



Sunday 16 June

17:00 -21:00 Welcome cocktail and Registration at campus of university

Monday 17 June

- 9:00 - 10:10 Registration and Poster display
Opening ceremony - Conveners, ISHS and SOI, National Authorities
Matera as a model city in water cycle, storage and collection, example of resilience
Pietro Laureano
- 10:10 - 13:00 **Session 1 | Climate and water resource perspectives: social and economic aspects**
Water resource: social perspectives, water-food nexus
Felix Reinders (ICID)
Climate change: hydroclimate scenarios at global level
Solutions to adapt to climate change: Governance and strategies of water resource management and infrastructures
Olcay Unver (FAO)
Constraints for an effective innovation transfer
Nicola Lamaddalena (CIHEAM)
Desertification
Daniel Tsegai (UNCCD)
Water Footprinting: assessments, impacts and economic perspectives
Steve Green
Discussion
- 13:00-14:00 **Lunch**
- 14:00-15:30 **Session 2| Non conventional water use: saline and urban wastewater**
Long-term irrigation olive orchard with reclaimed wastewater
Arnon Dag
Treating water for reuse: Testing an adoption decision-making model with nursery and greenhouse growers
Lamm Alexa
U. S. Consumer Perceptions of Water Sources and Uses Regarding Production and Enjoyment of Ornamental Plants
Bridget Behe



Saline reclaimed water and deficit irrigation strategy affected eco-physiological traits in almond trees under Mediterranean conditions

Gaetano Alessandro Vivaldi

Evaluating long-term effects of irrigation with municipal reclaimed water on urban landscape soil and plants

Raul I Cabrera

15:30 - 16:00

POSTER VIEW AND STAY TOGETHER

coffee break will be served

16:00 - 18:00

Session 3 | Evapotranspiration, irrigation requirement and modeling

ET of applied water and the cup+ model

Richard Snyder

Assessment of canopy transpiration from temperature: applications for almond orchards

Maria Victoria Gonzalez-Dugo

Towards modelling the impact of climate change on irrigation demand

Jana Zinkernagel

An update on the theory and application of surface renewal for estimating E

Donatella Spano

Dynamics of actual vineyard evapotranspiration under increasing aridity: how much water will we need?

Andrea Pitacco

Determining orchard specific crop coefficients for improved irrigation management in citrus

Nicolette Taylor

Estimation of Soil Surface Evaporation in Commercial Pistachio Orchards of Iran; the Case Study of Yazd Province

Mohammad-Hassn Rahimian

Discussion

Excursion to the Sassi



Tuesday 18 June

8:30 - 10:20

Session 4 | Water relations, Soil and plant water stress assessment

Assessing Soil and Plant Water Status for Irrigation Management

Elias Fereres (IAS-CSIC)

The Dual Method Approach (DMA) improves sap flow and stem water content measurements for horticultural irrigation research and management

Michael Forster

Physiological responses of radish (*Raphanus sativus* L.) to controlled water limitations - Potential effects on tuber quality and shelf life

Werner B. Herppich

Effects of two covering nets on water use efficiency and production in California nectarine cultivar

Pasquale Losciale

Trunk growth rate as tool for deficit irrigation in olive orchards

Alfonso Moriana

Transpiration reduction as an answer to water stress: models versus measurements for irrigated olive trees in South Portugal

Isabel Ferreira

Tolerance of different olive cultivars to salt stress

Luca Regni

Learning from the past to improve the future: tree-ring as a retrospective tool to investigate orchard irrigation management

Demetrio Perulli

Discussion

10:20 - 10:45

Coffee Break



10:45 - 13:00

Session 5 | Sensing technologies relevant to the precision irrigation

Plant-based sensing for irrigation management in the field

Alan Lakso

Precision drip irrigation for horticulture: methods for managing spatial variability from vineyard and orchard trails in Israel

Alon Ben-gal

Using a decision support system (Vintel) to determine the relationship between soil water content and whole-grapevine transpiration

Gerardo Lopez

Water Stress Mapping using Low-Cost Thermal Sensors Mounted on an All-Terrain Vehicle (ATV)

Carlos Poblete-Echeverría

Evaluation of a two-source model to estimate vineyard evapotranspiration using UAV-based thermal images and meteorological data

Fernando Fuentes-Penailillo

Comparing the accuracy of using thermal airborne and the fusion of Sentinel 2 and 3 imagery to calculate the crop water stress index in a vineyard

Joaquim Bellvert Rios

Scheduling regulated deficit irrigation in olive using leaf turgor measurements: another twist for the method

