



# **International Conference**

## 29 August – 2 September, 2017 CHANIA GREECE

## **Delegate Programme Booklet**









With the contribution of the LIFE + financial instrument of the European Union to the project "OLIVECLIMA-Introduction of new olive crop management practices focused on climate change mitigation and adaptation"





Dear Colleagues,

During the past year, a group of devoted people worked hard and with great enthusiasm to prepare this event and welcome you in Chania, Greece for the International Conference "Climate Changing Agriculture". On behalf of all involved team mates I would like to express my pleasure for meeting you, having the chance to be informed of your research achievements and exchange views for climate change mitigation and adaptation.

This international conference is one of the final deliverables of oLIVE-CLIMA project. The oLIVE-CLIMA project (LIFE 11 ENV/GR/942), "Introduction of new oLIVE crop management practices focused on CLIMAte change mitigation and adaptation" (oLIVE-CLIMA) is funded by 50% by the financial instrument Life + of the European Union and has a total budget of 3.649.373 € (EU contribution 1.822.436 €). It was launched in October 2012 and will be completed in September 2017. The project partners are the following: Development Agency of Eastern Thessaloniki's Local Authorities-ANATOLIKI S.A., Institute for Olive Tree, Subtropical Crops and Viticulture HAO DEMETER, Department of Soil Science of Athens HAO DEMETER, Soil and Water Resources Institute Former Land Reclamation Institute HAO DEMETER, University of Basilicata, Rodax Agro E.P.E., AGROTYPOS S.A., NILEAS Farmers Group, Agricultural Cooperatives of Peza, Agricultural Cooperatives of Mirabello.

Many thanks to the LIFE programme for funding as well as all the involved institutions for co-funding and hard work. We wish you all a fruitful participation in the conference and a pleasant stay in Chania.

Kind regards,

Dr. Georgios Koubouris





#### **Conference Organizers**

Hellenic Agricultural Organization DEMETER, Institute for Olive, Subtropical Crops & Viticulture, <a href="http://www.nagref-cha.gr/">http://www.nagref-cha.gr/</a>

CIHEAM, MAI Chania, http://www.maich.gr/en

Technical University of Crete, School of Environmental Engineering (ENVENG), <a href="http://www.enveng.tuc.gr/">http://www.enveng.tuc.gr/</a>

Technological Educational Institute of Crete, Department of Environmental and Natural Resources Engineering, https://www.teicrete.gr/en/tmfp/13754

With the contribution of the LIFE + financial instrument of the European Union to the project "OLIVECLIMA-Introduction of new olive crop management practices focused on climate change mitigation and adaptation"

#### **Convener:**

Dr Georgios Koubouris, Hellenic Agricultural Organization DEMETER, Institute for Olive Tree, Subtropical Crops and Viticulture (IOSV), GR.

#### Vice-chair and keynote speakers:

Prof Cristos Xyloyannis, University of Basilicata, Italy

Prof Luuk Fleskens, Soil Physics and Land Management Group of Wageningen University and School of Earth and Environment at the University of Leeds, UK.

Prof Mauro Centritto, Consiglio Nazionale delle Ricerche - National Research Council, Italy.

A. Kavadia; M. Omirou; I.M.Ioannides -Agricultural Research Institute, Department of Agrobiotechnology, Cyprus.

Michalopoulos George - RodaxAgro Ltd, Greece.

#### **Organizing Committee**

Dr Georgios Koubouris, ELGO DEMETER, Institute for Olive Tree, Subtropical Crops and Viticulture (IOSV), GR

Dr Georgios Psarras, ELGO DEMETER, IOSV, GR

Prof. George Karatzas, Technical University of Crete

Dr Ioannis Livieratos, Mediterranean Agronomic Institute of Chania, GR

Dr George Arampatzis, ELGO DEMETER, Soil and Water Resources Institute (SWRI), GR

Dr Victor Kavvadias, ELGO DEMETER, SWRI), GR

Prof. Nikos Lydakis-Simantiris, TEI of Crete, GR

Mrs Eftichia Kivrakidou, Economist, Project manager OliveClima. "ANATOLIKI"

DEVELOP. AGENCY OF EASTERN THESSALONIKI 'S LOCAL AUTHORITIES, GR

Mr Iakovos Sarigiannis, Mechanical Engineer, General Manager, ANATOLIKI, GR

Mrs Konstantia-Anastasia Kasapi, Msc Geologist Ecol. Water Quality, ANATOLIKI, GR

Mr. Christos Karkanias, MSc Environmental Scientist, ANATOLIKI, GR





#### **Scientific Committee**

Arampatzis, George, ELGO DEMETER, Soil and Water Resources Institute, GR

Boussadia Olfa, Institut de l'Olivier - Unité spécialisée de Sousse. TUN

Cantini Claudio, IVALSA-CNR, IT

Centritto Mauro, Trees and Timber Institute, National Research Council, IT

Chartzoulakis Kostas, ELGO DEMETER, Institute for Olive Tree, Subtropical Crops and Viticulture (IOSV), GR

Doulis Andreas, ELGO DEMETER, IOSV, GR

Evangelides Chris, Aristotle University of Thessaloniki, Rural and Surveying Engineering, GR

Fleskens Luuk, Soil Physics and Land Management Group of Wageningen University and School of Earth and Environment at the University of Leeds, UK.

