opportunities:

- Utilizing biofertilizers and composting techniques to enhance soil fertility.
- Reducing greenhouse gas emissions by preventing residue burning.

Collaboration:

- Engaging with local farming communities and agricultural organizations.
- Partnering with research institutions for ongoing innovation and validation.



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All information on the cross-visit is available on the event webpage:
https://eu-cap-network.ec.europa.eu/events/eu-cap-network-cross-visit-use-agricultural-and-forestry-residues

Funded by the European Union

Support Facility for Innovation & Knowledge exchange
EIP-AGRI

EU CAP Network cross-visit

Use of agricultural and forestry residues for creating alternative sources of income for farmers and foresters

Participants - personal profiles

26-27 June 2024 | **Vic, Spain**

Funded by the European Union

EU CAP Network cross-visit

'Use of agricultural and forestry residues for creating alternative sources of income for farmers and foresters'

Participants list in alphabetical order by family name

Update 18 June 2024

	First name	Family name	E-mail address
1	Marlena	Baranowska	marlena.baranowska@up.poznan.pl
2	Simon	Craeye	simon.craeye@inagro.be
3	Hanne	Denaeghel	hanne.denaeghel@viaverda.be
4	Teresa	Dentinho	teresa.dentinho@iniav.pt
5	Laura	Díaz	laura.diaz.guerra@uvic.cat
6	Pol	Gríful i Freixenet	pol@agrocat.com
7	Diana	Jiménez	diana.jimenez@uvic.cat
8	Pawel	Kowalczyk	pawelkowalczyk1410@gmail.com
9	Barbara	Majoch	barbara.majoch@agrismart-poland.com
10	Laura	Mejias	laura.mejias@uvic.cat
11	Eloi	Montcada	emontcada@innovi.cat
12	Olga	Moreira	olga.moreira@iniav.pt
13	Màrius	Simón	marius.simon@fcac.coop
14	Tamás	Szolnoky	agrogeo@mail.opticon.hu
15	Anna	Szosland-Fałtyn	anna.szosland@ibprs.pl
16	Jelina	Terrijn	jelina.terrijn@vlaamsbrabant.be
17	Rudi	Van Ingelgom	tipper@skynet.be
18	Bart	Vandecasteele	Bart.vandecasteele@ilvo.vlaanderen.be
19	Esther	Vega	esther.vega@uvic.cat
20	Agata	Wierzbińska	agata.wierzbinska@ibprs.pl

Organising team

1. Support Facility 'Innovation & Knowledge exchange | EIP-AGRI

	First name	Family name	E-mail address
1	Ineke	Van vliet	ineke.vanvliet@eucapnetwork.eu
2	Marta	Yonkova	marta.yonkova@eucapnetwork.eu
3	Margarida	Ambar	margarida.ambar@eucapnetwork.eu

2. European Commission, DG AGRI

	First name	Family name	E-mail address
1	Elin	Johnsson	Elin.JOHNSSON@ec.europa.eu

EU CAP Network cross-visit

Use of agricultural and forestry residues for creating alternative sources of income for farmers and foresters

Participants - personal profiles

First name: **Marlena**

Last name **Baranowska**

Place / country: **Poland**

Telephone number: **+48 781 139 715**

e-mail: **Marlena.baranowska@up.poznan.pl**

Main occupation: **science, teaching, forestry**

Social media accounts: https://www.facebook.com/profile.php?id=100088892348998
https://www.researchgate.net/profile/Marlena-Baranowska

My experience related to the topic of the multiple cross visit are:

This is my first cross-country visit, I have never participated in such a meeting before. I am glad that I qualified for this group. I hope that I will be a promoter not only of our "acorn operational group", but also of Polish forestry in the European Union.

