

**PROGRAM OF THE
5TH INTERNATIONAL SCIENTIFIC CONFERENCE ON WATER
SZARVAS, HUNGARY**

22nd March 2022 (Tuesday)

9.00 – 10.00 Registration

Moderator: BRLÁS-MOLNÁR Zsuzsanna

Opening Ceremony

10.00 – 10.05 Opening of the conference (Prof. Dr. GYURICZA Csaba, rector MATE)

10.05 – 10.10 Conference greeting (Prof. Dr. Cosmin Alin POPESCU, rector, USAMVBT)

10.10 – 10.15 Conference greeting (Prof. Dr. URBÁNYI Béla, Director of Szent István Campus, MATE)

10.15 – 10.20 Conference greeting (Prof. Dr. MICHÉLI Erika, Director of Institute of Environmental Sciences, MATE)

10.20 – 10.25 Conference greeting (Prof. Dr. Branko CUPINA, vice dean, University of Novi Sad Faculty of Agriculture)

10.25 – 10.30 Conference greeting (Dr. Piotr PRUS, ass. professor, Bydgoszcz University of Science and Technology Faculty of Agriculture and Biotechnology)

Plenary session:

10.30 – 10.55: Eduardo Jimmy P. QUILANG, Kristine SAMOY-PASCUAL: Coping with water scarcity for rice production in the Philippines: Advancement and Challenges in Rice R&D

10.50 – 11.15: Milica VRANESEVIC: Statistical analysis of excess water on drainage systems in northern part of Serbia

11.15 – 11.40: Peter STRAUSS: Introduction to the Hydrological Open Air Laboratory (HOAL) Petzenkirchen, Austria. Soil erosion and sediment transport

11.40 – 12.05: Piotr PRUS, Małgorzata SZCZEPANEK, Dariusz PAŃKA, Roman ROLBIECKI: Innovative solutions in agriculture and rural areas - selected case studies

12.05 – 12.30: HALASI-KOVÁCS Béla: Finding breakthrough points in European freshwater aquaculture

12.30 – 12.55: Endre DOBOS, Erika MICHÉLI, Tamás SZEGI: The impact of soil structural degradation on the soil moisture holding capacity

12.55 – 13.00 Opening Poster session (moderator: Dr. Károly BODNÁR, MATE)

13.00 – 14.00 Lunch

Water use in agriculture session (Chairs: Dr. Laura SMULEAC and Dr. Csaba BOZÁN):

14.00 – 14.15: Florent Demelezi: Aquacrop model evaluation for irrigation in the winter wheat cultivars under Hungarian climate

14.15 – 14.30: Arzu Rivera Garcia, Sinka Lúcia, Kovács Györgyi, Zsembeli József, Tuba Géza: Correlation of secondary salinization and soil conditioning in vegetable production under irrigation with saline water

- 14.30 – 14.45: Carmen Simona Dumitrescu, Salasan Cosmin, Sorin Stanciu, George Popescu: Romanian agriculture and irrigations
- 14.45 – 15.00: Varga Krisztina, Csizi Istvan, Halasz Andras: Reasons of meadow hay scarcity in Karcag region
- 15.00 – 15.15: Jancsó Mihály: Evapotranspiration of aerobic rice in large weighing lysimeter

15.15 – 15.30 Break

- 15.30 – 15.45: Valkovszki Noémi Júlia: Influence of agricultural effluent irrigation on common purslane (*Portulaca oleracea* L.) and garden basil (*Occimum basilicum* L.): preliminary results
- 15.45 – 16.00: Kerezsi György: Examination of red clover optimum harvesting status in seed production with unmanned aerial systems
- 16.00 – 16.15: Bozóki Boglárka, Kovács Gergő Péter, Birkás Márta, Kende Zoltán, Gyuricza Csaba: The effects of tillage practices on water management of soybean (*Glycine max* L.)
- 16.15 – 16.30: Szalacsi Norbert: Evaluation of the effect of Water Retainer on soil moisture and nutrient contents in apple orchards
- 16.30 – 16.45: Hortensia Radulescu: Impact of intensive system agriculture on depth water quality

16.45 – 17.00 Coffee break

Environmental protection and climate change session (Chairs: Dr. Andrea FEHER and Dr. Béla GOMBOS)

- 17.00 – 17.15: Toader Cosmina-Simona, Brad Ioan, Feher Andrea Ana, Sîrbu Constanța Corina, Sîrbulescu Claudia: Aspects regarding the evolution of Romanian businesses related to collection of non-wood forest products from spontaneous flora
- 17.15 – 17.30: Dekany Alexandru Tiberiu, Zoican Eugen Cătălin, Petroman Ioan: Greening the management and improving the environmental management from the perspective of sustainable development
- 17.30 – 17.45: Huzău Gelu, Zoican Eugen Cătălin, Petroman Cornelia: Measures to reduce liquid and groundwater pollution from the area of professional swine farms
- 17.45 – 18.00: Văduva Loredana Florina, Zoican Eugen Cătălin, Tarpian Denisa: Implementation of new environmental risk management programs in professional animal farms

