

Water Efficiency & Climate Resilient Agriculture

International Conference

15-16 July 2020

Chania, Greece

Delegate Programme Booklet

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 “Water Efficiency & Climate Resilient Agriculture”. Unfortunately, due to COVID-19 and considering the safety of our participants, the AgroClimaWater Conference will take place via teleconference and we will not have the pleasure to meet you in Chania.

We would like to express our pleasure for having the chance to be informed about your research achievements on the field of Water Resources Management and Climate Change Effects on Agriculture.

This international conference is one of the final deliverables of the LIFE14 CCA/GR/000389 – AGROCLIMAWATER.

Many thanks to the LIFE programme and co-workers for their hard work.

Kind regards,

The conveners

Dr. Nektarios Kourgialas, Dr. Georgios Psarras

Conference Organizers

Hellenic Agricultural Organization DEMETER, Institute for Olive, Subtropical Crops & Viticulture, Chania, Greece <http://www.nagref-cha.gr/>

Hellenic Agricultural Organization DEMETER, Soil and Water Resources Institute, Thessaloniki, Greece <https://www.swri.gr/index.php/el/>

Conveners

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Dr. Georgios Psarras (co-chair), Researcher (Grade B)

Hellenic Agricultural Organization (H.A.O "DEMETER") DG Research - Institute of Olive Tree, Subtropical Plants & Viticulture (IOSV)

Keynote speakers

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Prof. Cristos Xiloyiannis, University of Basilicata, Italy

Prof. Athanasios G. Loukas, Aristotle University of Thessaloniki, Greece

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Oral Presentations

Wednesday 15 July 2020

Session 1: Irrigation and Water Use Efficiency for Climate Resilient Agriculture

Session Chairs: G. Arampatzis, N. Kourgialas, G. Psarras

10:00-10:15

Welcome Introduction

10:15-10:45

Keynote speech: Sustainable fruit tree orchard management to improve water use efficiency - climate change effects | C. Xiloyannis

10:45-11:00

Promoting water efficiency and supporting the shift towards a climate resilient agriculture in Mediterranean countries LIFE AgroClimaWater | V. Koutalou, [D. A. Konstantinou](#)

11:00-11:15

LIFE AgroClimaWater project: environmental impact and water use of sustainable fruit orchards in Mediterranean area | [A. N. Mininni](#), T. Berloco, A. C. Tuzio, D. Laterza, C. Fausto, B. Dichio

11:15-11:30

An integrated framework for efficient irrigation water use and pricing in Greek rural areas | [A. Ragkos](#)

11:30-11:45

Effect of irrigation practices upon yield and fruit quality of four grapefruit (*Citrus paradisi* Mac.) cultivars | [G. Morianou](#), V. Ziogas, N. N. Kourgialas, G. Karatzas

11:45-12:00

Practices for improving agricultural Water Use Efficiency in tree crops - the LIFE AgroClimaWater case study | [N.N. Kourgialas](#), G. Psarras, G. Morianou, G. Koubouris

12:00-12:15

Break

Session 2: Water Resources & Geoinformatics in Agriculture – Climate Change Effects

Session Chairs: G. Arampatzis, N. Kourgialas, G. Psarras

12:15-12:45

Keynote speech: Is Climate Changing? Are the Impacts Significant for Hydrometeorological Hazards and Water Resources in Agricultural Watersheds? | [A. Loukas](#)

12:45-13:00

Geoinformatics and multi-criteria decision analysis in landslides hazard mapping: a case study from western Crete, Greece. | [A. Argyriou](#), N. Papadopoulos, R. Teeuw

13:00-13:15

Estimation of carbon, water and energy fluxes between ecosystems and the atmosphere with the eddy covariance technique – The case of a forest plantation | [N. Markos](#) and K. Radoglou

13:15-13:30	<i>Discharge for natural streams based on Manning equation using fuzzy transformation method</i> N. Samarinas , C. Evangelides
13:30-13:45	<i>Response of a contaminated aquifer to water resources management scenarios: The case of Lake Karla aquifer</i> G. Tziatzios , P. Sidiropoulos, L. Vasiliades, A. Lyra, N. Mylopoulos, A. Loukas
13:45-14:00	<i>An Integrated Modeling System for the Simulation and Management of Degraded Water Resources of Coastal Agricultural Watersheds: The case of Almyros basin, Thessaly, Greece</i> A. Lyra , A. Loukas, G. Tziatzios, P. Sidiropoulos, N. Mylopoulos
14:00-14:15	<i>Effects of sowing date, rainfed irrigation, soil's moisture and wind force on Coriander (Coriandrum sativum L.) yield and quality performance by applying new agro-technologies (GIS, GPS, Precision Agriculture, TDR soil sensors, Geostatistical models, soil and hydraulic analyzes) at an experimental field in Central Greece</i> E. Wogiatzi Eleni, A. Filintas , N. Gougoulas
14:15-14:30	Break
14:30-14:45	<i>Assessment of potential climate change impact on orchards' water management in three Mediterranean watersheds</i> V. Pisinaras , G. Sismani, G. Arampatzis
14:45-15:00	<i>Precision Irrigation for climate change adaption: the case of olive groves</i> A. Papafilippaki , N. Bounakis, I. Kasapakis, K. Kalaitzaki, K. Chartzoulakis
15:00-15:15	<i>Promoting Companies and Universities Cooperation to Enhance Sustainable Water Management in Eastern Mediterranean through Innovative Educational Approaches</i> G. N. Zaimes, P. Koutalakis , S. Khayat, F. Abu Al-Rub, B. Sonneveld, A. Marei, A. Al-Salaymeh, I. Vogiatzakis, J. L. Garcia Rodriguez, W. A. Salameh
15:15-15:30	<i>Developing a framework to enhance urban riparian areas ecosystem services</i> G. Gkiatas , I. Kasapidis, V. Iakovoglou, P. Koutalakis, A. Savvopoulou, G. N. Zaimes