First name: **Grzegorz**

Last name **Bełżecki**

Place / country: **Jabłonna/Poland**

Telephone number: **+48 609 612 229**

E-mail: **g.belzecki@ifzz.pl**

Main occupation: agricultural, soil microbiology, rumen microbiota, The use of biological agricultural and forest residues related to renewable energy sources in a closed cycle in the form of digestate as a new alternative source of income for farmers and foresters

Social media accounts (Twitter/X, Facebook, LinkedIn, ...):

My experience related to the topic of the multiple cross visit are:

The aim of the cross-project visits is to provide opportunities for cross-border knowledge exchange and mutual learning between EIP Operational Groups (GOs). The visits will create opportunities for intensive informal interactions between GO representatives from different Member States. They can also help to support potential future cooperation between projects and entities and lead to the creation of transnational community groups: Subject: Modern pig farming as part of the operation "Modern pig and beef cattle farming taking into account the principles of hygiene, improving welfare, prevention and biosecurity as an alternative to the use of antibiotics in animals". As part of the programme implemented by the European Agricultural Fund for Rural Development: Europe investing in rural areas "Training co-financed by the European Union from the European Agricultural Fund for Rural Development (EAFRD).

First name:	**Ricard**
Last name	**Carreras**
Place / country:	**Vic**
Telephone number:	**+34 636 69 92 66**
E-mail:	**ricard.carreras@uvic.cat**
Main occupation:	**Transfer & Territorial Projects Promotion Group Coordinator**
Social media accounts (Twitter/X, Facebook, LinkedIn, ...):	**https://www.linkedin.com/in/ricard-carreras-ubach-6008a649/**

My experience related to the topic of the multiple cross visit are:

The Beta Technological Centre is dedicated to enhancing sustainability and promoting the bioeconomy, particularly within the agri-food sector and rural environments. One of the centre's primary areas of focus is the management, treatment, and valorization of organic waste to generate value-added products. In this context, the treatment of livestock manure is a field in which the centre has significant expertise, aiming to improve its management and create products such as biogas, biofertilizers, and water recovery.

As Transfer Manager at the Beta Technological Centre, my role involves promoting projects related to these areas of work and implementing both territorial and sectoral strategies. A recent example of such initiatives is the Catalan Digestate Strategy, which seeks to optimize the treatment and valorization of livestock manure throughout the Catalan region.

First name: **Gloria**

Last name **Cugat**

Place / country: **Catalonia**

Telephone number: **+34 607074584**

E-mail: **gloria.cugat@gencat.cat**

Main occupation: **Deputy Director of Agrifood Transfer and Innovation**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **xxx**

My experience related to the topic of the multiple cross visit are:

Operational groups managing authority (Within Rural Developement Program 14-22 210 pilot projects have been executed, 718 benefitiaries, budget 29 M €; for the new CAP Strategic Plan in 2023 was launched first call with 15 M €)

Innovation Policy Maker

Funded by the European Union

First name: **Simon**

Last name **Craeye**

Place / country: **Roeselare - Belgium**

Telephone number: **+32 51 27 33 01**

E-mail: **simon.craeye@inagro.be**

Main occupation: **Researcher**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **https://www.linkedin.com/in/simon-craeye-3179803a/**

My experience related to the topic of the multiple cross visit are:

At Inagro, i work as a researcher on greenhouse crops like tomato, cucumber and strawberry. In several, regional and (inter)national projects we tackle the challenge of reducing waste by adding value to rest streams.
In the OG "**Entomoponics**", we investigated the technical and economical feasibility of rearing mealworms underneath the cultivation gutters in a greenhouse. On the one hand, we could use the unused heated space more efficiently and on the other hand we were able to valorise prunings or malformed fruits as wet feed source for the worms. All together we succeeded in the sustainable production of protein- and fat rich worms
In a project called "**Zero-Waste**" we optimised cultivation techniques for high wire production so that we obtain a more pure stream that can extend the existing value chain towards bioactive compounds like biostimulants or fibre-rich materials for growing media or construction purposes.
In a EIP project called "**RE-PEAT**" we engaged in the reuse of peat-based growing media for strawberry cultivation. We were able to detect bottlenecks and formulated solutions f.e. fertigation strategies towards maintaining the highest possible biological, chemical and physical quality in the case of

First name:	**Hanne**
Last name	**Denaeghel**
Place / country:	**Belgium**
Telephone number:	**+32 472/12.33.15**
E-mail:	**Hanne.denaeghel@viaverda.be**
Main occupation:	**Researcher in ornamental plant production**
Social media accounts (Twitter/X, Facebook, LinkedIn, ...):	**-**

My experience related to the topic of the multiple cross visit are:

Substrates that were used for the cultivation of strawberries are often discarded after one single use. However, they can be reused to cultivate strawberries again, or used in other horticulture crops, such as ornamentals. We addressed the difficulties and bottle necks for reuse of strawberry substrates in ornamentals, and demonstrated successful reuse to ornamental growers.