18.00 Dinner

23rd March 2022 (Wednesday)

Water management (Chairs: Dr. Cosmin SALASAN and Dr. Zoltán FUTÓ)

- 9.00 – 9.15: Atila Bezdan, Milica Vranešević, Boško Blagojević, Jovana Bezdan: Inland excess water risk assesment in Vojvodina Province
- 9.15 - 9.30: Nataša Čereković, Mihajlo Markovic, Mladen Todorovic, Nery Zapata, Teresa Paco, Erminio Efisio Riezzo, Sabrija Cadro: Smart water management in Bosnia and Herzegovina, SMARTWATER project
- 9.30 – 9.45: Cosmin Salasan: Local Knowledge Transmission - importance, dynamics and prospects
- 9.45 – 10.00: Tamás János: Key infrasturcture for agricultural water management
- 10.00 – 10.15: Nagy Attila: Sustainable solutions in integrated water management of small agricultural catchments

10.15 – 10.30 Coffee break

- 10.30 – 10.45: Malek Abidli, Gabor Halupka, István Waltner: Soil moisture dynamics of an urban park of Budapest, Hungary
- 10.45 – 11.00: Vinicius Deganutti de Barros, Malek Abidli, Dana Kaldybayeva, István Waltner: Comparative evaluation of the AquaCrop and Hydrus 1D models at Gödöllő, Hungary
- 11.00 – 11.15: Mohammed Zein: Detection of some physical soil properties based on the mid-infrared spectral library: Salt affected soils type, Hungary
- 11.15 – 11.30: Brian Rotich Kanyongi: Soil and Water Conservation in Kenya; practices, challenges, and prospects
- 11.30 – 11.45: Caleb Melenya Ocansey: Water balance in Lake Volta and factors determining sustainable use of the reservoir
- 11.45 – 12.00: Magyar Tamás, Pásztor Dávid, Fehér Zsolt Zoltán, Budayné Bódi Erika, Tamás János, Nagy Attila: Modelling the water budget of agricultural fields for precision irrigation scheduling

12.00 – 13.00 Lunch

Environmental protection and climate change session (Chairs: Dr. Ciprian RUJESCU and Mihály JANCSÓ)

- 13.00 – 13.15: Ciprian Rujescu, Adrian Firu: Statistical analysis of recent water supply developments in Romania
- 13.15 – 13.30: Vlad Mărăzan, Antoanela Cozma: Improving weather forecast accuracy using the Doppler radar – cross referential analysis of the 2018 convective season and the impact on agriculture
- 13.30 – 13.45: Hunor Vass, Bogdan Șonca, Oana Sicoe-Murg, Camelia Mănescu, Teodor Mateoc, Nicoleta Mateoc-Sîrb: Preventing the effects of climate change by planting protective curtains
- 13.45 – 14.00: Abidi Sahar: Impact of hydric erosion on soil fertility – Case study of Zouitina basin (Tabarka, Tunisia)
- 14.00 – 14.15: Tóth Flórián: The impact of aquaculture effluent on rotifer communities of a continental lowland oxbow lake
- 14.15 – 14.30: Szanyi Kálmán: Attractivity of light sources with different spectra on caddisfly (*Trichoptera*) species

- 14.30 – 14.45: Elena Claudia Sirbulescu, Cosmina Toader, Ciprian Rujescu, Andrea Feher, Luminita Pirvulescu: Analysis of the investments for environmental protection and sustainable economic development
- 14.45 – 15.00: Oana Maria Sicoe-Murg, Teodor Mateoc, Ana-Mariana Dincu, Vass Hunor, Nicoleta Bodea: Study regarding the impact of the pandemic on tourist reception structures from Geoagiu Băi area, Hunedoara County
- 15.00 -15.15: Simona Cristina Constantinescu, Carmen Simona Dumitrescu, Manuela Dora Orboi, Sabin Chis: Correlation of the quality of spa tourist services with consumer behaviour

Soil moisture monitoring, mapping and modelling session (Chairs: Dr. Endre DOBOS and Dr. István WALTNER)

- 15.15 – 15.30: Rajhi Mohamed, Endre Dobos: Soil moisture monitoring using remote sensing tools
- 15.30 – 15.45: Károly Zoltán Kovács, Anett Poss, Endre Dobos: Citizen science based soil moisture monitoring development
- 15.45 – 16.00: Károly Zoltán Kovács, Endre Dobos: Low-cost sensor application on vineyard's soil moisture-management
- 16.00 – 16.15: András Dobai, Endre Dobos: The impact of soil structural degradation on the soil moisture holding capacity
- 16.15 – 16.30: Daniel Kibirige, Endre Dobos: Estimation of soil moisture using environmental covariates and speckle filtered satellite imagery
- 16.30 – 16.45: János Vágó, Endre Dobos: Development of a GIS based decision support toolset for flood crosos management
- 16.45 – 17.00: András Dobai, Endre Dobos: Methodological development of flash flood risk analysis for small catchments

17.00 - Closing of the conference

18.00 Dinner

24th March 2022 (Thursday)

9.00 – Visit to the Arboretum of Szarvas (optional)

Departure