Hatzigiannakis Evangelos, ELGO DEMETER, Soil and Water Resources Institute, GR

Kabourakis Emmanouil, ELGO DEMETER, IOSV, GR

Kalaitzaki Argyro, ELGO DEMETER, IOSV, GR

Kalaitzidis Chariton, Mediterranean Agronomic Institute of Chania, GR

Kavroulakis Nektarios, ELGO DEMETER, IOSV, GR

Kavvadias Victor, ELGO DEMETER, Soil and Water Resources Institute, GR

Kouli Maria, TEI of Crete, GR

Kourgialas Nektarios, ELGO DEMETER, IOSV, GR

Mehdi Hosseini Mazinani, NIGEB, Iran

Michalopoulos Georgios, RodaxAgro LTD, GR

Montanaro Giuseppe, University of Basilicata, IT

Omirou Michalis, Agricultural Research Institute, CY

Psarras Georgios, ELGO DEMETER, IOSV, GR

Stavroulakis Georgios, TEI of Crete, GR

Tzerakis Kostandinos, ELGO DEMETER, IOSV, GR

Tzortzakis Nikolaos, Cyprus University of Technology, CY

Varikou Kiki, ELGO DEMETER, IOSV, GR

Xyloyannis Cristos, University of Basilicata, IT

#### **Secretarial support**

Mrs Chrysi Sergendani

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### **Conference Center Bureau**

Mrs Argyro Zervou or Mrs Katerina Karapataki

Conference Center Bureau of the Mediterranean Agronomic Institute of Chania

Tel: +30 28210 35080, E-mail: confer@maich.gr





## Conference overview

Tuesday, 29 August 2017, 19.00-20.00

Welcome drinks reception and registration. MAICh conference center, room "Mediterranee" (<a href="http://confer.maich.gr/halls/index.html#Mediterranee">http://confer.maich.gr/halls/index.html#Mediterranee</a>). The registration desk will remain open throughout the Conference.

Wednesday-Friday, 30 August – 1 September 2017, 09.00-17.00

Scientific sessions. MAICh conference center, room "Aristotle" (<a href="http://confer.maich.gr/halls/index.html#Aristotle">http://confer.maich.gr/halls/index.html#Aristotle</a> ).

All abstracts will be available only in electronic form for downloading at <a href="http://climate2017.eu/">http://climate2017.eu/</a>

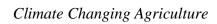
Saturday, 2 September 2017, 09.00-17.00

Technical Tour. Starting points: MAICh conference center and Chania city center.

#### We will visit:

- 1. http://www.olivemuseumvouves.com/default.aspx?lang=en
  - 2. http://biolea.gr/index.php?lang=en
- 3. <a href="http://www.terracreta.gr/default.aspx?lang=en#.WZq10rZLfIU">http://www.terracreta.gr/default.aspx?lang=en#.WZq10rZLfIU</a>
  - 4. http://visitfalassarna.com/







## **ORAL PROGRAMME**

	Wednesday 30 <sup>th</sup> August 2017	
Se	Session 1: Crop management for climate change mitigation and adaptation	
9:00-11:00	Session Chairs: S. Theocharopoulos, G. Koubouris and C. Xiloyannis	
9:00-9:30	<ul> <li>Opening Remarks</li> <li>Nikos Antonoglou, General Secretary, Ministry for Rural Development and Food</li> <li>Representatives of Local Authorities</li> <li>LIFE Oliveclima project coordinator</li> </ul>	
9:30-10:00	Keynote speech: Management options contributing to climate change mitigation and resilience improvement in olive groves   Xiloyannis Cristos, presenting author (Università degli Studi della Basilicata - DICEM), Tuzio Angelo C. (Università degli Studi della Basilicata - DICEM), Fausto Catia (Università degli Studi della Basilicata - DICEM), Montanaro Giuseppe, corresponding author (Università degli Studi della Basilicata - DICEM)	
10:00-10:15	A comparative estimate of climate change impacts on cotton and maize in Greece   Voloudakis Dimitrios, presenting author (Agricultural University of Athens), Karamanos Andreas (Agricultural University of Athens), Economou Garifalia (Agricultural University of Athens), Kapsomenakis John (Research Centre for Atmospheric Physics and Climatology, Academy of Athens), Zerefos Christos (Navarino Environmental Observatory)	
10:15-10:30	Carbon footprint of rainfed and irrigated arable crops under tillage compared to no till & guide assistance   Gil-Ribes Jesus A., presenting author (University of Córdoba), Márquez-García Francisco, corresponding author (University of Córdoba), Blanco Gregorio L. (University of Córdoba), González-Sánchez Emilio J. (Spanish Association of Conservation Agriculture)	
10:30-10:45	A tool for adaptation to Climate change Impacts on the Mediterranean islands' Agriculture:  LIFE ADAPT2CLIMA   Giannakopoulos Christos, presenting author (National Observatory of Athens), Moriondo Marco (CNR-IBIMET), Papadopoulou Maria (National Technical University of Athens), Karali Anna (National Observatory of Athens), Lemesios Giannis (National Observatory of Athens), Papadaskalopoulou Christina (National Technical University of Athens), Varotsos Konstantinos V. (National Observatory of Athens), Brilli Lorenzo (CNR-IBIMET), Charchousi Despoina (National Technical University of Athens).	
10:45-11:00	Effects of addition of organic materials and irrigation conditions on soil quality in olive groves: A case study of the region of Messinia, South West Peloponnese, Greece   Kavvadias Victor, presenting author (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water Resources, Department of Soil Science of Athens, ISWR-DSSA), Papadopoulou Maria (HAO-DEMETER, ISWR-DSSA), Vavoulidou Evangelia (HAO-DEMETER, ISWR-DSSA), Theocharopoulos Sideris (HAO-DEMETER, ISWR-DSSA), Repas Spiros (NILEAS-Agricultural Cooperative for Standardized Products - Nestor Messinia (NILEAS), Kokkinos Georgios (NILEAS), Koubouris Georgios (HAO-DEMETER, Institute for Olive Tree, Subtropical Crops & Viticulture IOSV, Agrokipion, Chania, Greece), Psaras Georgios (HAO-DEMETER, IOSV)	
11:00-11:30	Break	





