



French Associates Institute for  
Agriculture & Biotechnology of Drylands

Ben-Gurion University  
of the Negev

The Jacob Blaustein Center for Scientific Cooperation  
The Jacob Blaustein Institutes for Desert Research  
Ben-Gurion University of the Negev

# The 26<sup>th</sup> Even-Ari Memorial Conference

Israeli – Hungarian scientific workshop  
on sustainable agriculture

*Agriculture and Biotechnology of Drylands  
and Drought-stricken Areas*



Jacob Blaustein Institute for Desert Research, Sede Boqer, Israel  
26-27 April 2015

The 26<sup>th</sup> Even-Ari Memorial Conference  
Israeli – Hungarian scientific workshop on sustainable agriculture  
***Agriculture and Biotechnology of Drylands and Drought-stricken Areas***  
26-27 April 2015

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**Sunday, April 26 2015**

**10:00-10:30 OPENING REMARKS – Boris Zaltzman, Sammy Boussiba, Zvi HaCohen, Ambss. Andor Nagy, Balázs Györfy, Tristan Azbej, Yitzchak Gutterman and Jhonathan Ephrath**

**Session 1: Chairperson –Prof. Sammy Boussiba**

**10:30-10:55 E. Balázs.** The draft genome of a high lipid content *Scenedesmus sp.* microalgae

**10:55-11:20 S. Leu.** Emission free bio-energy production in integrated microalgae biofuels systems

**11:20-11:45 D Gal.** Sustainability of pond aquaculture models

**11:45-12:10 V. Ördög.** Biotechnological use of microalgae for plant production and plant protection

**12:10-12:35 D. Zilberg.** Examining the fate of disease-causing agents in intensive, closed recirculating aquaculture systems (RAS)

**12:35-13:30 LUNCH BREAK**

**Session 2: Chairperson – Dr. Naftali Lazarovitch**

**13:30-13:55 R. Berenstein.** Human-robot selective vineyard sprayer

**13:55-14:20 A. Bechar.** Development of Autonomous and Human-Robot Collaborative Systems for Field Operations in Greenhouses specialty crops and Orchards

**14:20-14:45 M. Dombos.** Innovative Real-time Monitoring and Pest control of Insects

**14:45-15:10 N. Agam.** Partitioning of evapotranspiration in a drip-irrigated wine-grape vineyard in arid areas

### **15:10-15:45 Coffee Break**

#### **Session 3: Chairperson Prof. Gideon Grafi**

**15:45-16:10 M. Jancsó.** New developments of irrigation farming and rice research in the Naric Övki

**16:10-16:35 J. Ephrath.** Comparison of deficit irrigation scheduling methods that use canopy temperature measurements

**16:50-17:15 M. Sagi** Halophyte crop cultivation: the case for Salicornia and Sarcocornia

**17:15-17:40 A. Kiss.** Specifically tailored food engineering activities and technological developments for the elaboration of functional foodstuff

**17:40 18:05 B Sellyei.** Remarks to changes in pathogen agents of fish diseases due to global warming in Hungary

**18:05- 18:30 G. Arye.** Fate and transport of dissolved organic carbon and nitrogen in soil amended with biosolids

**18:30-19:00 DISCUSSION**

### **19:00 Conference Dinner**

## **Monday, April 27**

#### **Session 4 Chairperson prof. Shimon Rachmilevitch**

**9:00-9:25 Z. Magyar.** Regulation of plant growth by the E2F-RBR transcriptional regulatory pathway

**9:25-9:50 J. Pauk.** The effects of water withdrawal on wheat phenotyping of mapping population for drought.

**9:50 – 10:15 Y. Saranga.** Genetic Diversity for Drought Resistance in Wild Emmer Wheat and its Potential for Wheat Improvement

**10:15-10:40 L. Szabados.** Use of the Conditional Overexpression System to identify novel stress regulatory genes.

**10:40 – 11:00 Coffee Break**

**Session 5:**

**11:00-11:25 L. Cseuz.** Selection for drought tolerance in a wheat breeding program

**11:25-11:50 K Jäger.** Effect of simultaneous drought and heat stress on gametophyte development, pollen-pistil interaction and fertilisation in wheat.

**11:50-12:15 G. Grafi.** Epigenetic mechanisms associated with drought tolerance in the desert plant *Zygophyllum dumosum* Boiss

**12:15-12:40 A. Golan-Goldhirsh.** Evolutionary adaptation of *Pistacia* to changing climate – molecular and biogeographical approaches

**12:40-13:05 G. Gyalog** Impact of relative factor prices on resource efficiency in aquaculture

**13:05-14:15 Lunch and Tour in the French Associates Institute for Agriculture and Biotechnology of Drylands**

**Session 6: Prof. Jhonathan Ephrath**

**14:15-14:40 T. Svoray.** Assessment of drought effect on crops and rangelands in the semiarid zone of Israel

**14:40-15:05 C. Bozán.** GIS techniques for the excess water hazard mapping in the NARIC ÖVKI

**15:05-15:30 T. Rapaport** Combining leaf physiology, hyper-spectral proximal sensing and partial least squares regression (PLSR) analysis for wine vine irrigation scheduling

**15:30-15:55 T. Janda.** Role of light in the development of stress tolerance in plants

**15:55-16:20 N. Tel-Zur** Jujube cultivation in Israel

**16:20 – 16:45 N. Lazarovitch.** Water, solute, and heat movement in the root zone: From measurements and models towards optimizing irrigation scheduling

**16:45 -17:15 DISCUSSION and SUMMARY**

**17:15 – Transportation to Tel Aviv**