Carmen Maria Ms. Padilla Diaz

Discussion

13:00 - 14:00

Lunch

14:00 - 16:00

Session 6 | Tree crop irrigation management (Drought and fruit quality)

Assessing Crop Water Productivity and Water Saving in an Orchard under Precise Irrigation: Risks from Ambiguous Terminology and Simplified Concepts

Josè Enrique Fernandez

Establishing the appropriate drip irrigation agronomic design for optimizing crop performance and water use efficiency in woody perennial crops

Diego Intrigliolo

Effects of different irrigation regimes on vegetative growth, yield and fruit quality of young pomegranate (*Punica granatum* L.) trees ev. 'Wonderful'

Annalisa Tarantino



Effects of climate variables on water use efficiency of an apple orchard

Damiano Zanotelli

Evaluation of Water Footprint for table olive groves of *Olea europaea* L. cv.

Conservolea

Ioannis Tsirogiannis

Improving water use efficiency in irrigated orchards - The LIFE +

AGROCLIMAWATER case study

Nektarios N. Kourgialas

Microclimatic drivers of leaf and tree transpiration and water use efficiency for low to high canopy cover irrigated apple orchards in two production regions of South Africa

Stephanie Midgley

Discussion

POSTER VIEW AND STAY TOGETHER

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16:00 - 16:30

Session 6 | Tree crop irrigation management (Drought and fruit quality)

Nitrogen (N) application needs to meet irrigation demands or it will compromise almond vitality and productivity

Or Sperling

Analysis of deficit irrigation strategies for almonds

Joan Girona

Timely water deficit in 'honeycrisp' apple reduces bitter pit incidence with little impact on fruit quality

Michelle Reid

Testing three strawberry cultivars for reduced water demand in the mid-adriatic area

Franco Capocasa

Optimization of the irrigation schedule in field-grown strawberry results in higher water use efficiency and improved taste quality

Pieter Janssens

Irrigation Levels and Proline Application Effects on Morphological Characteristics of Strawberry

Mehmet Ali Saridas

Discussion

16:30 - 18:00

SOCIAL DINNER



Wednesday 19 June

TECHNICAL TOUR

Thursday 20 June

PARALLEL SESSION

08:30 - 10:30

Session 7 | Vineyard irrigation: grape and wine quality

Vineyard irrigation: grape and wine quality

Simone Castellarin

Partial root drying and other strategies for reducing irrigation water consumption in Chilean vineyards without affecting water status, yield and wine quality

Pilar Gil

Sustainable irrigation strategy on organic Red Globe table grape in Apulia region

Luigi Tarricone

Effects of different deficit irrigation strategies on yield components and must quality of cv. Touriga Franca (*Vitis vinifera* L.) under Mediterranean climate conditions in Douro Region

Ines Cabral

Increasing yield and water use efficiency in wine grape vineyards with variable rate drip irrigation

Luis A. Sanchez

Combined effects of rootstock and irrigation on gas exchange, fruit quality and yield in 'Merlot' and 'Sangiovese' grapevines

Giovanni Caruso

Relations between factors affecting water consumption of *Vitis vinifera* cv. 'Cabernet Sauvignon'

Yishai Netzer

Controlling variability in vineyard with variable rate drip irrigation

Itamar Nadav

Discussion



Thursday 20 June

08:30 - 10:30

Session 8-9 | Irrigation of herbaceous crops and ornamental plants - open fields and greenhouses

Wim Voogt

Productive and not productive use of water of common bean under full and deficit irrigation

Aleksa Lipovac

Agronomical effects and response of growers in the application of the DSS GesCoN at commercial farms scale

Antonio Elia

Commercial yield response of iceberg lettuce (*Lactuca sativa* L. var capitata) to water irrigation at a cool semi-arid climate of Maipo Valley, Santiago, Chile

Alejandro Antunez

Shedding light on functional traits for water use efficiency: first results on open field trials with heirloom tomatoes

Francesco Orsini

Assessing the optimal timing of partial root-zone drying alternation in tomato crops under furrow irrigation

Jaime Puertolas

Potential reuse of drainage solutions from three soilless crops grown under Mediterranean conditions

Miguel Santos

Water use and evapotranspiration estimates at a California container plant nursery

Bruno Pitton

Developing an Automated Leaching Fraction-Based Irrigation Schedule for Nursery Crops

Amy Fulcker

Optimizing irrigation set-points for the growth and quality of two *Chrysanthemum morifolium* cultivars in two soilless substrates

John Derek Lea-Cox

Discussion

10:30 - 11:00

POSTER VIEW

13:00 - 14:30

Lunch

14:30 - 16:30

ISHS MEETING WORKING GROUP