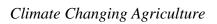
11:30-13:00	Session Chairs: E. Vavoulidou, G. Psarras and V. Kavvadias
	Climate Change Impacts on the Hydrologic Balance and Irrigation Demands for the Region of
11:30-11:45	Crete   Nerantzaki Sofia, presenting author (Technical University of Crete, Department of Environmental Engineering), Giannakis George (Technical University of Crete, Department of Environmental Engineering), Efstathiou Dionissis (Technical University of Crete, Department of Environmental Engineering), Nikolaidis Nikolaos (Technical University of Crete, Department of Environmental Engineering), Kritsotakis Marinos (Decentralized Administration of Crete), Tsanis Ioannis (Technical University of Crete, Department of Environmental Engineering), Grillakis Manolis (Technical University of Crete)
	Modelling of carbon fluxes and pools between soil, vegetation and atmosphere in crop fields
11:45-12:00	under different agricultural practices   Vavlas Nikolaos, Christos, presenting author (Centre for Ecology & Hydrology / University College London), Gomez-Dans Jose (National Centre for Earth Observation (NCEO) / University College London), Williams Mathew (National Centre for Earth Observation (NCEO) / University of Edinburgh)
	Impacts of climate change on reservoir management in Crete: the case of Potamon-Amariou
12:00-12:15	<b>Reservoir</b>   Papadaki Sofia, presenting author (Technical University of Crete, Department of Environmental Engineering), Nerantzaki Sofia, corresponding author (Technical University of Crete, Department of Environmental Engineering), Nikolaidis Nikolaos (Technical University of Crete, Department of Environmental Engineering)
10 15 10 00	Effect of different sustainable orchard management strategies on soil properties, nutrient
12:15-12:30	uptake and soil microbiological aspects in an olive orchard   Bechara E., Doupis G., Sofo A., Psarras, G., Papafilippaki A., Koubouris G. (Hellenic Agricultural Organization DEMETER, Institute for Olive Tree, Subtropical Crops & Viticulture, Agrokipion, Chania, Greece)
	Crop coefficients and water use efficiency in an apple orchard assessed by eddy covariance
12:30-12:45	measurements   Damiano Zanotelli, presenting author (Free University of Bolzano-Bozen), Montagnani Leonardo (Free University of Bolzano-Bozen), Andreotti Carlo (Free University of Bolzano-Bozen), Tagliavini Massimo (Free University of Bolzano-Bozen)
	Effects of addition of organic materials and irrigation conditions on soil quality in olive
12:45-13:00	groves: A case study of in the region of Merambello, island of Crete, Greece   Kavvadias Victor, presenting author (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens), Papadopoulou Maria (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens, ), Theocharopoulos Sideris (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens, ), Vavoulidou Evangelia (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens, ), Malliaraki Stella (Union of Agricultural Cooperatives of Mirabello, Sergaki 2, Neapoli, Lasithi, 72400, Crete, Greece ), Agelaki Katerina (Union of Agricultural Cooperatives of Mirabello, Sergaki 2, Neapoli, Lasithi, 72400, Crete, Greece ), Koubouris Georgios (Hellenic Agricultural Organization DEMETER, Institute for Olive Tree, Subtropical Crops & Viticulture, Agrokipion, Chania, Greece), Psarras Georgios (Hellenic Agricultural Organization DEMETER, Institute for Olive Tree, Subtropical Crops & Viticulture, Agrokipion, Chania, Greece).
13:00-14:00	Lunch break
14:00-16:30	Session Chairs: D. Zanotelli and E. Kabourakis
	Climate change and olive farming. The case of olive growing in different agroecological zones
14:00-14:15	and under different management systems in Crete, Greece.   Kabourakis Emmanouil, presenting author (Ecological Production Systems, Institute of Olive Tree, Subtropical Plants and Viticulture, Directorate of Agricultural Research (NAGREF), Hellenic Agricultural Organisation (ELGO)), Gkisakis Vasileios (Agroecologiki SP), Volakakis Nikolaos, presenting author (Geokomi)
	How can agriculture adapt to changing climate conditions? Social perceptions and new





14:15-14:30	
14:13-14:30	practices of farmers, a case study in Southern France   ASPE Chantal (Aix Marseille Université / LPED UMR 151), JACQUE Marie (Aix Marseille Université / LPED UMR 151)
14:30-14:45	Carbon and nutrient distribution across soil profiles in Mediterranean olive forests   Theocharopoulos Sideris, presenting author (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens, ), Vavoulidou Evangelia, presenting author (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens), Kavvadias Victor, corresponding author (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens), Papadopoulou Maria (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens), Michalopoulos Georgios (RodaxAgro Ltd)
	"Diversify & minimize": Agroecological approaches for reducing greenhouse gases emissions
14:45-15:00	and increasing resilience of Mediterranean agroecosystems and rural societies   Gkisakis Vasileios, presenting author (Sustainable Agriculture dpt, Mediterranean Agronomic Institute of Chania)
15:00-15:15	Climate change and water resources management in Arab countries   El Gayar Attia (Professor of SOIL-WATER MANAGEMENT. Soils, Water & Environment Research Institute)
	Break
15:15-15:30	
15:30-15:45	Description of olive cultivars through morphological parameters by using advanced mathematical algorithms   Blazakis Konstantinos (presenting author) (Department of Horticultural Genetics and Biotechnology (H.G.B.), Kosma Maria (H.G.B.), Kostelenos George (Kostelenos Olive Nurseries), Baldoni Luciana (Italian National Research Council, Institute of Biosciences and Bio-Resources (CNR-IBBR), Bufacchi Marina (CNR-, Institute for Agriculture and Forest Systems in the Mediterranean (CNR-ISAFOM), Kalaitzis Panagiotis (corresponding author) (H.G.B.).
	Interactions Effect of Cyanobacterial Bioactivities and Nitrogen Fertilizers on N <sub>2</sub> O and CO <sub>2</sub>
15:45-16:00	<i>Emissions and Soil Productivity</i>   Manal Abd-Allah Hassan El-Gamal, Professor of Microbiology, Agricultural Microbiology Research Department - Soils, Water and Environment Research Institute, (SWERI)-Agricultural Research Center (ARC), Egypt.
	The direct and indirect effect of climate change on citrus production in Tunisia: a macro and
16:00-16:15	micro spatial analysis   Zouabi Oussama (LAREQUA- University of Tunis El Manar and LEAD-University of Toulon)
	Adapting crop management practices to climate change: Opportunities and challenges for
16:15-16:30	climate change adaptation in Pakistan   Abid Muhammad, presenting author (Centre for Climate Research & Development, COMSATS Institute of Information Technology, Islamabad)
	Networking between LIFE projects
16:30-17:00	g r - g

