



**SUSTAIN
OLIVE**

PRIMA
Promoting Research and Innovation
IN THE MEDITERRANEAN AREA



Co-funded by the
Horizon 2020 Framework
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SUSTAINOLIVE

Deliverable D 7.5 Outcomes of the knowledge sharing events.

WP7. Dissemination, communication, training and demonstrative events

Novel approaches to promote the Sustainability of OLIVE cultivation in the Mediterranean

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Executive Summary

This document contains the outcomes of the knowledge sharing events, for the SUSTAINOLIVE project. SUSTAINOLIVE is a project funded by PRIMA H2020 Section 1 under the topic: *Improving the sustainability of Mediterranean agro-ecosystems*. SUSTAINOLIVE aims to enhance the sustainability of the olive oil farming sector throughout the implementation and promotion of a set of innovative sustainable management solutions that are based on agro-ecological concepts, and on the exchange and co-creation of knowledge involving multiple actors and end-users of the olive oil sector.

The document has been prepared as part of SUSTAINOLIVE Work Package 7 and corresponds to the deliverable 7.5. of SUSTAINOLIVE, and will deliver the outcomes of the knowledge sharing events that we have developed throughout the project. As described in the project, these are demonstrative and training actions in the STSs experimental fields to ensure a maximum outreach to various actors and stakeholders in close connection to the work performed in the other WPs. These knowledge-sharing events these actions have allowed advisors, farmer's associations, olive mill companies, policy makers and other stakeholders to share their skills, information, and knowledge with each other and with SUSTAINOLIVE partners to obtain first-hand information on project activities and outcomes.

The end-user partners of SUSTAINOLIVE (CRDOP, ACK, GC, AT, COB, UNAPROL, ESP, CEPAAL), with the assessment of TKV and ExecCom have identified the most appropriate and worthwhile public for a given area, partners and country. At first they were planned at least two demonstrations and two training events to be held in Spain (CRDOP), Portugal (ESP and CEPAAL), Italy (AIAB and UNAPROL), Greece (ACK and NGC), Morocco (AT and COB) and Tunisia (IO) during year 2 and year 3 of the project.

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1.- Development of demonstration and transfer actions

Since the beginning of the second year of the project, periodic meetings have been held with the entities responsible for carrying out demonstration and transfer actions, at least 2 per year, and they have been held by countries to ensure mutual collaboration. In addition, we have held meetings with the different partners to resolve individual doubts, or explain the protocols to the people who have been incorporated at different stages. As the coordinating entity of this work package, TEKIEROERDE offered the following tools:

- Support for the graphic design of the advertising posters for the activities,
- Collaboration to develop a didactic methodology appropriate to the beneficiary group, the number of people and the matter to be dealt with,
- Tools to carry out large-scale calls,
- Models for writing the reports of each activity that allows the preparation of the final report in an orderly manner,
- Videos and posters demonstrating transfer actions,

In March 2021, an Excell table was sent where each entity had to reflect the scheduled workshops, dates, number of expected attendees, as well as the type of technical assistance they required.

We have only been asked for collaboration for graphic design issues in the preparation of advertising posters and the dissemination of these events through social networks.

These events in the STSs experimental fields have been organised to ensure a maximum outreach to various actors and stakeholders in close connection to the activities performed in the other WPs. These knowledge-sharing events have trained advisors, farmer's associations, olive mill companies, policy makers and other stakeholders to share their skills, information, and knowledge with each other and with SUSTAINOLIVE partners to obtain first-hand information on project activities and outcomes. Due to the COVID 19 pandemic, the organization of these face-to-face events had to be re-structured; some of them have been carried out on line and for others the number of attendees was reduced in accordance with the security measures. TKV has provided support to IO, NILEAS, ACK, AT, COB, CRDOP, AIAB and UJA in the organization of these events. In particular TKV have contacted (52 on line meetings) with the partners involved in this task to provide support on graphic design and the design of the training and demonstration activities (teaching methodology, experts, etc.).

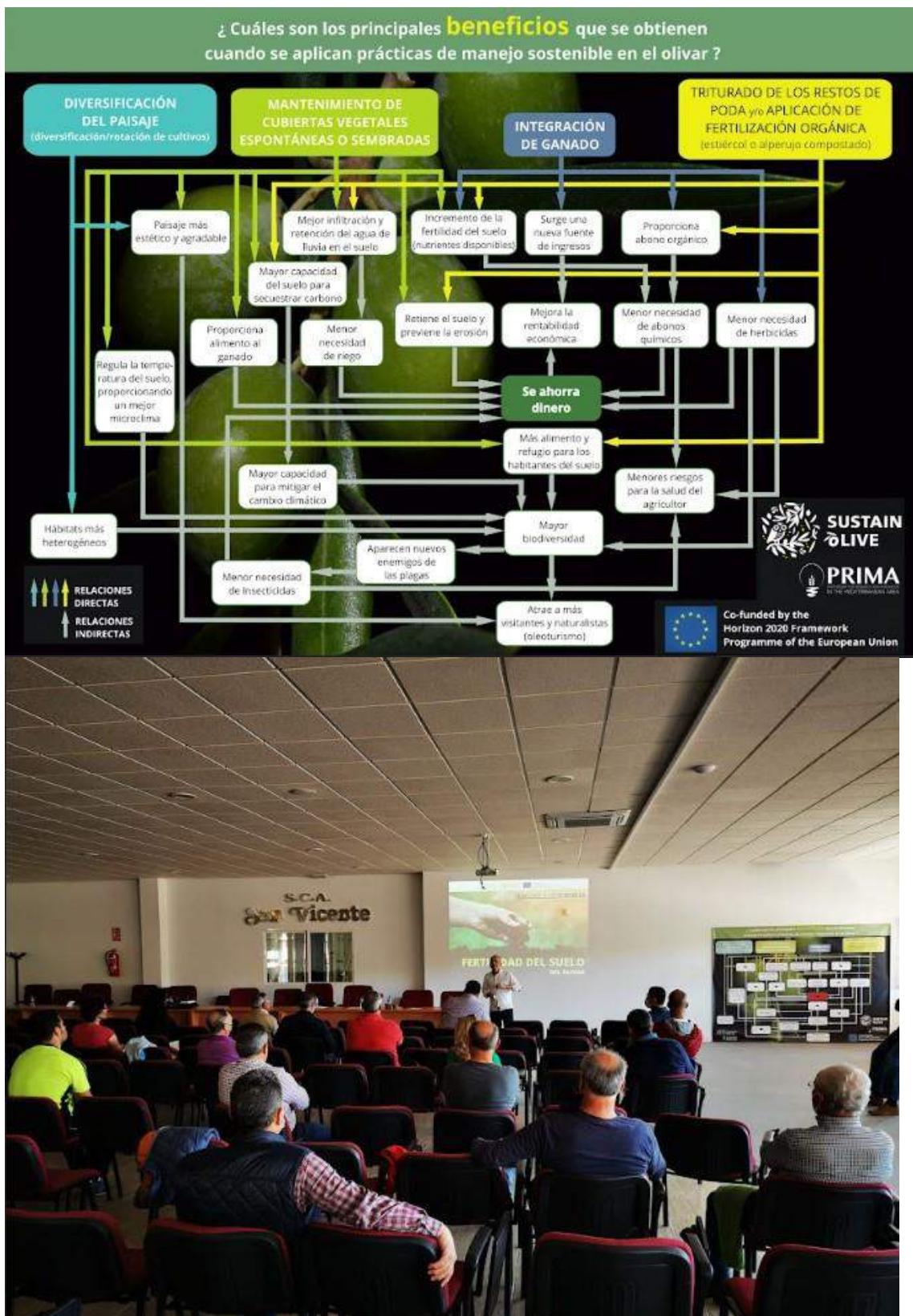
In addition, on April 7, 2021, an on line meeting was held with IFAPA team to establish a collaboration with the training program on sustainable olive groves of this institution. We agreed to make available to the IFAPA the booklet on STSs and the videos produced to spread them to the network of IFAPA. In addition, IRTA has also been involved in training and demonstrative events related to the sustainability of the olive grove through conferences and online seminars. In the same way, IRTA, a project partner that was not responsible for transfer actions within the framework of the SUSTAINOLIVE project, has incorporated into its training offer for farmers and mill technicians all the resources available in the project: manuals for farmers, informative sheets and informative videos on good practices.

We have also provided our collaboration for the organization of training workshops in cooperatives in the province of Jaén developed by José Liétor Gallego from the UJA. Regarding the workshops in the cooperatives, a total of 5 were developed in the province of Jaén with the assistance of 186 people. The participation of José Liétor in the Agroecological Meeting organized by the Agroecosistema Foundation, in which more than 150 attendees participated, stands out. The project coordinator, Roberto García Ruiz, has not only participated in numerous workshops and presentations within the framework of the transfer days developed by the Denomination of Origin of Estepa or the University of Jaén in Spain, but also in Greece, Portugal and Italy,

transferring first-hand the results of the research carried out in the 6 countries participating in SUSTAINOLIVE.







Throughout the year 2022, SUSTAINOLIVEs team created a good practice in olive cultivation cycle of online seminars, organized by José Liétor from the University of Jaén, with the collaboration of Roberto García (UJA) and Alejandro Gallego, from TKV. The wide dissemination of the events through

advertising on the web and social networks, as well as the massive sending of emails to agricultural organizations, cooperatives and official institutions, has resulted in a very high participation, with an average of 150 registered people interested in Spain, Morocco and Portugal. The format was developed with a presentation by a researcher specialized on the subject to be discussed, and a subsequent debate with the participation of farmers, technicians and researchers, it aroused great interest among the participants. A total of 6 webinars were developed on key issues related to the project: soil quality, carbon footprint, health as a standard of the EVOO, and management of plant covers with livestock. The face-to-face attendance at the seminars and the views of the videos that have been posted on the YouTube channel give us a figure close to 3,000 people, and we know that these videos serve as reference material for courses organized by other entities.



AIAB, IO, UEVORA, CEPAL, DOE and UNAPROL have also developed online seminars, as you can see in the corresponding annexes.



Relatore: Prof. Nelson Marmiroli, Professore emerito dell'Università di Parma, Direttore Cinsa e Responsabile scientifico del progetto Sustainolive (WP 3)

Modera AIAB (Associazione Italiana di Agricoltura Biologica)

Per accedere: meet.google.com/iko-gnnp-rfh

AIAB
ASSOCIAZIONE ITALIANA DI AGRICOLTURA BIOLOGICA

cidea
Centro di Ricerca per l'Agricoltura Integrata

SUSTAIN OLIVE

PRIMA
Progetto di Ricerca e Innovazione Multidisciplinare per le Attività Agroalimentari

This project is part of the SUSTAINOLIVE programme supported by the European Union.

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UNIVERSITÀ DI PARMA



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في إطار مشروع SUSTAINOLIVE، والذي يهدف إلى تحسين استدامة مزارع الزيتون وتشمين المنتجات الثانوية
لمعاصر الزيتون في بلدان البحر الأبيض المتوسط

تنظيم ورشات تكوينية لفائدة بعض التعاونيات المنتجة لزيت الزيتون بإقليم وزان
تعاونية الأمية والهدى) حول :

Organisation d'ateliers de formation pour certaines coopératives productrices d'huile d'olive
dans la Province de Ouezzane (Coopératives Houdaet Oumnia) :

- * Diagnostic de certaines maladies et insectes nuisibles des oliviers
- * Traitement naturel et contrôle biologique de la santé des plantes et des oliviers
- * Valoriser les résidus contemporains dans l'industrie du savon naturel/noir
- * التشخيص لبعض الأمراض والآفات الخشنة لأشجار الزيتون
- * المعالجة الطبيعية والمكافحة البيولوجية لصحة النباتات وأشجار الزيتون
- * تثمين مخلفات المعاصر في صناعة الصابون الطبيعي / الأسود

ذلك يوم
في 13 و 14
مارس 2022

La Sostenibilità dell'Olivicoltura Mediterranea

Giovedì 22 giugno 2023 dalle ore 15:30 alle ore 17:30
Piattaforma ZOOM

PROGRAMMA

Introduce e modera il Dott. Francesco Iannelli;
Consigliere delegato alla Formazione

Saluti istituzionali del Dott. Antonino Sgrò

Presidente dell'Ordine dei Dottori Agronomi e dei Dottori Forestali della
Provincia di Reggio Calabria

**La valutazione della sostenibilità sociale, economica e ambientale dei
sistemi produttivi olivicoli**

Relatori:

Prof.ssa Anna Irene De Luca*

Dott.ssa Nathalie Iofrida*

Dott. Emanuele Spada*

Dott. Giacomo Falcone*

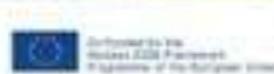
*Dipartimento di Agraria - Università degli Studi Mediterranea di Reggio
Calabria

Dibattito conclusivo



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Al partecipanti saranno attribuiti CFP ai sensi del regolamento CONAF N.3/2013



WEBINAR

gratuito

ciclo de webinars 2022 del proyecto SUSTAINOLIVE

EL OLIVAR A CONCIENCIA



SUSTAIN
OLIVE



PRIMA
IN THE MEDITERRANEAN AREA



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**LA CALIDAD
DEL SUELO:
una de las claves del
futuro sostenible
del olivar**



23 JUNIO

19:30-21:00h



guiado por el profesor
Julio Antonio Calero González

Área de Edafología y Química Agrícola
Universidad de Jaén

sustainolive.eu



Dr. Julio A. Calero González
Universidad de Jaén



SUSTAIN
OLIVE



PRIMA
IN THE INNOVATION LEAD



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Webinar

Impiego di DSS per la lotta sostenibile ai parassiti dell'olivo

Lunedì 29 Marzo 2021 – ore 10:30

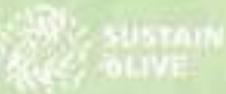
L'incontro ha l'obiettivo di illustrare come l'utilizzo di una piattaforma DSS innovativo quale Oliveto 4.0 possa contribuire alla sostenibilità delle produzioni olivicole.

Un sistema di supporto alle decisioni (DSS) è un software che, vagliando ed elaborando grandi quantità di dati, fornisce infatti informazioni utili al processo decisionale, aiutando quindi l'olivicoltore a prendere decisioni gestionali più mirate e quindi più corrette.

I principali vantaggi che può offrire l'impiego di questo tipo di strumento sono:

- ottenere supporti decisionali chiari, affidabili e tempestivi
- accrescere la consapevolezza sui processi che regolano l'ecosistema del campo
- aumentare la qualità delle decisioni per la gestione del campo
- valorizzare i mezzi tecnici a disposizione
- ottimizzare l'uso dei fattori di produzione
- ridurre i costi di produzione
- stabilizzare e aumentare nel corso degli anni le rese quanti-qualitative
- incrementare il valore di mercato della materia prima
- conformarsi ai principi della Direttiva 2009/128/CE e della Produzione Integrata
- ridurre l'impatto ambientale

L'evento, in programma sul canale formativo online di Unaprol è rivolto ai tecnici delle OP associate



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For its part, IRTA, which did not have transfer to the olive sector within its responsibilities, has actively participated in this work package with the development of 7 online seminars, transfer days, face-to-face seminars and symposiums in which it has included the resources and contributions of SUSTAINOLIVE to the world of olive groves and olive oil.

Also different online training organized by the Spanish Society of Organic Agriculture in which all the resources published by the SUSTAINOLIVE project related to the transfer to the olive sector (2023). In total, we estimate that among all the seminars scheduled within the framework of SUSTAINOLIVE, 10.000 people have benefited from the transfer of good practices to the sector.

Below we detail all the transfer actions carried out by our partners with the corresponding links to the most precise information.

Category Title of the activity	Material Query	Link	Brief description
Outreach and dissemination events with farmers	Free webinar program. UJA	Click HERE Click HERE	Participatory online seminars, videos and presentations
	The role of livestock in the control of herbaceous cover and soil fertility. UJA	Click HERE	Participatory online seminars
	Carbon footprint in the olive grove. UJA	Click HERE	Participatory online seminars
	Olive pomace composting. IRTA and UJA	Click HERE	Participatory online seminars
	Good management practices in the olive grove. UJA	Click HERE	Participatory online seminars
	The benefits of EVOO on health. UJA	Click HERE	Participatory online seminars
	Presentation of Sustainolive to farmers in Kantano Chania. ELGO-DEMETER	Click HERE	Discuss with the producers the problems in the area
	VIII Workshops of Plant Defense Groups on the olive sector. IRTA	Click HERE	Participatory online seminars
	Conference on sustainability in the olive sector Agustí Romero. IRTA	Click HERE	Series of Conferences on Climate Change and Sustainability (IRTA)
	Webinar "L'Ordine Agronomi e Forestali sulla sostenibilità dell'Olivicoltura Mediterranea". UNIRC	Click HERE	Free webinar organized by the Rural Economics and Estimate section of the Department of Agriculture

Category Title of the activity	Material Query	Link	Brief description
Outreach and dissemination events with farmers	Innovative solutions for the sustainable management of the olive grove and the production chain. UNAPROL	PDF Report	Participatory online seminars
	Meeting with Associazione Olivo Quercetano in Serravezza. AIAB	Click HERE Click HERE Click HERE	Meeting with olive growers, discussion and illustration of practical abstracts
	Workshops in cooperatives. IO	Click HERE	Field visit to the Institute of Specialized Technicians in Agriculture, located in "Benkarich"
	Workshops in cooperatives. UJA	Click HERE	Program of participatory workshops in olive oil cooperatives in the province of Jaén
	Visit to the olive mill pomace plant of the Cooperative of Nuestra Señora de los Remedios (Olvera, Cádiz). UJA	Click HERE	Participatory online seminars
	Pruning techniques. UNAPROL	PDF Report	Training course for pruning where they were
	Field visit to Portuguese SUSTAINOLIVE farmers with José María de la Rosa (IRNAS-CSIC) and "Plantas Continental" to discuss options for soil and plant breeding improvements – MED/UEVORA - CEPAAAL - ESPORÃO	PDF Report	Demonstration and discussion by farmers with experts in soil management, waste management and plant breeding and genetic improvements

Category Title of the activity	Material Query	Link	Brief description
Outreach and dissemination events with farmers	Transfer of innovative solutions developed within the project. UNAPROL	Click HERE	On sustainable olive grove management techniques, a targeted activity was organized with our 28 producer organizations through a synergistic activity to integrate the results of sustain oil into the normal direct and indirect technical assistance activity
	Organization of the National Congress of Olive oil in PT (CEPAAL) and coordination of the round table on sustainability. UEVORA - UJA	Click HERE for the program. PDF Report yet to be released.	Discussion and round tables organized for the following topics: Societal Impact; Sustainability; Byproducts and alternatives. Participation of over 150 experts including farmers, technicians, policy-makers, trade. Finance... Link
	Organization of a discussion and dissemination event in the National Agricultural Fair of Portugal (Satarém, 6 June 2023). Focus on the implementation and barriers for C-farming practices and strategies in the olive groves of Portuguese Olive Groves. CEPAAL-MED/UEVORA - ESPORÃO	Click HERE for the program. PDF Report yet to be released.	Discussion forum with farmers, policy makers, market agents, certification agencies and financial entities around the topic of C farming opportunities for the olive sector in PT. In the context of the National Agricultural Fair (annual) of PT. Expected at least 150 participants.... Link
	Demonstration event of composting and reuse of mill and olive grove waste in Esporão Portugal. Date yet to be defined end of June 2023. Participation expected by academics, farmers, agro-industry and certification and finance. CEPAAL - MED/UEVORA - ESPORÃO	Click HERE for the program. PDF Report yet to be released.	Demonstration of practices implemented, and results obtained in Esporão (WP4). Discussion of opportunities and barriers with farmers, public administration, agro-industry and end-users from Portugal. Expected ~50 participants....
	Soil quality for proper and sustainable functioning of the olive grove agroecosystem. UJA	Click HERE	Participatory online seminars

Category Title of the activity	Material Query	Link	Brief description
Outreach and dissemination events with farmers	Curs compostatge descentralitzat de salsa d'oliva. IRTA	PDF 1 Report	Training Course
	EA Borges olive technology course . IRTA	PDF 2, 3 Report	Training Course
	Training program on the resilience of agroecological production systems to climate change. ELGO-DIMITRA	Click HERE	Participatory online seminars
	Monitoring pests and diseases and the phenological stages in the olive trees. Dr Vasileios Stournaras, ELGO-DIMITRA	Click HERE	Visits the experimental olive farms of Greek partners ACK and NGC
	The VIII José Humanes Chair. DO ESTEPA	Click HERE	Participatory online seminar
	Sostenibilidad del olivar y su rentabilidad para el medio ambiente. Julio Calero. UJA	Click HERE	Participatory online seminar
	SUSTAINOLIVE transfer days. Conference on sustainable management of pruning in olive groves. UNAPROL	Click HERE	Participatory online seminar
	Increase productivity and income in olive cultivation through Associations. AIAB	Click HERE	Participatory online seminar
	Diversify the production of local olive growers. UAM	Click HERE	Visit the members of the Zaouia Women's Cooperative

Category Title of the activity	Material Query	Link	Brief description
Outreach and dissemination events with farmers	Transfer of innovative solutions developed within the project. UNAPROL	Click HERE	On sustainable olive grove management techniques, a targeted activity was organized with our 28 producer organizations through a synergistic activity to integrate the results of sustain oil into the normal direct and indirect technical assistance activity
	Sustainable practices were presented to the farmers in an online workshop. ELGO - DIMITRA	Click HERE	A practical presentation with sustainable practices on pruning and olive grove management that was posted in the website of KAME
	Training of farmers group of Terra Creta Olive Academy 27/03/2023, Chania Greece. ELGO - DIMITRA	Click HERE	Presentation in the conference room and practical demonstration in the olive grove
	Workshops in cooperatives. IO	Click HERE	Program of participatory workshops in olive oil cooperatives in the province of Jaén about: a) good management practices in the olive grove and b) impacts of pesticides on health and the environment
	"Uma estratégia nacional para a gestão da água em tempos de escassez". MED/UEVORA	PDF Report	Event organized by SEDES.
	C farming and soil protection in the olive trees of Alentejo: why?, how?...and so what?. MED/UEVORA	Click HERE	"Restoration of natural and productive ecosystems towards climate and energy transition" at the 2023 National Science Meeting

Category Title of the activity	Material Query	Link	Brief description
Outreach and dissemination events with farmers	Food sensitive planning levers for sustainability: scales and spaces. MED/UEVORA	PDF Report	Oral presentation together with colleagues from INRAE (France) within the World Congress of Landscape Ecology
	Muñoz-Rojas, J.* , Prats-Alegre, S Rodríguez-Sousa, A.A, Noll, D. Current governance of the olive oil sector in Alentejo (Portugal) is schizophrenic: implications (and opportunities) at landscape and territorial scales. MED/UEVORA	Click HERE	Oral presentation Nairobi-Kenia
	Field visit Herdade de Monte Nova de Fonte Corcho. MED/UEVORA	PDF Report	(Serpa, Portugal). 21 de Junio de 2023. Visit to experimental plots (organic and biodynamic intensive) of SUSTAINOLIVE olive groves in PT with the Local Development Group of the Association of Spanish Geographers - José Muñoz-Rojas (MED-UEVORA) attended, as well as 4 producers with plots in the project, and 15 university professors, students and researchers from the Universities of Alicante and Huelva
	AAIBM (Applied Agro-Biotechnology International Meeting). MED/UEVORA	Click HERE	Beja (Portugal) - 30 y 31 de Mayo de 2023. The event was attended by some 70 participants, including academics, representatives of the public administration, companies, farmers and the general public

Category Title of the activity	Material Query	Link	Brief description
Outreach and dissemination events with farmers	Conference on Demonstration and Discussion of SUSTAINOLIVE Results - "main challenges for the sustainability of portuguese olive culture in 2023". MED/UEVORA - CEPAAAL -UNIC - ESPORÃO -	Click HERE	National Agriculture Fair. Santarem (Portugal). June 6, 2023. Demonstration event and discussion of results organized by CEPAAAL. The event is scheduled for a maximum of 90 participants, including the farmers involved in the project, managers, associations, politicians, representatives of the industrial sector, and civil society
	National Congress of Oils. Moura (Portugal), including demonstration and discussion of SUSTAINOLIVE Results. CEPAAAL - MED/UEVORA - UJA	PDF Report	May 5, 2023. In the context of this event, three oral presentations were made by members and collaborators of SUSTAINOLIVE. The event (organized by CEPAAAL, was attended by about 120 attendees, including farmers, managers, associations, politicians, representatives of the industrial sector, and civil society
	39 OVIBEJA. Debate: "Pensar o Futuro do Rural". MED/UEVORA - CEPAAAL	Click HERE	Participation in the debate organized by CONSULAI in the context of the 39th OVIBEJA Fair. Participation of José Muñoz-Rojas (MED) and Gonçalo Tristão (CEPAAAL)
	Training and Exchange Course on WP5 (SIMAPRO/LCA) UNIRC - MED/UEVORA	PDF Report	University of Évora, May 22 and 23, 2023. Co-financed with an ERASMUS + grant and the SUSTAINOLIVE project.