First name:	**Laura**
Last name	**Díaz-Guerra**
Place / country:	**BETA Technological Center (University of Vic)** **Vic (Barcelona), Spain**
Telephone number:	**+34 938 81 61 68 (ext. 8433)**
E-mail:	**laura.diaz.guerra@uvic.cat**
Main occupation:	**Scientific researcher**
Social media accounts (Twitter/X, Facebook, LinkedIn, ...):	**https://www.linkedin.com/in/laura-d%C3%ADaz-guerra-7b52a3113/**

My experience related to the topic of the multiple cross visit are:

I am an Environmental Scientist, PhD in Experimental Science and Sustainability specialized in plant ecophysiology. My research interest focuses on understanding plant-soil responses to changes in biotic and abiotic factors, as well as in the study of more sustainable agricultural practices. Currently, I am a postdoctoral researcher in the Unit of Sustainable Food and Farming Systems at the BETA Technological Center (University of Vic). In the last years, I have been involved in numerous scientific projects on adequate management of soils and nutrients in crops, and evaluation of innovative fertilisers and agronomical products, with the objective of improving the sustainability of agricultural practices and the circularity in rural areas.

First name: **POL**

Last name **GRIFUL FREIXENET**

Place / country: **CATALUNYA**

Telephone number: **618201498**

E-mail: **pol@agrocat.com**

Main occupation: **AGRONOMIST ENGINEER**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **polgriful**

My experience related to the topic of the multiple cross visit are:

First name: **DIANA**

Last name **JIMENEZ**

Place / country: **SPAIN**

Telephone number: **639 337 315**

E-mail: **DIANA.JIMENEZ@UVIC.CAT**

Main occupation: **RESEARCHER**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **Diana Jimenez LinkedIn**

My experience related to the topic of the multiple cross visit are:

My professional and scientific experience is related to soil organic fertilization (pig slurry, compost, and biochar). Framed in the circular economy and resilient agriculture, my role at CT BETA focuses on the on-farm test of manure-derived fertilisers, its relation to the soil organic matter, the agricultural practices and its environmental implications (ammonia emissions to the atmosphere, soil organic matter quality, and nitrate lixiviation).

First name: **Paweł**

Last name **Kowalczyk**

Place / country: **Jabłonna/Poland**

Telephone number: **+48 728 862 717**

E-mail: **p.kowalczyk@ifzz.pl**

Main occupation: agricultural, soil microbiology, genetic engineering, clinical biochemistry, molecular biology The use of biological agricultural and forest residues related to renewable energy sources in a closed cycle in the form of digestate as a new alternative source of income for farmers and foresters

Social media accounts (Twitter/X, Facebook, LinkedIn, ...):

My experience related to the topic of the multiple cross visit are:

The aim of the cross-project visits is to provide opportunities for cross-border knowledge exchange and mutual learning between EIP Operational Groups (GOs). The visits will create opportunities for intensive informal interactions between GO representatives from different Member States. They can also help to support potential future cooperation between projects and entities and lead to the creation of transnational community groups: Subject: Modern pig farming as part of the operation "Modern pig and beef cattle farming taking into account the principles of hygiene, improving welfare, prevention and biosecurity as an alternative to the use of antibiotics in animals". As part of the programme implemented by the European Agricultural Fund for Rural Development: Europe investing in rural areas "Training co-financed by the European Union from the European Agricultural Fund for Rural Development (EAFRD).