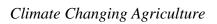






	Thursday 31 <sup>th</sup> August 2017	
	Session 2: GIS and remote sensing	
9:00-12:00	Session Chairs: N. Kourgialas and C. Kalaitzidis	
9:00-9:30	Keynote speech: On the use of leaf spectral indices for real-time detection of physiological responses of olive under variable water conditions   Centritto Mauro, presenting author (CNR-IVALSA)	
9:30-9:45	Drones for Ship Emissions Monitoring at European Emission Controlled Areas / Sarris Zacharias, presenting author (BUSINESS DEVELOPMENT MANAGER ALTUS LSA)	
9:45-10:00	On-farm Implementation of ICT tools for sustainable irrigation management under climate change / Todorovic Mladen, presenting author (CIHEAM - Mediterranean Agronomic Institute of Bari), Riezzo Erminio (Sysman Progetti & Servizi srl), Galiano Angelo (Dyrecta Lab), Boari Francesca (CNR – Institute of Science of Food Production)	
10:00-10:15	Methods and challenges of remote sensing in climate change impact studies on agriculture / Toulios Leonidas, presenting author (ELGO 'DEMETER', Industrial & Forage Crops Institute), Spiliotopoulos Marios (University of Thessaly, Department of Civil Engineering)	
10:15-10:30	Spraying against the olive fruit fly using a Location Aware System (LAS) / Pontikakos Costas (1Agricultural University of Athens, Informatics Laboratory, Division of Informatics, Department of Agricultural Economy and Development School of Food, Biotechnology and Development, ), Perdikis Dionyssios, presenting author (Agricultural University of AthensDepartment of Crop Science, Laboratory of Agricultural Zoology & Entomology,), Tsiligiridis Theodore (1Agricultural University of Athens, Informatics Laboratory, Division of Informatics, Department of Agricultural Economy and Development School of Food, Biotechnology and Development)	
10:30-10:45	Modeling maize production in limited irrigation conditions for sustainable water use / Jancic Tovjanin Milena.	
10:45-11:00	Water erosion in olive and citrus tree crops under current and future climate conditions   Kourgialas Nektarios (presenting author) –H.A.O. "Demeter" - Institute of Olive Tree, Subtropical Crops & Viticulture (I.O.S.V.), Karatzas George -School of Environmental Engineering, Technical University of Crete, Chania, Greece, Koubouris Georgios (I.O.S.V.).	
11:00-11:30	Break	
11:30-11:45	Soil characteristics and nutrient estimation through spectroscopy / Antoniuk, Vita <sup>1</sup> ; Stamatakis, Aristidis <sup>1</sup> ; Tzortzakis, Nikolaos <sup>2</sup> ; Kalaitzidis, Chariton <sup>1</sup> . 1Mediterranean Agronomic Institute of Chania, Department of Geoinformation in Environmental Management, 2Cyprus University of Technology, Department of Agricultural Sciences, Biotechnology and Food Science	
11:45-12:00	Contribution to the sustainability of solar photovoltaic irrigation systems: agronomy case study / Đurin Bojan, corresponding author (Faculty of Geotechnical Engineering, University of Zagreb), Lajqi Shpetim, presenting author (Faculty of Mechanical Engineering, University of Prishtina "Hasan Prishtina"), Baić Lucija (Faculty of Geotechnical Engineering, University of Zagreb)	







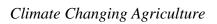
Session 3: Environmental certification	
12:00-13:00	Session Chairs: M. Omirou and A. Kavadia
12:00-12:30	Keynote speech: Measuring environmental performance through agri-products environmental footprint and declaration - The case of Olive Oil / Michalopoulos George (Rodax Agro Ltd), Schau Erwin (European Commission, Joint Research Centre, Dir. D – Sustainable Resources – Bio-Economy), Malliaraki Stella (Union of Agricultural Cooperatives of Merabello), Aggelaki Katerina (Union of Agricultural Cooperatives of Merabello), Giakoumaki Georgia (Union of Agricultural Cooperatives of Peza), Kokkinos Georgios (Nileas Farmers Group, Messinia).
12:30-12:45	Influence of soil properties and geographic origin on the elemental composition of olive leaves and pomace   Pošćić Filip, presenting author (Institute for Adriatic Crops and Karst Reclamation), Mikac Nevenka (Institut Ruđer Bošković), Jukić Špika Maja (Institute for Adriatic Crops and Karst Reclamation), Romić Marija (Faculty of Agronomy, University of Zagreb), Strikić Frane (Institute for Adriatic Crops and Karst Reclamation), Urlić Branimir (Institute for Adriatic Crops and Karst Reclamation), Bačić Niko (Institut Ruđer Bošković), Lučić Mavro (Institut Ruđer Bošković), Runjić Marko (Institute for Adriatic Crops and Karst Reclamation), Fiket Željka (Institut Ruđer Bošković), Klepo Tatjana (Institute for Adriatic Crops and Karst Reclamation), Žanetić Mirella (Institute for Adriatic Crops and Karst Reclamation), Bakić Helena (Faculty of Agronomy, University of Zagreb), Rengel Zed (School of Earth Sciences, The University of Western Australia), Perica Slavko (Institute for Adriatic Crops and Karst Reclamation)
12:45-13:00	Environmental Impact Assessment of Sustainable Development / Fazelbeygi Mohamadmehdi, corresponding author (Head of department of education. Supreme Council of Provinces)
13:00	Conference group photo
13:00-14:00	Lunch break
	Session 4: Natural resources conservation
14:00-16:15	Session Chairs: G. Karatzas and I. M. Ioannides
14:00-14:30	Keynote speech: Conserving natural resources in a changing agro-environment: practices and policies   Luuk Fleskens, Wageningen University and Research
14:30-14:45	Olive Alive: Toward the design and certification of biodiversity friendly olive groves   Gutiérrez Jose Eugenio (SEO/BirdLife), Ruiz Carlos, presenting author (SEO/BirdLife), Cano María (SEO/BirdLife), Rey Pedro J. (University of Jaén), Murgado Eva María (University of Jaén), Valera Francisco (Experimental Station of Arid Zones), Bermúdez Sonia (Diputación de Jaén)
14:45-15:00	Effects of addition of organic materials and irrigation conditions on soil quality in olive groves: A case study of the region of Peza, Island of Crete, Greece.   Kavvadias Victor, presenting author (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens, ), Papadopoulou Maria (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens), Vavoulidou Evangelia (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens), Theocharopoulos Sideris (Hellenic Agricultural Association HAO-DEMETER", Institute of Soil and Water resources, Department of Soil Science of Athens, ), Manolaraki Chrisa (Union of Agricultural Cooperatives of Peza (PEZA), Giakoumaki Georgia (Union of Agricultural Cooperatives of Peza (PEZA), Koubouris Georgios (Hellenic