Below we detail all the transfer actions carried out by our partners in workshop format that will be documented in more depth in the respective annexes. A total of 998 people have attended these transfer actions, in which the main theme has been the composting of olive mill pomace, although issues such as pruning, biological control of pests and diseases or the management of plant covers have also been addressed.

Topic of the training and demonstrative event	Institution	Date	Nº of people
The importance of Compost	DOE Estepa	30/06/2021	No data
Transfer day the soil as a living entity (Estepa)	DOE Estepa	19/10/2022	80
Transfer day the soil as a living entity (Arbequisur)	DOE Estepa	21/09/2022	35
Cover crops in olive grove	DOE Estepa	08/07/2021	No data
New Trends in Olive farming	DOE Estepa	15/07/2021	No data
Transfer day extra virgin olive oil tasting conference (Pedrera)	DOE Estepa	18/03/2022	60
Transfer day extra virgin olive oil tasting conference	DOE Estepa	01/06/2022	60
Oil quality and production factors.	IRTA ea Más Mové	01/06/2021	No data
Olive Oil mill master course	IRTA	05/09/2021	No data
Recovery of by-products from the oil mill for the manufacture of different soaps	Cooperative Oumnia Bellota/UAE	13/11/2020	50
Recovery of by-products from the oil mill for the manufacture of different soaps	Association Tismonine/UAE	No data	20
Pruning in the olive grove	Association Tismonine/UAE	16/02/2021	20
Composting of olive oil pomace	Cooperative Oumnia Bellota/UAE	17/02/2021	25

Pests and diseases in the olive grove. Biologic control.	Cooperative Oumnia Bellota/UAE	13 and 14/03/2022	25
Agroecological management of the olive grove.	Association Tismonine/UAE	24 and 25/06/2022	20
Compost	ACK	22/06/2022	16
Waterwaste and Byproducts	ACK	29/06/2022	20
Plant protection and pathogens in olive tree cultivation	NILEAS	29/09/2021	18
Plant protection from colletotrichum gloesporioides.	NILEAS	22/03/2022	33
Transfer day on organic fertilization	NILEAS	02/05/2022	26
Transfer day on crushing the olive tree remains	NILEAS	01/06/2022	25
Transfer day on models of sustainable olive groves	NILEAS	29/09/2022	39
Transfer day on biodiversity enhancement practices in olive groves	NILEAS	22/03/2023	25
Transfer day on compost preparation	NILEAS	24/04/2023	25
Training-practical demonstration of compost making	KALAMATA	/06/2022	15
Compost	IO	17/05/2021	39
Pruning	IO	17/05/2021	50
Good practices of olive oil extraction	IO	16/11/2021	25
Organic fertilization	IO	01/02/2023	37
The physico-chemical and sensory quality of organic olive oil	IO	02/02/2023	29
Demonstration actions and discussion of results	ESP, CEPAAL and UEVORA	05/05/2023	160

at the National Olive Oil Congress			
Main challenges for the sustainability of portuguese olive culture in 2023	ESP, CEPAAL and UEVORA	06/06/2023	50
Potatura dell'Olivo a vaso policónico	UNAPROL	No data	No data
Chioma dell'olivo	UNAPROL	16to18/04/2021	22
Potatura dell'Olivo a vaso policónico	UNAPROL	25 to 26/02/2021	No data
Potatura dell'Olivo a vaso policónico	UNAPROL	11 to 13/03/2022	No data
Potatura dell'Olivo a vaso policónico	UNAPROL	8 to10/04/2022	No data
I campionamenti negli uliveti delle due aziende toscane	AIAB	21/04/2022	No data
L'olivo quercetano incontra sustainolive	AIAB	15/09/2022	14
Jornadas Finais Projeto Sustainolive	ESP, CEPAAL and UEVORA	26/09/2023	50
OLIDAY	NILEAS	29/09/2023	50

MOROCCO TRANSFER ACTIONS



SUSTAIN
OLIVE



Co-funded by the
Horizon 2020 Framework
Programme of the European Union

This project is part of the PRIMA programme supported by the European Union



Valorisation des huiles contenues dans les margines au Maroc pour la fabrication du savon biodégradable

Organise : Association El Houda à Ouezzane et Association Tismounine à Amizmiz (Marrakech)

Coordinateur : Kamal Targuisti

Enseignants:

- Ahmed Kattouss, Ingénieur et président de la Cooperative Rayhan à Zinat (Province de Tétouan).

Lieu et Date: Association el Houda à Ouezzane y Cooperativa Rayhan en Zinat (Tétouan) le 13/11/2020

Association Tismounine à Amizmize (Marrakech le 24-25-26/6/2021

Public cible et nombres de participantes : 50 Femmes des 3 Associations.

Justification:

La producción de aceite de oliva en Marruecos ha experimentado un desarrollo considerable en los últimos años debido a su importancia nutricional y económica fomentada por el clima del país y la tecnología agrícola avanzada. Después de la extracción del aceite de oliva por prensado o centrifugación, el líquido resultante contiene aceite y agua de vegetación que se separan posteriormente por decantación o centrifugación. Estos alperujos, a pesar de su tratamiento durante todo el proceso de extracción, todavía contienen cantidades significativas de productos oleosos que aún se consideran como rechazo o alperujos. El aceite de los alperujos no se puede utilizar para alimentos debido a su alta acidez del 33,97% que supera el estándar internacional para el consumo humano. Esta formación a las mujeres de las asociaciones de Tismounin y el Houda consiste en la utilización de aceites de alperujos y su valorización por saponificación para tener jabón biodegradable que venden en los Mercados rurales, turistas de paso en las sedes de cooperativas y asociaciones y en las tiendas de las ciudades cercanas.

PROGRAMME

- Materias primas para la elaboración del jabón
254 gramos de hidróxido de sodio (video 1)
640 gramos de agua a mezclar con hidróxido de sodio (video 2, video 3 y foto 1)
2000 gramos de aceite de alperujo (video 4 y foto 2) que hay que añadir a la mezcla anterior (video 5)
Hay que añadir al final distintas esencias (video 6, foto 3, foto 4 y foto 5)

- Mujeres trabajando en la elaboración del jabón
(Foto 6, foto 7, foto 8, foto 9, foto 10, foto 11, foto 12, foto 13, foto 14, foto 15, video 7 y video 8)
- Lote de productos finales destinados a la venta al público
(foto 16, foto 17, foto 18, foto 19, foto 20, foto 21, foto 22, foto 23 y foto 24)
- Grupo de mujeres de la asociación
(foto 6 y foto 8)

Datos necesarios:

- Nombre de las asociaciones

Asociación Tismounine en Amizmiz (Marrakech)

Asociación el Houda (Ouezzane)

Cooperativa Rayhan en Zinat (Tétouan)

- Ingredientes (incluyendo esencias aromáticas en caso de que se utilicen)
hidróxido de sodio, agua y aceite de oliva

esencias aromáticas de (almendras (foto 16), menta (foto 17), yasmine (foto 18), verbena y flores (foto 19), mandarinas (foto 20), albahaca (foto 22), canela (foto 24)

Anexos:

- Affiche annonçant l'action et le programme de transfert
- Photographies/vidéos de l'activité.







Rapport :

Organisation d'ateliers de formation pour les femmes des coopératives productrices d'huile d'olive de la Province d'Ouezzane (Coopératives Oumnia Bellouta et AL Houda) :

Réalisé par : Saleheddine EL

Azzouzi & Kamal Targuisti

Lieu :
**Coopérative AL Houda,
Ainbaida ; Ouezzane**

13 et 14 Mars 2022



Objectifs de la mission :

- Diagnostic de certaines maladies et insectes nuisibles des oliviers.
- Traitement naturel et contrôle biologique de la santé des plantes et des oliviers.
- Valoriser les résidus contemporains dans l'industrie du savon naturel/noir.
- Découvrir les produits et sous-produits de la coopérative d'Al Houda
- Echange et partage des idées entre les productrices et les doctorants de l'Université UAE Tétouan.
- Formation au profit des actrices et des productrices de la filière d'olivier.

Participants : 25 personnes

Bénéficiaries : (liste de présence).

- 15 Membres de deux coopératives féminines : ALHOUDA ET OUMNIA BELLOUTA

Staff : (AFHTA ET EXPERTS).

- Mona RAHMOUNI Ingénieur d'état en agriculture (Arboriculture)
- Abdelghani LAKHDAR ; conseiller en développement de la gestion des projets en agroécologie.
- Saleheddine EL AZZOUZI , formateur en agroécologie

Equipe scientifique d'UAE :

- Pr. Kamal TARGUISTI
- Mr. Ali YAHYA
- M Abdelaziz EL MAHMOUDI

• اليوم: 13 و 14 مارس 2022
 • المكان: منتدى تعاونية الزيتون تعاونية الأملية، وزان

"الأمراض والآفات الحشرية الضارة باشجار الزيتون وبعض الحلول من المعالجة الطبيعية والمكافحة البيولوجية".

Pr. Mouna RAHMOUNI
M Abdelghani LAKHDAR & M Saleheddine EL AZZOUZI,
 Association Bellouta (AFHTA)
Équipe scientifique d'UAE:
Pr. Kamal TARGUISTI
Mr. Ali YAHYA
M Abdelaziz EL MAHMOUDI



This project is part of the PRIMA programme supported by the European Union

12/03/2022

Projet SustainOlive - Faculté Sciences Tétouan -AFHTA-Bellouta
Saleheddine ELAZZOUZI

1



Réalisation de bonde roule :

Nous avons assuré le Suivi de réalisation de bonde roule des formations sur les maladies d'oliviers et présentations des soins naturels pour la lutte contre les maladies d'oliviers,

في إطار مشروع SUSTAINOLIVE، والذي يهدف إلى تحسين استدامة مزارع الزيتون وتشجيع المنتجات الثانوية لمعاصر الزيتون في بلدان البحر الأبيض المتوسط تنظم ورشات تكوينية لفائدة بعض التعاونيات المنتجة لزيت الزيتون بإقليم وزان تعاونية الأممية والهدي حول:

Organisation d'ateliers de formation pour certaines coopératives productrices d'huile d'olive dans la Province de Ouezzane (Coopératives Houdaet Oumnia) :

- * التشخيص لبعض الأمراض والأفات الحشرية لأشجار الزيتون
- * المعالجة الطبيعية والمكافحة البيولوجية لصحة النباتات وأشجار الزيتون
- * تثمين مختلفات المعاصير في صناعة الصابون الطبيعي / الأسود

• تشخيص بعض الأمراض والأفات الحشرية لأشجار الزيتون

• المعالجة الطبيعية والمكافحة البيولوجية لصحة النباتات وأشجار الزيتون

• تثمين مختلفات المعاصير في صناعة الصابون الطبيعي / الأسود

اليوم الأول: 13 مارس 2022

المكان: مقر تعاونية الهدي عين بيضاء، وزان.

استقبال المشاركون وحضورات بعض التعاونيات الفلاحية لسلسلة زيت الزيتون "تعاونية الهدي ، ، تعاونيات أخرى (). كلية العلوم بطنطاوan "ممثلة مشروع البحث العلمي حول استدامة حقول الزيتون وتثمين المنتجات الثانوية لمطاحن الزيتون في بلدان البحر الأبيض المتوسط. جمعية " مؤسسة لإنسان مجالات وب戴ائل". البلوطية، إبريكشة.

ورشة 1: الأمراض والأفات الحشرية التي تلحق الأضرار بشجرة الزيتون خاصة، والأشجار المثمرة بصفة خاصة .

ورشة 2: تقديم بعض الحلول الطبيعية حول استعمال المعالجات الطبيعية ضد الأمراض والحشرات الضارة بأشجار الزيتون. تطبيقات حول تهيئة الزيتون، بمزارع تعاونية الهدي. تقطير: السيد عبد الغني لخضار وصالح الدين العزوzi.

استراحة شاي 15 min

ورشة 2: 13h – 15h

• تقديم بعض الحلول الطبيعية حول استعمال المعالجات الطبيعية ضد الأمراض والحشرات الضارة بأشجار الزيتون. تطبيقات حول تهيئة الزيتون، بمزارع تعاونية الهدي. تقطير: السيد عبد الغني لخضار وصالح الدين العزوzi.

وجبة خذاء، بتعاونية الهدي 16h

اليوم الثاني: 14 مارس 2022

المكان: مقر تعاونية الأممية، إبريكشة، وزان

ورشة صناعة أنواع الصابون والصابون البلدي ، كمعالج طبيعي لأشجار الزيتون والأشجار المثمرة.

استراحة شاي 15 min

وجبة خذاء، بمنتزه البلوطية 16h

Programme de formation :

ال موضوع	الساعة
اليوم الأول: 13 مارس 2022	
المكان: مقر تعاونية الهدي عين بيضاء، وزان.	
• استقبال المشاركون وحضورات بعض التعاونيات الفلاحية لسلسلة زيت الزيتون "تعاونية الهدي ، ، تعاونيات أخرى ().	10h
• كلية العلوم بطنطاوan "ممثلة مشروع البحث العلمي حول استدامة حقول الزيتون وتثمين المنتجات الثانوية لمطاحن الزيتون في بلدان البحر الأبيض المتوسط.	
• جمعية " مؤسسة لإنسان مجالات وب戴ائل". البلوطية، إبريكشة.	
ورشة 1: الأمراض والأفات الحشرية التي تلحق الأضرار بشجرة الزيتون خاصة، والأشجار المثمرة بصفة خاصة .	10h15 – 13h15
• تشخيص الوضعية الحالية لأشجار الزيتون.	
• تقديم الامراض والأفات الحشرية التي تصيب أشجار الزيتون.	
• تقديم بعض المعالجات البيولوجية.	
- تقطير: المهندسة الفلاحية، السيدة مونى الرحمونى .	
استراحة شاي	15 min
ورشة 2:	13h – 15h
- تقديم بعض الحلول الطبيعية حول استعمال المعالجات الطبيعية ضد الأمراض والحشرات الضارة بأشجار الزيتون.	
- تطبيقات حول تهيئة الزيتون، بمزارع تعاونية الهدي.	
تقطير: السيد عبد الغني لخضار وصالح الدين العزوzi.	
وجبة خذاء، بتعاونية الهدي	16h
اليوم الثاني: 14 مارس 2022	
المكان: مقر تعاونية الأممية، إبريكشة، وزان	
• ورشة صناعة أنواع الصابون والصابون البلدي ، كمعالج طبيعي لأشجار الزيتون والأشجار المثمرة.	10h
تقطير: السيد أحمد كطوس	
استراحة شاي	15 min
وجبة خذاء، بمنتزه البلوطية	16h

Support didactique utilisé :

- DATA CHOW
- PC Portable
- Tableau
- Flip chart, Stylos,
- Dessin, schéma et images
- Appareil photos et caméra.

Déroulement de la formation :

Après l'assemblage des participants à la coopérative AL Houda, nous avons pris le petit déjeuner de « produit du terroir » ; et puis Pr Kamal TARGUISTI, responsable de projet SUSTAINOLIVES au Maroc (Faculté de Sciences Tétouan) ; il a présenté un mot d'ouverture de la session de formation, également, il a donné au bénéficiaires un petit rappel concernant le cadre général de projet « SUSTAINOLIVES » qui touche la filière d'olivier au bassin de la méditerrané.

M Saleheddine EL AZZOUZI, a présenté le contexte de formation sur les maladies, les ravageurs d'oléicole ; ainsi le processus du traitement biologique pour la lutte contre ces maladies.



A savoir la Problématique à traité lors de la formation :

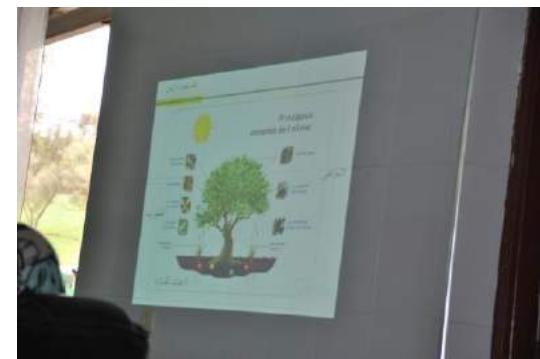
- ❖ L'Apparition des maladies des oliviers (Mouche, L'Œil de paon..).
- ❖ La chute des olives (Impact de la chaleur, pauvreté du sol, manque d'irrigation / moins de chute de pluie..).
- ❖ Affaiblissement du rendement des olives.



- ❖ Manque d'utilisation des traitements organiques par les productrices.

Après Mlle Mona RAHMOUNI ; Ingénierie agricole à la DPA Direction Provinciale d'Agriculture de Ouezzane a présenté une conférence sur les maladies et ravageurs d'olivier.

L'ingénieur agronome a présenté aux bénéficiaires les principaux maladies et ravageurs qui attaquent la filière oléicole, Mouna a commencé tout d'abord par des généralités sur l'olivier au Maroc ; superficie de plantation d'olivier ; les bienfaits économiques d'oliviers ; aboutissant au plat principale sur les maladies et ravageurs notamment :



- ❖ l'œil de paon,
 - ❖ la tuberculose,
 - ❖ la mouche,
 - ❖ le psylle
 - ❖ la teigne de l'olivier.
- dans cette partie elle a présenté comment se manifestent les maladies puis comment peut-on protéger notre verger de ces attaques et puis elle a terminé sa présentation par des recommandations qu'on pourrait adopter afin d'avoir un verger sain indemne de maladies.

Et puis M Saleheddine et M Abdelghani LAKHDAR, ont présenté quelques solutions des soins/ traitements naturels contre certains maladies et ravageurs d'oliviers et des cultures en générales comme :



Les soins naturels et/ ou les traitements biologiques : les maladies, et ravageurs des arbres fruitiers et des cultures :

- ❖ Plantes anti-moustiques :

il existe de multiples plantes dont le feuillage, odorant, dégage ce parfum citronné qui tient les moustiques à distance comme l'Origan, marjolaine, suage, Absinthe, Basilic

- ❖ Traitement biologique : les Extraits végétaux :
 - Purin d'ortie.
 - Infusion d'ail.
 - Infusion d'oignon.
 - Décoction d'absinthe.
 - Le mélange de Savon noir.
- ❖ Les extraits minéraux :
- ❖ bouillie bordelaise (sulfate de cuivre).
- Lors de la formation, nous avons appelé le Doctorant M Abdelaziz EL MAHMOUDI (Faculté des sciences-Tétouan), pour faire de suivi au terrain sur l'impact de ces soins naturels sur les maladies.

Et puis nous avons présenté des ateliers de démonstration des traitements biologique :

Atelier1 :

- Recette1 : préparation de traitement d'ortie (1kg au 10l d'eau) ; pendant 25 jours / utilisation comme traitement et fertilisant naturel après 20 jours.