First name: **Barbara**

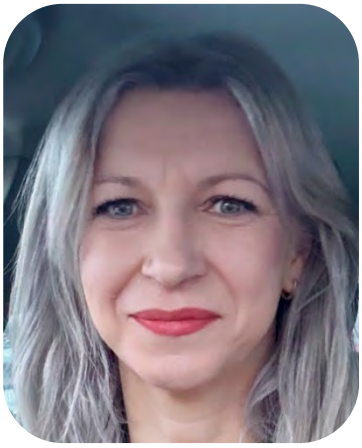
Last name **Majoch**

Place / country: **Poland**

Telephone number: **0048 663 095 539**

E-mail: **barbara.majoch@agrismart-polnad.com**

Main occupation: **Farmer, entrepreneur**



Social media accounts (Twitter/X, Facebook, LinkedIn, ...):

My experience related to the topic of the multiple cross visit are:

My experience related to the topic of the multiple cross visit involves the use of agricultural and forestry residues for creating alternative sources of income for farmers and foresters. As a farmer and agribusiness entrepreneur, I frequently encounter the challenge of managing agricultural and forestry waste. To date, we have repurposed this waste into products such as compost. However, we aim to transform these residues into other valuable products in the future, such as bioenergy and eco-friendly packaging materials.

First name: **Laura**

Last name **Mejias Torrent**

Place / country: **Vic (Spain)**

Telephone number: **+34 938816168 ext 8424**

E-mail: **Laura.mejias@uvic.cat**

Main occupation: **Researcher**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): www.linkedin.com/in/laura-mejias-torrent-992b80166

My experience related to the topic of the multiple cross visit are:

My knowledge and experience are in the field of organic waste treatment and valorization, to produce value-added bioproducts and contribute to the circular economy concept. To reach that objective, different biological technologies can be applied, such as composting. Developing decentralized solutions for treating in-situ different by-products can contribute positively to minimizing the environmental impact of their management.

First name: **Eloi**

Last name **Montcada**

Place / country: **Spain**

Telephone number: **931185951**

E-mail: **emontcada@innovi.cat**

Main occupation: **Clúster Manager**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **https://www.linkedin.com/in/eloi-montcada-00b0873/**

My experience related to the topic of the multiple cross visit are:

Agricultural engineer and postgraduate in environmental management. With more than 20 years of experience in the field of RD, as a consultant he has led and participated in numerous national and international projects. Member of various technical committees for the standardization of AENOR and expert of the European Economic and Social Committee, NAT section.

First name:	**Olga**
Last name	**Moreira**
Place / country:	**INIAV/Portugal**
Telephone number:	**+351 968 226 691**
E-mail:	**olga.moreira@iniav.pt**
Main occupation:	**Senior Researcher**
Social media accounts (Twitter/X, Facebook, LinkedIn, ...):	**www.facebook.com/olga.moreira.31** **linkedin.com/in/olga-moreira-3715a729**

My experience related to the topic of the multiple cross visit are:

PhD in Animal Science and Technology. Staff Scientist at INIAV - Portugal. Director of the Portuguese Research Station on Animal Production - INIAV (since 2014), Coordinator of the Livestock Sector (since 2013), Council Member of EAAP (2020-2024). Research topics relate with Circular Economy and Zero residues and with Environmental Impact and Climatic Changes in livestock production. Past Projects: ALGAVALOR, MICROGASTRICS, ENTOVALOR, GOEFFLUENTS. Coordinates INIAV participation in the Projects: NETA; INSECTERA – The Era of Insects; LIVING LAB on effluents and coproducts of livestock activity.

First name: **Maria Teresa**
Last name **Ponce Dentinho**
Place / country: **Santarém/Portugal**
Telephone number: **+351 966221338**
E-mail: **teresa.dentinh@iniav.pt**
Main occupation: Animal Nutrition Researcher

My experience related to the topic of the multiple cross visit:

Maria Teresa Vacas de Carvalho Ponce Dentinho graduated in Agronomic Engineering from the Technical University of Lisbon in 1983 and completed her master's degree in Animal Nutrition and Feeding at the same university in 1998. She has worked in animal nutrition and feeding at the National Institute for Agricultural and Veterinary Research (INIAV).
Her main focus of interest has been the chemical and nutritional evaluation of animal feed having worked on the quantification of phenolic compounds for use in ruminant feed as dietary protein protectors, for reduction of methane emissions and to control of rumen biohydrogenation as a way of increasing the nutritional value of dietary fats. He has published several articles on these topics in books and national and international magazines.
She has participated in congresses and meetings to disseminate knowledge and in working groups, namely the working group to review the methodologies for estimating methane production resulting from enteric fermentation in ruminants for the National Greenhouse Gas Inventory and, as Portugal's representative in the European Union, he was a member of the ‘Feed Materials and Compound Feeds’ working group.
She is a member of the Centre for Interdisciplinary Research in Animal Health (CIISA) at the Faculty of Veterinary Medicine - University of Lisbon and member of the Associate Laboratory for Animal and Veterinary Sciences (AL4AnimalS)

First name:	**Sergio**
Last name	**Ponsá**
Place / country:	**Vic**
Telephone number:	**+34 938816168 ext 8145**
E-mail:	**sergio.ponsa@uvic.cat**
Main occupation:	**Beta TC Director**
Social media accounts (Twitter/X, Facebook, LinkedIn, ...):	**https://www.linkedin.com/in/sergio-pons%C3%A1-salas-08814837/**

My experience related to the topic of the multiple cross visit are:

As the Director of a research center, my role is focused on driving impactful research that benefits the agroindustry sector. I oversee the strategic planning and execution of research projects, ensuring they align with our goal of advancing agricultural innovation and sustainability. This includes securing funding, managing budgets, and building strong partnerships with industry stakeholders, agricultural producers, and governmental agencies. My experience is rooted in extensive research within the agroindustry, with a proven track record of successful projects and practical applications. I lead multidisciplinary teams, mentor emerging leaders in the field, and foster a culture of innovation and collaboration. Additionally, I play a critical role in translating our research findings into practical solutions through industry collaborations, public outreach, and direct application, thereby enhancing the agroindustry's efficiency, productivity, and sustainability.

First name: **Jordi**

Last name **Pous**

Place / country: **Vic**

Telephone number: **+34 630 98 71 91**

E-mail: **jordi.pous@uvic.cat**

Main occupation: **Transfer & territorial projects promotion technician**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **https://www.linkedin.com/in/jordi-pous-miralles-4a191b3a/**

My experience related to the topic of the multiple cross visit are:

The Beta Technological Centre is dedicated to enhancing sustainability and promoting the bioeconomy, particularly within the agri-food sector and rural environments. One of the centre's primary areas of focus is the management, treatment, and valorization of organic waste to generate value-added products. In this context, the treatment of livestock manure is a field in which the centre has significant expertise, aiming to improve its management and create products such as biogas, biofertilizers, and water recovery.

As Transfer Technician at the Beta Technological Centre, my role involves promoting projects related to these areas of work and implementing both territorial and sectoral strategies.I have participated on OG consorcium creation, projecte design and writting.

First name: **Maira**

Last name **Ros Royo**

Place / country: **Vilafranca del Penedès, Spain**

Telephone number: **+34 672 645 776**

E-mail: **vinyes@covides.com**

Main occupation: **Viticulture technician**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **www.instagram.com/covides/**

My experience related to the topic of the multiple cross visit are:

I am an agricultural technician and have a degree in oenology. My work experience has always been related to the wine sector, working in different wineries in Catalonia. I currenty work in Covides, a wine cooperative in the Penedes area.
In recent years I have been part of the cooperative's viticulture team. Our main job is to advise wingrowers on the most sustainable cultivation techniques in order to obtain high quality grapes. Reducing the environmental impact of our activity is one of our main concerns. This is why we are investing in research and making efforts to improve our processes and reduce waste generated.

First name: **Màrius**

Last name **Simon Monrós**

Place / country: **Catalonia / Spain**

Telephone number: **+34621 27 52 13**

E-mail: **marius.simon@fcac.coop**

Main occupation: **R+D+I manager**

Social media accounts (Twitter/X, Facebook, LinkedIn): **@RDIcoopagroCAT**

My experience related to the topic of the multiple cross visit are:

I have been involved in operational groups since 2015. These operational groups have given me the opportunity to participate as a coordinator in pilot projects with cooperatives and other SMEs, universities, and technological centers on various topics related to agriculture and food processes, many of which focus on by-products valorization. Additionally, I have been involved in European projects under Horizon 2020, and an Interreg-Poctefa project, and now in several Horizon Europe projects. My main objective in the operational groups is to ensure the correct transfer of results to farmers and their cooperatives. Although I lack explicit experience in multiple cross visits, I hope to contribute to the success of the activities with my background in managing innovation, with a strong emphasis on connecting the reality of our SMEs cooperatives with universities and technological centers, aiming to have a more efficient impact on the tasks performed in the R+D+I projects.