	Agricultural Organization DEMETER, Institute for Olive Tree, Subtropical Crops & Viticulture, Agrokipion, Chania, Greece), Psarras Georgios (Hellenic Agricultural Organization DEMETER, Institute for Olive Tree, Subtropical Crops & Viticulture, Agrokipion, Chania, Greece), Vasiliadis Anestis (Union of Agricultural Cooperatives of Peza (PEZA)
	Assessing biodiversity and its ecosystem services in Andalusian olive orchards through the
15:00-15:15	landscape moderation hypothesis approach / Rey Pedro J., presenting author (Dept. Biología Animal, Biología Vegetal y Ecología. Universidad de Jaén), Valera Francisco (Estación Experimental de Zonas Áridas, EEZA-CSIC), Manzaneda Antonio J. (Dept. Biología Animal, Biología Vegetal y Ecología. Universidad de Jaén.), Alcántara Julio M. (Dept. Biología Animal, Biología Vegetal y Ecología. Universidad de Jaén.), Molina-Pardo José L. (Dept. Biología Animal, Biología Vegetal y Ecología. Universidad de Jaén.), Tarifa Rubén (Estación Experimental de Zonas Áridas, EEZA-CSIC), Isla Jorge (Dept. Biología Animal, Biología Vegetal y Ecología. Universidad de Jaén.), Salido Teresa (Dept. Biología Animal, Biología Vegetal y Ecología. Universidad de Jaén.), Calvo Gemma (Dept. Biología Animal, Biología Vegetal y Ecología. Universidad de Jaén.), Martínez-Nuñez Carlos de Jaén.), Ruiz Carlos (Sociedad Española de Ornitología. SEO-BirdLife), Gutiérrez José E. (Sociedad Española de Ornitología. SEO-BirdLife)
15:15-15:30	Break
15:15-15:30 15:30-15:45	Break Study of Rainfall erosivity estimation, relation with runoff and climate adaptation in Northern Semi-arid Tunisia / BELAID Hechmi (ESIER Tunisia)
	Study of Rainfall erosivity estimation, relation with runoff and climate adaptation in Northern
15:30-15:45	Study of Rainfall erosivity estimation, relation with runoff and climate adaptation in Northern Semi-arid Tunisia / BELAID Hechmi (ESIER Tunisia)  The buried diffuser a new efficient technology for olive trees plantations in climate change
15:30-15:45 15:45-16:00	Study of Rainfall erosivity estimation, relation with runoff and climate adaptation in Northern Semi-arid Tunisia   BELAID Hechmi (ESIER Tunisia)  The buried diffuser a new efficient technology for olive trees plantations in climate change conditions   Chahbani Bellachheb, presenting author (chahtech SA)  Airborne pollen dynamic in Northern Tunis from 2011 to 2016   Hadj Hamda Sahar, presenting author (National Institute of Agronomy / Olive Tree Institute), Ben Dhiab Ali (Olive Tree Institute), Msallem Monji (Olive







Friday 1 <sup>st</sup> September 2017		
	Session 4: Natural resources conservation	
9:00-11:00	Session Chairs: M. Doula and M. Kouli	
09:00-09:30	Keynote speech: Using microbes in a climate changing agriculture: challenges and perspectives / A. Kavadia; M. Omirou; I.M.Ioannides (Agricultural Research Institute, Department of Agrobiotechnology)	
09:30-09:45	LIFE PROSODOL: Strategies and tools developed by capitalizing project's achievements / Doula Maria, corresponding author (Benaki Phytopathological Institute), Sarris Apostolos (Foundation for Research and Technology, Hellas), Komnitsas Konstantinos (Technical University of Crete)	
09:45-10:00	Growing lentils in a changing environment: cultivar selection and phosphorus fertilization as means for earliness / Theologidou Georgia, presenting author (PhD candidate), Baxevanos Demetrios (Researcher), Tsialtas Ioannis, corresponding author (Assistant Professor)	
10:00-10:15	Yield improvement by using biostimulant products in winter wheat managed with No Till   Márquez-García Francisco, presenting author (University of Córdoba), Gil-Ribes Jesus A. (University of Córdoba), González-Sánchez Emilio J. (Spanish Association of Conservation Agriculture), Blanco-Roldán Gregorio L. (University of Córdoba)	
10:15-10:30	Evaluation of land suitability for Olive Mill Waste distribution on soil / Gounela Eleni, presenting author (Agricultural University of Athens), Kolovos Chronis (Benaki Phytopathological Institute), Papadopoulos Antonis, presenting author (Benaki Phytopathological Institute), Doula Maria (Benaki Phytopathological Institute), Theocharopoulos Sid (ELGO DEMETER, Dept. Soil Science of Athens), Kalyvas Dionysis (Agricultural University of Athens)	
10:30-10:45	Seasonal variation effect on essential oil content and composition of Pelargonium graveolens cultivated in Crete, Greece / Lydakis-Simantiris Nikos (Department of Environmental and Natural Resources Engineering, Technological Education Institute of Crete), Ben Jeddou Khaoula (Mediterranean Agronomic Institute of Chania - MAICh), Jancheva Magdalena (MAICh), Benchennouf Amina (MAICh), Grigorakis Spyros (MAICh).	
10:45-11:00	Optimization of cropping techniques under climate change conditions in Tunisia and its effect on the balance of carbohydrates and the quality of olive oil of the cultivars "Koroneiki" and	
	"Chetoui"   Annabi Khouloud, presenting author (Phd student), Van-Labeck Marie-Christine (professor), Ayadi Mohamed (Research Fellow in Food Technology), Laribi ibtissem, corresponding author (Phd. student), Gouta hassouna (Research Fellow), Laabidi fouad (senior technician), Ayachi Mouna (Master of conference), Hannachi Cherif (Higher education professor)	
11:00-11:30	Break	
11:30-13:00	Session Chairs: A. Doulis and G. Doupis	
11:30-11:45	Study of the impact of efficient irrigation by the use of innovative technologies on pomological parameters of olives and physic-chemicals of oils / Grati Kammoun Naziha, presenting author (Institut de l'Olivier)	
11:45-12:00	Ecophysiological and biochemical response of Chemlali and Koroneiki olive tree cultivars under salt stress and gibberellic acid / Moula Ines, presenting author (Olive Tree Institute - Unit of Sousse), Boussadia Olfa (Olive Tree Institute - Unit of Sousse), Ben Hassine Mortadha (Olive Tree Institute - Unit of	