- Recette2 : Mélange de savon noir dans l'eau + une cuillère huile d'olive : (deux cuillères de savon noir dans 1 litre d'eau). / (recette estimatif).|





Aussi M Saleheddine ELAZZOUZI a fait un rappel sur des pratiques en Agro-écologie suivant :

- 1 Les besoins de la plante :
- 2 L'humus dans la nature :
- 3 Système du Compost : NPK naturel base des grignons des olivesetc.
- 4 Techniques des cultures en Agro-écologie : Butte sandwich, paillage, rotation, associations, diversité,
- 5 Technique d'aménagement antiérosif : impluvium et terrasse.

Et puis, on a présenté des idées des projets verts qui rentrent dans l'entreprenariat vert, pour motiver et encourager les jeunes de lancer leurs projets propres aux domaines d'agriculture écologique et valorisation des déchets des grignons des olives.

M Abdelghani a présenté plusieurs expériences que l'association AFHTA a concrétisé dans ce domaine de l'agroenvironnement et commercialisation des produits de terroirs en agro-écologie, notamment l'accompagnement des agriculteurs dans les voyages d'apprentissage et dans leurs parcelles pour promouvoir des techniques antiérosives et l'agro-forestière.

Après la formation, le doctorant M Ali YAHYA, a présenté le résultat de compost à base des grignons des olives et d'autre matières organiques :

- Des résultats positifs en termes des éléments minéraux de NPK.
- Une faiblesse de Zinc.

En fait le susdit doctorant a proposé de refaire l'essai de compost pour équilibrer des matières organiques pour avoir un bon résultat du compost

Également, il a informé les productrices de possibilité d'utiliser le compost aux arbres fruitier et culture maraîchères.

Après le déjeuner à la coopérative AL Houda, nous avons remplir les sacs du compost que nous avons préparé base des grignons des olives ; et puis on est parti ensemble à la parcelle des oliviers de la coopérative pour faire des aménagements Antiérosif d'olivier et la démonstration à l'utilisation de compost organique ;



SUSTAIN
OLIVE



Une démonstration auprès des agricultrices pour l'utilisation des techniques antiérosives, pour l'olivier, et l'utilisation de compost organique et puis de semi des légumineuses autour des arbres d'oliviers pour favoriser l'Azote aux pieds des arbres.



Défis / Résultats :

- Les membres de la coopérative AL HOUDA s'engagent d'aménager 20 oliviers productives, par des techniques antiérosives et elles souhaitent d'ajout du compost organique.

Fin de programme de formation

Rapport sur la formation des femmes membres de l'Association Tismounine (AT) à AMIZMIZ (Province de Marrakech)

Formation théorique et pratique sur l'Agro-écologie

- Les maladies et ravageurs d'oliviers
- Les soins naturels lutte contre les maladies et ravageurs d'oliviers
- Fabrication du compost à base des grignons des olives et d'autre MO.

Réalisé par :

**Saleheddine El
Azzouzi & Pr.
Kamal Targisti**

Lieu :

**Association
Tismounine,
Village
Ameghrasse**

**24 et 25 Juin
2022**

**Province de
Marrakech**



Objectifs de la mission :

- Sensibiliser les productrices d'olivier à la problématique d'olivier lié au changement climatique.
- Diagnostic de certaines maladies et insectes nuisibles des oliviers.
- Transmettre des pratiques en Agro-écologie : techniques antiérosives, compost et Paillage.
- Valoriser des résidus contemporains dans le compost.
- Echange et partager d'idée entre les productrices et les doctorants d'UAE-Tétouan.
- Favoriser la recherche scientifique dans les fermes des agricultrices d'olivier de la Région d'Amizmiz

Participants : 20 personnes

1 Bénéficières :

- 20 membres de la coopérative féminine « Zaouïa » et Association TISMONINE ; AMIZMIZ, MARRAKECH

2 Experts :

- Saleheddine EL AZZOUZI, formateur en agroécologie
- Mona RAHMOUNI Ingénieur d'état en agriculture (Arboriculture) à la DPA (Direction Provinciale d'Agriculture d'Ouezzane).

3 Équipe scientifique d'UAE :

- Professeur Kamal TARGUISTI (responsable de Projet Sustainolive Maroc)
- Mr. Ali YAHYA, Doctorant / biologiste
- Mr. Abdelaziz EL MAHMOUDI / chimiste

Programme de formation :

- Premier jour : 23 juin 2022 : Départ de Staff (Tétouan vers Amizmiz, Marrakech 700 Km).
- Deuxième jour : 24 juin 2022 : Assurer la formation en Agro-écologie
- 10h-10h15min : Accueil des participants au lieu de Formation (Coopérative Zaouïa, AMIZMIZ).
 - Mot de présentation par le responsable Pr. Kamal TARGUISTI.
- 10h-12h : Formation sur les maladies et les ravageurs des oliviers, animée par Mlle. Mouna RAHMOUNI
- 12h30 à 15h : Formation sur le sol vivant, compost et les soins naturels pour la lutte contre les ravageurs et les maladies d'oliviers, Animé par Mr. Saleheddine EL AZZOUZI

- 15h30 : déjeuner convivial
- Deuxième jour : 24 juin 2022 : formation en Agro-écologie, animé par Mr. Saleheddine ELAZZOUZI.
- 10h : Accueil des participants à la ferme d'Amizmiz
- 10h30min : Formation pratique sur les techniques de préparation de Tas du Compost :
- 12h30 à 14h : Formation sur les techniques de paillage du sol par le BRF (Bois Rafael fragmenté).
 - Utilisation de broyeur
 - Valorisation des branches de taille.
- 15h30 : déjeuner convivial

Support didactique utilisé :

- Projecteur Datashow
- PC Portable
- Tableau
- Flip chart, Stylos,
- Dessin, schéma et images
- Appareil photos et caméra.

Déroulement de la formation :

Après une douce nuitée à l'auberge, l'olivier d'Amizmiz, nous avons pris le chemin vers le siège de la coopérative Zaouia, à une dizaine de kilomètres du centre de la ville d'Amizmiz, et après le rassemblement des membres de femmes de la susdite coopérative; Pr. Kamal TARGUISTI de l'Université Abdelmalek Essaâdi et responsable de projet SUSTAINOLIVE au Maroc ; a pris la parole pour présenter le contexte de formation qui s'inscrit dans le cadre du susdit projet. Juste après Mlle. Mouna RAHMOUNI (Ingénieur en arboriculture à la DPA d'Ouezzane) a pris la parole pour présenter la formation sur les maladies et les ravageurs d'oléicole :



A savoir la Problématique qui a été traité lors de la formation :

- ❖ L'Apparition des maladies des oliviers (Mouche, L'Œil de paon.).
- ❖ La chute des olives (Impact de la chaleur, pauvreté du sol, manque d'irrigation / moins de chute de pluie.).
- ❖ Affaiblissement du rendement des olives.
- ❖ Manque d'utilisation des traitements organiques par les productrices.

L'ingénieur agronome a présenté aux bénéficiaires tout d'abord quelques généralités sur l'olivier au Maroc ; superficie de plantation d'olivier ; les bienfaits économiques d'oliviers ; et puis elle a présenté les maladies et ravageurs qui attaquent la filière oléicole comme suivant :

- ❖ l'œil de paon,
- ❖ la tuberculose,
- ❖ la mouche,
- ❖ le psylle
- ❖ la teigne de l'olivier.

	
<i>Mlle. Mouna RAHMOUNI (Ingénieur en arboriculture à la DPA d'Ouezzane) présentant la formation sur les maladies et les ravageurs d'oléicole</i>	<i>Pyramide de besoins de vie durable basée sur l'eau, le sol et l'arbre.</i>

Par la suite Mr. Saleheddine el Azzouzi a présenté d'abord la pyramide de besoins de vie durable basée sur l'eau, le sol et l'arbre. Les différentes solutions pour la lutte contre les maladies et les ravageurs d'oliviers et des cultures en général, à savoir :

Les soins naturels et/ ou les traitements biologiques : Comme l'association des Plantes anti-moustiques :

Il existe de multiples plantes dont le feuillage, odorant, dégage ce parfum citronné qui tient les moustiques à distance comme l'Origan, mythe, marjolaine, suage, Absinthe, Basilic

Aussi nous avons présenté les techniques de fabrication des Extraits végétaux : le Purin d'ortie ; Infusion d'ail Infusion d'oignon ; Décoction d'absinthe.



A la suite de bons résultats des essais d'utilisation des extraits des produits à base d'huile d'olive et de la soude (savon noir), pour aider à traiter naturellement la mouche d'olivier par des extraits minéraux comme la Bouillie bordelaise (sulfate de cuivre).

Par suite, il a été question de présenter aux femmes de l'Association présente, les différentes techniques de Fabrication du compost à partir des matières organiques disponibles : les NPK naturels à travers plusieurs techniques : composteur, système des fosses, compost direct

A la fin de formation, nous avons mobilisé les femmes de collecter des matières organiques disponibles à partir de leurs déchets organiques pour préparer un tas du compost comme :

- 1.Grignons des olives
- 2.Pailles sèches
- 3.Cendre
- 3.Les os / épluche des œufs
- 4.La chaux
- 5.Les épéchés des légumes.
- 6.les herbes vertes
- 7 fumiers des bétails : vaches chèvres

	
	<p><i>Photos montrant la fabrication du compost par les femmes de l'Association Tismounine</i></p>

Aussi, nous avons présenté aux membres de la coopératives plusieurs pratiques en Agro-écologie suivant :

- Techniques des cultures en Agro-écologie pour rendre un sol vivant : Butte sandwich, paillage, rotation, associations, diversité,
- Technique d'aménagement antiérosif : impluvium et terrasse.

Lors de cette formation les femmes de la coopérative ont été satisfaite par cette formation en Agro-écologie, qui leurs apportes beaucoup de savoir-faire dans l'agriculture durable et l'adaptation au changement climatique.

Après cette formation riche, nous avons assuré une visite chez la ferme de Fatima aussi partenaire du Projet Sustainolive, pour découvrir le biotope de la zone de production d'olivier



- Découvrir des cultures d'oliviers
- Visite de bassin de collecte d'eau remonté de la nappe par l'énergie solaire.
- Echange et partage que la question d'adaptation au changement climatique dans la l'agriculture.
- A la fin du soir, nous avons retourné à l'auberge d'olivier d'Amizmiz.

2^{ème} jour : formation pratique

Dans cette journée, qu'a été animé par Saleheddine El AZZOUZI, sur la fabrication du compost à base des matières organiques disponibles

- Les femmes de la coopérative ont apporté avec elles, des restes de matières organiques à savoir ; déchets de cuisine, grignons des olives, cendre, et puis nous avons cherché à la ferme expérimentale de Mme Fatima AMIZMIZ, le fumier, herbes sèches, herbes vertes et l'eau
- Il a été question après le traçage et creusement des fausses pour préparer le tas des matières organiques tout en respectant le rapport C/N
-



Fabrication du compost à base des matières organiques disponibles

-Respecter le rapport carbone / azote
(c/n=25)

- Il ne faut jamais tasser le tas du compost

-Ajouter d'eau pour avoir de l'humidité

-Protéger le tas du compost par une bâche aérée.

-retournez à Chaque 15 jours le tas du compost

-Assurer un Suivi pour décomposition des matière organique « compost ».

Saleheddine EL AZZOUZI, Formateur-Facilitateur en Agro-écologie

- Les femmes ont bien participé à la préparation de tas du compost avec les matières organiques équilibrés en C/N.
- Mr. Mohamed gérant de la ferme, s'occupera du retournement du compost et il va assurer le suivi comme il faut pour avoir un compost mûr et prêt à l'utiliser
- A la suite de cette formation, nous avons montré aux femmes l'utilisation de broyeurs pour produire de BRF (bois raméal fragmenté) pour faire plus de paillage du sol, et d'autre utilisation comme matière organique qui rende un sol vivant.
- A la fin de formation, nous avons montré aux femmes l'utilisation de BRF, comme paillage contre les mauvaises herbes du jardin, aussi pour favoriser le développement de macro et micro-organismes dans le sol vivant, aussi la possibilité de semis autour des arbres de légumineuse pour une fixation de l'Azote organique au sol.



Utilisation par les femmes de l'association de broyeurs pour produire de BRF (bois raméal fragmenté)

Utilisation de BRF, comme paillage contre les mauvaises herbes du jardin, aussi pour favoriser le développement de macro et micro-organismes dans le sol vivant

Défis / Résultats :

- Les femmes de la coopérative ont exprimé leurs joies et leurs intérêts pour la formation en Agro-écologie, elles souhaitent refaire ces expériences de compost aux vergers de la coopérative.
- Les membres de l'association souhaitent renforcer leurs capacités à la production de l'huile d'olives et d'autre produits comme couscous et plantes aromatique et médicinale.

Constatations :

- Un biotope est très aride qui demande des interventions en Agro-écologie pour contribuer à développer des agrosystèmes durables
- Les habitants locaux ont besoin d'accompagnement et du renforcement de leurs capacités au niveau de développement local et territorial

Fin de programme de formation

IO TRANSFER ACTIONS



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IN THE MEDITERRANEAN AREA



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COMPOST SEMINAR DAY

Organized by: Olive Tree Institute

Coordinator: Sofiane Abdelhamid

TRAINER: Henem Grissa: Researcher at the Technical Center for Organic Agriculture
(CTAB) Chott Meriem

VENUE: CFPA: CHOTT MERIEM VOCATIONAL TRAINING FARMING CENTER, SOUSSE

Date: 17 JUNE

TARGET AUDIENCE: farmers, engineers, etc.

Number of participants: 39

PARTICIPATION WAY: Face to face

Justification:

In Tunisia, composting has aroused more and more interest since the increase of urbanization, and the more and more intensive exploitation of agricultural land have made it possible to release large quantities of agricultural waste while increasing demand at the level of the need for organic matter for soil fertilization.

Compost is a humus-rich organic combination that acts over the long term to improve the physical, chemical and biological properties of the soil. It is obtained from the decomposition of organic waste by a biological process of transformation. The recovery of solid waste by reuse in soil fertilization, in organic farming is of increasing interest. Since the last quarter of the last century, developed countries have been using the technique of composting organic waste to produce compost rich in organic and mineral matter.

This transfer day aims to highlight the benefits of compost, inform participants about the best techniques for obtaining good quality organic compost, and finally put all these information into practice by carrying out a concrete demonstration.

Tools used: Image projector, field practices, etc.

PROGRAM

9:00-9:30 Welcome of participants

9:30-9:50 Management of organic matter

9:50-10:15 Benefits and goals of compost production

10:15-11:15 Techniques of compost production (first part)

11:15-11:30 Coffee break

11h30-12h30 Techniques of compost production (second part)

12:30-13:30 Practical demonstration on compost production and composting methods in the technical center of organic agriculture in Chott Meriem

13:30 Closing session and lunch

Appendices:

- Participant signature sheet.
- Poster announcing the action and the transfer program
- Photos of the activity.



The Tunisian-European scientific cooperation project "Sustainolive"
on "Creating a new approach to promote sustainable agriculture in
the Mediterranean region"

The Zitouna Institute joins in partnership with the regional delegate
for agricultural development in Sousse

and the Technical Center for Biological Agriculture in Chott Maryam

Training day around

**How to prepare and use compost in soil fertilization and improve
olive oil yield**

June 17, 2021 at the Agricultural Vocational Training Center and the
Technical Center for Agriculture Biological Chott Mariam - Sousse









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PROMOTING RESEARCH AND INNOVATION
IN THE MEDITERRANEAN AREA



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THE GOOD PRACTICES OF OLIVE OIL EXTRACTION SEMINAR

Organised by: Olive tree institute (IO)

Coordinator: Sofiane Abdelhamid

TEACHERS:

- Sofiane Abdelhamid: A researcher at the Olive Institute, Sousse
- Mohamed Ayadi: A researcher at the Olive Institute, Sfax

Venue: Moulin Bouraoui, Hergla

Date: 16 november 2021

Target audience: farmers, technicians, etc.

Number of participants: 25

Participation way: face – to - face

Justification:

The strategic option for the development of the Tunisian olive oil field is based on the production of high quality of olive oil and the improvement of the added value to consolidate Tunisia's position on the international market, given that Tunisian olive oil is already known in the world. This is why this seminar insists on the development of this niche in order to improve the extra virgin olive oil production quality rate (25% in Tunisia compared to 80% in Italy, 78% in Spain and 70% in Greece).

Virgin olive oils are obtained from the fruit of the olive tree through mechanical procedures or other physical procedures under conditions which do not lead to the alteration of the oil and which have not undergone any treatment other than washing, decantation, centrifugation or filtration.

This transfer day aims to highlight the benefits of modern mills and to inform participants of the best techniques for obtaining good quality olive oil.

Tools used: image projector, on site practices, etc.

PROGRAM

9:00-9:30 Participant welcoming

9:30-11:00 Tasting Bases presented by Dr.Sofiane Abdelhamid

11:15-11:30 coffee break

11h30-12h30 Olive Oil Extraction Techniques and the Importance of Modern Mills presented by Dr. Mohamed Ayadi

12:30-13:30 A visit to the mill, olive oil tasting and a group work session to evaluate the acquired knowledges.

13:30 Closing session.

Appendices:

- Participants attendance sheet.
- A poster featuring the action and the program transfer.
- Photos of the activity.
-



The Olive Tree Institute joins in partnership with the regional delegate for agricultural development in Sousse

Training day around

"Good Practices for the Extraction of Fine Olive Oil"

November 16, 2021 in Bouraoui's Mill, Souih, Hergla-Sousse







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TRANSFER DAY ON THE PRUNING

Organised by: Olive Tree Institute

Coordinator: Sofiane Abdelhamid

TEACHER:

- Imed BEL BAHRI: a trainer at Boughrara Farming Training Center.

Venue: "Dar Zitouna" Ecovillage, Kalaa kbira

Date: 17 June 2021

Target audience: farmers, technicians, etc.

Number of participants: 50

Participation way: face-to-face

Justification:

Pruning the olive tree is very advantageous. It limits fluctuations in olive production from one year to the next and increases the quality of the fruiting. This operation aerates the tree and thus reduces the risk of diseases.

A well pruned tree by a real professional pruner gives a harvest every year with reduced alternation even in semi-arid areas.

This pruning must be adapted to the plant development of each tree.

This transfer day is very interesting for the participants because it is a question of improving the production of olives and ensuring the continuity of this arboreal culture so paramount and important to Tunisia.

Tools used: image projector, on site practices, etc.

PROGRAM :

9:00-9:30 Participants welcoming and morning coffee
9:30-10:50 Different Types of pruning
10:50-11:15 Advantages and Objectives of Olive Tree Pruning.
11:15-12:15 Pruning Techniques – Theoretical: First part
12h13-13h30 Pruning Techniques – Practical: Second part
13:30 Closing session and lunch.

Appendices:

- Participants Attendance Sheet.
- A poster featuring the action and the transfer program.
- Activity Photos.



The Tunisian-European scientific cooperation project
“Sustainolive” on “Creating a new approach to promote
sustainable agriculture in the Mediterranean region”

The Zitouna Institute is organized in partnership with
the Regional Commissariat for Agricultural
Development in Sousse

Training day about:

Good practices for pruning olives

On March 11, 2021, in the "Dar Al-Zaytouna" space in
Kalaa Kbira - Sousse









Rapport

Résumé : dans le cadre du projet Sustainolive, l'institut de l'olivier a organisé deux séminaires au centre de formation professionnelle du Jammel (Monastir), le 01 et le 02 Février consacré aux thèmes suivants :

- **La fertilisation organique,**
- **La qualité physico-chimique et sensorielle de l'huile d'olive biologique**

La fertilisation organique

Réalisé par :
Dr HechmiChehab
Dr MounaAyechi

**Lieu : CENTRE DE
FORMATION
PROFESSIONNELLE
AGRICOLE DE
JEMMEL**

01 Février 2023



Objectif de la mission :

- Présenter les résultats du projet Sustainolive concernant l'emploi du couvert végétal dans les oliveraies tunisiennes ;
- Montrer les avantages de l'agriculture biologique et ses applications pour la durabilité du système de production oléicole ;
- Identifier les besoins nutritifs de l'olivier ;
- La fertilisation foliaire de l'olivier et son utilité ;
- L'importance de planter de sous couvert végétal (blé, féverole...) ;



- Discuter des meilleures alternatives pour préparer le compost ;
- Mettre en valeur les engrains verts dans la fertilisation des oliviers.

Participants : 37 personnes

Bénéficiers : (liste de présence).

Staff :

Institut de l'olivier

CRDA Monastir

Equipe scientifique :

Dr Sofiane Abdelhamid

Dr HechmiChehab

DrMounaAyachi

Mr Youssef Amor

Mr Mohamed Ouhibi

Programme de la formation :

Heure	Sujet
Journée 1 : 01/02/2023	
	Lieu : Centre de formation professionnel Agricole de Jemmel
9 - 9:30	: Accueil et inscription des participants
9 :30 - 9 :40	: Ouverture de la session de formation et mot de bienvenue

- 9 :40 – 9 :55 : Fondements, Particularités et avantages de l'agriculture biologique : Mr Mohamed Ouhibi (DAB, CRDA de Monastir)
- 10 :00-10 :20 : Identification des besoins nutritifs de l'olivier
- 10 :20-10 :40 : La fertilisation foliaire de l'olivier
Pr. Mouna Ayachi - Institut de l'olivier
- 10 :40-11 :00 : Importance du compost et de la matière organique pour la fertilisation de l'olivier : Mr. Youssef Amor du CTAB
- 11 :00-11 :15 : Pause café
- 11 :15-11 :35 : Importance des engrains verts dans la fertilisation de l'olivier : Dr. Hechmi Chehab - Institut de l'olivier
- 11 :35-13 :00 : Discussion et valorisation de la 1^{ère} Journée
- 13 :00 : déjeuner

Support didactique utilisé

- Data show
- Ordinateur portable
- Tableau
- Appareil photo et caméra

Déroulement de la formation :

La pratique de l'agriculture biologique a pour objectif de respecter scrupuleusement les règles de la nature.