First name: **Tamás**

Last name **Szolnoky**

Place / country: **Hungary**

Telephone number: **+36 70 2794747**

E-mail: **agrogeo@mail.opticon.hu**

Main occupation: **agricultural engineer MSc, managing director**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **https://www.facebook.com/agrogeokft/**

My experience related to the topic of the multiple cross visit are:

Tamás Szolnoky (male) is our research and development leader holding a MSc in Agricultural Engineering in Environmental Management (2001) from Szent István University, Gödöllő, Hungary. He has coordinated an important multi-actor project called BIOKOMP4 between 2008 and 2010. This project focused on complex utilization of bioenergy plant by-products. His specific fields in research and development are slow-release organic fertilizer development and its application in precision agriculture. Tamás is an inventor registered in the Database of the Hungarian Intellectual Property Office. He holds three patents.

First name:	**Anna**
Last name	**Szosland-Fałtyn**
Place / country:	**Lodz/Poland**
Telephone number:	**48690966636**
E-mail:	**anna.szosland@ibprs.pl**
Main occupation:	**Manager of Microbiological Laboratory, Department of Food Quality, Institute of Agricultural and Food Biotechnology-State Research Institute**
Social media accounts (Twitter/X, Facebook, LinkedIn, ...):	**https://www.facebook.com/IBPRS**

My experience related to the topic of the multiple cross visit are:

I attended one cross visit in Estoril (Portugal) that allowed me to establish relationships with local farmers and gain awareness of other agriculture activities and innovations, share knowledge, and experiences about collaboration programs. It was a great opportunity to get acquainted with the combination of traditional and innovative approach on the example of the cork oak vitality.
My Institute is open to hosting of the multiple cross visit in Poland and to prepare dedicated visit programme to allow farmers and scientists to be exposed to different perspectives and form relationships with organizations that have a focused skillset and a profound understanding of the community and landscape, its particular strengths and the challenges.

First name: **Jelina**

Last name **Terrijn**

Place / country: **Belgium**

Telephone number: **+32 479 72 14 94**

E-mail: **Jelina.terrijn@vlaamsbrabant.be**

Main occupation: **Researcher**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...):

My experience related to the topic of the multiple cross visit are:

I work as a researcher for Praktijkpunt Landbouw Vlaams-Brabant, a practical research institution for agriculture. With Praktijkpunt, we are mainly involved in the surveying and maintaining a close contact with the farmers involved in the project.

First name: **Alba**

Last name **Vallès**

Place / country: **Spain**

Telephone number: **931185951**

E-mail: **avalles@innovi.cat**

Main occupation: **European project manager**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **https://www.linkedin.com/in/alba-vall%C3%A8s/**

My experience related to the topic of the multiple cross visit are:

Political Sciences and Public Administration graduate. Experienced in the project coordination and public policy work where she has worked for several years in different consulting services.

First name: **Bart**

Last name **Vandecasteele**

Place / country: **Belgium**

Telephone number: **+32479998210**

E-mail: **Bart.Vandecasteele@ilvo.vlaanderen.be**

Main occupation: **Senior researcher**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **https://www.linkedin.com/in/bart-vandecasteele-7b9250240/**

My experience related to the topic of the multiple cross visit are:

Application of compost, biochar and plant fibres in renewable growing media

Circular use of growing media

Biochar use in cascade, i.e., apply biochar first to reduce emissions during biomass processing and then use the biochar-enriched soil improvers for C sequestration

First name: **Rudi**

Last name **Van Ingelgom**

Place / country: **Belgium**

Telephone number: **+32 475 83 17 67**

E-mail: **tipper@skynet.be**

Main occupation: **Farmer**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...):