	Sousse), Ghariani Wafa (Olive Tree Institute - Unit of Sousse), El Hafi Mariem (Olive Tree Institute - Unit of Sousse), Van Labeke Marie Christine (Faculty of Bioscience Engineering, Ghent University,), Braham Mohamed (Olive Tree Institute - Unit of Sousse)
12:00-12:15	Durability of the olive tree cultivation in arid conditions under the climate change / Mezghani Ayachi Mouna (Olive Tree Institute), Annabi Khouloud (Olive Tree Institute)
12:15-12:30	Fingerprinting of Olive (Olea europaea L.) germplasm in Tunisian national collection by using Simple Sequence Repeat markers / Souabni Hana, presenting author (PhD student), Saddoud-Debbabi Olfa (Assistant Professor), Fendri Mahdi (PhD), Triki Mohamed Ali (Master conference), Ben Amar Fathi (Assistant Professor)
12:30-12:45	Water status and biomass response of two olive tree cultivars under water stress / Ben Hassine Mortadha), presenting author (Olive tree Institute, Unit of Sousse), Boussadia Olfa (Olive tree Institute, Unit of Sousse), Moula Ines, (Olive tree Institute, Unit of Sousse), El Hafi Mariem (Olive tree Institute, Unit of Sousse), Braham Mohamed (Olive tree Institute, Unit of Sousse)
12:45-13:00	Molecular and Agronomic characteristic of the local Tunisian olive cultivar Sradki / Mnasri Sameh, presenting author (National Gene Bank of Tunisia), Saddoud Debbabi Olfa (National Gene Bank of Tunisia), Ferchichi Ali (National Institute of Agronomy of Tunisia)
13:00-14:00	Lunch break
14:00-15:00	Session Chairs: K. Varikou and M. Mathioudakis
14:00-14:15	Inventory of phytopathogenic soilborne fungi causing wilt and die-back disease of olive tree in Tunisia and opportunities for biological control management / Triki Mohamed Ali, presenting author (Olive Tree Institute of Tunisia)
14:15-14:30	Survey of the Fusarium Species Associated to Olive-tree (Olea europaea) in Tunisia / Trabelsi Rahma (Faculty of Sciences of Sfax)
14:30-14:45	Climate change impacts on agricultural drought across Ankara, Turkey   Danandeh Mehr ALI, presenting author (Department of Water Resources Engineering, Faculty of Civil Engineering, University of Tabriz, Iran), Nourani Vahid, presenting author (Department of Water Resources Engineering, Faculty of Civil Engineering, University of Tabriz, Iran), Sharghi Elnaz (Department of Water Resources Engineering, Faculty of Civil Engineering, University of Tabriz, Iran)
14:45-15:00	An assessment of pan coefficient equations for calculating reference crop evapotranspiration (ET0) under the humid environment / Pandey Pankaj K., presenting author (NERIST, India)
15:00	End of presentations





## **POSTER PROGRAMME**

## Wednesday 30<sup>th</sup> August 2017

	Posters should be placed between 09:00-09:30
	and presented during the breaks (11:00-11:30 and 15:15-15:30)
1	Assessment of soil water content variation patterns in olive trees cultivation   Arampatzis George - H.A.O. "Demeter" -, NAGREF, Soil and Water Resources Institute (S.W.R.I.) (Presenting author), Hatzigiannakis Evangelos -(S.W.R.I.), Kourgialas Nektarios - H.A.O. "Demeter", NAGREF - Institute for Olive Tree, Subtropical Crops & Viticulture (I.O.S.V.), Psarras Georgios -(I.O.S.V.), Kinigopoulou Vasiliki -(S.W.R.I.), Panagopoulos Andreas -(S.W.R.I.), Koubouris Georgios -(I.O.S.V.)
2	Farmer's adaptation measures to changing climate in Karnataka state of India   T H Gajendra, (presenting author), Biradar Nagaratna, L. Manjunath, S. Onkarappa, M K Naik –UAHS.
3	The effect of photo-selective nets on yield and fruit quality of apple cv. Braeburn and peach cv.  Suncrest under Croatian agro-climatic conditions  Fruk Mladen -University of Zagreb, Faculty of Agriculture (U.Z.) (Presenting author), Jemric Tomislav -(U.Z.), Fruk Goran -(U.Z.), Vukovic Marko -(U.Z.), Buhin Josip -(U.Z.), Jatoi Mushtaque Ahmed -Shah Abdul Latif University, Date Palm  Research  Institute.
4	Effect of biological and mineral nitrogen on wheat productivity under newly reclaimed land conditions   Abd El-Lattief Essam El-Deen -Agronomy Dept., Faculty of Agriculture, South Valley University, Egypt.
5	Climate change effects on biochemical compounds and antioxidant activity of Olea europaea cv.  Meski   Ben Mansour-Gueddes Samia, Saidana Dhouha, Ben Dhiab Ali, Braham Mohamed -Olive Tree Institute.
6	LIFE-Stymfalia: The nature of business   Skouloudaki Katerina -Piraeus Bank.
7	Soil management in agriculture for climate change mitigation   Carbonell-Bojollo Rosa (Presenting author), Ordóñez-Fernández Rafaela, Moreno-García Manuel, Repullo Ruibérriz de Torres Miguel –IFAPA, Area of Agriculture and Environment.
8	The pH effect on soil selenium's absorption in plant tissues of lettuce (Lactuca sativa L.) and berseem (Trifolium alexandrinum L.), as affected by the application of sodium selenate   Tsioumpri Myrto -Agricultural University of Athens.
9	The olive grove a tool to develop mitigation strategies to climate change   Savé Robert -IRTA.
10	Comparing reference evapotranspiration calculation methods to determine olive trees irrigation schedule in different bioclimatic stage of Tunisia   Bchir Amani -Olive Tree Institute, Unit of Sousse (presenting author), Boussadia Olfa -Olive Tree Institute, Unit of Sousse (O.T.I.), Ben Dhiab Ali – (O.T.I.), Lemeur Raoul -Laboratoire