En fait, respecter les règles de la nature, signifie aussi les utiliser à son profit pour améliorer la qualité et la quantité de sa production agricole tout en préservant la qualité et la diversité de l'environnement.

La Tunisie est le pays du continent africain qui compte le plus grand nombre de terres consacrées à agriculture biologique,(336.000 hectares au total en 2018 la Direction générale de l'agriculture biologique).

Dans son intervention Mr Mohamed Ouhibi(de la direction de l'agriculture biologique, CRDA Monastir) a cité les avantages de l'agriculture biologique qui se traduisent par :

- Préserver, renouveler et accroître l'humus pour lutter contre la destruction des sols et leur érosion,
- Favoriser une agriculture qui produit plus d'énergie qu'elle n'en consomme,
- Développer une agriculture qui ne pollue pas la biosphère, directement ou indirectement....

Ensuite Mr Youssef Amor de centre technique de l'agriculture biologique, nous a expliqué l'importance du compost et de la matière organique dans la fertilisation des oliviers, en fait la matière organique à différents stades de décomposition (particulièrement sous la forme d'humus) est bénéfique. Elle améliore la condition du sol, fonctionne en tant qu'ajusteur de pH, maintient l'humidité du sol, augmente la capacité de rétention, active les microorganismes et accroît l'absorption des nutriments. Par conséquent, les fertilisants organiques forment souvent la base d'un programme rationnel de fertilisation de l'oliveraie.

Un niveau suffisant de calcium est très important pour le développement des oliviers, car il réduit la vulnérabilité aux maladies. Le symptôme le plus courant d'une carence en calcium est la chlorose (les feuilles pâlissent ou deviennent jaune-blanc). Une carence en calcium est souvent corrigée en ajoutant 6-7kg d'oxyde de calcium par arbre.

Le magnésium et le bore sont aussi très importants pour un bon développement des fruits. Le magnésium (Mg) constitue la partie centrale de la molécule de chlorophylle tandis que le bore (B) joue un rôle vital dans le



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métabolisme et le transport des sucres. Dans de nombreux cas, si les oléiculteurs diagnostique une carence en magnésium ou en bore au milieu de la période végétative, ils appliquent souvent un fertilisant foliaire (11-0-0-16 Oxyde de magnésium, 20,5% de bore).

ANNEXE



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RAPPORT

La qualité physico-chimique et sensorielle de l'huile d'olive biologique

Réalisé par :

**Dr Sofiane Abdelhamid et Dr
Meriem Gharsellaoui**

**Lieu : CENTRE DE
FORMATION
PROFESSIONNELLE
AGRICOLE DE JEMMEL**

02 Février 2023



Objectifs de la mission :

- Etudier les caractéristiques de l'huile d'olive vierge, et savoir différencier entre les différentes classes d'huile.
- Initiation à l'analyse sensorielle et la dégustation de l'huile d'olive,



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- Se familiariser avec les mots techniques des dégustateurs,
- Déguster quelques huiles d'olive vierge

Participants : 29 personnes

Bénéficiers : (agriculteurs : liste de présence).

Staff :

Institut de l'olivier

CRDA Monastir

Jammel

Equipe scientifique :

Dr sofiane Abdelhamid

Dr MariemGharsellaoui

Programme de formation :

Heure	Sujet
Journée 2 : 02/02/2023	
Lieu : Centre de formation professionnel Agricole deJemmel	
10h	Accueil des participants
10 :15	Les caractéristiques des huiles d'olives vierges : Dr Sofiane Abdelhamid
10 :30	Initiation à l'analyse sensorielle
10 :45	Pause café
11h	Dégustation de quelques variétés d'huile d'olive présenté par Mme Meriem Gharsellaoui.
13h	déjeuner

Support didactique utilisé

- Data show
- Ordinateur portable
- Tableau
- Appareil photo et caméra

Déroulement de la formation :

Dr Sofiane Abdelhamid a entamé la journée par la définition de la qualité de point de vue physico-chimique et sensorielle pour classer les différentes catégories de l'huile d'olive à savoir :

-Huile d'olive vierge extra

-Huile d'olive vierge

- Huile d'olive vierge courante

-Huile d'olive lampante :

Ensuite, il a présenté les propriétés et l'évaluation sensorielles de l'huile d'olive dont l'objectif est la recherche de ses qualités et ses défauts. Cette analyse peut également rechercher la typicité d'une huile d'olive (arômes, ...).

Le chercheur a montré aux invités la méthode de la dégustation de l'huile d'olive vierge, il a mentionné que :

- La dégustation de l'huile d'olive passe par l'odorat (olfaction et rétro-olfaction) et le goût.
- Indispensable à toute dégustation : la recherche olfactive des arômes ;

- Permet de définir certaines des caractéristiques positives ou négatives de l'huile d'olive ;
- Evaluation de l'intensité olfactive du fruité et identification de certains arômes particuliers qui le composent ;
- Evaluation de la présence éventuelle de certains défauts : le rance, le chômé...
- La recherche de ses qualités et ses défauts. Cette analyse peut également rechercher la typicité d'une huile d'olive (arômes...).

Le chercheur a montré que la dégustation comprend deux composantes principales :

Le fruité : on peut décrire la composition (sensations aromatiques: amande...) et l'intensité (léger, moyen, intense).

La structure : elle est composée de l'amertume et le piquant qui sont plus ou moins intenses (Amertume = goût et Piquant = sensation tactile).

A la fin de la formation Mme Mariem gharsellaoui (chercheur à l'institut de l'olivier), a assuré une séance pratique sur la dégustation de quelques échantillons d'huile d'olive. Elle a montré l'avantage d'un panel test dont le nombre doit être entre 8 et 12 dégustateurs.

Chaque participant a versé dans un verre d'huile à déguster (3 ml environ d'huile) et a essayé de déguster l'huile par la méthode retro nasale pour que par la suite chaque participant note sur la feuille de profil l'intensité de l'huile à laquelle il perçoit ses attributs négatifs et/ou positifs.

Descripteurs positifs :

Fruité (odeur & goût de l'olive)

Amer

Piquant (sensation gustative de picotement)

Descripteurs négatifs (défauts)

Chômé (dû à la fermentation avancée des olives)

Moisi

Vineux/vinaigré/acide/aigre (formation d'acide acétique/fermentation)

Lies (huile récupérée des boues décantées)

Métallique

Rance (huile auto-oxydée, contact avec l'air et/ou la lumière)



ANNEXE

IRTA TRANSFER ACTIONS



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Jornada SUSTAINOLIVE: oportunitats per a la valorització de residus orgànics de la producció d'oli d'oliva

Jornada tècnica en línia

Dijous, 24 de novembre de 2022

Presentació

Europa concentra prop del 70% de la producció mundial d'oli d'oliva. En total, en la conca del Mediterrani es comptabilitzen 7,7 milions d'hectàrees. El sector de l'olivar, i especialment el de l'oli d'oliva, és un actor econòmic de primer ordre per la seva capacitat de generar ocupació, sent el manteniment econòmic d'extenses àrees de la conca del Mediterrani i un dels sectors responsables del tre de la despoblació rural.

El projecte SUSTAINOLIVE (<https://sustainolive.eu>) té com a objectiu millorar la sostenibilitat del sector de l'oli d'oliva a partir de la implementació i promoció d'un conjunt de solucions innovadores de gestió sostenible basades en conceptes agroecològics, així com en l'intercanvi de coneixement i la participació de múltiples actors i usuaris finals. L'IRTA participa en la caracterització d'olivars i almàsseres, així com en la recuperació de subproductes a partir dels residus del sector.

Inscripcions

A través de l'IRTA: [Inscripcions](#)
Per a més informació:
IRTA
Av: javier.lobal@irta.cat

Programa

10.00 h	Registre d'assistents
10.20 h	Benvinguda a la jornada
10.30 h	Descripció del sector olivarer <ul style="list-style-type: none">▶ Introducció al projecte Sustainolive Sra. Belén Fernández, Programa Sostenibilitat en biosistemes de l'IRTA.▶ Secció olivarer Sr. Agustí Romero i Sr. Juan F. Hermoso, Programa Fructicultura de l'IRTA.▶ Producció d'energia – biogás Sr. Albert Martínez, director Planta Biometanització La Galera.
11.30 h	Preguntes i comentaris
11.45 h	Noves oportunitat de valorització <ul style="list-style-type: none">▶ Noves perspectives sobre sistemes de gasificació i conversió bioquímica per a la Indústria agroalimentària Sr. Joan Carles Bruno, Departament d'Enginyeria Mecànica de la Universitat Rovira i Virgili.▶ Recuperació fòsfor de canya d'oliva Sra. Marlene Mendoza, Programa Sostenibilitat en biosistemes de l'IRTA.▶ Compostatge de canya d'oliva Sra. Belén Fernández, Programa Sostenibilitat en biosistemes de l'IRTA.
12.45 h	Preguntes i comentaris
13.15 h	Cloenda de la jornada

Aquesta jornada es realitza en línia. El dia abans de la jornada rebreu l'enllaç d'accés a l'aula virtual des d'on podreu seguir-la.

Organització

POTENCIAL DELS SUBPRODUCTES DEL SECTOR OLIVARER A CATALUNYA

Juan Fco. Hermoso/Agustí Romero

IRTA Mas Bové

Introducció al
projecte
Sustainolive

Belén Fernández

belen.fernandez@irta.cat

IRTA



IRTA



Producció d'energia – biogàs

Sr. Albert Martínez,
Planta Biometagás
La Galera



Jornada SUSTAINOLIVE:
Oportunitats per a la valorització de residus orgànics de la producció d'oli d'oliva



New perspectives on gasification and biochemical conversion systems for the agro-food industry



Joan Carles Bruno
Universitat Rovira i Virgili
Mechanical Engineering Department
Group of Applied Thermal Engineering (CREVER)
juancarlos.bruno@urv.cat
www.crever.urv.cat



November 24th, 2022



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Recuperació fòsfor i potassi de sansa de oliva

Marlene Mendoza

Marlene.mendoza@irta.cat

IRTA

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Compostatge de sansa de oliva

Belen Fernández

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IRTA

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CURS DE FORMACIÓ BÀSICA SOBRE COMPOSTATGE DESCENTRALITZAT DE SANSA D'OLIVA



22 D'ABRIL,
10 I 12 DE MAIG

ORGANITZA



CURS DE FORMACIÓ BÀSICA SOBRE COMPOSTATGE DESCENTRALITZAT DE SANSA D'OLIVA

Presentació

La circularitat dels sistemes agrícoles consisteix, entre d'altres aspectes, en la reincorporació dels subproductes generats a la pròpia explotació per tal de mantenir la qualitat dels sòls i també aprofitar els nutrients que contenen. La reincorporació es pot realitzar en millors condicions després de la seva transformació a partir de mètodes basats en la natura com ara és el compostatge.

Amb aquest curs es pretén capacitar personal d'explotacions agrícoles o ramaderes per a què puguin disposar d'elements per a decidir l'adopció del compostatge a nivell de la mateixa explotació. Aquesta formació es realitza en el context del projecte [Interreg Transgrowth Transgrowth](#) - liderat per la Subdirecció General d'Indústries i Qualitat Agroalimentària i Departament d'Acció Climàtica, Alimentació i Agenda Rural. L'IRTA organitza aquest curs, i proporciona la formació bàsica en els continguts relacionats amb la caracterització, transformació mitjançant compostatge i característiques del compost (Programa de Sostenibilitat en Biosistemes i Programa Fructicultura).

Les sessions es realitzaran bàsicament a Torre Marimon. Una de les activitats consistirà en la visita a dues instal·lacions de compostatge a petita i gran escala; es realitzarà de manera voluntària i cada participant emprarà els seus propis mitjans per arribar-s'hi.

Els participants, abans del curs, poden veure la ponència registrada i compartida "Compostaje del alperujo: hacia una olivicultura circular" en el context del projecte [SUSTAINOLIVE](#).

Lloc de realització

IRTA Torre Marimon, Auditori Josep Tarragó
08140- Caldes de Montbui

[LOCALITZACIÓ](#)

Inscripcions gratuïtes:

INSCRIPCIÓ

PROGRAMA

Divendres 22 d'abril. 9:30h - 13.00h

La sansa i el compostatge de sansa d'olivera: particularitats. D'altres materials de km 0 de característiques complementàries.

(9.30h - 11.30h)

Sra. Rafaela Cáceres, Sr. J.Francisco Hermoso i Sr. Victor Riau.

Torre Marimon, Caldes de Montbui

Visita a l'explotació d'oliveres Mas Curró (11.30h - 13.00h)

Más Curró, Caldes de Montbui

Dimarts 10 de maig. 8.00h - 17.00h

Visita a una planta de compostatge descentralitzat de sansa en funcionament i una planta industrial.

Sr. Esteve Martí, Sr. J.Francisco Hermoso, Sr. A. Romero i Sra. Rafaela Cáceres.

Dijous 12 de maig. 10.00h - 11.00h

Transformació dels subproductes durant el compostatge.
Característiques generals del compost a base de sansa.

Sra. Rafaela Cáceres i Sr. J.Francisco Hermoso.

Torre Marimon, Caldes de Montbui

Inscripcions gratuïtes:

INSCRIPCIÓ



Formació

Escoles Agràries

Innovació tecnològica en el cultiu de l'olivera

Les Borges Blanques, del 26 de setembre al 17 d'octubre de 2022

Presentació i objectius

L'objectiu d'aquest curs és analitzar els aspectes més importants del cultiu de l'olivera i els factors que afecten la seva rendibilitat econòmica.

Didàcticament, s'ha organitzat una combinació de classes teòriques i visites pràctiques, en les quals es tractarà de l'elecció de varietats, el disseny de plantacions, la formació i l'esporga, el reg, la fertilització i la protecció fitosanitària.

També es presentaran els requisits per a la producció sostenible d'olis de qualitat i els aspectes del maneig de plantacions convencionals, ecològiques i en sistema superintensiu.

Professorat

Sr. Joan Girona Gomis, IRTA.

Sr. Venanci Guiu Piñol, tastador i responsable del Molí dels Torms, SL.

Sr. Juan Francisco Hermoso Leon, IRTA.

Sr. Pablo Ortigueira, tècnic assessor.

Sr. Victor Sas Lamora, enginyer agrònom.

Realització

Lloc:

EA de les Borges Blanques

Calendari:

26, 27, 28 i 30 de setembre
3, 10, 14 i 17 d'octubre
de 2022

Horari:

De 16.00 a 20.00 h

Durada: 35 h

Inscripcions

Podeu inscriure-us-hi a l'**Escola Agrària
de les Borges Blanques**

Coordinador:

Sr. Miquel Vilaginés. Telèfon: 973 14 31 69
a/e mvilagines@gencat.cat

Cost del curs:

Dret d'inscripció: 54 €

Més informació: agricultura.gencat.cat



Generalitat de Catalunya
**Departament d'Acció Climàtica,
Alimentació i Agenda Rural**



Fons Europeu Agrícola
de Desenvolupament Rural:
Europa invertix en les zones rurals

**Pla Anual de
Formació Agrària**



Formació Escoles Agràries

Innovació tecnològica
en el cultiu de l'olivera

Programa

SESSIÓ 1, dl. 26 de setembre

16.00 a 20.00 h **BENVINGUDA.**
SITUACIÓ DEL SECTOR OLEÍCOLA. REQUERIMENTS CLIMÀTICS I DE SÒL DE L'OLIVERA.
NOUS MODELS D'EXPLOTACIÓ.

SESSIÓ 2, dt. 27 de setembre

16.00 a 20.00 h **MANEIG DE PLANTACIONS, FORMACIÓ I PODA .**

SESSIÓ 3, dc. 28 de setembre

16.00 a 20.00 h **CONTROL DE PLAGUES, MALALTIES I MALES HERBES EN OLIVERA. MANEIG D'OLIVERES EN PRODUCCIÓ ECOLÒGICA. OLIVERA REGENERATIVA.**

SESSIÓ 4, dv. 30 de setembre

VISITA TÈCNICA AL MOLÍ DELS TORMS. TIPOLOGIA DE PRODUCCIÓ. QUALITAT I COMERCIALITZACIÓ DE L'OLI D'OLIVA. TAST DIRIGIT D'OLI (5 H)

SESSIÓ 5, dl. 3 d'octubre

16.00 a 20.00 h **ELECCIÓ VARIETAL. DISSENY I ESTABLIMENT DE NOVES PLANTACIONS. MANEIG DEL CONREU I QUALITAT DE L'OLI.**

SESSIÓ 6, dl.10 d'octubre

VISITA DE CAMP A PLANTACIONS D'OLIVERA. OBSERVACIONS DE DISSENY DE PLANTACIONS, ESPORGA I SEGUIMENT DE PLAGUES I MALALTIES (6H)

SESSIÓ 7, dv.14 d'octubre

16.00 a 20.00 h **MANEIG DEL CULTIU DE L'OLIVERA.**

SESSIÓ 8, dv.17 d'octubre

16.00 a 20.00 h **REG I FERTILITZACIÓ EN OLIVERA.**



Formació

Escoles Agràries

Mestre d'almàssera

Vallfogona de Balaguer, de l'1 al 16 de març de 2023

Presentació i objectius

Aquest curs pretén actualitzar les qüestions claus que ha de dominar un moliner, Mestre d'almàssera, en la gestió d'un molí productor d'oli d'oliva verge extra (OOVE), tant en l'establiment de criteris i requisits de recepció de les olives en el molí, establiment de les millors condicions i processos de recol·lecció a realitzar pels productors, l'organització en lots de les diferents partides rebudes assegurant la seva traçabilitat, com en el maneig, preparació i ajustament de les diferents instal·lacions del molí d'oli per extreure tot el potencial organolèptic i qualitatius possible per elaborar un OOVE de màxima qualitat.

Professorat

Juan Francisco Hermoso León, investigador IRTA Mas Bové.

Esteva Martí, IRTA, especialista molins IRTA Mas Bové.

Pablo Ortigueira, consultor oleícola.

Tècnics de seguretat laboral, industrial i medi ambient.

Realització

Lloc:

EA Vallfogona de Balaguer

Calendari: de l'1 al 16 de març

Horari:

Dimecres 1, 8 i 15 de març,
de 10.00 a 14.00 i 15.00 a 19.00 h
Dijous 16 de març, de 9.00 a 15.00 h

Durada: 30 h

Inscripcions

Podeu inscriure-us-hi a l'**Escola Agrària de Vallfogona de Balaguer**.

Tel. 973 443 650

Coordinadora: Aida Cortés Fabregat,
a/e: aecaval.daam@gencat.cat

Cost del curs:

Dret d'inscripció: 32 €
Dinar a l'Escola: 6,30 €

Hi col·laboren



Institut
de Recerca i Tecnologia
Agroalimentàries



Més informació: agricultura.gencat.cat



Generalitat de Catalunya
Departament d'Acció Climàtica,
Alimentació i Agenda Rural

Pla Anual de
Formació Agrària

Programa

SESSIÓ 1, dc. 1 de març

10.00 a 14.00 h **SITUACIÓ ACTUAL DEL MERCAT OLEÍCOLA.**

Mercat global de l'oli d'oliva.

INFLUÈNCIA DE LA MATÈRIA PRIMERA EN LA QUALITAT.

Factors de producció, qualitat de l'oli verge extra (condicions climàtiques i de maneig de les olives en recol·lecció, efectes del reg, recol·lecció, transport, etc.).

Gestió de patis (recepció, neteja, gestió per lots de les olives, rentat i emmagatzematge dels fruits).

Professor: Juan Francisco Hermoso

15.00 a 19.00 h **INFLUÈNCIA DE LA GESTIÓ DEL MOLÍ EN LA QUALITAT.**

Operacions de preparació de la pasta: mòlta i batut.

TECNOLOGIA D'ELABORACIÓ D'OLIS VERGES EXTRA D'OLIVA

Teoria de la centrifugació.

Controls i regulacions a les operacions d'elaboració.

Emmagatzematge i conservació.

Professor: Esteva Martí

SESSIÓ 2, dc. 8 de març

10.00 a 14.00 h **CONTROL I REGULACIÓ INTEGRAL DEL PROCÉS.**

Controls d'esgotaments.

Pèrdua industrial i extractabilitat.

Tecnologies per millorar les característiques organolèptiques de la varietat arbequina.

Programa DACC-IRTA de millora dels olis catalans.

15.00 a 19.00 h **INTERPRETACIÓ D'ANALÍTIQUES.**

Controls i regulacions. Casos pràctics en les regulacions del molí.

Professors: Esteva Martí / J.F. Hermoso

HIGIENITZACIÓ I NETEJA DEL MOLÍ.

Professor: Pablo Ortigueira

SESSIÓ 3, dc. 15 de març

10.00 a 14.00 h **GESTIÓ DELS SUBPRODUCTES I DIMENSIONAMENT MOLINS.**

Aprofitament de la fulla, la sansa i la pinyola. Gestió de les aigües residuals.

Dimensionament i disseny d'almàsseres associats a les noves explotació oleícole.

TAST D'OLIS PER A MOLINERS.

Composició i qualitat de l'oli de oliva verge. Identificació de defectes.

Formació de lots simultanis en funció del tast.

Professor: Juan Francisco Hermoso

15.00 a 19.00 h **DIRECTIVA DE MÀQUINES, MESURES DE SEGURETAT I PROTECCIÓ EN L'ÚS DE DELS EQUIPS.**

Professor: a determinar.