Thursday 16 July 2020

Session 3: Water Supply in the Agricultural Sector

Session Chairs: G. Arampatzis, N. Kourgialas, G. Psarras

10:00-10:05	Welcome Introduction
10:05-10:35	Keynote speech: Preparedness against Droughts and Floods under Climate Change-The case of Crete G. Tsakiris
10:35-10:50	Mitigation of the effects of climate change in the agricultural sector of Cyprus, through more efficient water use and optimization of benefit Y. Economidou , M. K. Doula, A. A. Zorpas
10:50-11:05	Can plants tolerate drought stress with epigenetic effects; A case study for Medicago sativa varieties E. V. Avramidou , Y. E. Ventouris, E.M. Abraham, S. N. Chorianopoulou, A. Kapazoglou, E. Tani
11:05-11:20	Cost and effectiveness of in-season strategies for coping with weather variability in Pakistan's agriculture H. Shah , C. Siderius, P. Hellegers
11:20-11:35	Sustainable hop production in Slovenia by using bioplastic twine adopted in project LIFE BioTHOP B. Čeh , L. Luskar , T. Guček, J. Flis
11:35-11:50	Adaptation of olive groves to climatic challenges and potential mitigation through sustainable management. G. Koubouris , G. Psarras, G. Michalopoulos, K.A. Kasapi, G. Arampatzis, E. Hatzigiannakis, V. Kavvadias, C. Xiloyannis, G. Montanaro, S. Malliaraki, A. Angelaki, C. Manolaraki, G. Giakoumaki, S. Reppas, N. Kourgialas, G. Doupis, E. Markakis, N. Kavroulakis, A. Papafilippaki, A. Voulgarakis, C. Sergentani, N. Digalaki and G. Kokkinos
11:50-12:05	Break
12:05-12:20	Utilizing new agro-technologies and precision agriculture for advanced soil, water, fertilizer and irrigation application, digital mapping and management decisions at farm level A. Filintas , N. Gougoulas
12:20-12:35	Natural zeolites for a more environment sustainable integrated defense of Olive trees and for contrasting the climate change G. Ferretti , L. Morrone, G. Galamini, A. Rotondi, B. Faccini, O. Facini, V. Medoro, M. Coltorti
12:35-12:50	Soil organic carbon modeling and digital GIS mapping using various soil and hydraulic auxiliary variables and new agro-technologies (GIS, GPS, Precision Agriculture, Geostatistics, soil and hydraulic analyzes) at farm level A. Filintas , N. Gougoulas
12:50-13:05	Reducing Aquatic Footprint of cotton Cultivation, by developing a decision support system using satellites and sensors D. Leonidakis , D. Koumoulides , N. Katsenios, A. Efthimiadou

13:05-13:20	<i>Water governance in three Mediterranean Farmers' Organizations towards the development of water management adaptation strategies</i> G. Michalopoulos, V. Pisinaras, G. Sismani, E. Hatzigiannakis, E. Tziritis, C. Doulgeris, <u>G. Arampatzis</u>
Closing the English part (sessions 1-3) of the Teleconference	
13:20-13:35	Break
<i>Session 4 (in Greek) - Διαχείριση Νερού στην Κρήτη υπό το πρίσμα της κλιματικής αλλαγής</i>	
13:35-13:55	<i>Διακυβέρνηση νερού και αγροτικός τομέας</i> <u>M. Κριτσωτάκης</u>
13:55-14:15	<i>Μέθοδοι και Συστήματα Βέλτιστης Διαχείρισης - Εξοικονόμηση Ενέργειας στα Υδροαρδευτικά Έργα του Ο.Α.Κ. Α.Ε.</i> <u>B. Μαμαγκάκης</u>
14:15-14:30	<i>Διαχείριση Αρδευτικού Νερού & Κλιματική Αλλαγή - Εφαρμοσμένη Έρευνα από το Ινστιτούτο Ελιάς Υποτροπικών & Αμπέλου (ΙΕΛΥΑ) στην Κρήτη-Το παράδειγμα του LIFE AgroClimaWater</i> <u>N. Κουρνιαλάς</u>
14:30-15:00	<i>Ελεύθερη συζήτηση με τοπικούς φορείς</i>

Research Posters

Posters are available on the teleconference webpage

<https://acw-conference.com/teleconference/>

1	<i>Use of ornamental plants in constructed wetlands for greywater treatment</i> <u>A. Deligianni</u> , H. Ritzema, M. Fountoulakis
2	<i>Impact of monthly changes of rainfall erosivity and cover management factors on soil loss estimation for Crete Island, Greece</i> <u>D. D. Alexakis</u> , C. Polykretis, M. Grillakis, S. Manoudakis
3	<i>Avocado maturation in western Crete as an indicator of climate change in cool subtropical areas</i> <u>T. T. Tzatzani</u>
4	<i>Salinization and alkalization as degradation soil problem at south part of Danube Lowland (Slovakia)</i> <u>V. Kováčová</u>