	d'Ecologie des Plantes, Université de Gent, Ben Mariem Fethi -(O.T.I.), Boukhrissa Najet -(O.T.I.), Ghariani Wafa -(O.T.I.), Braham Mohamed -(O.T.I.).
11	Bioclimatic Assessment Of A Representative Mediterranean Agroecosystem   Papadakis Manolis -
	University of Aegean.
12	Transpiration modeling and determining the climatic key component of the olive tree in Semi arid
	<b>Tunisian area</b>   Bchir Amani - Olive Tree Institute, Unit of Sousse (O.T.I.) (presenting author), Escalona Lorenzo José - Departamento de Biologia, Universidad de las Islas Balears, Douthe Cyril -Departamento de Biologia, Universidad de las Islas Balears, Boussadia Olfa -(O.T.I.), Ben Dhiab Ali -(O.T.I.), Lemeur Raoul -Laboratoire d'Ecologie des Plantes, Université de Gent, Ben Mariem Fethi -(O.T.I.), Boukhrissa Najet -(O.T.I.), Gariani Wafa -(O.T.I.), Braham Mohamed - (O.T.I.).
13	The role of the olive tree in the protection against the hydric erosion (the case of the Tunisian sahel)
	Lahmar Karim -Iseah Mahdia, University of Monastir.
14	OLIVE – MIRACLE Modelling solutions for improved and resilient management strategies for Olive
	tree against future climate change   Georgios Koubouris, Nektarios Kourgialas, Antonia Zaharouli, Apostolos
	Voulgarakis, Georgios Doupis, Chrysi Sergentani, Evangellos Michelakis

## Thursday 31<sup>th</sup> August 2017

Posters should be placed between 09:00-09:30 and presented during the breaks (11:00-11:30 and 15:15-15:30)

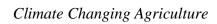
1	Influence of climatic and bioclimatic parameters on the intensity and chronology of the Olea
	europaea L. pollen season in Tunisia   Ben Dhiab Ali -Olive Tree Institute of Sousse (presenting author), Hadj
	Hamda Sahar -Institut National Agronomique de Tunisie, Bchir Ameni -Olive Tree Institute of Sousse, BEN MIMOUN
	Mehdi -Institut National Agronomique de Tunisie, MSALLEM Monji -Olive Tree Institute of Tunis.
2	Assessing environmentally sensitive areas to desertification – An application in two Mediterranean
	watersheds   Morianou Giasemi (presenting author) –H.A.O. "Demeter" - Institute of Olive Tree, Subtropical Crops &
	Viticulture (I.O.S.V.), Kourgialas Nektarios (kourgialas@nagref-cha.gr) corresponding author -I.O.S.V., Psarras George -
	I.O.S.V., Koubouris Georgios -I.O.S.V., Karatzas George -School of Environmental Engineering, Technical University of
	Crete





3	Different nutrient management strategies reduce soil $N_2O$ emissions in olive orchards   M. Omirou <sup>1</sup> (presenting author), I. Anastopoulos <sup>1</sup> , E. Christodoulou <sup>2</sup> , A. Agapiou <sup>2</sup> , I.M. Ioannides <sup>1</sup> , 1 Agricultural Research Institute, Department of Agrobiotechnology, 2 University of Cyprus, Department of Chemistry
4	Does the application of post-harvest industry wastes reduce direct soil fluxes of $N_2O$ in organic
	farming?   I.M. Ioannides¹-(presenting author), A. Kavadia¹, I. Anastopoulos¹, M.A. Vasiliades², A.M. Efstathiou², M. Omirou¹¹ Agricultural Research Institute, Department of Agrobiotechnology, ² University of Cyprus, Department of Chemistry
5	CarbonsequestrationbycovercropsinoliveorchardsRepullo Ruibérriz de Torres Miguel A. (Presenting author), Ordóñez Fernández Rafaela, Moreno García Manuel, MárquezGarcía Javier, Carbonell Bojollo Rosa MIFAPA, Area of Agriculture and Environment.
6	LIFE-Stymfalia: The nature of business   Skouloudaki Katerina -Piraeus Bank.
7	Evaluating water stress in irrigated durum wheat based on remote sensing techniques   Mzid Nada - Higher Agronomic Institute of Chott Mariem (presenting author), Todorovic Mladen - Mediterranean Agronomic Institute of Bari, Albrizio Rossella - CNR-ISAFOM, Cantore Vito - CNR-ISPA.
8	Ecophysiological response of two olive tree cultivars (Olea europaea L. 'Chemlali' and 'Koroneiki')
	underwaterstressandsaltstressBoussadiaOlfa-OliveTreeInstituteUnitofSousse.
9	Survey on orchard management practices applied in two olive growing areas of Crete, as compared to the approach proposed by LIFE AgroClimaWater project   Psarras Georgios (presenting author), Kourgialas Nektarios, Morianou Giasemi, Koubouris Georgios –H.A.O. "Demeter" - Institute of Olive Tree, Subtropical Crops & Viticulture.
10	Behavior of the olive tree Chemlali in climate change conditions   SAIDANA Dhouha, BEN MANSOUR Samia, BRAHAM Mohamed. Institute of olive tree, Sousse Station, Tunisia.
11	Broccoli cultivars for reducing atmospheric CO <sub>2</sub> . Study of different cultivars grown under salinity   Sagarduy Ana LSakata Seed Iberica, Agudelo Agatha -Sakata Seed Iberica, Rios Juan JGrupo de Aquaporinas, Departamento de Nutrición Vegetal. CEBAS-(CSIC), Martinez-Ballesta M. Carmen - CEBAS-(CSIC), Carvajal Micaela -CEBAS-(CSIC) (Presenting author).
12	Wastewater Treatment By Floating Macrophyte (Salvinia Natans) Under Algerian Semi Arid Climate   Laabassi Ayache - University of Batna (presenting author), Harzallah Daoud -University of Setif, Boudehane Asma - University of Batna, Fercha Azzedine - University Abbas Laghrour Khenchela.
13	Morphological variability among Stipagrostis ciliata (Desf.) De Winter accessions growing under North African arid bioclimate   Mnif Fakhfakh Lobna, Jeddi Kowther, Chaieb Mohamed -Faculty of Sciences of Sfax.
14	Developing drought action plans at farmers' organization level in order to improve their climate change adaptation potential   Arampatzis George (Presenting author), Pisinaras Vasilis, Hatzigiannakis Evangelos, Panagopoulos Andreas - H.A.O. "Demeter" -, NAGREF – Soil and Water Resources Institute.