SESSIÓ 4, dj. 16 de març

9.00 a 15.00 h **VISITES TÈCNIQUES A MOLINS D'OLI DE LA ZONA.**



Thermal treatment assessment to improve the phosphorus recovery as struvite from olive mill wastes

Mendoza M.*, Espejo L.**, Tey L.*, Viñas M.*, Fernández B.*

*IRTA Institute for Food and Agricultural Research and Technology, Torre Marimon, Road C59, km 12, E08140 Caldes de Montbui, Barcelona, Spain. **University of Barcelona, Barcelona, Spain. Email: marlene.mendoza@irta.cat; belen.fernandez@irta.cat.

Abstract: A thermal treatment at different pressures and temperatures was assessed for phosphorus solubilisation, before its recovery, contained in a mixture of olive oil mill pomace and olive oil mill wastewater. The highest increments of soluble phosphate, compared to the initial content, were 55 % at 130 °C & 10 bar (condition E), followed by 47 % at 100 °C & 2.5 bar (condition C). Under any of these treatments, the soluble content of potassium and ammonium also increased thus allowing the recovery of 88-97% of the solubilised phosphate as a precipitate from hydrolysates or liquid fractions of treated mixtures; this precipitate was predominantly struvite ($MgNH_4PO_4 \cdot 6H_2O$). Furthermore, mesophilic biomethanation tests of the remaining solid phase of the treated materials revealed an increment of methane production yield of +25% and +14% at conditions C and E, regarding the untreated mixture.

Keywords: phosphorus solubilisation, struvite, thermal treatment, olive pomace.

INTRODUCTION

A thermal treatment to improve the recovery of essential nutrients (N, P, K) required for olives production (Kolakovic, et al., 2021; Hadrami, et al., 2004), that were included in olive pomaces (OP) and olive mill wastewaters (OMWW), was developed as an improvement of the current valorisation strategy of a real olive oil cooperative that was already treating their mill wastes in a biogas plant. This work was designed as a proof of concept before implementing this strategy at field scale, to facilitate the closing of the olive oil production loop. Therefore, the main objectives of this study were (i) to improve the recovery of phosphorus as a salt from a mixture of OP and OMWW, and (ii) the production of biogas of the remaining material after the production of the phosphate salts.

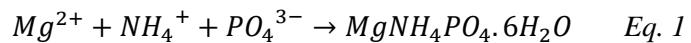
MATERIALS AND METHODS

Two mixtures (initial-1 and initial-2) of OP : OMWW (wet weight ratio 56:44 %) were prepared. The mixture initial-1 was prepared with OP and OMWW collected in 2021 October, while mixture initial-2 contained OP and OMWW collected in 2022 January. All wastes were taken in the same industrial olive oil mill (Santa Bárbara, Tarragona, Spain) and were characterized similarly (TS, VS, COD, TN, TP, TK, pH, and soluble ions as phosphate, potassium, ammonium, nitrite, nitrate).

Both mixtures were submitted to a 60 minute thermal treatment in two ranges (Figure 1 and Table 1): low range or 50 - 75 - 100 °C at 2.5 bar (treatments A, B and C, respectively); high range or 100 – 130 - 180 °C at 10 bar (treatments D, E and F, respectively). After the thermal treatment, the treated mixtures were centrifuged (8,500

rpm, 10 °C, 20 minutes) to obtain a liquid and solid phases (L and S, respectively). The subsample L was characterised by its content in soluble ions, before the phosphorus recovery test, while all S subsamples were submitted to a biochemical methane production (BMP) test at 37 °C for 34 days to determine their potential methane yield (Otero et al. 2021).

The solubilised phosphate was recovered by precipitation, adjusting the magnesium and phosphorus molar ratio (1:1 or 2:1), at ambient temperature (22°C) and constant pH 10.5 (using a 40 % NaOH solution). The trials were made in batch in two steps: first, stirring at 200 rpm for 60 minutes (reaction and nucleation); then, no stirring for 60 minutes (crystal growth and precipitates settling). The recovered phosphate as struvite was calculated based on the stoichiometric molar ratio of struvite precipitation (Eq. 1), after the experimental determination of the precipitated ions (Eq. 2). The initial and remaining content of soluble ions was determined by ion chromatography.



$$Ions_{Initial} - Ions_{remaining} = Ions_{precipitated} \quad Eq. \ 2$$

RESULTS AND DISCUSSION

The mixtures initial-1 and initial-2 had a soluble phosphate content of $1,018 \pm 54$ and 958 ± 68 mg/kg, and an initial soluble potassium content of $3,923 \pm 67$ and $3,771 \pm 81$ mg/kg, respectively. Comparing the composition of soluble ions before and after the thermal treatments, the best phosphate solubilisation was attained with conditions C (100 °C, 2.5 bar) and E (130 °C, 10 bar) (Table 1), being the soluble phosphate a 47 and 55 % higher than the initial soluble phosphate respectively. Under these C and E conditions, the content of soluble potassium also increased (a 28 and 37 % higher than the initial soluble potassium in C and E, respectively) as well as the soluble ammonium content (17 and 18 % of the initial TN in C and E, respectively).

Based on the best results of phosphorus solubilisation, the hydrolysates or L phases of materials submitted to conditions C and E were selected to phosphorous recovery. The recovery assays were named C1, E1, C2, and E2, being the subscript equivalent to the Mg:P molar ratio (1:1 or 2:1) (Figure 2). In terms of phosphorus recovery, an $88\% \pm 0$ and $97\% \pm 0$ of soluble phosphate was recovered in C1 and E2 respectively. The recovery was $90\% \pm 3$ and $90\% \pm 2$ of soluble phosphate in the precipitates in C2 and E2, respectively, but some added magnesium remained not precipitated (Figure 2A); therefore, an optimisation of the combined processes of thermal treatment and precipitation would be done in a near future.

Considering the molar ratio for the formation of struvite (Eq.1), the amount of PO_4^{3-} and Mg^{+2} that precipitated under conditions C1 and E1 might indicate that struvite crystallization was completed (Figure 2B). The quantity of struvite obtained in each condition were 1.58, 1.74, 1.57 and 1.69 g-struvite/kg of initial mixtures in C1, E1, C2 and E2, respectively. Potassium struvite (K-struvite or $MgKPO_4 \cdot 6H_2O$) could also be formed; however, ammonium ions competed and hindered the K-struvite precipitation based on the precipitation potential ($p_{K_{sp}}$) of struvite and of K-struvite ($p_{K_{sp}}$ 12.5-13.6 and 12.2, respectively) (Xu et al., 2015).

Once the precipitates were extracted, a significant concentration of phosphate, potassium and ammonium remained available in hydrolysates (85-185 mg- PO_4^{3-} /kg, 143-193 mg- NH_4^+ /kg and 3,398-4,396 mg- K^+ /kg), which can be considered as

hygienised liquid fertilisers due to the applied thermal treatment. The assessment as fertilisers of precipitates, and the remained fractions, through a phytotoxicity test are currently on-going.

Once the phosphorous was recovered, the S fraction of the treated mixture would be valorised in the biogas plant. The initial untreated mixtures had a methane yield of 219 and 316 NLCH₄/kgVS (initial 1 and initial 2). After the thermal treatment, the methane yield was higher than methane yield of the untreated mixture for S fractions from treatments A (+16 %), C (+25 %) and E (+14 %). Other treatments showed negligible or no increment of the methane yield (+1 % from B solids; -5 and -6 % from D and F solids). The solubilisation of compounds such as polyphenols (Batista et al. 2014), or their intermediate compounds due to thermal decomposition, may have inhibited the methanogenic activity for B, D and F solids. Therefore, the best methane yield was obtained under treatment C, followed by treatments A and E (Table 1).

CONCLUSIONS

The recovery of essential nutrients NPK, together with biogas production, can be key to implement a circular economy model in the agricultural olive oil sector, obtaining non-fossil fertilisers and renewable energy from its own wastes. This study showed an improvement of soluble P (the soluble phosphate increased 47 - 55 % after the treatment under the best conditions C and E), soluble K and soluble N after the thermal treatment. This solubilization, plus the adjustment of the Mg:P molar ratio to 1:1, allowed the recovered of the 88-97 % of the soluble phosphate, predominantly as struvite. Therefore, the best thermal treatment was C (100 °C and 2.5 bar) considering its lower energy demand (compared with treatment E), the high phosphate recovery and the higher methane yield increment of its corresponding solid fraction (its methane yield was +25 % higher than the untreated mixture after treatment C).

Acknowledgements

This work was financed by Sustainolive project which is part of the PRIMA program supported by the European Union. IRTA thanks the financial support of CERCA program (Generalitat de Catalunya). The authors from IRTA of this study belong to the Consolidated Research Group of Sustainability in Biosystems, funded by the AGAUR (Generalitat de Catalunya; ref. 2021 SGR 01568).

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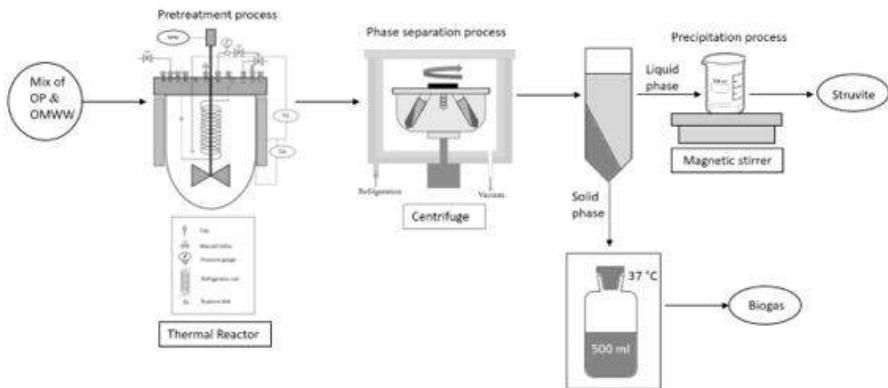


Figure 1. Phosphate recovery procedure.

Table 1. Thermal treatments: conditions and results. Notes: *Increment compared with the initial soluble content of the corresponding ion in the untreated initial mixture. **Increment of soluble ammonium, expressed as percentage of initial total nitrogen. ***Increment of the methane yield (NLCH₄/kgVS) after the biodegradation of the solid phases obtained after the treatment, compared with the methane yield of untreated initial mixture. Nomenclature: L, S, liquid, and solid fraction; ww, wet weight.

Treatment	Temp (°C)	Pressure (bar)	L/S (%ww)	Soluble PO ₄ ³⁻ inc* (% in)	Soluble K ⁺ inc* (% in)	Soluble NH ₄ ⁺ inc** (% TN)	Methane yield inc*** (% in)
A	50	2.5	52/48	+9.2	+46.3	+0.3	+16.0
B	75		52/48	+16.2	+16.0	+4.9	+0.7
C	100		55/45	+41.7	+27.7	+17.0	+25.1
D	100	10	60/40	-8.8	-10.7	+0.5	-5.1
E	130		57/43	+54.6	+37.0	+18.3	+13.5
F	180		69/31	+28.8	+30.5	+13.7	-5.7

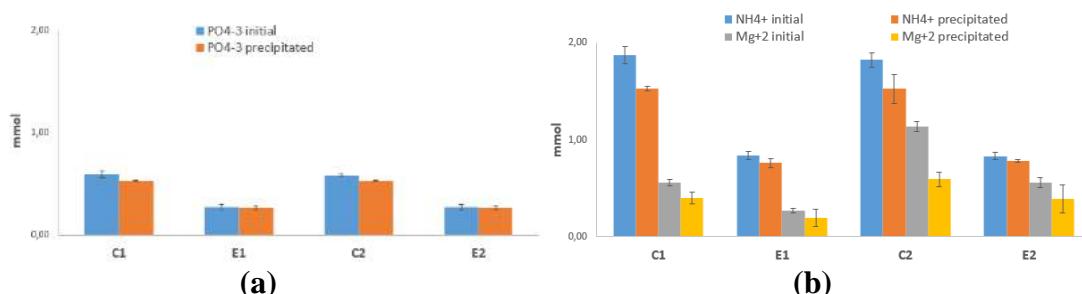


Figure 2. Precipitation of struvite. (a) Initial and precipitated mmol of phosphate. (b) Initial and precipitated mmol of ammonium and magnesium. Nomenclature: C and E, hydrolysates from treatments C and E (table 1); 1 or 2, subscript equivalent to the Mg:P molar ratio (1:1 or 2:1). Colours: blue, initial phosphate and ammonium; orange, precipitated phosphate and ammonium; grey, initial magnesium; yellow, precipitated magnesium.

ARBECA 26 DE NOVEMBRE DE 2022, SALA L'ABADIA

III SIMPOSI DE L'OLIVA ARBEQUINA

L'entorn natural i social als territoris de conreu de l'olivera arbequina, canvi climàtic i despoblament.

8:45 Acreditació i entrega de documentació.

9:00 Acte institucional d'inauguració.

9:15 Entorn social i despoblament

Nora Maristany Bosch / Autora del projecte Horizon 2020 Ruralization

Damià Sánchez Requena / La Trenca, Bovera

Dolors Català Roig / Ex Presidenta de l'Associació de Dones Rurals

Oriol Anson Fradera, Secretari d'Agenda Rural del Departament d'Acció Climàtica de la Generalitat de Catalunya

Modera: Adrià Dalmau Garsaball

10:45 Pausa Cafè

11:15 Taula Rodona: L'entorn natural i el canvi climàtic, cultiu sostenible.

Francesc Mauri Domènech / Meteoròleg

Josep Maria Alventosa Cuadrat / Apoderat i Gerent de Cuadrat Valley

Juan Francisco Hermoso Leon / IRTA

Arnau Queralt i Bassa / Director del Consell Assessor per al Desenvolupament Sostenible de Catalunya

Modera Adrià Dalmau Garsaball

13:00 Presentació de la revista comarcal Som Rurals

Albert Gonzalez Farran i Francesc Florensa Masip / Periodistes

13:15 Conferència:

El pinyol d'oliva més antic de la Plana de Lleida

Dra. Natàlia Alonso Martínez / Grup Investigació Prehistòrica, Universitat de Lleida

13:30 Acte institucional de cloenda.

14:00 Dinar de Fira.

16:45 Visita al Molí d'Oli de la Cooperativa Arbequina

Entrada gratuïta prèvia inscripció al formulari que trobareu a la pàgina web de l'Ajuntament d'Arbeca o trucant al 973160008, espai amb aforament limitat.

III SIMPOSI DE L'OLIVA ARBEQUINA

L'entorn natural i social als territoris de conreu de l'olivera arbequina, canvi climàtic i despoblament.

ARBECA 26 DE NOVEMBRE 2022



Ajuntament
d'Arbeca



Generalitat de Catalunya
Departament d'Acció Climàtica,
Alimentació i Agenda Rural



CRDOP TRANSFER ACTIONS



SUSTAIN
OLIVE



Co-funded by the
Horizon 2020 Framework
Programme of the European Union

This project is part of the PRIMA programme supported by the European Union

TRANSFER DAY THE SOIL AS A LIVING ENTITY

Organizes: CRDOP ESTEPA

Coordinator: José Carlos Sánchez Morilla / Moisés caballero Páez

Teachers:

- Concepción García Ortiz Civantos: Researcher at the Agricultural Research and Training Institute, specialist in green roofs in olive groves.

- Ricardo Sánchez: Specialist in microbiotics

Location: Arbequisur SCA (Aguadulce, Sevilla)

Date: September 21 2022

Target audience: Farmers, technicians, etc.

Number of attendees: 35

Justification:

Tools used: image projector, field practices, etc.

PROGRAM

11:00-11:15 Welcome of participants

11:15-11:30 Group dynamics to meet the participants and their motivations

11:30-12:30 Theoretical introduction to the importance of plant cover and its management.

12:30 -13:30 1º Conference “Use and utilities of compost”

13:30-15:00 2º Conference “The soil as a living entity”

Anexos:

- Participant signature sheet.

- Poster announcing the action and the transfer program

- Photographs/videos of the activity.

- All this is recorded and later posted on the website and social networks of the Regulatory Council so that those who cannot attend can view it calmly at home. The visualizations at home are amazing.





Conferencias "Usos y Utilidades del Compost" y "El Suelo como ente Vivo" 21-09-2022

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Cristina Rico		
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Conferencias "Usos y Utilidades del Compost" y "El Suelo como ente Vivo" 21-09-2022

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TRANSFER DAY THE SOIL AS A LIVING ENTITY

Organizes: CRDOP ESTEPA

Coordinator: José Carlos Sánchez Morilla / Moisés caballero Páez

Teachers:

- Roberto García Ruiz: Professor at the University of Jaén, Researcher

Location: Oleoestepa SCA (Estepa, Sevilla)

Date: October 19 2022

Target audience: Farmers, technicians, etc.

Number of attendees: 80

Justification:

The olive growers cultivate olives and produce extra virgin olive oil, but also cultivate carbon. In other words, among its attributions should be considered the transfer of carbon dioxide (CO₂) from the atmosphere to different

parts of the farm and society, in the latter case in the form of fatty acids contained in olive oil. The more CO₂ the olive grower is able to remove from the atmosphere, the greater its contribution to mitigating the serious problem of climate change.

climate. And this could turn out to be profitable for the farmers and their territory!

Tools used: image projector, field practices, etc.

PROGRAM

19:00-19:10 Welcome of participants

19:10 – 20:15 pedagogical conference

20:15-20:45 Group dynamics to meet the participants and their motivations

Anexos:

- Participant signature sheet.
- Poster announcing the action and the transfer program
- Photographs/videos of the activity.
- All this is recorded and later posted on the website and social networks of the Regulatory Council so that those who cannot attend can view it calmly at home. The visualizations at home are amazing.





Cátedra de Olivicultura **José Humanes**

DENOMINACIÓN DE ORIGEN ESTEPA
IX EDICIÓN

www.catedradosehumanes.com



EL OLIVAR: DEL CO² AL CARBONO ORGÁNICO

a cargo de ROBERTO GARCÍA, Investigador de la Universidad de Jaén
y uno de los mayores expertos en sostenibilidad en el olivar

**19 de OCTUBRE
a las 19:00 h.**

Salón de Actos de
Oleoestepa

Sobre la conferencia

Los olivareros cultivan aceitunas y producen aceite de oliva virgen extra, pero también cultiva carbono. Dicho de otro modo, entre sus atribuciones se debería considerar el traslado de dióxido de carbono (CO₂) desde la atmósfera hacia distintas partes de la finca y de la sociedad, en este último caso en forma de ácidos grases contenidos en el aceite de oliva. Cuanto más CO₂ sea capaz de retener el olivarero de la atmósfera, mayor será su contribución a mitigar el grave problema del cambio climático. ¡Y esto podría llegar a ser rentable para los agricultores y su territorio!



TRANSFER DAY EXTRA VIRGIN OLIVE OIL TASTING CONFERENCE

Organizes: CRDOP ESTEPA

Coordinator: José Carlos Sánchez Morilla / Moisés caballero Páez

Teachers:

- Moisés Caballero Páez: Expert in tasting Doctor Disseminator in aove
- Emilio Camacho Poyato: Professor at the University of Cordoba. Hydraulics Specialist.

Location: Olivarera Pontanense SCA (Puente Genil, Córdoba)

Date: June 1 2022

Target audience: Consumers, Farmers, technicians, etc.

Number of attendees: 60

Justification:

The issue of water, its uses, and its reuse is key to the future of agriculture, especially for olive growing and specifically for a territory of Andalusia that is seriously affected by the issue of Climate Change. Responding and debating around this very important question is one of the tasks that we set ourselves within the project. Irrigation using reclaimed water, essential due to the water deficit in the Andalusian basins, aggravated by climate change, which forces

resorting to these new sources of water for crops of great value such as the olive grove, are topics that were exposed at the conference.

Conference offered by one of the main irrigation researchers in the olive grove, Emilio Camacho, who is also Director of the Department of Agronomy, Unit of Excellence María de Maeztu (DAUCO) and Scientific Director of the DAUCO unit,

ETSIAM. University of Cordoba.

Tools used: image projector, field practices, etc.

PROGRAM

19:00-19:10 Welcome of participants

19:10 – 20:15 pedagogical conference

20:15-20:45 Group dynamics to meet the participants and their motivations

Anexos:

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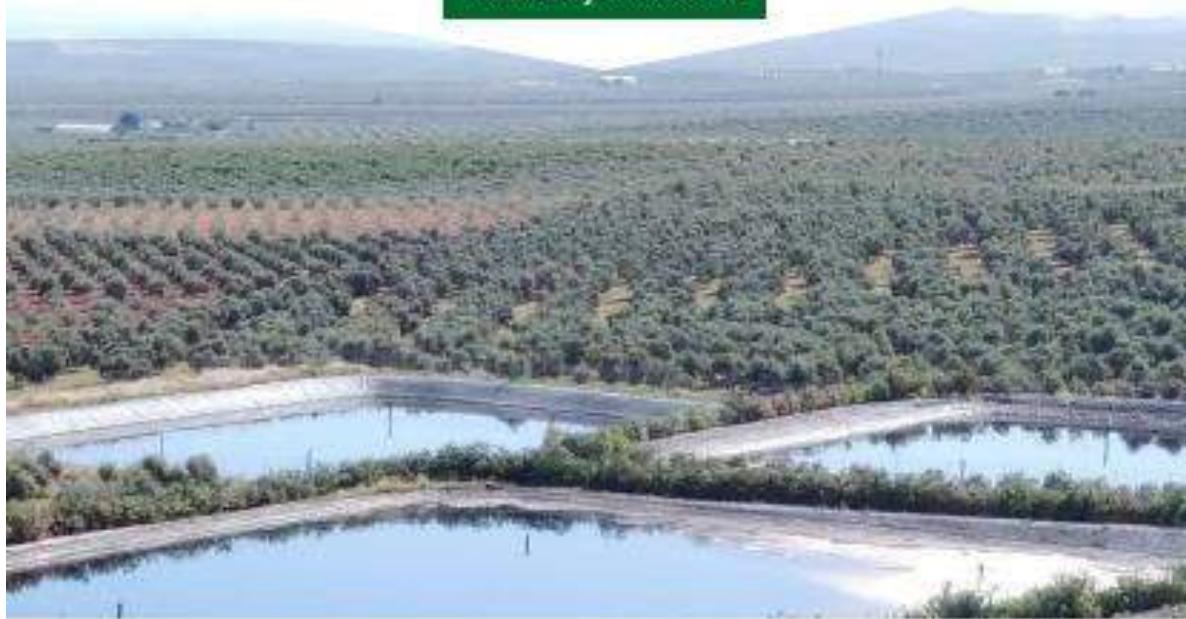


Cátedra de Olivicultura
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RIEGO DE OLIVAR CON AGUAS REGENERADAS

a cargo de Emilio Camacho Poyato, Catedrático de Ingeniería Hidráulica
y uno de los mayores expertos del mundo en riego del olivar

**1 de JUNIO
a las 19:00 h.**

Salón de Actos de la
Olivarera Pontanense

Sobre la conferencia

Tratará el riego empleando las aguas regeneradas, fundamentales debido al déficit hídrico de las cuencas andaluzas, agravado por el cambio climático, que obliga a recurrir a estas nuevas fuentes de agua para cultivos de gran valor como el olivar. Ofrecerá la conferencia uno de los principales investigadores de riego en el olivar, Emilio Camacho, que además es Director del Departamento de Agronomía, Unidad de Excelencia María de Maeztu (DAUKE) y Director Científico unidad DAUCO, ETSIAM, Universidad de Córdoba.