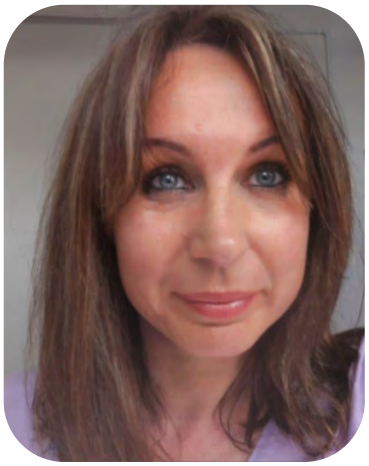
My experience related to the topic of the multiple cross visit are:

I am an active member of the OG. In the past, I have already invested a lot to provide my farm of sustainable power. In a next step, I am eager to implement alternative valorisation methods for my residues.

First name:	**Esther**
Last name	**Vega**
Place / country:	**Vic / Spain**
Telephone number:	**+34 93 881 61 68**
E-mail:	**esther.vega@uvic.cat**
Main occupation:	**researcher**
Social media accounts (Twitter/X, Facebook, LinkedIn, ...):	**www.linkedin.com/in/esther-vega/**

My experience related to the topic of the multiple cross visit are:

Valorisation of livestock manure waste and its use in organic crops through hyperthermophilic composting



First name: **Agata**

Last name **Wierzbinska**

Place / country: **Warsaw/Poland**

Telephone number: **+48 692 32 80 54**

E-mail: **agata.wierzbinska@ibprs.pl**

Main occupation: **Coordinator for International Academic Cooperation, Institute of Agricultural and Food Biotechnology -State Research Institute**

Social media accounts (Twitter/X, Facebook, LinkedIn, ...): **https://www.facebook.com/IBPRS**

My experience related to the topic of the multiple cross visit are:

I took part in a field visit to a Portugese farm during an event European CAP Network Conference 'EIP-AGRI Operational Groups: Innovation in practice' which was organized in Estoril, Portugal. I had a chance to get to know the concept of the Operational Groups ECOMONTADO XXI and NUTRISUBER implemented at a farm near Lisbon. That showcased how the objectives of the OGs are carried out in real life environment and gave me a better overview of the tasks realized within the framework of these practicular OGs.
My Institute is available to facilitate the organization of a field visit in Poland and involve the partners who have already implemented the results of their OGs. Institute of Agricultural and Food Biotechnology has been a partner in several OGs in the years 2014-2024.

Reimbursement claim form Support Facility for Innovation and Knowledge exchange

1. Activity description

Date of the meeting:
Place:
Activity name:

2. Participant information

Name and Surname:

Reimbursement to a natural person or to a company?
Please tick the correct box and fill in the form accordingly

☐ A company
Name of the Company:
Official address:
VAT number:

☐ A natural person
➔ Please fill in the additional Excel form “Bis_template”
(no need to fill it in again if you already sent it to us in the past)

Claimant Bank information
Name of the accountholder:
Bank name:
SWIFT or BIC code:
IBAN bank account number:

3. Description of the expenses

Please add a detailed description of each expense in the table below (one row per expense). A proof of payment of each expense should be added to the reimbursement request.

Date	Description of the expense	Cost (local currency)	Costs (EUR)
	Total		

Date and signature of the participant

Confirmation bank account

1. Participant information

   Name and Surname:
   Company (if applicable):

2. Bank account information

   Name of the accountholder:
   Bank name:
   SWIFT or BIC code:
   IBAN bank account number:

Application for CBSS number (BIS number : Foreign natural person)

Surname*	
First name*	
Street*	
House number (+ postbox number)*	
Municipality/City*	
Postal code*	
Country*	
Since** (dd/mm/jjjj)	
Date of birth* (dd/mm/jjjj)	
Sex* (m/f)	

APPLICATION BIS NUMMER : only applicable for natural persons who are non-residents but interact with the government here in Belgium.
* AL fields are mandatory fields.
** Date from when the person resides at this address. The Crossroads Bank of Social Security (CBSS) determines which info and which fields are necessary for the registration of a person in the BIS register. Neither Orafin-helpdesk, nor Magda are involved in this.