## Friday 1<sup>st</sup> September 2017

	Posters should be placed between 09:00-09:30
	and presented during the breaks (11:00-11:30 and 15:15-15:30)
1	The olive tree varieties behavior in different Tunisian area / Saidana Dhouha, presenting author (Institute of the olive tree), Ben Mansour Samia (Institute of the olive tree), Braham Mohamed (Institute of the olive tree)
2	Olive mill wastewater phytoremediation in a pilot scale unit using Myrtus communis and Punica
	granatum plantsPetoussi Margarita (presenting author), Papadimitropoulos Christos, Kalogerakis Nicolas - School of EnvironmentalEngineering,TechnicalUniversityOf Crete,Chania,Greece.
3	Landscape influences on population dynamics of Bactrocera oleae   Stattegger Sophie -University of the Aegean, Biogeography and Ecology Lab) (presenting author), De Moraes Consuelo ETH Zurich, Institute of Agricultural Sciences, Tscheulin Thomas -University of the Aegean, Biogeography and Ecology Lab.
4	Certification organic snails and future market-consumption edible snails   Karamani Evangelia - Aristotle University of Thessaloniki, Faculty of Agriculture, Forestry and Natural Environment, Department of Agricultural Economics (AUTh) (presenting author), Tzimitra Kalogianni Eirini - (AUTh) (presenting author), Karamani Maria - Alexandreio Technological Educational Institute of Thessaloniki (presenting author).
5	Use of olive mill waste sludge and clinoptilolite as soil additives for pepper cultivation   Kosmidis Stavros -TEI of Peloponnese, Department of Agricultural Technology, Doula Maria -Benaki Phytopathological Institute (B.P.I.), Assimakopoulou Anna -TEI of Peloponnese, Department of Agricultural Technology, Troyanos Yerasimos - (B.P.I.), Papadopoulos Antonis -(B.P.I.), Kolovos Chronis -(B.P.I.)(Presenting author), Kostopoulos Panagiotis - Agricultural University of Athens (A.U.A.), Gounela Eleni -(A.U.A.).
6	LIFE-Stymfalia: The nature of business   Skouloudaki Katerina -Piraeus Bank.
7	Climate Change on Increasing the Risks of Armed Conflicts in Sudan   Ali Yousif Mohammed Awad - Chinese Academy of Sciences.
8	Influence of spreading olive-mill wastewater on earthworm survival and growth   Chalkia Christina (presenting author) -Agricultural University of Athens (A.U.A.), Lab. of Agr. Zoology and Entomology, Vavoulidou Evangelia –H.A.O. "Demeter" - Soil Science Institute of Athens, Koubouris Georgios (koubouris@nagref-cha.gr) –H.A.O. "Demeter" - Institute of Olive Tree, Subtropical Crops & Viticulture (I.O.S.V.), Chatzipavlidis Iordanis (chatzipavlidis@aua.gr) -(A.U.A.) Lab. of General & Agricultural Microbiology, Kalaitzaki Argyro (I.O.S.V.), Perdikis Dionyssios -(A.U.A.), Lab. of Agr. Zoology and Entomology.
9	Survey on orchard management practices applied in two olive growing areas of Crete, as compared
	to the approach proposed by LIFE AgroClimaWater project   Psarras Georgios (presenting author), Kourgialas Nektarios, Morianou Giasemi, Koubouris Georgios –H.A.O. "Demeter" - Institute of Olive Tree, Subtropical Crops & Viticulture.
10	Yield and quality of lettuce as related to hydroponic system and NaCl concentration in irrigation
	<i>water</i>   Tzerakis Konstandinos (presenting author), Mixelakis Evangellos, Psarras Georgios –H.A.O. "Demeter" - Institute of Olive Tree, Subtropical Crops & Viticulture (I.O.S.V.).





11	Effect of temperature on Phelipanche Ramosa Pomel parasitism on tomato crop   Tarantino Emanuele (presenting author) -University di Foggia.
12	Physiological comparative study of halophytes and glicophyte plants for adaptation to
	Mediterranean salinity coastal areas   Agudelo Agatha -Sakata Seed Iberica (Presenting author), Chelbi Najla - Laboratory of Extremophile Plants, Center of Biotechnology, Martinez-Ballesta M. Carmen -Grupo de Aquaporinas, Departamento de Nutrición Vegetal. CEBAS-(CSIC), Rios Juan J CEBAS-(CSIC), Carvajal Alcaraz Micaela - CEBAS-(CSIC) (Presenting author).
13	Fingerprinting of Olive (Olea europaea L.) germplasm in Tunisian national collection by using
	Simple Sequence Repeat markers   Souabni Hana -Institut de l'Olivier (I.d.O.) (Presenting author), Saddoud-Debbabi Olfa -National Gene Bank of Tunisia, Fendri Mahdi -(I.d.O.), Triki Mohamed Ali -(I.d.O.), Ben Amar Fathi - (I.d.O.).
14	Allelopathic effects of Acacia saligna (Labill.) Wendl. and Cupressus sempervirens L. on germination and seedling growth of alfalfa in arid Mediterranean lands   JEDDI Kaouthar (presenting author), MNIF Lobna, CHAIEB Mohamed - Faculty of Sciences of Sfax- Tunisia.
15	Reducing the impact of drought by potassium application in olive trees (Olea europaea L.) / Dbara Soumaya, presenting author (Regional center of horticulture and organic farming / Olive tree Institute), Abboud Samia (Higher Agronomic Institute Chott Mariem)





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