SUSTAIN
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TRANSFER DAY EXTRA VIRGIN OLIVE OIL TASTING CONFERENCE

Organizes: CRDOP ESTEPA

Coordinator: José Carlos Sánchez Morilla / Moisés Caballero Páez

Teachers:

- Moisés Caballero Páez: Expert in tasting Doctor Disseminator in aove

-

- .

Location: Olivarera de Pedrera SCA (Pedrera, Sevilla)

Date: March 18 2022

Target audience: Consumers, Farmers, technicians, etc.

Number of attendees: 60

Justification:

This is a very practical conference in which agronomists and tax experts from the ASAJA Sevilla Agrarian Union commented to farmers on the new realities that the PAC and the labor policies of the Government of Spain itself are going to impose on said sector.

The problems of roofing, the use of phytosanitary products, prevention of occupational hazards, etc. were topics discussed at these conferences that had a lot of participation among the attending public.

In addition to these important topics, other very important issues related to the hiring of personnel in the farms, considerations, etc. were discussed.

This also led to the issue of generational change in the field and the problems that this situation is generating.

Tools used: image projector, field practices, etc.

PROGRAM

19:00-19:10 Welcome of participants

19:10 – 20:15 pedagogical conference

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LOS EFECTOS DE LA REFORMA LABORAL Y DE LA PAC EN EL SECTOR AGARIO

Conoce la repercusión de la nueva reforma laboral y de la próxima reforma de la PAC en el sector agrario, especialmente sus efectos en el sector del olivar.

**19 de MAYO
a las 19:00 h.**

Salón de Actos de la
Olivarera de Pedrera

Sobre las conferencias

En el encuentro se tratarán "La nueva Reforma Laboral y sus repercusiones para el sector agrario", a cargo de Mercedes Adulid Luca de Tena, del Departamento Jurídico Laboral de ASAJA-Sevilla, y el "Estado actual y situación de la Reforma de la PAC con especial incidencia para el sector del olivar", a cargo de Antonio Caro-Calvo, Coordinador de los Servicios Técnicos de ASAJA-Sevilla.



Este proyecto es parte del PRIMA Programme, apoyado por la Unión Europea.

CEPAAL, UEVORA AND ESP TRANSFER ACTIONS



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Co-funded by the
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Programme of the European Union

This project is part of the PRIMA programme supported by the European Union

Conference on Demonstration and Discussion of SUSTAINOLIVE Results - "MAIN CHALLENGES FOR THE SUSTAINABILITY OF PORTUGUESE OLIVE CULTURE IN 2023"

Sustainolive Project

Event: MAIN CHALLENGES FOR THE SUSTAINABILITY OF PORTUGUESE OLIVE CULTURE IN 2023

Organization: CEPAAL, MED – UEvora, Esporão

Presentation by: José Muñoz Rojas, Sérgio Prats, José Herrera, Ana Gaspar, Gonçalo Moraes Tristão

Place: National Agriculture Fair, Santarém, Portugal

Date: June 6th, 2023

Target Audience: Producers, farmers, students, teachers, economic agents of Alentejo, managers, associations, politicians, representatives of the industrial sector and civil society.

Number of participants:

- Face-to-face: 50

Summary of the action:

On the 6th of June, the Portuguese partners promoted the Session to Discuss the Results of the Sustainolive Project, entitled "Main challenges for the Sustainability of Portuguese Olive Culture in 2023 – Measuring and monitoring sustainability in olive groves: why, how, where, when and for what?", which took place at the National Agricultural Fair.

This results discussion session had the main objective of discussing and disseminating the results of the 4 years of this project and addressed topics such as, "Measuring Sustainability in Olival: Indicators, limitations and opportunities for its implementation", "Functionality, nutrition and footprint of C in the protection of soils in olive groves", "Integrated fight against pests and diseases in olive groves in a context of climate change", "Olive Oil Production - Sustainability and by-products of the mill" and "Life cycle and socio-ecological metabolism", ended with a Round Table dedicated to "Limitations, opportunities and future scenarios to implement more sustainable management practices for the Alentejo olive grove".

Including the following input from SUSTAINOLIVE researchers:

B.1. Muñoz-Rojas, J. (MED) Measuring the sustainability of the olive grove. Opportunities, and limitations for its implementation.

B2. Prats, S. (MED) Functionality, nutrition, and C footprint in the protection of olive grove soils.

B.3. Herrera, J.M. (UCA & MED) Integrated fight against olive pests and diseases in a CC context.

B4. Gaspar, A. (ESPORÃO) Oil production, sustainability, and by-products of the winery.

B.5. From Luca. A (UNIC) & P. Domusso (UPO). Life cycle and socio-ecological metabolism.

B.6. Tristão, G. (CEPAL) Muñoz-Rojas, J. (MED). Catita, D. (EDIA) Gaspar, A. (ESPORÃO) Prats, S (MED) Calado, J. (DRAPAL). Limitations, opportunities, and future scenarios to implement more sustainable practices in the Alentejo olive grove.

Program/Speakers:

6 | JUNHO | 2023 ESTÚDIO - CNEMA (CENTRO NACIONAL DE EXPOSIÇÕES E MERCADOS AGRÍCOLAS, SANTARÉM) | 59º FEIRA NACIONAL DE AGRICULTURA

SESSÃO DE DISCUSSÃO DE RESULTADOS PROJECTO SUSTAINOLIVE

PRINCIPAIS DESAFIOS PARA A SUSTENTABILIDADE DA OLIVICULTURA PORTUGUESA

MEDIR E MONITORIZAR A SUSTENTABILIDADE NOS OLIVAIOS: PORQUÊ, COMO, ONDE E PARA QUÊ?

LOTAÇÃO LIMITADA

10H00 SESSÃO DE ABERTURA | JOSÉ MUÑOZ-ROJAS (MED-UEVORA) | NUNO RUSSO (VEREADOR DA CÂMARA MUNICIPAL DE SANTARÉM)

JOSÉ MUÑOZ-ROJAS (MED-UEVORA)

SÉRGIO PRATS (MED-UEVORA)

JOSÉ HERRERA (UNIVERSIDADE DE CÁDIZ)

ANA GASPAR (ESPORÃO)

ANA DE LUCA (UNIVERSITÀ DI REGGIO CALABRIA (ITALIA))

10H10 MEDIR A SUSTENTABILIDADE NO OLIVAL: INDICADORES, LIMITAÇÕES E OPORTUNIDADES PARA SUA IMPLEMENTAÇÃO.

10H30 FUNCIONALIDADE, NUTRIÇÃO E PEGADA DE CARBONO NA PROTEÇÃO DOS SOLOS NO OLIVAL.

10H50 LUTA INTEGRADA CONTRA PRAGAS E DOENÇAS NO OLIVAL NUM CONTEXTO DE ALTERAÇÕES CLIMÁTICAS.

11H10 PRODUÇÃO DE AZEITE – SUSTENTABILIDADE E SUBPRODUTOS DO LAGAR

11H30 CICLO DE VIDA E METABOLISMO SÓCIO-ECOLÓGICO ETRABALHO DESENVOLVIDO POR ANNA DE LUCA APRESENTADO POR JOSÉ MUÑOZ-ROJAS

GONÇALO TRISTÃO (CEPAL) MODERADOR

DAVID CATITA (EDIA)

ANA GASPAR (ESPORÃO)

SÉRGIO PRATS (MED-UEVORA)

JOSÉ MUÑOZ-ROJAS (MED-UEVORA)

JOSÉ CALADO (DIRECTOR REGIONAL DE AGRICULTURA E PESCAS DO ALENTEJO)

11H50 MESA REDONDA: LIMITAÇÕES, OPORTUNIDADES E CENÁRIOS DE FUTURO PARA IMPLEMENTAR PRÁTICAS DE GESTÃO MAIS SUSTENTÁVEIS PARA O OLIVAL ALENTEJANO.

13H00 CONCLUSÕES FINAIS. SESSÃO DE ENCERRAMENTO.

MED

CEPAL

ESPORÃO

SUSTAIN OLIVE

PRIMA

Photos:



Demonstration actions and discussion of results at the National Olive Oil Congress

Sustainolive Project

Event: National Olive Oil Congress

Organization: CEPAAL

Presentation by: José Muñoz Rojas and Roberto García Ruiz

Place: Moura, Portugal

Date: May 5th, 2023

Target Audience: Producers, farmers, students, teachers, economic agents of Alentejo, managers, associations, politicians, representatives of the industrial sector and civil society.

Number of participants:

- Face-to-face: 160

Summary of the action:

The 6th edition of the National Olive Oil Congress, organized by the Center for Studies and Promotion of Azeite do Alentejo (CEPAAL), in partnership with the Municipality of Moura, took place in Moura, on the 5th of May, within the scope of the Feira Nacional de Olive growing – Olivomoura.

The National Olive Oil Congress is an initiative that aims to boost the National Olive sector as a forum of excellence for dialogue, promoting a meeting point for professionals in the sector, a stage for discussions and sharing of information on topics related to the sector. olive and olive cultivation, privileging the dissemination of information of a mainly technical nature.

The works, as in previous editions, were divided into three Panels with specific themes: "Portuguese Olive Groves and Society (Sociological and Media Impact)", "Sustainability", and "By-products of the Olive Sector - What Alternative Solutions?" and had the most prestigious national and international speakers, who were part of a program of excellence.

In the context of this event, two oral presentations were made by members and collaborators of SUSTAINOLIVE:

C.1. Muñoz-Rojas et al (MED). Current situation in the sustainability of the olive grove and oil sector in PT. Current situation and future prospects.

C.2. García Ruiz, R., al (UJA). C balances in the olive grove.

Program/Speakers:

**5 MAIO
2023**

congresso **Nacional** do azeite

CINE-TEATRO
CARIDADE,
MOURA

08H30 - CHECK IN

09H30 - SESSÃO DE ABERTURA

- Presidente da Direção do Centro de Estudos e Promoção do Azeite do Alentejo - Gonçalo Morais Tristão
- Presidente da Comissão de Agricultura e Pescas da Assembleia Republica - Pedro do Carmo
- Presidente do CAP - Eduardo Oliveira e Sousa

10H00 - 1º PAINEL - OLIVAL PORTUGUÊS

E A SOCIEDADE [IMPACTO SOCIOLOGICO E MEDIÁTICO]

Mesa redonda

Intervenientes:

- Pedro Reis - Instituto Nacional de Investigação Agrária e Veterinária, I.P.
- Teresa Andressen - Arquiteta Paisagista
- Fernando Oliveira Baptista - Instituto Superior de Agronomia
- Francisco Malta Flores - Escritor

Moderador:

- José Velez - Diretor Regional Adjunto de Agricultura e Pescas do Alentejo

11h00 - COFFEE BREAK

Comissão de honra

Presidente da Câmara Municipal de Moura - Álvaro Azedo | Diretor Regional Agricultura e Pescas do Alentejo - José Godinho Calado | Presidente da Comissão de Agricultura e Pescas da Assembleia Republica - Pedro do Carmo | Presidente da CAP - Eduardo Oliveira e Sousa | Primeiro-Ministro - António Costa

11h30 - 2ºPAINEL - SUSTENTABILIDADE

Oradores:

- José Muñoz-Rojas - MED - Universidade de Évora
- Roberto García Ruiz - Instituto Universitário de Pesquisa do Olival e Azeite, Universidade Jaén
- Gonçalo Moreira - Programa de Sustentabilidade do Azeite do Alentejo - Olivum

Moderador:

- Henrique Herculano - Representante da Casa Relvas na Direção do CEPAL

Comentadores:

- Rui Flores - Esporão
- Maria Teresa Goulão - Especialista em Sustentabilidade e Economia Circular
- Francisco Campello - AGRO.GES
- João Barroso - Programa de Sustentabilidade dos Vinhos do Alentejo/ Comissão Vitivinícola Regional Alentejana (CVRA)
- José Alberto Pereira - CIMO/SustEC - Instituto Politécnico de Bragança

13H00 - ALMOÇO

15H00 - 3ºPAINEL - SUBPRODUTOS DO SETOR OLIVÍCOLA, QUE SOLUÇÕES ALTERNATIVAS?

Oradores:

- David Catta - Unidade de Recirculação de Subprodutos do Alqueva (URSA) EDIA
- João Claro - Tecnologia BIOCOMBUS, Universidade de Trás-os-Montes e Alto Douro
- Tânia Marques - Laboratório Colaborativo Montanhas de Investigação - MORE
- Gonçalo da Cunha Ferreira - Entogreen
- João Diogo - Casa Alta
- Ana Cristina Carvalho - Agência Portuguesa do Ambiente

Moderador:

- Pedro Santos - Consulair

17H00 - SESSÃO DE ENCERRAMENTO

- Presidente da Câmara Municipal de Moura - Álvaro Azedo
- Diretor Regional de Agricultura e Pescas do Alentejo - José Godinho Calado

Percuso:



Photos:





ESPORÃO



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Field Visit and Demonstration of Sustainable Composting and Soil Management Practices over the Project Meeting in Évora (Portugal, 25th October 2022)

Sustainolive Project

Event: Annual Meeting of SUSTAINOLIVE in Évora (23-25 October 2022)

Organization: MED-Universidade de Évora + Esporão

Field demonstrations by: Ana Gaspar and Ana Carrilho (Esporão), José Munoz-Rojas, Sergio Prats, Antonio Rodríguez Sousa & Clarisse Brígido (MED-UEVORA).

Place: Various locations across the District of Évora, Portugal

Date: October 25th, 2022

Target Audience: Producers, farmers, managers, associations, politicians, representatives of the industrial sector and civil society, academics and partners of the project SUSTAINOLIVE for the 6 countries and 22 institutions involved.

Number of participants:

- Face-to-face: 45

Summary of the action:

As part of the 3rd annual meeting of the SUSTAINOLIVE consortium a field demonstration visit was organized in agreement with 2 of the farmers that actively collaborate with the project:

Herdade de Esporão (Reguengos de Monsaraz, Portugal)

Herdade da Correia (Montoito, Portugal)

During this field demonstration visit the following aspects of our empirical work in Portugal was presented and discussed with farmers, partners and the experts from the public and private sector:

A) Esporão (organic production); mill, and experiments with composting, control and monitoring of soil erosion, C and nutrients.

B) Visit to experimental plots in modern super-intensive olive groves (H. Correia). Impacts of olive grove expansion and intensification at scales from plot to landscape.

Along with a lively discussion of the options and alternatives for sustainable practices that were encouraged amongst all participants, a film was undertaken with a drone, to illustrate the effects of diverse models of olive grove management at the landscape scale. Some examples of images undertaken in this experience are presented in the following pages.

AIAB TRANSFER ACTIONS



SUSTAIN
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Programme of the European Union

This project is part of the PRIMA programme supported by the European Union

L'OLIVO QUERCETANO INCONTRA SUSTAINOLIVE

Proprio sotto olivi maestosi della varietà Quercetano si è svolto l'incontro del 15 settembre, a Seravezza, loc. Pozzi (LU), organizzato da AIAB nell'ambito del progetto Sustainolive, come attività del WorkPackage 7 (eventi di diffusione, comunicazione).

La Comunità dell'Olivo Quercetano, istituita ufficialmente nel 2005, raggruppa piccoli produttori olivicoli che hanno concentrato i loro sforzi nel recupero e nella valorizzazione di una varietà di olivo da secoli presente sul territorio versiliese e caratterizzante il suo paesaggio.

L'Olivo Quercetano rischiava l'abbandono, tra edilizia, frazionamenti delle proprietà terriere, e scarsa attitudine alla radicazione della pianta per talea, aspetto, quest'ultimo, che ne favoriva la sostituzione in favore di altre varietà.

Tra i pregi di questa varietà vi è la resistenza alla mosca (*Bactrocera oleae*, il fitofago chiavo dell'olivicoltura), in virtù della piccola dimensione delle drupe e della maturazione tardiva. Questa caratteristica ne rende molto facile la gestione del tutto ecosostenibile, che è quella adottata da tutti loro "Non potremmo neanche fare diversamente, considerando che gli olivi sono tutti coltivati vicino alle abitazioni" specifica Cristina Pellizzari della Comunità.

Il prof. Nelson Marmiroli ha espresso, con valide argomentazioni scientifiche frutto di molti anni di studi ed esperienze la sua posizione verso un'agricoltura e anche un'olivicoltura sostenibile, quella che anche Sustainolive promuove nei diversi Paesi coinvolti. Il professore ha parlato, tra le altre tematiche che il progetto intende implementare, di suolo, di comunità microbica e del Biochar, materiale ancora poco conosciuto ma dalle grandi potenzialità nel sequestro del carbonio e nella rivitalizzazione dei terreni.

Preoccupano, e sono stati oggetto di domande e dibattito, le tendenze in alcune aree al rendere intensiva l'olivicoltura, con impianti fitti e irrigazione.

Sara Petrucci di AIAB ha poi descritto in breve quali sono le possibilità di difesa fitosanitaria nel biologico e ha citato la possibilità, data dal nuovo Regolamento europeo sul biologico, della certificazione di gruppo, adatta ai piccoli produttori.

Ma che cosa caratterizza l'olio che si ottiene dall'Olivo Quercetano? È un olio monovarietale dal sapore delicato, e dalle note profumate di erba e rosmarino.

L'incontro si è concluso con una visita alle piante di Olivo Quercetano.

A questo link la locandina dell'evento



A SERAVEZZA I MASSIMI ESPERTI DELL'OLIVO QUERCETANO, ECCELLENZA NAZIONALE

"Lo scopo di questa giornata è stato da una parte divulgare il progetto Sustainolive, ma anche portare come esempio pratico l'esperienza dell'Olivo Quercetano, che è stato in grado di valorizzare al meglio una varietà di olivo che stava per scomparire. Un modello che può essere replicato anche in altre zone d'Italia. Nel nostro Paese abbiamo una grande biodiversità e l'Olivo Quercetano dimostra come si possa valorizzare questa ricchezza".

Con queste parole Sara Petrucci di AIAB (Associazione Italiana Agricoltura Biologica) ha aperto oggi pomeriggio l'evento "L'olivo quercetano incontra Sustainolive – Le potenzialità dell'agricoltura biologica in oliveto" che si è tenuto a Seravezza (LU). Sono intervenuti anche Nelson Marmiroli, dell'Università degli Studi di Parma, per Sustainolive e Cristina Pellizzari per l'Olivo Quercetano.

L'Olivo Quercetano è una comunità nata in Versilia da 30 produttori di olio extravergine di oliva che ha lo scopo di valorizzare, proteggere e diffondere la conoscenza dell'olivo quercetano e dell'olio al maggior numero possibile di consumatori e cultori dei prodotti locali e tradizionali. Tutti i produttori utilizzano metodi di coltivazione ecosostenibile ed è anche un Presidio Slow Food.

"L'incontro – ha aggiunto Petrucci – è stato anche l'occasione per parlare dei vantaggi delle coltivazioni biologiche, della sostenibilità ambientale e anche, tema spesso molto caro ai produttori, delle possibilità di difesa fitosanitaria nel biologico".







**SUSTAIN
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Sustainolive

I campionamenti negli uliveti delle due aziende toscane

Il progetto europeo Sustainolive (<https://sustainolive.eu/?lang=it>) entra nel vivo delle attività pratiche, relativamente alle aree pilota della Toscana, Calabria e Liguria, con i primi campionamenti negli uliveti nelle aziende agricole coinvolte da AIAB.

L'obiettivo dei campionamenti, nel progetto, è quello di rilevare le differenze, in termini di valori numerici e su specifici parametri, tra le aziende olivicole sostenibili e quelle convenzionali.

Campionamenti in Toscana

Le visite si sono svolte nelle giornate di mercoledì 8 e giovedì 9 settembre, con la presenza della Professoressa Elena Maestri dell'Università di Parma, due assegnisti di ricerca e AIAB, partner del progetto e tramite con le due aziende.

L'azienda definita come "convenzionale" per la Toscana è il Podere Chiostrino, situata a Barberino Tavarnelle (FI), di Alessandro Parigi. L'azienda produce vino Chianti DOC e olio extra vergine di oliva con metodo convenzionale, pur se a basso impatto ambientale.

Gli olivi sono per la maggior parte della cv Frantoio (50%), e per il resto Moraiolo (20%), Leccino (25%) e Pendolino (5%). L'uliveto è in leggera pendenza, su terreno argilloso che viene regolarmente lavorato. Al momento della visita, infatti appare nudo e smosso, con poca erba spontanea ricresciuta.

Ogni anno le piante vengono potate leggermente e i residui di potatura vengono incorporati al suolo. Raramente vengono praticate altre concimazioni.

L'azienda sostenibile si trova a Castellina in Chianti (SI), località Pomona, si chiama Podere Pomona ed è condotta da Monica Raspi. L'azienda produce vino Chianti DOC e olio extra vergine di oliva.

Qui le cv di olivo sono all'80% Frantoio, 15% Moraiolo e 5% Leccino, l'uliveto è in leggera pendenza ed è lasciato naturalmente inerbito, benché al momento della visita l'inerbimento sia apparso decisamente secco a causa della siccità.

I campionamenti

Nelle due aziende sono stati eseguiti i seguenti campionamenti e analisi mediante specifici strumenti:

Foglie

- Analisi clorofilla, mediante sensori ad infrarossi, su 5 foglie per pianta, senza prelievo;

- Apertura degli stomi mediante un porometro, su 5 foglie per pianta per 3 piante di cv diverse
- Prelevati campioni di 50 foglie/albero per successive analisi di laboratorio (contenuto enzimatico e altre analisi molecolari)

Suolo

In tre diversi punti di ciascun oliveto sono stati fatti i seguenti prelievi:

- Campione di suolo “non disturbato”, ovvero estratto tale e quale, senza smuoverlo, mediante un apposito cilindretto metallico, dallo strato superficiale;
- Campione di suolo “non disturbato”, come sopra, ma a 30 cm di profondità
- Campione di suolo disturbato, ovvero prelevato smuovendolo.

I campioni sono stati pesati per avere il dato del peso fresco, determinante per il calcolo della densità. In laboratorio verranno svolte poi le analisi specifiche.

Volume alberi

Per 3 olivi di ciascuna delle varietà presenti sono stati misurati:

- Circonferenza tronco alla base e in cima (un valore per ciascun tronco nel caso di alberi a tronchi multipli)
- Circonferenza delle branche primarie
- Altezza di ciascun tronco
- Altezza delle branche primarie

Cover crops

Nella sola azienda sostenibile, dove è presente l'inerbimento spontaneo, è stata realizzata anche l'analisi delle “cover crops”.

In 3 punti dell'uliveto sono stati tracciati rettangoli 50 x 50 cm e dal loro interno è stata tagliata tutta l'erba presente (solo la parte aerea). In laboratorio saranno eseguite analisi del contenuto del carbonio e di altri nutrienti.

OLIVICOLTURA TRA POLLI E ASPARAGI. SE NE PARLA IL PROSSIMO 21 APRILE.

Aumentare produttività e reddito in olivicoltura tramite consociazioni. Se ne parla il prossimo 21 aprile alle 18:00, insieme ad Adolfo Rosati, del Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA) - Spoleto, in un incontro organizzato da AIAB, nell'ambito di Sustain Olive e PRIMA

Questo tipo di consociazioni possono diventare un'interessante risorsa per l'olivicoltura quella dell'utilizzo dell'oliveto per altre colture aggiuntive. Un esempio arriva da Spoleto, dove la locale sezione del CRA OLI (Centro di Ricerca per l'Olivicoltura e l'Industria olearia) ha inserito in un oliveto sia un allevamento di polli rustici, sia la coltivazione dell'asparago selvatico. L'esperimento, coordinato dal Parco tecnologico agroalimentare dell'Umbria e in collaborazione con Università di Perugia, ha visto coinvolte un'azienda di trasformazione agroalimentare e un'impresa agricola.

I risultati di questa sinergica consociazione hanno consentito di trasformare in risorsa i problemi di ogni singola coltura, così da garantire all'impresa agricola un maggior reddito e minori costi. Il pollo, infatti, produce pollina (letame) e la distribuisce nell'oliveto, dove non serve più concimazione, riducendo sia l'impatto ambientale che il costo della gestione agronomica. L'olivo ripara i polli (dal sole, dal vento e dai predatori) i quali a loro volta diserzano il terreno, cibandosi di erbe e di insetti. In pratica alcuni dei principali problemi che si riscontrano nella coltura dell'olivo – erbe infestanti e parassiti – diventano risorse per l'animale allevato, mentre il più impattante problema dell'allevamento – la concentrazione di pollina – diventa a sua volta risorsa per l'oliveto. Si produce di più nello stesso areale, si abbattono i costi, si produce migliore qualità, come nel caso del pollo allevato all'aperto. Si evitano il diserbo e la concimazione, con vantaggi economici e ambientali: niente inquinamento diretto né consumo di carburanti e mezzi. L'attività motoria degli animali consente di ottenere carni più magre, ricche in ferro e di maggiore consistenza.

L'asparago, dal canto suo, è una coltura rifiutata dal pollo, cresce in maniera ideale favorito dalle ottime condizioni che si creano all'ombra dell'olivo, e diventa anch'esso ulteriore fonte di reddito collocandosi in quel mercato di nicchia costituito da prodotti selvatici.

Partecipazione libera e gratuita. Per partecipare ed iscriversi iscrizione: <https://cefab.aiab.it/i-webinar-di-aiab/>

A questo link la locandina del seminario

seminario on-line



incontro per i produttori biologici, operatori, consumatori e tecnici

Aumentare produttività e reddito in olivicoltura tramite consociazioni

Il caco olivo, asparago selvatico e pollo rustico ed altre esperienze

Mercoledì 21 aprile, h 18:00-19:30

Relatore: Dott. Adolfo Rosati, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA) – Spoleto.



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partecipazione libera e gratuita, iscrizione obbligatoria su
<https://cetab.aiab.it/i-webinar-di-aiab/>







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PER TE E PER L'AMBIENTE
SOSTIENI LA RICERCA
PER L'AGRICOLTURA BIOLOGICA**













UNAPROL TRANSFER ACTIONS



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CORSO BASE DI POTATURA



POTATURA DELL'OLIVO A VASO POLICONICO

SEMINARI TEORICO/PRATICI TENUTI DAL DOTT. MASSIMO GRISCIOLI

5-6 MARZO 2021

STABILIMENTO PRODUTTIVO FRANTOIO

OP LATIUM TUSCANIA

VIA TARQUINIA - TUSCANIA VT

Programma

Venerdì 5 Marzo

ore 15:00 ritrovo ed accredito
ore 15:30 inizio lezione Teorica
ore 17:30 pausa
ore 19:30 fine lezione Teorica

Sabato 6 Marzo

ore 09:00 ritrovo dei partecipanti
ore 10:00 dimostrazione pratica
ore 11:00 inizio pratica guidata
ore 13:00 fine lezione Pratica
Consegna Attestati di Partecipazione

Informazioni e prenotazioni: e-mail: corsi@oplatium.it

Tel.: 347 850 7171 / 339 747 1589

N.B.: tutti i partecipanti per le prove pratiche, dovranno presentarsi muniti dei propri dispositivi di sicurezza individuale (quali: cappello con visiera, occhiali, guanti, etc.) e dell'attrezzatura idonea alla potatura manuale da terra (quali: segacce elettroniche, forbici, fornaci elettronibili, stendardi, etc.).

Nel rispetto della normativa vigente in merito di misure di contenimento del Covid19

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Timac AGRO
Italia



**SUSTAIN
& LIVE**

PRIMA
IN THE MEDITERRANEAN AREA



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Webinar **Impiego di DSS per la lotta sostenibile ai parassiti dell'olivo**

Lunedì 29 Marzo 2021 – ore 10:30

L'incontro ha l'obiettivo di illustrare come l'utilizzo di una piattaforma DSS innovativa quale Oliveto 4.0 possa contribuire alla sostenibilità delle produzioni olivicole.

Un sistema di supporto alle decisioni (DSS) è un software che, vagliando ed elaborando grandi quantità di dati, fornisce infatti informazioni utili al processo decisionale, aiutando quindi l'olivicoltore a prendere decisioni gestionali più mirate e quindi più corrette.

I principali vantaggi che può offrire l'impiego di questo tipo di strumento sono:

- ottenere supporti decisionali chiari, affidabili e tempestivi
- accrescere la consapevolezza sui processi che regolano l'ecosistema del campo
- aumentare la qualità delle decisioni per la gestione del campo
- valorizzare i mezzi tecnici a disposizione
- ottimizzare l'uso dei fattori di produzione
- ridurre i costi di produzione
- stabilizzare e aumentare nel corso degli anni le rese quanti-qualitative
- incrementare il valore di mercato della materia prima
- conformarsi ai principi della Direttiva 2009/128/CE e della Produzione Integrata
- ridurre l'impatto ambientale

L'evento, in programma sul canale formativo online di Unaprol è rivolto ai tecnici delle OP associate



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PRIMA
IN THE MEDITERRANEAN AREA



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Corso teorico pratico sulla **Gestione razionale della chioma dell'Olivo** *in collaborazione con OP LATIUM*

16-17-18 Aprile 2021
Sala Giardini Santa Croce – Tuscania (VT)

Venerdì 16 Aprile

ore 15:30 ritrovo ed accredito
ore 15:30 inizio lezione teorica
ore 17:30 intermezzo dedicato alle caratteristiche dei nuovi prodotti per la fertilizzazione dell'oliveto.
ore 19:30 fine lezione teorica.

Sabato 17 Aprile

ore 09:00 ritrovo partecipanti
ore 10:00 dimostrazione pratica
ore 11:00 inizio pratica guidata
ore 13:30 Light Lunch
ore 15:30 Il Prof. Ruggero Petacchi Scuola Sant'Anna di Pisa, Istituto Scienze della Vita esporrà i recenti studi sulla avversità Cecidomia (Dasineura oleae).

Domenica 18 Aprile

ore 09:00 ritrovo partecipanti
ore 09:00 inizio pratica guidata
ore 13:00 fine pratica guidata
Consegna degli Attestati

Le attività si svolgeranno nel rispetto della normativa vigente in merito di misure di contenimento del Covid19

Informazioni e prenotazioni: 339 747 1589

N.B.: tutti i partecipanti per la prova pratica, dovranno presentarsi muniti dei propri dispositivi di sicurezza individuale (quali: cappello con visiera, occhiali, guanti, etc.) e dell'attrezzatura idonea alla potatura manuale da terra (quali: segaccio estensibile, forbici, forbici estensibili, svettatori etc.)



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CORSO BASE DI POTATURA



POTATURA DELL'OLIVO A VASO POLICONICO

SEMINARI TEORICO/PRATICI TENUTI DAL DOTT. MASSIMO GRISCIOLI

25-26 FEBBRAIO 2022

STABILIMENTO PRODUTTIVO FRANTOIO
OP LATIUM TUSCANIA
VIA TARQUINIA – TUSCANIA VT

Programma

Venerdì 25 Febbraio

ore 15:00 ritrovo ed accredito
ore 15:30 inizio lezione Teorica
ore 17:30 pausa
ore 19:30 fine lezione Teorica

Sabato 26 Febbraio

ore 09:00 ritrovo dei partecipanti
ore 10:00 dimostrazione pratica
ore 11:00 inizio pratica guidata
ore 13:00 fine lezione Pratica
Consegna Attestati di Partecipazione

Informazioni e prenotazioni: e-mail: corsi@oplatium.it

Tel.: 347 850 7171 / 339 747 1589

N.B. tutti i partecipanti per la prova pratica, dovranno presentarsi muniti dei propri dispositivi di sicurezza individuale (quali: cappello con visiera, occhiali, guanti, etc.) e dell'attrezzatura idonea alla potatura manuale da terra (quali: sega secca estensibile, forbici, forbici estensibili, sventato etc.)

Nel rispetto della normativa vigente in merito di misure di contenimento del Covid19

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CORSO DI POTATURA AVANZATO



POTATURA DELL'OLIVO A VASO POLICONICO

SEMINARI TEORICO/PRATICI TENUTI DAL DOTT. MASSIMO GRISCIOLI

11-12-13 MARZO 2022

OP LATIUM TUSCANIA

SALA GIARDINI SANTA CROCE – TUSCANIA VT

Venerdì 11 Marzo

Ore 09:30 ritrovo, accredito ed inizio lezioni teorica.

Ore 13:00 Pausa pranzo.

ore 14:00 Dott.ssa Catilotta Pasetto - la Qualità dell'olio EVO. Processi produttivi e qualità organolettiche guida all'assaggio.

Sabato 12 Marzo

ore 09:00 ritrovo dei partecipanti

ore 10:00 dimostrazione pratica

ore 11:00 inizio pratica guidata

ore 13:00 Pausa pranzo.

ore 15:30 Il Prof. Ruggero

Petacchi Scuola Sant'Anna di Pisa,

Istituto Scienze della Vita

esporrà i recenti studi sulla

avversità Mosca dell'olivo

(*Bactrocera oleae*). Per l'evento

del Prof. Petacchi l'ingresso è

libero.

Domenica 13 Marzo

ore 09:00 ritrovo partecipanti

ore 09:00 inizio pratica guidata

ore 13:00 fine pratica guidata

Consegna degli Attestati

Durante la manifestazione sarà possibile provare le attrezzature messe a disposizione da Archman Italy.

Informazioni e prenotazioni: e-mail: corsi@oplatium.it

Tel.: 347 850 7171 / 339 747 1589

N.B.: tutti i partecipanti per la prova pratica, dovranno presentarsi muniti dei propri dispositivi di sicurezza individuale (quali: cappello con visiera, occhiali, guanti, etc.) e dell'attrezzatura idonea alla potatura manuale da terra (quali: segaccio estensibile, forbaci, forbici estensibili, svettatori, etc.).

Nel rispetto della normativa vigente in merito di misure di contenimento del Covid19

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CORSO DI POTATURA AVANZATO



POTATURA DELL'OLIVO A VASO POLICONICO

SEMINARI TEORICO/PRATICI TENUTI DAL DOTT. MASSIMO GRISCIOLI

8-9-10 APRILE 2022

NUOVE
DATE

STABILIMENTO PRODUTTIVO FRANTOI
OP LATIUM COLLI SABINI
S.P. PASCOLARE, 87 – PALOMBARA SABINA RM

Programma

Venerdì 8 Aprile

ore 15:00 ritrovo ed accredito
ore 15:30 inizio lezione Teorica
ore 17:30 pausa
ore 19:30 fine lezione Teorica

Sabato 9 Aprile

ore 09:00 ritrovo partecipanti
ore 09:30 inizio pratica guidata
ore 13:00 pausa pranzo
ore 14:00 inizio pratica guidata
ore 18:00 fine pratica guidata

Domenica 10 Aprile

ore 09:00 ritrovo partecipanti
ore 09:00 inizio pratica guidata
ore 13:00 fine pratica guidata
Consegna degli Attestati

Informazioni e prenotazioni:

e-mail: corsi@oplatium.it Tel.: 339 747 1589

N.B.: tutti i partecipanti per la prova pratica, dovranno presentarsi muniti dei propri dispositivi di sicurezza individuale (quali: cappello con visiera, occhiali, guanti, etc.) e dell'attrezzatura idonea alla potatura manuale da terra (quali: segaccio estensibile, forbici, forbici estensibili, svettatoi etc.)

Nel rispetto della normativa vigente in merito di misure di contenimento del Covid19

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IN THE INTERESTS OF OLIVE



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NGC TRANSFER ACTIONS



SUSTAIN
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TRANSFER DAY ON MODELS OF SUSTAINABLE OLIVE GROVES

Organizes: NILEAS Producers Group Company A.C. & Agrenaos

Coordinator: George Kokkinos

Teacher: Dr I. Metzidakis – Agronomist researcher, former Director at the Laboratory of Olive Growing, N.AG.RE.F. Chania

Location: Farm in Kotronouli location (Hora, Messinia, Greece)

Date: 29 September 2022

Target audience: Producers of olive oil and table olives, members of cooperatives, members of the local community etc.

Number of attendees: 39

Justification:

Olive cultivation is considered as the most significant agricultural activity in Messinia, from a financial, social, and ecological point of view. Intensive cultivation practices in combination with the Mediterranean climate, lead to depletion of soil organic matter, erosion, desertification, and degradation of water resources.

Adapting to the requirements of the CAP leads us to increase the scale of sustainable management in the local community.

This training and demonstrative activity were organised in order to highlight the contemporary challenges, opportunities and threats of the olive cultivation sector. Agro-environmental approaches were presented during the event, in order to contribute to a more sustainable and ecologically innovative model for olive tree cultivation.

The basic themes were: 1) Autumn plant protection, 2) Harvest and Post-harvest handling, 3) Models of sustainable olive groves and 4) Soil erosion of olive groves.

Tools used: image projector, field practices, etc.

PROGRAM

16:00-16:30	Welcome of participants and coffee
16:30-17:00	Introduction to SUSTAINoLIVE Project
17:00-18:30	Pruning techniques (in field)
19:00-19:30	Autumn plant protection
19:30-20:00	Harvest and Post-harvest handling
20:00-20:30	Models of sustainable olive groves

20:30-21:00	Soil erosion of olive groves
21:00-21:30	Q&A and discussion

Annex:

- Participant signature sheets
- Poster announcing the action / Program
- Photographs/video of the activity
- Links:

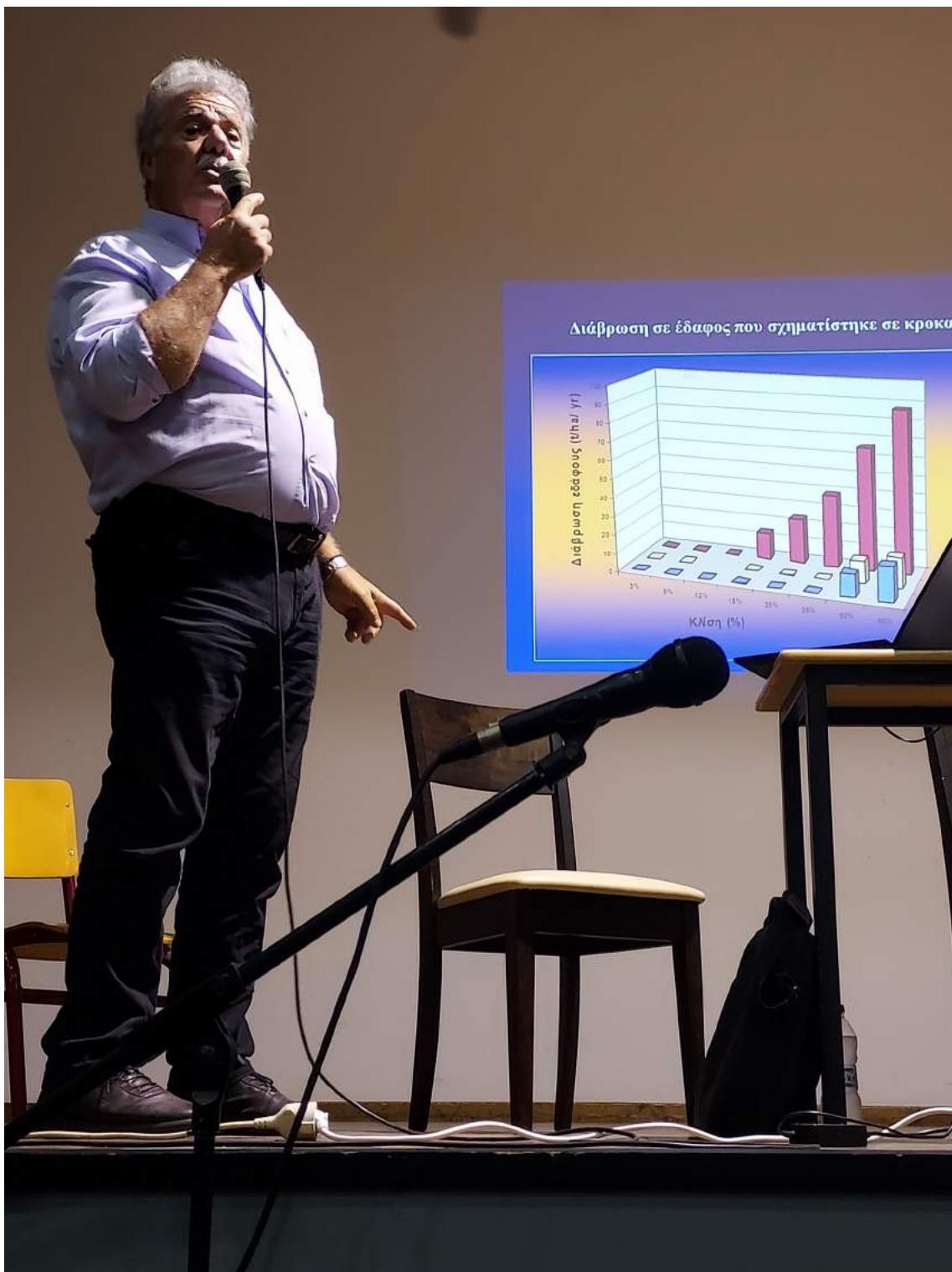
<https://nileasoliveoil.gr/%CE%BF%CE%BB%CE%BF%CE%BA%CE%BB%CE%AE%CF%81%CF%89%CF%83%CE%B7-%CE%B5%CE%BA%CF%80%CE%B1%CE%AF%CE%B4%CE%B5%CF%85%CF%83%CE%B7%CF%82-%CF%80%CE%B1%CF%81%CE%B1/>

<https://best-tv.gr/seira-ekpaideyseon-paragogon-elaioladoy-apo-ton-nilea-kai-ton-agrenaostin-trifylia-video-amp-pic-s/>

<https://youtu.be/1sngzDpnwpo>







Olive Growers Training

By OEF AES NILEAS

Thursday, 29 September 2022

REX - Hora
Starting time 19:00

Free Entrance

Training Themes

Autumn plant protection

Harvest, Post-harvest handling

Models of sustainable olive groves

Soil erosion of olive groves

Before the training session a demonstration activity will take place with emphasis on pruning during harvest.

Keynote Speaker

Dr L. Metzidakis – Agronomist researcher,
former Director at the Laboratory of Olive
Growing, N.A.G.R.E.F. Chania



The training is implemented within the framework of the European Project SUSTAIN-OIL (PRIMA) and R&D, CDT of the approved program of the OEP.

TRANSFER DAY ON CRUSHING THE OLIVE TREE REMAINS

Organizes: NILEAS Producers Group Company A.C.

Coordinator: George Kokkinos

Teachers:

- Panagiotis Nasis, agronomist-partner in Agrenaos
- Konstantinos Kokkinos, owner of the farm

Location: Farm in Primi location (Hora, Messinia, Greece)

Date: June 1, 2022

Target audience: Producers of olive oil and table olives, olive mills owners, members of cooperatives etc.

Number of attendees: 25

Justification:

Olive cultivation is considered as the most significant agricultural activity in Messinia, from a financial, social, and ecological point of view. Intensive cultivation practices in combination with the Mediterranean climate, lead to depletion of soil organic matter, erosion, desertification, and degradation of water resources.

This training and demonstrative activity were organised in order to highlight that, since the olive oil produced from the olive trees does not remove valuable elements for the nutrition of the olive trees, when the by-products obtained (olive pomace and branches) are returned to the field, then the requirements for nutrition are drastically reduced, with what this implies for the reduction of costs and dependence on chemical fertilizers.

The program of the activities was structured in 3 sessions: a) crushing the olive tree remains, b) validation of quantitative data (amount of material produced per acre), and c) validation of economic data (fuels and daily labor costs).

Crushing the pruned olive material and depositing it in the olive grove - either directly or after composting - is extremely beneficial for our trees and for the environment (circular economy).

Tools used: tractor, crusher machine, field practices, etc.

PROGRAM

09:00-09:30	Welcome of participants and coffee
09:30-10:00	Introduction to SUSTAINoLIVE Project
10:00-11:00	Theoretical introduction to the importance of crushing the olive tree remains

	and its results
11:00-12:00	Step-by-step presentation of the technical settings of the machines
12:00-12:30	Gathering the crushing remains and usage options
12:30-13:00	Q&A and discussion
13:00-14:00	Light lunch
14:00-15:00	Visit a neighbouring farm that burns the olive tree remains for observation and discussion

Annex:

- Participant signature sheet
- Poster announcing the action / Program
- Photographs/video of the activity





**CRUSHING THE OLIVE TREE
PRUNING REMAINS**

Hora, Messinia
Wednesday, June 1, 2022
09:00-15:00

Training and Demonstration Activity

NILEAS Producers Group Company A.C.

We learn the circular economy in olive tree cultivation through training and demonstration activities for producers of olive oil and table olives, olive mills owners and members of cooperatives. We are crushing the pruning remains to prepare compost in the context of **SUSTAINoLIVE Project** in olive groves that participate in the project.



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TRANSFER DAY ON BIODIVERSITY ENHACEMENT PRACTICES IN OLIVE GROVES

Organizes: NILEAS Producers Group Company A.C., Center for Agrofood Entrepreneurship of Messinia (KAEM) and ELGO DIMITRA Center in Kalamata

Coordinator: George Kokkinos

Teacher: Dr. Vassileios Gkisakis, agronomist and authorized researcher of ELGO DIMITRA

Location: NILEAS demonstration olive grove (Hora, Messinia, Greece)

Date: March 22, 2023

Target audience: Producers of olive oil and table olives, members of cooperatives, members of the local community etc.

Number of attendees: 25

Justification:

Olive cultivation is considered as the most significant agricultural activity in Messinia, from a financial, social, and ecological point of view. Intensive cultivation practices in combination with the Mediterranean climate, lead to depletion of soil organic matter, erosion, desertification, and degradation of water resources.

This training and demonstrative activity were organised aiming to create and install infrastructure to enhance biodiversity in olive groves.

Tools used: field practices

PROGRAM

16:00-16:10	Introduction to SUSTAINoLIVE Project
16:10-16:40	Biodiversity in olive groves and ecological balance
16:40-17:10	Factors that reduce biodiversity in olive groves
17:10-17:40	Presentation of the installed infrastructure (nests of diurnal and nocturnal birds and insect hotel)
17:40-18:00	Q&A and discussion

Annex:

- Participant signature sheet
- Poster announcing the action / Program
- Photographs of the activity





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ΒΙΩΜΑΤΙΚΟ ΣΕΜΙΝΑΡΙΟ

Πρακτικές ενίσχυσης της βιοποικιλότητας σε ελαιώνες, ως παράγοντας μετάβασης στην "πράσινη" ελαιοκομία.

Εκπαιδευτής: Δρ. Βασίλειος Γκισάκης, γεωπόνος,
εντεταλμένος ερευνητής του ΕΛΓΟ Δήμητρα

Τετάρτη, 22 Μαρτίου 2023 ώρα 16:00-18:00

Τοποθεσία: Ο ελαιώνας απέναντι από το αρχαιολογικό Μουσείο στη Χώρα Μεσσηνίας

Πληροφορίες: Γραφείο ΚΑΕΜ Καλαμάτα 2721025700 & 6974600678

Σκανάρετε για να
βρείτε την τοποθεσία



ΚΕΝΤΡΟ
ΑΓΡΟΔΙΑΤΡΟΦΙΚΗΣ
ΕΠΙΧΕΙΡΗΜΑΤΙΚΟΤΗΤΑΣ
ΜΕΣΣΗΝΙΑΣ

ΜΙΑ ΔΡΑΣΗ ΤΩΝ:

ΙΑΡΥΑ
ΚΑΡΕΤΑΝ ΒΑΣΙΛΗ & ΙΩΑΝΝΗ
ΚΕΝΤΑΝΤΑΚΟΠΟΥΔΗ

ΑΜΒΡΑΚΙΑΝΗ ΦΙΛΙΞΙΚΗ ΕΣΩΘΗ
Επαγγελματική Επαγγελματική Επαγγελματική

Σε συνεργασία με



TRANSFER DAY ON COMPOST PREPARATION

Organizes: NILEAS Producers Group Company A.C.

Coordinator: Fotis Mathios

Teacher: George Kokkinos, President of NILEAS, biological farmer

Location: Farm in Primi location (Hora, Messinia, Greece)

Date: April 24, 2023

Target audience: Producers of olive oil and table olives, members of cooperatives, members of the local community etc.

Number of attendees: 25

Justification:

Olive cultivation is considered as the most significant agricultural activity in Messinia, from a financial, social, and ecological point of view. Intensive cultivation practices in combination with the Mediterranean climate, lead to depletion of soil organic matter, erosion, desertification, and degradation of water resources.

This training and demonstrative activity were organised in the context of agroecological approaches. Preparation of anaerobic compost using shredded pruning material, olive leaves and organic chicken droppings.

Tools used: field practices

PROGRAM

14:00-14:30	Welcome of participants and coffee
14:30-15:00	Introduction to SUSTAINoLIVE Project
15:00-16:00	Presentation of how wetting and stirring materials are transported
16:00-16:45	Defining the needs of the olive grove based on the existing content of organic matter
16:45-17:30	Presentation of the total cost per ton of the final product
17:30-18:00	Q&A and discussion

Annex:

- Participant signature sheets

- Poster announcing the action / Program

- Photographs of the activity







25	AERONAUTIQUE CON/NEX	<u>A</u>
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27		
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30		

COMPOST PREPARATION

Hora, Messinia

Monday, April 24, 2023

14:00-18:00

Training and Demonstration Activity

NILEAS Producers Group Company A.C.

We learn the circular economy in olive tree cultivation through training and demonstration activities for producers of olive oil and table olives, olive mills owners and members of cooperatives.

We prepare compost with olive tree cultivation byproducts in the context of **SUSTAINoLIVE Project** in olive groves that participate in the project.



**SUSTAIN
OLIVE**

PRIMA
IN THE MEDITERRANEAN AREA



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PLANT PROTECTION FROM COLLETOTRICHUM GLOESPORIOIDES.

NILEAS Producers Group Company A.C. carries out activities on plant protection from Colletotrichum gloesporioides. March 2022

Colletotrichum gloesporioides is one of the most common Colletotrichum fungal plant pathogens. It causes bitter rot in variety of crops worldwide, particularly perennials in the tropical regions. It produces substantial amount of pre- and post-harvest loss in crops worldwide. It acts as a secondary invader of injured tissue, but can also survive as a saprophyte.





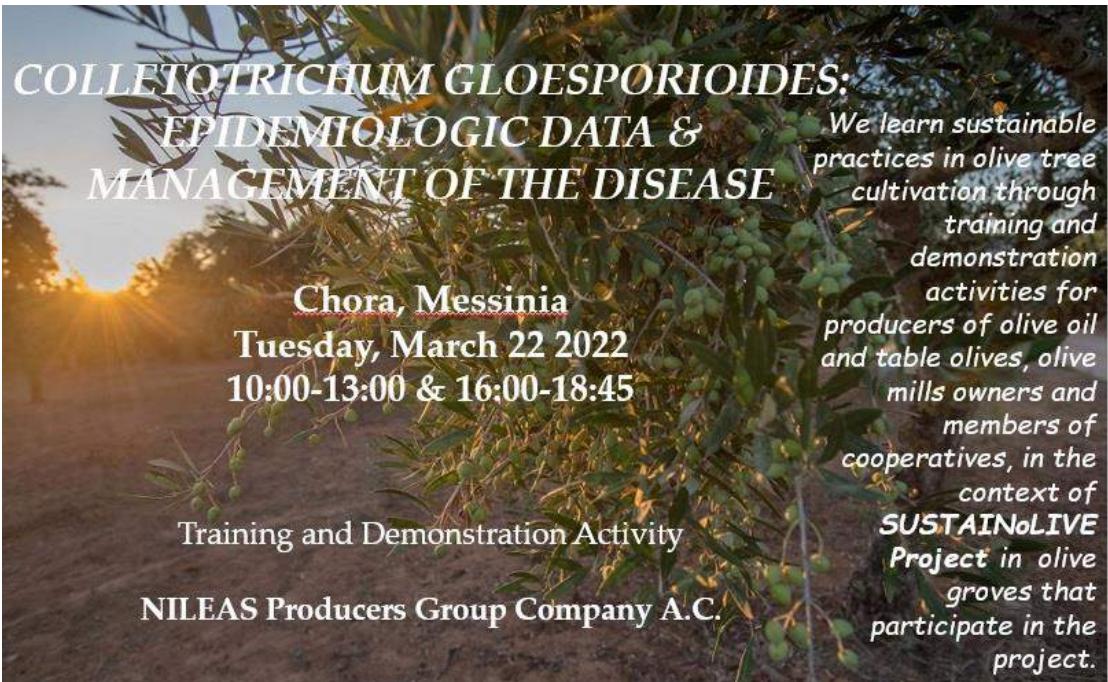
COLLETOTRICHUM GLOESPORIOIDES:
EPIDEMIOLOGIC DATA &
MANAGEMENT OF THE DISEASE

Chora, Messinia
Tuesday, March 22 2022
10:00-13:00 & 16:00-18:45

Training and Demonstration Activity

NILEAS Producers Group Company A.C.

We learn sustainable practices in olive tree cultivation through training and demonstration activities for producers of olive oil and table olives, olive mills owners and members of cooperatives, in the context of SUSTAINoLIVE Project in olive groves that participate in the project.



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PLANT PROTECTION AND PATHOGENS IN OLIVE TREE CULTIVATION

NILEAS Producers Group Company A.C. carries out activities on plant protection and pathogens in olive tree cultivation. September 2021





**SUSTAINABLE PRACTICES:
PLANT PROTECTION &
PATHOGENS**

Chora, Messinia
Tuesday, September 29 2021
09:00-12:00 & 17:00-19:45

Training and Demonstration Activity

NILEAS Producers Group Company A.C.

We learn sustainable practices in olive tree cultivation through training and demonstration activities for producers of olive oil and table olives, olive mills owners and members of cooperatives, in the context of SUSTAINoLIVE Project in olive groves that participate in the project.

The background of the poster features a close-up of an olive tree branch with green olives and leaves, set against a warm, golden sunset sky. The overall theme is agricultural and environmental.

Co-funded by the
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Programme of the European Union

This project is part of the PRIMA programme supported by the European Union

TRANSFER DAY ON ORGANIC FERTILIZATION

Organizes: NILEAS Producers Group Company A.C. and the Center for Agrofood Entrepreneurship of Messinia (KAEM)

Coordinator: George Kokkinos

Teacher:

- Dr Christos Vasilikiotis, Chair of Sustainable Agriculture & Management Program, Perrotis College, American Farm School

Location: Farm in Primi location (Hora, Messinia, Greece)

Date: May 2, 2022

Target audience: Producers of olive oil and table olives, members of cooperatives, members of the local community etc.

Number of attendees: 26

Justification:

Olive cultivation is considered as the most significant agricultural activity in Messinia, from a financial, social, and ecological point of view. Intensive cultivation practices in combination with the Mediterranean climate, lead to depletion of soil organic matter, erosion, desertification, and degradation of water resources.

This training and demonstrative activity were organised to present the positive effects of using organic fertilization for the optimisation and sustainability of crop production.

The participating producers were trained about the time and method of sowing, the selection of the right seed mixture, the selection of time for cutting the cover crop in order to make the process efficient, the contribution of organic fertilization to the improvement of soil structure, fertility and nitrogen addition. In addition, the first water permeability measurements and sampling to measure organic matter content were carried out.

On January 16 and 19, 2023, 6 plant species (pisum sativum, hordeum vulgare, vicia sativa, vicia faba, trifolium alexandrinum and trifolium subterraneum) were sown in 3 plots. The aim was to examine a number of factors [1) the possibility of sowing in no-tillage of soil conditions, 2) the best combination of seed mixes for the soils and microclimate of the area, 3) the combination with the cultivation practices and especially with the harvest, 4) the measurement of soil improvement (structure, enrichment in organic matter and nitrogen) 5) the cost-benefit ratio] in order to evaluate the specific practice and then adopt it by all NILEAS members, in the context of sustainable management which is the primary strategy of NILEAS.

Tools used: field practices.

PROGRAM

12:00-12:30	Welcome of participants and coffee
12:30-13:00	Introduction to SUSTAINoLIVE Project – Organic Fertilization
13:00-13:45	Selection of time and method of sowing
13:45-14:30	Selection of time for cutting the cover crop
14:30-15:30	Contribution of organic fertilisation to the improvement of soil structure, fertility and nitrogen addition
15:30-16:00	Q&A and discussion
16:00-17:00	Lunch
17:00-17:20	Water permeability measurement
17:20-17:40	Sables to measure organic matter content
17:40-18:30	Visit a neighbouring olive grove with conventional cultivation, observation and discussion

Annex:

- Participant signature sheets
- Poster announcing the action / Program
- Photographs of the activity



Ο.Π. Νηλέας

...

Προσθήκη χόμπι

Προσθήκη επιλεγμένων

Φωτογραφίες

Δείτε όλες τις φωτογραφίες

Ο.Π. Νηλέας
5 μέρ.

...

Σπορά ψυχανθών σε έλαιωνες της ΟΠ ΝΗΛΕΑΣ

Το προηγούμενο διάστημα η ΟΠ ΝΗΛΕΑΣ έκανε πειραματική σπορά ψυχανθών σε τρία αγροτεμάχια μελών της, με την υποστήριξη του ΚΑΕΜ, της Αμερικάνικης Γεωργικής Σχολής του καθηγητή κυρίου Χρήστου Βασιλικώτη και της γεωπόνου κυρίας Αικατερίνης Δουρβανάκη. Στόχος είναι να εξεταστούν μια σειρά από παράγοντες ώστε να αξιολογηθεί η συγκεκριμένη πρακτική και στη συνέχεια να υιοθετηθεί από τους παραγωγούς, στο πλαίσιο της αειφορικής διαχείρισης που αποτελεί βασική στρατηγική του ΝΗΛΕΑ.

Οι παράγοντες που πρόκειται να αξιολογηθούν είναι:

- Η δυνατότητα σποράς σε συνθήκες οκαλιέργειας
- Ο καλύτερος συνδυασμός σπορομιγμάτων για τα εδάφη και το μικροκλίμα της περιοχής
- Ο συνδυασμός με τις καλλιεργητικές πρακτικές και κυρίως με τη συγκομιδή
- Η μέτρηση της βελτίωσης του εδάφους (δομή, εμπλουτισμός σε οργανική ουσία και άζωτο)
- Η σχέση κόστους-οφέλους

Την Τρίτη 2 Μαΐου ο καθηγητής Κ. Βασιλικώτης, συνοδευόμενος από την κα Κέλλου Δημητρουλιά, επισκέφτηκε τα αγροτεμάχια που είχε πραγματοποιηθεί σπορά, όπου έγινε εκπαίδευση σε παραγωγούς που συμμετείχαν, καθώς και οι πρώτες μετρήσεις υδατοπερατότητας και λήψεις δειγμάτων για μέτρηση της περιεκτικότητας σε οργανική ουσία.

Τα συμπεράσματα και η συνολική εμπειρία από τη δράση θα παρουσιαστούν πριν την έναρξη της συγκομιδής σε όλα τα μέλη της Ομάδας Παραγωγών, αλλά και σε άλλους εκτός του ΝΗΛΕΑ ενδιαφέρεται.

Η πρακτική της σποράς ψυχανθών αξιοποιείται από τον ΝΗΛΕΑ και στο πλαίσιο του έργου PRIMA SUSTAINoLIVE στο οποίο συμμετέχει από το 2019, με συντονιστή εταίρο το πανεπιστήμιο της JEAN και τη συμμετοχή 22 εταίρων από 6 χώρες της Μεσογείου. Τα εν λόγω έννοι που ολοκληρώνεται τον Ιοππείμβοιο

του εργού ΚRIMA SUSTAINOLIVE στο οποίο συμμετεχει από το 2019, με συντονιστή εταίρο το πανεπιστήμιο της JEAN και τη συμμετοχή 22 εταίρων από 6 χώρες της Μεσογείου. Το εν λόγω έργο, που ολοκληρώνεται τον Σεπτέμβριο 2023, στοχεύει στη βελτίωση της αειφορίας του παραδοσιακού ελαιώνα, μέσω της εφαρμογής και προώθησης μιας σειράς καινοτόμων λύσεων αειφόρου διαχείρισης που βασίζονται σε αγροοικολογικές προσεγγίσεις. Από το SUSTAINOLIVE αποκτήθηκε πολύτιμη γνώση και εμπειρία την οποία ο ΝΗΛΕΑΣ φροντίζει για τη διάχυσή της στα μέλη του, αλλά και στην τοπική κοινωνία.









Nileas



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ACK TRANSFER ACTIONS



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TRAINING DAY

Organizes: Agriculture Cooperative of Kalamata

Co-organizer : American Farmers college

Coordinator: President of the Cooperative, geologist Mr. Antonopoulos

Teachers:

- Charalambos Dalalakis agronomist of GREEK FARMER

- Efstatia Georgakopoulou, Director of Agricultural Economy and Veterinary Medicine of DAOK Messinia,

Location: Biological farm named kerezenia, located in Farai, Kalamata as indicated in the following map. (maps/@37.0313072,22.1401834)

Date: June 22 2022

Target audience: Farmers, technicians, etc.

Number of attendees: 16

Justification:

Within the framework of the SUSTAINOLIVE program,,the training-practical demonstration of compost making with the use of microorganisms took place on Wednesday 22/6 in the plot of land of the member of AES KALAMATA.

The agronomist of GREEK FARMER, Charalambos Dalalakis did the training, while the Director of Agricultural Economy and Veterinary Medicine of DAOK Messinia, Georgakopoulou Efstatia, was present, as well as many members of AES KALAMATA, mainly young producers.

The president of the Agricultural Cooperative of Kalamata, Michalis Antonopoulos, made a very brief review of the history of the AES KALAMATAS, emphasizing the environmental dimension of olive cultivation.

Then Charalambos Dalalakis described the technique of making compost using microorganisms, which accelerate the fermentation process. He stressed that the philosophy of compost is to use materials that are available in the field and the derived material to be dispersed in the same area, after the fermentation process is completed, in order to avoid transportation and keep costs low. Thus, at the same time, the soil structure is constantly improved and enriched, ensuring health of the olive trees and quality production.

The Following documents are attached

-Participant signature sheet.

-Photographs/videos of the activity.





TRAINING-PRACTICAL DEMONSTRATION OF COMPOST MAKING

Within the framework of the SUSTAINOLIVE program, the training-practical demonstration of compost making with the use of microorganisms took place on Wednesday 22/6 in the plot of land of the member of AES KALAMATA. The agronomist of GREEK FARMER, Charalambos Dalalakis did the training, while the Director of Agricultural Economy and Veterinary Medicine of DAOK Messinia, Georgakopoulou Efstatia, was present, as well as many members of AES KALAMATA, mainly young producers.

The president of the Agricultural Cooperative of Kalamata, Michalis Antonopoulos, made a very brief review of the history of the AES KALAMATAS, emphasizing the environmental dimension of olive cultivation.

Then Charalambos Dalalakis described the technique of making compost using microorganisms, which accelerate the fermentation process. He stressed that the philosophy of compost is to use materials that are available in the field and the derived material to be dispersed in the same area, after the fermentation process is completed, in order to avoid transportation and keep costs low. Thus, at the same time, the soil structure is constantly improved and enriched, ensuring health of the olive trees and quality production.

At the end, the attendees were offered coffee and a light meal.









TRAINING DAY 2

Organizes: Agriculture Cooperative of Kalamata

Coordinator: President of the Cooperative, geologist Mr. Antonopoulos

Teachers:

- Stacy Georgakopoulou, agronomist of AES KALAMATA

Location: At the facilities of AES KALAMATA

Date: June 29 2022

Target audience: Farmers-Members of the Cooperative

Number of attendees: 20

Justification:

On the sustainability of olive cultivation in the Mediterranean & the results from the olive mill wastewaters and byproducts period from 01/06/2019 until 15/06/2021

The Following documents are attached

-Participant signature sheet.

-Photographs/videos of the activity.



